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Sport Psychology - A Rational Explanation and Practical Application

Keynote Address

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Sport Psychology - the Perspective

Sport psychology is a *hybrid* field - a growing specialty within the broader field of psychology - in which scientific theories about human perception, memory and motivation are applied in physiological contexts including biomechanics and kinesiology, though the benefits from the latter two sport sciences in terms of sport performance-enhancement are severely limited. Briefly, sport psychology spells out how thoughts and behaviour influence athletic performance, and vice versa, helping athletes to improve performance and increase their motivation to beyond perceived levels. Through the medium of sports and training, and applying their skills and knowledge, the sport psychologists endeavour to assist sportspersons of all ages and all levels to realize their performing potential and sharpen the edge of their performing ability both in recreational and competitive sport and also enhance their lives and wellbeing through the entire lifespan; thus, making them unstoppable on the playing field and elsewhere. Compared with other branches of psychology, sport psychology utilizes many techniques and interventions that require very active participation from both the psychologist and the client athlete. However, sport psychologists wield no magic wand to make individuals with average athletic skills

become elite as most guileless parents these days more often believe.

As with other psychological fields of study, extensive education (knowledge and skills of both psychology and sport) and training (learning techniques and practicing them to the point of perfection) is required for any person desirous of getting on to the bandwagon of sport psychology and be called a "*game changer*", as many in the field profess to be. Working in close proximity with the coach, the sport psychologists extend their helping hand to the athletes, teams, and organizations achieve their overall performance goals. They show competitors how to break through the mental barriers that limit performance and teach them how to perform in "the zone" on a more eventful and consistently.

The Sport-Yoga Connection

As sport psychology expanded, diverse philosophical and scientific disciplines began to contribute their principles to its potential for application in practical conditions. One of these important disciplines is yoga with its rich physical-psycho-spiritual content. At its best, the science of yoga, both in its theoretical and practical ramifications, deals with body, breath, mind, soul, and ultimately, the universe itself. It is designed to yoke or fuse individual consciousness and awareness

(*atma* or soul) with super conscious awareness (*Paramatma* or the Supreme Being), which is, but a natural state of mind for both. Ultimately, this yoking process leads to a realization of identity, and by integrating mind, body and spirit, it enhances physical and mental health and wellbeing, even as it helps attain spiritual insight and harmony, a union with the divine. However, this sublime aspect of yoga is beyond sport periphery

As there are physical sciences to create external wellbeing, yoga is the science for inner wellbeing. Its practices not only encourage mental, spiritual and physical fitness - which is a fundamental requirement for sport - but also they are known to be effective against several mental and physical disorders and diseases such as anxiety, aggressiveness, headache, migraine, osteoporosis, rheumatoid arthritis, and more. Special yogic techniques particularly *Pranayama* (breath regulation processes) and meditation have no parallel in cleansing the body of the toxins, improving the muscle tone and, blood circulation. Notably, most elite athletes have now begun to benefit from these techniques to achieve perfect homeostasis, control over-arousal, keep focused and play cool during extreme competitive situations. Balancing the mind, body and spirit is a primary philosophical principle of yoga and of immense value to all athletes. Athletes, in general, are finding that *yogic conditioning* not only elongates tight, shortened, fatigued muscles but also brings calmness and clarity to the mind. Some athletes begin the practice to rehabilitate an injury and to gain more flexibility, stability and strength.

Research studies and well-documented statements of hundreds of elite athletes in several sports across the globe vouch for the fact that regular need-based selective yoga practices can be very helpful (Quinn, 2018) in :

- a) ***reducing performance anxiety and improving concentration*** using deep, relaxed breathing techniques e.g. pranayama resulting in integration of body-mind connection (as in golf, tennis, archery);
- b) ***building core strength*** (in body's midsection) through a new form of resistance training as opposed to typical machine-based workouts;
- c) ***increasing flexibility and range of movement*** (relieving muscle tension as in case of a runner or a golfer);
- d) ***improving balance, physical and mental*** (removing imbalance created by weight training routines of repetitive nature);
- e) acting as a great ***low impact cross training device*** for athletes who do the stereotypic sport or exercise routine year-round; and
- f) ***reducing incidence of injury***, relieving training boredom, adding variety and helping recover from hard aerobic or strength workouts.

Yoga has something for everyone is a truism.

Sport Psychology - the Interactional Space

The three major sport psychology interactional areas include: (a) ***Academic*** - educating physical educators, coaches, and athletes how and why to juxtapose mind training with body training; (b) ***Application*** - developing need-based individual and

collective psycho-training skills, and intervention programmes and preparing ground for their practice as a performance-enhancement, athlete's mental health and wellbeing measure; and (c) **Research** - designing and undertaking research studies (both lab and field) on issues considered significant in terms of sport and psychology objectives. Among these three the most crucial, and yet the most bamboozling area is the application of sport psychology knowledge ingeniously to produce desired effects in human performance behaviour.

The four major aspects of sport psychology that make its application suavely fruitful, productive and prognostic with the sole objective of learning how to apply the theory that helps athletes perform to their potential, include the following :

1. Exploring five most significant psychological areas so intimately connected with performance-enhancement : motivation, confidence, intensity, focus, and emotions
2. Studying the mental tools that athletes can use to improve their training and competitive performances.
3. Examining the roles of coach and team as they affect athletic performance.
4. Learning the most serious challenges athletes face and how to overcome them.

Above all this, the single biggest misconception regarding sport psychology is that it is only for the mentally weak (Burton & Raedeke, 2008.); that is no truer than saying resistance training is only for the physically weak. It is for the fit and fine athlete, not the sick and sulking. Typically, sports psychologists can expect to (a) provide psychological counseling services as

they apply to sport performance, exercise and fitness; (b) assess athletes to determine the relationship between their mental state and physical performance; (c) diagnose and identify mental strengths and weaknesses that are caused by or affect a person's athletic performance; (d) teach visualization techniques to individuals to enhance performance; (e) counsel and treat athletes with mental health disorders and problems (this only clinically-oriented sport psychologist would do); (f) help athletes cope with pressures, both on and off the field; (g) apply recently discovered scientific concepts to improve athletic potential; and finally conduct action research to solve day-today mind-training problems (Kamlesh, 2019).

Psycho-Principles - Applied and Researched

The following brief account of an unstructured action research study conducted very recently based on practical application of an almost year-long motivational and interventional programme at the Archery Training Centre, Punjabi University, Patiala carried out for over a period of one year or so, will suffice to dispel all gloom about mind training and set at rest all negative criticism of the sport psychology role in performance-improvement. Archery, a competitive Olympic sport, is distinctly individual and requires an altogether different approach to mind training vis-à-vis other individual sports of like nature e.g. golf, track & field athletics and swimming which, unlike archery, are thoroughly dynamic and involve intense physical effort.

Participants (i.e. subjects) in the psycho-training programme were current 50 archers (15 senior, 15 junior and 20 youth and a few sub-juniors) both from compound and re-curve archery sections. The **motivational-interventional programme** of one hour duration once a week comprised of inspirational lecture and counseling (20-25 minutes), *pranayama* (*aloma-viloma*, *kapalbhati* or *bhramari* in rotation for 5-10 minutes), yogic meditation - fixing one's mind on *shunya* or nothingness in particular (10-15 minutes), attentional control & concentration training i.e. *trataka* (fixing one's gaze at point or flame) in particular (5-10 minutes), imagery & visualization (10-15 minutes) individual problem-solving (15 minutes). Specific yoga mental exercises for handling anxiety and improving concentration were also prescribed to be practiced at leisure as per convenience. The programme was started in a humble measure and progressively its intensity and extensity were increased. Working with archers over

time has been an exhilarating, exciting, self-educating, and ego-enhancing experience worth sharing with academic and athletic community.

As per recorded performance data maintained by the coach at the Archery Centre, for the year 2017-18, from out of a throng of these fifty archers, 5 gave out **medal winning performances** at international level, 20 at national level, 15 at all India Interuniversity, and 10 at junior national level. Against this background, a random, unpremeditated and unannounced abrupt survey was conducted on a Thursday mind-training session in which a mixed lot of 28 archers were impressed upon to give their honest, truthful and unbiased opinion on the efficacy of various mind training tools and techniques applied on and practiced by them over a year and a half. The results of opinion survey are as under without substantiating it with their individual performance during practice and competition.

Sl. No.	Mind Training Aspect	Percentage
1.	Motivation training effectiveness	100 %
2.	Meditation positive effect (during session)	45 %
3.	Meditation practice (10-15 minutes) in leisure	63 %
4.	(a) Regular Pranayama practice (daily) (b) Occasional Pranayama practice	17 % 20 %
5.	Imagery/Visualization Practice (daily)	65 %
6.	(a) Self-talk (generally after poor performance) (b) Self-talk (even after good performance)	63 % 35 %
7.	Archers having constant problem with concentration	65 %
8.	Archers constantly struggling with competition anxiety	25 %
9.	Archers who have improved their performance over time	80 %
10.	Archers seeking mind training twice a week Archers seeking mind training thrice a week	43% 22%
11.	Overall effect of mind-training was positive	100%

Concluding Observations

Based on an analysis of the playfield activities and occasional oral testimony of a few experienced and understanding archers over time, the following observations made during weekly sessions are worth reckoning for future guidance:

- The archers felt that there is an over-emphasis on physical practice of the sport, often causing boredom and monotony among them, hence a dire need for yoga-enriched cross training.
- External reasons responsible for occasional poor performance, both during practice and at the competitions,

noted by archers included equipment failure, visual and audio distraction.

- General internal (psychological) reasons causing performance slide, as vociferously held by archers included negative thinking, fear of defeat (failure), lack of confidence, sagging energy, boredom resulting from over-practice.
- While older archers often struggle to control the distracting mind, the younger ones are less knowledgeable about and sensitive to mind training techniques - they simply carry it things out unmindful of the impact they create.

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Effects of Exercise and Yoga Schedules on Nostril Dominance in Relation to Athletic Performance

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Introduction:

Enrichment in athletic performance and creating new records has become the fascinating tendency in modern sports. Explosion of scientific researches has evolved various techniques and strategies to enhance top performance in world sports. Scientific methods of sports training, in fact, facilitate significantly one's efficiency in sports performance (Cumming, 1969; Matveyev, 1981.) Sports coaches also use appropriate training strategies or scientific schedules to improve the performance of sportsmen. Although various researches in the area of exercise-physiology have explained the role of respiration in sports performance (Byrne-Quinn *et al.*, 1971; Martin *et al.*, 1979), a very few sports coaches are aware of it. Even during the regular schedules of sports training, generally, athletic coaches do not consider the importance of control of respiration (i.e., control of breathing). On the contrary, literature revealed that control of respiration has good relationship with various motor abilities (Campbell, 1958; Ganguly & Bhole, 1985; Lioyd, 1963; Martin *et al.*, 1979). Often, individual's demonstration telecast through Indian television also revealed that by controlling respiration an individual could tolerate the heavy weight of loaded truck for few seconds. This, in turn, indicates that control of respiration or controlled breathing has real significance in improving strength

and power that might enhance top performance in sports.

Statement of the Problem:

Generally, sudden breath holding helps to improve sports performance especially which are anaerobic in nature. Research in Yoga reveals that the training in control of respiration has significant relationship with grip strength (Moorthy & Ganguly, 1982). Moreover, in our Indian tradition it is a superstition that the activation of "Pingala-Nadi" (Right Nostril Dominance or Control of breathing through right nostril) has close association with individual's better concentration, excellent digestive power and efficiency of work. Simultaneously, the activation of "Ida-Nadi" (Left Nostril Dominance or Control of breathing through left nostril) has relation with weakness or laziness or dullness in overall performance. The balanced condition of "Pingala" and "Ida" Nadis leads to an activation of an equilibrium state called "Susumna-Nadi" (both nostrils are equally dominated or control of breathing through both nostril) which has relation with all works concerning with higher conscious level.

The above literatures, traditional claims and superstitions in turn suggest that control of respiration, especially control of breathing through activation of "Ida-Nadi", "Pingala-Nadi" and "Susumna-Nadi" (over all nostril dominance) may be useful in improving the performance in athletics. Review of literature on

sports sciences also indicates non-availability of any research reports in this area except More (2001). So also, the effect of nostril breathing (specially, nostril dominance) on physical performance of athletes is not known. Even no attempt has been made so far by any other researcher to investigate the efficacy of any schedule of exercises and / or yoga on changing one's nostril dominance that may lead to enhance athletic performance. Therefore, the present investigation entitled "**Effects of Exercise and Yoga Schedules on Nostril Dominance in Relation to Athletic Performance**" has been undertaken.

Objectives of the Study

- To design some "Schedules of Exercise and Yoga" and to evaluate their efficacy in favour of interchanging one's nostril dominance voluntarily.
- To determine the degree of relationship between the scores of nostril dominance and performance in selected track field athletics.
- To predict the performance scores in athletic events on the basis of different conditions of nostril dominance (left nostril, right nostril and both nostril).

Delimitation

Subjects : Junior College level students volunteered in this study.

Age: This study was delimited to male students, who are ranged from 17 to 19 years.

Athletic Events

Selected Track and Field events were delimited here as dependent variables.

The running event was restricted to 100 M Run only, whereas throwing event was Shot Put and Jumping event was Long Jump:

Significance of the study

- This study may help to establish the applicability of nostril dominance in the field of games and sports.
- Present investigation may contribute knowledge that breathing style may influence one's athletic performance.
- Physical Education professionals and sports coaches may take advantage of the results of this study. They may consider the technique of nostril dominance (or breathing style) in sports training schedules.
- During participation in athletic events, an athlete may aware of his or her nostril dominance to achieve better performance.
- The coaches and athletes will get readymade schedule of exercises for interchanging one's nostril dominance that may enhance athletic performance.

Operational Definitions

Ida-Nadi

When we experience vital energy (prana) flowing towards the left side of our body, we are generally left nostril dominated. This state is known as activation of Ida-Nadi.

Pigala-Nadi

When we experience vital energy (prana) flowing towards the right side of our body, we are generally right nostril dominated. This state is known as activation of Pingala-Nadi.

Susumna-Nadi

When we experience vital energy (prana) flowing through the middle part of our body or the energy is distributed equally on both sides of our body, we are generally both nostril dominated. This state is known as activation of Susumna-Nadi.

Nostril Dominance

We breathe day and night even during sleep. Breathing pattern changes generally after each 1 hour (approx.) from right nostril to left nostril or vice-versa. When flow of breathing is more through right nostril, we call it right nostril dominated. When flow of breathing is more through left nostril, we call it left nostril dominated. Similarly, if the flow of breathing is equal (approx.) through both the nostrils, we call it both nostril dominated.

Assumption

- It has been assumed that control of respiration may be associated with the ability of strength and power at physical level.
- This study assumed that control of respiration may be beneficial for strength and power that may attribute performance in track and field events, viz., throwing, jumping and sprinting.
- As both the techniques of control of respiration and nostril dominance represent a voluntary process, it has been assumed that nostril dominance may be effective for improving track and field performance.

Hypotheses

The present investigator reviewed research literature, analyzed the traditional concept of “Ida-Nadi”, “Pingala-Nadi: and “Susumna-Nadi”,

and considered some superstition of Indian culture prior to the inception of this topic. Based on the above, it has been hypothesized that-

H₁: The schedules of exercise yoga would help to inter-change ones level of nostril dominance voluntarily.

H₂: There would be significant relationship between scores of nostril dominance and the scores of performance in selected athletic events.

H₃: Performance scores in selected athletic events would be higher during right nostril dominance.

H₄: Performance scores in selected athletic events would be lower during left nostril dominance.

H₅: Performance scores in selected athletic events would be lying in between high and low ability during the dominance of both nostrils.

H₆: There would be significant difference in athletic performance scores during right, left and both nostril breathing.

Methods

This study was conducted in three phases. In Phase-I, separate schedules of Exercise and Yoga were designed scientifically.

In Phase-II, an experiment was conducted to evaluate the efficacy of the scientifically designed schedules of Exercise and Yoga towards the time required in inter-changing the subjects' nostril dominance (i.e., from right nostril- both nostril- left nostril or vice

versa) and maintenance ability in particular nostril dominance. For this, 60 students aged 15 to 19 years studying in Chhatrapati Shahu Maharaj Sainik School Udgir, Dist. Latur, Maharashtra, were divided randomly into four equal groups viz., Groups A, B, C and D. Thus, each group consists of at least 15 students. Group-A received a training of selected exercises, Group-B treated with Yoga, Group-C was exposed to a training of both Exercise and Yoga, and Group-D remained as controls. All these training programmes were imparted with a view to record one's highest efficiency in maintaining particular nostril dominance (right nostril or left nostril or both nostrils) voluntarily. Duration of training to each group was for a minimum period of 6 weeks.

In Phase-III, all the subjects of the experimental groups were exposed to perform selected track and field events viz., 100 M run (running event), Long Jump (jumping event) and Shot Put (Throwing event) during each nostril dominance (right, both and left). Then the prediction of athletic performance on the basis of the types or nostril dominance was studied.

Nostril dominance was measured by a mirror-technique (developed in Kaivalyadhama, Lonavla), which bears accepted level of reliability and validity. The scores are expressed in terms of percentage.

Standard methods were used to measure selected athletic events. The athletic events included in this study were throwing (shot put), jumping (long jump) and sprinting (100 M run) respectively. The scores of throwing and jumping

ability were recorded in terms of distance in meters whereas the scores in running event in terms of time in seconds.

Each subject's nostril dominance was assessed prior to participation in each athletic event. Each subject participates in each event three times separately by three conditions of nostril dominance (viz., left nostril, right nostril and both nostril respectively). For examples, a subject participated in 100 M run thrice separately during the dominance of left nostril, right nostril and both nostril respectively. Nostril dominance of the subjects was changed from one nostril to other by Yoga-Danda technique, if the subjects do not possess appropriate nostril dominance prior to the participation in each event.

Drop outs

During the experiment, the investigator recorded the attendance of the subjects participated in the respective group of the experiment. Attendance (i.e., above 80%) was quite satisfactory. However, out of 120 subjects, there were 5 dropouts (i.e., 1 from yoga group, 2 from exercise group and 2 from control group. It is amazing that no dropout is recorded in yoga plus exercise group.

Facilities Arranged

- 1) Play Field: Track for 100 M run, Shot Put Sector, and Long Jump pit
- 2) Equipments :
 - Stop Watch to measure time in seconds for 100 M run.
 - Measuring tape to assess distance in meters for shot put and long jump events.
 - Shot put.
 - Lime for marking field, iron nails, etc.

- Nostril Dominance Apparatus.

The above facilities were made available by the investigator.

Statistical Analysis

ANCOVA followed by Scheffe's post hoc test was employed to compare the group-wise data regarding maintenance of maximum duration of one's nostril dominance, Multiple Step Up Regression analysis was done to determine the degree of relationship between nostril dominance and performance in selected track and field events and to predict the athletic performance on the basis of one's level nostril dominance.

Results

The Phase-wise results have been summarized below.

Result of Phase-I (Designing Exercise and Yoga schedules)

The training schedules of exercises and yoga formulated and designed in this study were found authentic and valid to alter nostril dominance. Regular practice of these schedules is expected to enhance the one's ability to quickly change nostril dominance and retain longer maintenance time in the dominance of both nostrils. The schedules have content validity.

Results of Phase – II (Experiment)

The result of within group comparison revealed that –

1. Regular practice of the scheduled Exercise for a period of 6 weeks –
 - Could alter nostril dominance very quickly (CD=0.47, $p<0.01$),
 - Could not retain the dominance of both nostrils for a longer period of time (CD=0.17, $p<0.05$),

2. Regular practice of the scheduled Yoga (CD=0.35, $p<0.05$) for a period of 6 weeks –

- Could alter nostril dominance very quickly (CD=0.38, $p<0.05$), and
- Could retain the dominance of both nostrils for a longer period of time (CD=0.43, $p<0.01$),

3. Regular practice of the scheduled Yoga plus exercise for a period of 6 weeks helped to –

- alter nostril dominance very quickly (CD=0.38, $p<0.05$), and
- could retain the dominance of both nostrils for a longer period of time (CD=0.55, $p<0.01$),

4. The control group could not-

- alter nostril dominance very quickly (CD=0.14, $p<0.05$), and
- retain the dominance of both nostrils.

The result on changing nostril dominance between-group-comparison revealed that

–

- The Exercise group could alter nostril dominance very quickly than Yoga plus exercise group (CD=0.42, $p<0.01$) and Yoga group (CD=0.37, $p<0.05$).
- The Yoga plus exercise group could alter nostril dominance very quickly than Yoga group (CD=0.31, $p<0.05$).
- Thus, Exercise group was found better in changing nostril dominance faster than the Yoga plus exercise group and Yoga group.

The result on retaining nostril dominance for a longer period of time between-group-comparison revealed that-

- The Yoga plus exercise group could retain the dominance of both nostril for a longer duration of time than

Yoga group (CD=0.50, $p < 0.01$) and Exercise group (CD=0.54, $p < 0.01$).

- The Yoga group was found better to retain the dominance of the nostril for a longer duration of time than Exercise group (CD=0.36, $p < 0.05$).
- Thus, both Yoga plus exercise group and Yoga group were found effective in retaining the dominance of both nostrils for a longer duration of time than the Exercise group.

Thus result of ANCOVA followed by Scheffe's post hoc test revealed that the selected "Yoga plus exercise training" and "Yoga training" were effective in maintaining the dominance of both nostrils for a longer period of time, whereas, the "Exercise training: could not help

Result of Phase-III (Regression and predication)

The result on the relationship of nostril dominance and athletic performance revealed that-

- Left nostril dominance had significantly low relationship with 100 M run ($r=0.13$), Long Jump ($r=0.10$), and shot put ($r=0.09$) performance.
- Right nostril dominance had high relationship with 100 M run ($r=0.54$), Long Jump ($r=0.60$), and shot put ($r=0.66$) performance.
- Both nostril dominance had high relationship with 100 M run ($r=0.77$), Long Jump ($r=0.76$), and shot put ($r=0.74$) performance.

The result on the prediction (regression) of athletic performance on the basis of nostril dominance revealed that-

- Performance ability in 100 M running event was orderly explained by left

nostril dominance ($R^2=0.01148$), right nostril dominance ($R^2=0.3165$) and both nostril dominance ($R^2=0.9249$) of the selected subjects respectively.

- Performance ability in Long Jump event was orderly explained by left nostril dominance ($R^2=0.2062$) right nostril dominance ($R^2=0.7281$) and both nostril dominance ($R^2=0.9492$) of the selected subjects respectively.
- Performance ability in Long Jump event was orderly explained by left nostril dominance ($R^2=0.1865$) right nostril dominance ($R^2=0.7155$) and both nostril dominance ($R^2=0.9242$) of the selected subjects respectively.

The result of contribution of nostril dominance toward the improvement in athletic performance further indicates that –

- Left nostril dominance could not contribute to enhance the performance in 100 M Run (increased $R^2=0.1723$, $p > 0.05$).
- Right nostril dominance could contribute to enhance the performance in 100 M run (increased $R^2=0.6512$, $p > 0.01$), Long Jump (increased $R^2=0.6923$, $p > 0.01$), and Shot Put (increased $R^2=0.71237$, $p > 0.01$).
- Both nostril dominance could contribute to enhance the performance in 100 M run (increased $R^2=0.7751$, $p > 0.01$), Long Jump (increased $R^2=0.7614$, $p > 0.01$), and shot Put (increased $R^2=0.7527$, $p > 0.01$).

All the hypotheses were tested and found sustained in compliance with the above results.

Conclusion

Present investigation could warrant the following conclusions:

- Exercises help to change one's nostril dominance very fast, but could not contribute to maintain the dominance of both nostrils for a longer duration of time
- Yoga helps to change one's nostril dominance moderately and could also contribute to maintain the dominance of both nostrils for a longer duration of time.
- Yoga plus exercise training helps to change one's nostril dominance very fast and also contributes to maintain the dominance of both nostrils for a longer duration of time.
- Thus, Yoga plus exercise training was better than yoga and exercise in altering nostril dominance within shortest possible time and also could maintain the dominance of both nostril for comparatively longer period of time.
- Further, left nostril dominance has no significant relationship with the selected track and field events, However, right nostril dominance could show significant relationship with running Lon Jump and Shot Put. Here it is interesting to note that both nostrils dominance has statistically better significant relationship with almost all the selected track and field events.
- Further, left nostril dominance could not predict one's athletic performance, whereas, right nostril dominance could predict the performance. However, both nostril dominance was more effective in improving athletic performance.

Recommendations and Further Suggestions

The present report of investigation recommends that-

- Since both nostril dominance contributes added advantage in exhibiting athletic performance, the coaches of games and sports may incorporate this knowledge of nostril dominance as a strategic training to enhance sports performance.
- Further research in similar lines for women subjects and on other athletic events may be organized to enlighten more ideas on nostril dominance.

Contribution to the Knowledge

- This study will contribute to evolve a strategy of manipulation of nostril breathing for the improvement of the performance in any sport with special reference to track and field athletics.
- The Knowledge "Nostril Dominance" belongs to traditional yoga being experimented in this study would be directly helpful as a strategic technique in the arena of world sports.
- In recent days, of course, the scientists of physical education and sports in world over are involved with different research activities, the research on the area of nostril dominance and sports performance is a new but challenging one. The present research is, without doubt, first of its kind that added new information to the quantum of knowledge about the efficient mechanism of nostril dominance for explaining the sports performance.

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Impact of Sport Psychology in the Career of Sports-Persons

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“Success is not mean to participate and win each and every race, it means handling the worst but still finishing the race.”

Sports Psychology is a combine study of Physiology, Psychology, Kinesiology and Biomechanics. This discipline is widely used in a study of Preparatory Phase, Competition Phase and Transition Phase. Psychological factors affects performance of players regarding injury, rehabilitation, burn out, age group, team atmosphere, bonding with team-mates, timing of the competition, schedule of the practice, physical activity and recreation.

As per Gross, Sports Psychology is the study of the psychological basis, process and effects of sports. Sports psychology is the science of mind and behavior. So the coach of Sports psychology works for moral of players.

In a present generation, most of the professional players have commonly come across with emotional breakdown or mental blockages. They often feel attitude problem, aggressiveness, fear of performing specific task, handling the pressure in crunchy situation. These players always try to be at par with the others. But each athlete has certain limit. Having attained the highest level of performance, after certain level they can't move forward. At some point, they feel fatigue and gradually the downfall of their career starts.

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A famous coach at Princeton University was once the pertinent and often baffling question, “Is an athlete born or made?” the coach pondered over the question for a while and replied thoughtfully, “An athlete is born to be made,” it is in the dynamic process of making an athlete, the entire problem of coaching is to be scrutinized and determined scientifically.

Area of Sports Psychologist

Most common area of the study within the sports psychology is making bridge between personality and performance. The main area of the study is the characteristics of specific personality and how they respond to performance or other psychological variables.

Mental Toughness

Mental toughness is a psychological edge that helps the players to improve performance regularly. Self-confidence, trust on abilities, control on feeling and self-motivation are the vital factors that improve the performance of any athletes in difficult condition under any pressure with specific task.

Sports and Exercise psychology consist of instructing the coaches of athlete, teams, exercises, parents, fitness, professionals groups and other performer on psychological aspects of their sports activity. The aim of psychiatrist is to optimize

performance and enjoyment through the use of psychological skills and the use of psychometrics and psychological assessment.

Sports psychology primarily works with athletes to find out the exact way to improve athletes' performance. Situation and condition play vital role in player's performance and their individual goals. As a psychiatrics, coaches mainly focus on building skills and improvements in their abilities to inspire them for giving more completes efforts and achieving (visualizing) their goals.

Motivation

Motivation is a drive that encourages action or feeling to inspire. It is a driving force to our lives. It comes from desire to success. Without success, there is no enjoyment, no excitement. Social and family life will become one dimensional.

Internal motivation is a drive and attitude motivation decides what kind of response will get from others. If you think of a change, it should be reflected in your performance. So it is important to stay focused in each and every neck-to-neck situation. When we believe that, we are solely responsible for the change in our lives, player's outlook towards life changes for the best.

Stress and Anxiety

It is the most important response to motivate players to excel new parameters every time. It plays vital role for their existence, but frequent occurrence of it may adversely affect the performance of players.

Chocking

It is a phenomenon of deactivating the performance, usually under temporal, environments, cognitive or emotional pressure. Specifically pressure compromises skilled performance by narrowing attention to one's own process of performance.

Coaching and leadership

A healthy relationship between task master and performer is the key component in player's self-satisfaction and commitment towards team and self. To this extend, effective coaching leads to the performance and talent development in sports. Team development is also contingent on its leader's behaviors and philosophy. Each task master has his own ideology. When he is attached with his performer, he tries to implement his own thinking to make his coaching more effective. Behaviors are also transformational models of leadership and make a link between performer and his expectations.

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Team co-ordination and communication dynamics

It is a very crucial attachment in athletics' performance because successful team performance is not depending on individual player. It is more precious when each and every team member can perform averagely rather than any individual performer gives his best. A healthy co- ordination in a team is making a difference between the high and low performing units.

Collective efficacy

Collective efficacy is a specific group level confidence influenced by multiple sources. Collective efficacy is the group equivalent to the notion of self-efficacy differing only in the unit of analysis. It has been co-relational in nature and focused on identifying the homological network of collective efficacy.

Sportsmanship

It is a kind of pressure on performer to feel. It is a social behavior. It prevents aggressiveness and the moral behavior. It is a social learning depends on environmental circumstances.

Goal setting

It allows an individual to develop athletes and his life skills gradually while boosting efficacy beliefs when accomplishing a specific objective. In general, psychology research has covered several important events including performance level.

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Imaginary training (visualization and mental rehearsal)

This is the enhancement in learning performance and motivation in sports. Imagery based on either individual or external perspective, is most effective when involving all sensorial channels. During imagery, player should also consider the vividness and control of the imagine experience.

Self-talk

It is a common internal inspiration because everybody has thousands of conscious thoughts hit every day which are essential conversation with themselves. It is an important technique to help athletes to remain positive while focusing on current task. Thoughts stopping technique, changing negative to neutral to positive thoughts are among the pragmatic uses of self- talk technique.

A Comparative Study of Anxiety among University Students

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Abstract

The aim of this study was to assess and compare cognitive anxiety, somatic anxiety and self-confidence among university students. Sixty university students (N=60) who were studying in School of Education, Central University of Kashmir were selected randomly with age ranging between 22-30 years. The selected subjects were divided into two groups, sports (n=30) and non sports (n=30) depending on playing sports or not playing sports. The data was collected by using the CSAI-2 developed by Martens, Vealey, and Burton (1990). The data was analyzed by using descriptive statistics and independent t test. The results of the present study revealed that there was a significant difference in cognitive anxiety, somatic anxiety and self-confidence between sports and non sports university students. It was concluded that cognitive anxiety and somatic anxiety is higher in non-sports university students than sports university students while self confidence was higher in sports university students than non-sports university students. The level of significance was set at 0.05.

Key Words: Anxiety, Self-confidence

Introduction

Anxiety has always been a fundamental human emotion. In recent times, this phenomenon attracts the attention of many researchers, since it has a major impact on achieving results in sport. According to a recent study conducted by Nilgin et al. (Nilgin et al., 2013), sport anxiety assumes the existence of three basic dimensions: somatic anxiety (negative thrill and withstanding of emotions during competition), cognitive anxiety (negative thoughts and expectations of own success or performance), and self-confidence (perception of personal capabilities and belief in the possibility of flawless performance of motor activity). When it

comes to sport anxiety, it is necessary to distinguish two components: sport anxiety as a state of being, and sport anxiety as a dimension of personality (Hesketh & Ding, 2005). In his research, Behzadi et al. (2011) think that sport anxiety represents the tendency of considering the circumstances of the competition threatening, which, as a reaction to this situation, leads to an anxious state. Research findings by Vujanović and Tišma (2011) turn the attention to the fact that the state of sport anxiety mandates an emotional state of fear and tension in relation to a certain situation in sports, whereas a high level of sport anxiety prevents the athlete's achievement. Such conclusion was made by Pineda-Espejel et al. (2011). According to research conducted

by Hamam (2013) but also Hardy & Grace (2009), there is a significant interaction between sport anxiety as a state, and sport achievement, self-confidence and mood in athletes.

Methodology

Sixty university students (N=60) who were studying in School of Education, Central University of Kashmir were selected randomly with age ranging between 22-30 years and were divided into two groups. The selected subjects were divided into two groups, sports (n=30) and non sports (n=30) depending on playing sports or not playing sports. The data was collected by using the CSAI-2 questionnaire developed by Martens, Vealey, and Burton (1990). The following variables were selected for the study:

1. Cognitive anxiety
2. Somatic anxiety
3. Self-confidence

The data was collected from the selected subjects after administration of CSAI-2 questionnaire assessing cognitive anxiety, Somatic anxiety and self-confidence. Necessary instructions were given to the subjects before the administration of the questionnaire. Descriptive statistics and “t” test was applied to assess the difference between cognitive anxiety, Somatic anxiety and self confidence in rural and urban adolescent boys. The level of significance was set at 0.05. The result of the present study is displayed in the table no 1.

Result and Analysis

The results were obtained by applying descriptive statistics and independent t test.

Table 1: Descriptive analysis and independent t test

Variables		Groups	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Cognitive Anxiety	Non Sports		30	25.06	2.70	0.49348	2.45	58	0.01
	Sports		30	23.46	2.33	0.42544			
Somatic Anxiety	Non Sports		30	24.73	2.49	0.45469	2.13	58	0.03
	Sports		30	23.46	2.08	0.37976			
Self Confidence	Non Sports		30	23.50	2.72	0.49770	2.52	58	0.01
	Sports		30	25.40	3.10	0.56650			

The results indicate that there is a significant difference in cognitive anxiety between non sports and sports group $t(58) = 2.45$, $P = 0.01$. That is the average score of non sports group ($M=25.06$, $SD=2.70$) was statistically different from that of sports group ($M=23.46$, $SD=2.33$). It is evident from table that in cognitive anxiety, a t value of 2.45 was obtained and the probability in the significance was $P=0.01$, which is less than 0.05. Thus, it could be concluded that there was a significant difference in cognitive anxiety between non sports and sports university students.

The results indicate that there is a significant difference in somatic anxiety between non sports and sports group $t(58) = 2.13$, $P = 0.03$. That is the average score of non sports group ($M=24.73$, $SD=2.49$) was statistically different from that of sports group ($M=23.46$, $SD=2.08$). It is evident from table that in somatic anxiety, a t value of 2.13 was obtained and the probability in the

significance was $P=0.03$, which is less than 0.05. Thus, it could be concluded that there was a significant difference in somatic anxiety between non sports and sports university students.

The results indicate that there is a significant difference in self confidence between non sports and sports group $t(58) = 2.52$, $P = 0.01$. That is the average score of non sports group ($M=23.50$, $SD=2.72$) was statistically different from that of sports group ($M=25.40$, $SD=3.10$). It is evident from table that in self confidence, a t value of 2.52 was obtained and the probability in the significance was $P=0.01$, which is less than 0.05. Thus, it could be concluded that there was a significant difference in self confidence between non sports and sports university students.

The graphical representation of mean scores of cognitive anxiety, somatic anxiety and self-confidence of sports and non sports university students are displayed in fig. I.

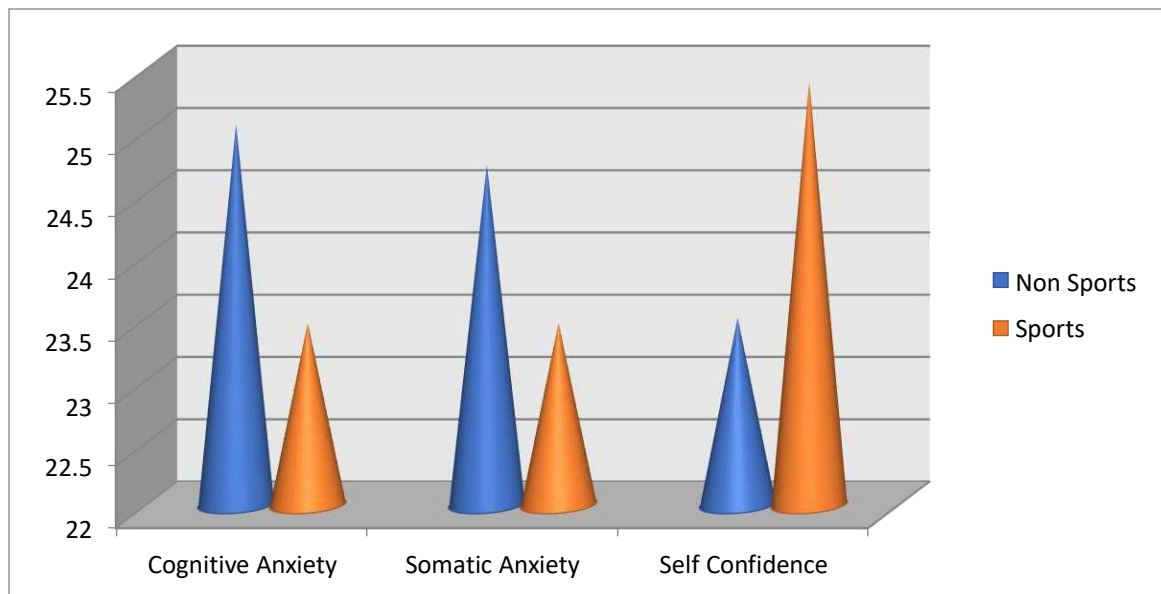


Fig. I: Mean scores of cognitive anxiety, somatic anxiety and self-confidence

Discussion

The results of the present study revealed that there was a significant difference in cognitive anxiety, somatic anxiety and self-confidence between sports and non sports university students. Athletes participating in sports experience different levels of stress from competitive sports. For most young athletes (generally 13 to 24 years old, i.e., high-school and college age group) sport participation is reported to be no more stressful than many other activities of daily student or work life in general where competition is involved and performance is measured. Some level of sport related performance anxiety is considered to be normal and healthy; however, extreme anxiety in athletes can be detrimental in these performance situations. A number of factors may contribute to the development, severity, and persistence of performance anxiety related to sport participation (**Patel et al., 2010**). The analyses of **Wong et al., (1993)** showed that the athletic context is associated with variations in competitive trait anxiety and self-presentation confidence; however, no main effect or interaction was noted for perceived ability. The findings of **Jones et al., (1994)** showed that there was no difference between the two groups on the intensity of cognitive and somatic anxiety symptoms, but that elite performers interpreted both anxiety states as being more facilitative to performance than the non-elite performers. Furthermore, self-confidence was higher in the elite group. Further analyses investigated differences

between those swimmers who reported their anxiety as debilitating and those who reported it as facilitative in the elite and non-elite groups. These showed that anxiety intensity levels were higher in the debilitated than the facilitated swimmers in the non-elite group, but no such differences were evident in the elite group. These findings provide further support for the distinction between intensity and direction of competitive state anxiety symptoms. They also emphasize the importance of skill level as an individual difference variable in the examination of the nature of the competitive anxiety response.

Conclusion

The following conclusions were concluded from the current study:

1. There was a significant difference in cognitive anxiety between sports and non sports university students. So, it was concluded that cognitive anxiety is higher in non sports university students than sports university students.
2. There was a significant difference in somatic anxiety between sports and non sports university students. So, it was concluded that somatic anxiety is higher in non sports university students than sports university students.
3. There was a significant difference in self-confidence between sports and non sports university students. So, it was concluded that self-confidence is higher in sports university students than non sports university students.

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Comparative Study on Motor Educability and Emotional Stability among Rural and Urban Girls

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Abstract

The purpose of the study was to compare motor educability and emotional stability among rural and urban girls. The study was conducted on 100 subjects in which 50 rural girls & 50 urban girls selected as a sample. The age of the sample ranged from 13-18 years and all the samples were selected from random basis. To measure the motor educability of selected girls, Metheny Johnson Test was preferred. This test consist of four items namely front role, back role, jumping half turn & jumping full turn. To assess Emotional Stability of selected subjects, Emotional Stability Inventory is developed by A San Gupta was used & this inventory is highly reliable & valid to assess emotional stability of selected subjects. The 't' test was used to find out significant difference between two groups i.e. rural girls & urban girls. Results found that rural girls have more emotional stability as compared to urban girls. Rural girls are more superior on the basis of motor educability as compared to urban girls.

Key Words: Motor Educability, Emotional Stability Rural & Urban Girls etc.

INTRODUCTION:

World was simple and very huge before revolution when a term urbanization came into existence that was used for these growing cities. Science and technology made people's life easy, nevertheless how hard they had to work to acquire a living because globalization had brought competition with it. The most adverse impact of this development was seen in field of education.

Education plays crucial role in everyone's life whether in school or at home, practical or theoretical. A student has to work harder to gain stability both mentally and physically. But these developments had changed civilizations into two scenarios that are called rural and urban areas. Ultimately there is huge margin between student

studying in cities and villages as technology, development in science had affected these areas differently. Thus, study of comparison is done that compare mental ability and physical strength of a child studying in rural area with those who study in urban area. Before beginning few questions arise: how a rural child is different from an urban child; what are the causes and reasons for this difference; how can these be minimized. Analyzed data would help us to know psyche and physique of students who are studying in totally different environment. This study would help researcher to know where both the fields lag behind to impart proper care and education to students. In this way improvement can be made and even a developing country like India can be tagged as developed. We need to focus on student

because they are bright future for our country.

Not everyone is given good knowledge which is basic requirement for a person. The knowledge we already have about these is scarce as we know about the differences that exist between an urban and rural child but does not know how it exists, why it exists, when this difference started to widen, what can be done to solve it out and make everyone equal. We generally get to see a child studying in city goes to a fully furnished school which has all facilities including drinking water, canteen, washrooms, proper ventilated classrooms with air conditioners or heaters etc. His or her dress is defined properly and these schools meet high standards. The scene changes if we visit schools in our country and villages usually have a school run by government. The percentage of having only one teacher employed in one school is high in India. There are no washrooms, in case they have one these are either shared by both genders or are not in situation to use in hygienic manner. In some schools there are benches to sit but some school children take sheets along with them to sit on. Moreover, if we talk about studies or attendance, nobody cares. A child is coming to school or not, he or she is grasping education or not, no one care about it. Usually a dress is assigned to all students attending school but not everyone is dressed up to mark.

Earlier mentioned points are normally witnessed. If a rural child is compared to an urban child, they too have strength and weaknesses. Commonly, mothers try their best to give perfect diet to their child but deficiencies remain back. A child may get

opportunities and facilities in city but as their food is not nutritious they usually remain too weak or become obese whereas a child born and brought up in village gets fresh and nutritious food as every villager grow food in their farms. Ultimately, they are strong physically but lack of guidance suppresses whatever talent they might have in them. So, this study is done to see whether actually nurture makes difference in a human being or nature is only that rules human life.

METHODOLOGY:

The study was designed with a main objective to compare motor educability and emotional stability among rural and urban girls. Total hundred subjects (n = 100) in which 50 rural girls & 50 urban girls were purposively selected as samples. The age of subjects ranged between 13-18 years.

TOOLS:

To measure the motor educability of selected girls, Metheny Johnson Test was preferred. This test consist of four items namely front role, back role, jumping half turn & jumping full turn. . The scoring was done according to the rule led down the authors. To assess Emotional Stability of selected subjects, Emotional Stability Inventory is developed by A San Gupta was used & this inventory is highly reliable & valid to assess emotional stability of selected subjects The 't' test was used to find out significant difference among rural and urban girls.

STATISTICAL ANALYSIS:

After the collection of relevant data, it was processed and analyzed with descriptive

statistics. To compare motor educability and emotional stability among rural and urban girls of the selected subjects, Mean, standard

deviation and t-test was employed. To test the hypothesis the significance level was set at 0.05 percent.

TABLE NO: 1

COMPARISON BETWEEN RURAL & URBAN GIRLS ON EMOTIONAL STABILITY

Group	N	Mean	SD	MD	't' Value
Rural Girls	50	8.04	2.60	0.16	0.85
Urban Girls	50	7.88	3.37		

't' (0.05) = 1.98, 't' (0.01) = 2.61

From table no.1, result found that rural girls have more emotional stability (M=8.04, SD=2.60) as compared to urban girls (M=7.88, SD=3.37). The 't' value is 0.85, which is less than the tabulated value, so that there is no significant difference has been found at .05 level.

TABLE NO: 2

COMPARISON BETWEEN RURAL AND URBAN GIRLS ON MOTOR EDUCABILITY

Items	Rural Girls		Urban Girls		't' Value
	Mean	SD	Mean	SD	
Front Roll	8.62	2.09	7.34	2.96	0.14
Back Roll	7.74	1.83	5.94	2.80	0.25
Jumping Half Turn	9.04	1.35	8.36	1.92	0.43
Jumping Full Turn	6.96	1.86	5.08	2.53	2.23*

't' (0.05) = 1.98, 't' (0.01) = 2.61

From table no.2, first comparison made on the basis of front roll, result indicated that rural girls are superior ($M=8.62$, $SD= 2.09$) as compared to urban girls ($M=7.34$, $SD= 2.96$). The 't' value is 0.14 which is less than the tabulated value so that there is no significant difference has been found.

Second comparison made on the basis of back roll, result found that urban girls are inferior ($M=5.94$, $SD= 2.80$) as compared to rural girls ($M=7.74$, $SD=1.83$). The 't' value is 0.025 i.e. no significant difference has been found at 0.05 level.

Third comparison made on the basis of jumping half turn, result showed that urban girls are dominated ($M=8.36$, $SD=1.92$) by rural girls ($M=9.04$, $SD=1.35$). But no

significant difference has been found between two groups.

Fourth comparison made on the basis of jumping full turn, result indicated that rural girls are superior ($M=6.96$, $SD=1.86$) as compared to urban girls ($M=5.08$, $SD= 2.53$). The 't' value is 2.23 which is greater than the tabulated value, so it is significant at 0.05 level.

CONCLUSIONS:

- 1) It was concluded that rural girls have more emotional stability as compared to urban girls.
- 2) Rural girls are more superior on the basis of motor educability as compared to urban girls, and there is a significant difference between rural & urban girls.

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Yogic Practices: Need of the Hour

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Abstract

This descriptive study aims to focus on the various yogic practices and its relation to human life. Yogic practices are the need of the hour. Yogic practices contribute to all the aspects of health. A yogic practice contributes in physical fitness, mental agility and spiritual values. It is also expressed in overall satisfaction, inner happiness, piece and blissful experience. Yogic practices have been found useful in preventing and managing disorders related to the body system. The practice of yoga fills up the reservoirs of hope and optimism within us. It helps us to overcome all obstacles on the path of good quality of life along with spiritual contentment, and then it is rebirth. Therefore the growth in quality of life depends upon efforts taken while conduction of yoga.

Key Words: Concept of Yoga, Yogic Practices etc.

Introduction

In the present age of globalization everyone is trying to achieve their goal for the development. In each and every field there is competition for achieving their goal. To success achieving our goal one need to be keep him physically and mentally strong. The old age "A sound mind in a sound body" underlines the importance of a healthy body, it is source of happiness as it helps create an atmosphere of amiable interaction with our near and dear ones. In the present era Yoga is a valuable tool for every person of all ages to improve their quality of life. Yoga is said to be enjoyable physical activity which invites all the people of different age groups to become stronger, more mindful and more initiative enhances our mental health also.

Meaning of Yoga

The word "Yoga" comes from "Yuj" root in Sanskrit which means union or joining together. When a man develops a relationship with another that relationship is also known as yog. According to general language, three meaning of Yoga are Jodna, Samadhi and Sanyama.

Objectives of the Study

1. To know the important factors of Yoga.
2. To know the bond between Yoga and health of human.
3. To study the benefit of yoga in human life.
4. To focus on rule and techniques to be keep in mind while doing yogasana.

Methodology of the Study

In this study basically secondary source of data has been utilized. Secondary data includes research papers, books written by foreign and national authors on the said

theme, websites and related national and international journals and magazines articles etc.

Definitions of Yoga

Oxford Dictionary defined it, “a Hindu system of Philosophic meditation and asceticism designed to affect the reunion of the developed soul with the universal spirit”.

According to **Swami Vivekanand**, “Each soul is potential divine. The goal is to manifest this divinity within, by controlling nature-external and internal. Do it either by work or worship, psychic control or philosophy, by one, or more, or all of these and be free”.

According to **Bhagvad Gita**, “Yoga must be followed with faith, with a strong and courageous”.

According to **Patanjali**, “Yoga is affected by preventing the modifications of **pitta** or the thinking principal by keeping the mind in its unmodified state- a-state clear as crystal when uncolored by contact with our substance and by the practice of vairagaya- a state of abstinence of no attachment that is complete suppression of the passions.

Lord Sri Krishna, in the Geeta says that, Yoga is a way by which a person can discharge his duties efficiently with mental equilibrium and body poise.”

According to **Lyengar** (1976), the aim of Yoga is to teach the means by which the human soul may be completely united with the supreme spirit pervading the universe and thus serve absolution.

Principles of Modern Yoga

The modern yoga is based on the following basic principles.

1. Proper relaxation
2. Proper exercise
3. Proper breathing
4. Proper diet
5. Positive thinking and meditation

Elements of Yoga

Patanjali described eight elements of yoga in Yogasutras. The practice of each element is very important for the attainment of the goal of yoga. After getting proficiency in one element, we should proceed to the next element. The elaboration of these elements is given subsequently.

1. **Yama:** Yama is the first element of Astanga yoga. Through the practice of Yama one can attain from doing things that keeps one’s mind involved in the inevitable struggle for survival. One can remain away from violence. Yama consists of five moral codes of conduct. According to Maharshi Patanjali, there are five yama i.e. Ahimsa or non-violence, satya or truthfulness, Asteya or non-stealing Brahmacharya and Aparigraha.

2. **Niyama:** Niyamas are related to individual’s body and senses. Niyamas also ethical practices as yamas. There are five Niyamas such as Saucha, Santosh, Tapa, Swadhyaya and Ishwara pranidhana.

3. **Asana:** Asana means position or posture of body. It also means to sit in easy posture. Due to its popularity most of the people think that yoga is nothing but asana. Asana is a step towards yoga. In fact, asanas are performed to keep the body flexible, agile and young. Asanas also enhance the beauty of the body by

reducing in appropriate accumulation of it in the body. There are various types of asanas such as corrective asanas, relaxative asanas and meditative asanas.

4. **Pranayama:** Pranayama is the control of the process of breathing. It means the appropriate control over inhalation and exhalation. Basically there are three constituents of Pranayama such as Ujjayi, Suryabhedhi, Sheetkari, Sheetali, Bhastrika, Bhramari, Murcha and Plavini. Pranayama helps in regulating the metabolic activities and enhances the functions of heart and lungs.

5. **Pratyahara:** Pratyahara is a process of self-control in which an individual is able to exercise control over his senses. Indeed, to control the mind and senses is called pratyahara. In pratyahara, the senses no longer respond to the external objects that hinder mental concentration.

6. **Dharna:** Dharna is the concentration of mind. Generally, it is seen that the mind has a tendency to get scattered but if the scattered mind is brought under control and set to one focal point, concentration is said to be achieved. The focal point can be the centre of the forehead or navel or a pointed soothing light at a distance. Dharana is the first step towards Samadhi.

7. **Dhyana:** Dhyana is a process of complete constancy of mind. It is a stage prior to Samadhi. Generally, Dhyana remains attached to our life at every point. Whenever we perform any specific task in the family, it is usually advised to do that task with Dhyana. But we do not understand its appropriate meaning. In fact, Dhyana is a complete concentration

of mind over a period of time without any distraction.

8. **Samadhi:** The union of individual's soul with the Supreme soul is called the Samadhi. Samadhi is also called the checking or destruction of all the impulses of mind. During the stage of Dhyana, when the disappearance of self-awareness takes place, the yogi attains the stage of Samadhi. He begins to feel the real truth. He forgets himself completely. He begins to experience the divine pleasure.

Benefit of Yoga

Women become empowered through collective reflection and decision-making. The parameters of empowerment are as follows.

1. Improves flexibility of muscles
2. Corrects the posture and alignment of the body.
3. Renders better digestive system.
4. Strengthens internal organs
5. Cures asthma
6. Cures diabetes
7. Helps in curing heart related problems
8. Helps in skin glow
9. Promotes strength and stamina
10. Tones internal organs
11. Improves concentration
12. Helps in mind and thought control
13. Keeps mind calm by overcoming anxiety, stress and depression
14. Helps in releasing tension
15. Helps in blood circulation and muscle relaxation

16. Weight reduction

17. Protection from injury

Rules and Techniques of Yogasana

Some rules must be followed about Yogasana to get maximum benefit.

1. Yoga should be done in the morning
2. It is preferable to practice them after bathing because it makes the body light and fresh, hence increasing its elasticity. It should be done on empty stomach.
3. The place of asana must be clean and peaceful along with enough ventilation and fresh air.
4. The blanket or Yoga mattress should be spread on ground.
5. One should not talk while doing asana. Attention should be on the breath. Greater the concentration, greater the advantage to the body and mind.
6. One should start with simple and easy asana. Then gradually one can perform next asana. Patience and faith are required to do yoga regularly.

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7. A yoga Practitioner is required to pay due attention to his food. It should have sattvik qualities like light, easily digestible, fresh, little sweet and not spicy.

8. One should not eat at least for half an hour after doing yoga

Conclusion

Yoga is a practice that works on eight levels of development in the areas of mental, physical, spiritual and social health. When the physical heal is intact, the mind is clear and focused there is no more. Words fail to convey the total value of yoga. It has to be experienced. The better our practice, the brighter will be the flame. The primary aim of yoga is to restore the mind to simplicity and peace, to free it from confusion and distress. The practice of yoga fills up the reservoirs of hope and optimism within us. It helps us to overcome all obstacles on the path of good quality of life along with spiritual contentment, and then it is rebirth. Therefore the growth in quality of life depends upon efforts taken while conduction of yoga.

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Personality Profiles of Athletes and Non-Athletes

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Abstract

The set of Psychological traits and mechanisms within the individual that are organised and relatively enduring and that influence his/her interactions is personality. There are several numbers of psychological traits. But which one should be considered depends on the researcher. 70 students participated in a study, 34 were athletes and 36 were non-athletes. Only male participants were included in the study. They were administered with NEO FFI and Socio Economic Status Scale. 5 Hypothesis were tested.

Introduction:

Defining personality is a difficult task. Earlier, Allport in 1937 and Murray in 1938 struggled with the definition of personality. Now-a days, after considering various factors, personality is defined as the set of psychological traits and mechanisms within the individual that are organised and relatively enduring and that influence his/her interactions with, and adaptations to, the intra-psychic, physical and social environments. Psychological traits are characteristics that describe ways in which people are different from each other. But the difficulty is that, there are several numbers of psychological traits. Which trait should be considered and which not depends to a good extent on the perception of researcher.

When Raymond Cattell worked on 16 personality factor, first he has used a large number of personality traits and then by using factor analysis, he reached to the conclusion that 16 dimensions of personality are sufficient to describe personality of individuals (See Cattell, 1967). There was

other researchers also who concentrated their studies type approach. For example Eysenck proposed only three major personalities. Factors namely psychoticism, extraversion and neuroticism. He believed that detailed description of psychoticism, extraversion and neuroticism are sufficient to describe personality of individuals. However, since the last two decades some researchers who are working in the field of personality believe that neither Eysenck's approach is sufficient to describe neither personality nor the type approach. Among those who believe like this, there are two psychologists who worked for developing a five factor model. They are Costa and McCrae (1995). Before the famous work of Costa and McCrae, Goldberg (1981, 1996) prepared ground for five factor model of personality. In the present study, these five factors of personality were measured. The five factors are Extraversion, agreeableness, conscientiousness, neuroticism and openness.

Extraversion or surgency is described as talkative, assertive, forward, outspoken, etc.

Those who are having predominance of agreeableness were believed to be sympathetic, kind, warm, understanding and sincere. Broad characteristic of conscientiousness denotes organised, neat, orderly, practical, prompt and meticulous. Neuroticism includes moody, anxious and insecure characteristics.

It is believed that these five factors are sufficient to describe complete personality of the individual. In the present study, a group of athletes and another group of non-athletes took part as subjects. With regards to their age, and socio-economic status background, they matched each other.

Aim of the study: Main aim of the study is to measure 5 different personality characteristics of athletes and non-athletes and search whether athletes and non-athletes differ significantly from each other with regards to the five broad traits of personality.

Hypotheses: Unfortunately, most researchers even today, use null hypotheses. However, here, directional hypotheses were used. Assuming that the other factors are kept constant, it is hypothesized that:

- Athletes are significantly more extrovert than non-athletes.
- Agreeableness is significantly more predominant among athletes than non-athletes.
- Conscientiousness characteristics are significantly more predominant among non-athletes than athletes.
- Neuroticism characteristics are significantly more predominant among athletes than non-athletes.

- Openness is significantly more predominant among athletes than non-athletes.

Sample: Thirty four athletes and thirty six non-athletes were selected by using purposive sampling technique. This was done primarily to match the groups. Their age range was 20-22 years. Their socio-economic status was middle class. All were graduates. Only male participants were included in the study.

Tools used for data collection:

- NEO-FFI: Neo-Five Factor Inventory was used for measuring the personality characteristics of the subjects. This inventory was constructed and standardised by Costa and McCrae. It consists of sixty statements related to different personality traits. Each statement is provided with five alternatives. It measures five different factors of personality namely extraversion, agreeableness, conscientiousness, neuroticism and openness. The authors have given several reliability indices, the highest being 0.91. Also validity indices were cited by authors who show that the inventory has very high validity.
- Socio-Economic Status Scale: This scale was constructed by Janbandhu and Shubhra Nandi. This is a revised scale of the old version of 1990. It is a short scale and it contains only 14 questions, which demand factual information regarding social, economic and educational status of the family and the family members. The authors have reported reliability value of 0.83.

Procedure of Data Collection: Two approaches were used for collecting data. In some cases, personal interview technique was used whereas in some cases copies of the scales were handed over to the subjects. Filled copies were collected after 2-3 days.

Result and Discussion: The two groups of Ss were athletes and non-athletes. First, means and standard deviations obtained by the two groups on five factors were completed. Later on 't' test was used to find out whether the groups differ significantly from each other or not. On extraversion measure athletes obtain mean 37.24 ± 4.36 , while means obtained by non-athletes was 36.92 ± 4.24 . The difference in the mean is less and non significant also ($t=.31$, $df=68$, $p>.05$).

On agreeableness, athletes obtained mean of 29.29 ± 3.69 , and non athletes had a mean of 30.56 ± 3.41 . It seems on agreeableness also the two groups might not differ significantly. When treated by t-test, the value of 't' was equal to 1.51, which for 68 df is non-significant.

With regards to conscientiousness, however, the two groups differ significantly from each other. On conscientiousness athletes obtained mean of 34.92 ± 4.64 ; and non-athletes had a mean of 37.24 ± 4.16 . The complete 't' value is 2.21, which for 68 df is significant at .05 level.

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Neuroticism seems to be more among non-athletes. Group o athletes obtained a mean of 28.67 ± 3.27 ; non-athletes on the other hand had a mean of 30.10 ± 3.05 . When treated by 't' test of significance, the two groups fail to differ significantly ($t=1.91$, $df=68$, $p>.05$).

The last personality factor measured in the study was openness. On this measure, the group of athletes had a mean of 38.72 ± 4.92 , and non-athletes obtained a mean of 40.09 ± 4.3 . The difference in these two means is non-significant ($t=1.23$, $df=68$, $p>.05$)

Conclusions: On the basis of the results, the following conclusions were drawn:

- Extraversion was more or less equally pre-dominant among athletes and non-athletes.
- No significant difference was found between athletes and non-athletes with regards to agreeableness.
- Conscientiousness was significantly more pre-dominant among non-athletes than athletes.
- Athletes and non-athletes failed to differ significantly from each other.
- Openness characteristics were more or less similar among athletes and non-athletes.

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**Psychological Factors Influencing Exercise Adherence among Young Adult Females in
Pune City – A Pilot Study**

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Abstract

Physical inactivity remains a serious issue in our society, particularly for women. Among individuals who do initiate exercise programs, approximately half drop out during the first six months. Presumably, when individuals feel pressured to exercise, they lack the enjoyment and inner motivation to continue, causing them to discontinue their behavior. In this study Ten female participants completed the survey, Participants ranged in age from 20 – 25 yrs. Adherence was determined based on a calculation of the difference between a participant's reported exercise goal and her average weekly exercise. The results from the current study partially supported this hypothesis. Compared to adherent women, non-adherent women were more likely to endorse body-related and health-related motives for exercising; however, the results did not indicate that adherent women were more likely to express intrinsic motives for exercising. Overall, the results from this study provide two key messages: 1) that body-related and health related pressures have the potential to detract from women's abilities to persist towards exercise adherence, and 2) that psychological well-being improves with exercise adherence.

Key Words: Exercise Adherence, Young adult females, Psychological factors.

1. Introduction

As we enter the 21st century, one of the greatest accomplishments to be celebrated is the continuous pursuit of fitness since the beginning of man's existence. Throughout prehistoric time, man's quest for fitness has been driven by a desire to survive through hunting and gathering. With passage of time, though no longer driven by subsistence requirements, fitness remains paramount to health and well-being. In The Dark (476-1000) and Middle Ages (900-1400) also Physical activity and fitness were prerequisites for survival. . The renewed appreciation for human life, which evolved

during the Renaissance, created an environment which was ready for the widespread development of physical education. It appears that as societies become too enamored with wealth, prosperity and self entertainment that fitness levels drop. In addition, as technology has advanced with man, the levels of physical fitness have decreased. History offers little insight how to prevent or turnaround these recourses. Among individuals who do initiate exercise programs, approximately half drop out during the first six months (Dishman, 1990). [1]

Physical activity is very important from fitness and health point of view, which is equally important for males as well as females; now a day's female mortality rate is increasing due to various diseases and women specific health problems, so physical activities are vitally important for females and also we find females engaged in different health practices and fitness practices everywhere as prescribed by their physicians or mentors. Today, Social pressures focusing on health and physical attractiveness have been used to promote exercise among women. However, research has shown that motives driven by external sources result in decreased exercise participation i.e. it has shown a negative association with persistence. Physical inactivity remains a serious issue in our society, particularly for women. Among individuals who do initiate exercise programs, approximately half drop out during the first six months. Presumably, when individuals feel pressured to exercise, they lack the enjoyment and inner motivation to continue, causing them to discontinue their behavior. Women often report that their motivation to exercise is based on body related concerns, which reflect an external or interjected pressure. For example, Berman and colleagues (2005) [2] reported that women endorsed weight and body related reasons for exercise, and though they did exercise, they continued to experience body dissatisfaction, pre-occupation with weight, and poor emotional well-being. Importantly, research suggest that women report weight management as a motivation for exercise more often than do men, which may make them particularly

susceptible to exercise non-adherence. Results from other research have indicated that body-related motives are not only associated with social physique anxiety, depression, anxiety, reduced self-esteem, and body dissatisfaction, but also with less exercise participation. Other research showed that individuals who are more adherent to regular exercise programs, compared to those who are less adherent, experience greater improvements in fitness, physical function, quality of life, and disease specific outcomes. However, studies suggest that about 50% of adults who start a physical activity program will drop out within a few months. In this study the researcher will be attempting to find out the different psychological reasons for exercise adherence and non-adherence for particular area (Pune city), as habitat, environment, community also has greater impact on exercise adherence.

2. Methodology

Participants

Ten female participants completed the online surveys detailed below. Participants ranged in age from 20 – 25 yrs. All subjects were recruited from I2IT College Gym by convenient sampling method.

Instrumentation

Participants reported their sex, age, ethnicity, and a specific exercise goal, in days per week, which they aimed to meet for each of the four weeks of the study.

The Exercise Motivation Inventory- 2 (EMI-2)

The EMI-2 is a 51-item scale administered to assess the degree to which participants

endorse specific motivational factors. Participants answered each item on a Likert-type scale, ranging from 0 = *not at all true for me* to 5 = *very true for me* (Mark-land & Ingledew, 1997) [3]. They received an average score for each of 14 subscales, which fall under five major scales. The Cronbach's alpha, mean, and standard deviation for each of these five scales in the current sample were: psychological motives ($\alpha = 0.90, M = 50.35, SD = 13.75$); interpersonal motives ($\alpha = 0.90, M = 19.36, SD = 14.54$); health motives ($\alpha = 0.80, M = 28.33, SD = 7.26$); body motives ($\alpha = 0.87, M = 30.65, SD = 7.96$); and fitness motives ($\alpha = 0.84, M = 27.20, SD = 5.73$).

The Physical Self-Efficacy Scale (PSES)

The PSES is a five-item scale used to assess participants' beliefs in their ability to overcome specific barriers to maintaining their exercise intentions (Schwarzer & Renner, 2005) [4]. Participants answered each item on a Likert-type scale, ranging from 1 = *very uncertain* to 4 = *very certain*. The Cronbach's alpha, mean, and standard deviation for the current sample were: $\alpha = 0.89, M = 13.56, SD = 3.61$.

The Positive and Negative Affect Schedule (PANAS)

The PANAS is a 20-item scale that was used to assess participants' affective well-being (Watson, Clark, & Tellegen, 1988) [5]. Ten items comprise the positive affect subscale; the other 10 items comprise the negative affect subscale. Participants answered each item on a Likert-type scale, ranging from 1 = *very slightly or not at all* to 5 = *extremely*. The Cronbach's alpha, mean, and standard

deviation for each of the scales in the current sample were: positive affect: $\alpha = 0.90, M = 34.66, SD = 7.15$ and negative affect: $\alpha = 0.90, M = 22.15, SD = 7.81$.

The Satisfaction with Life Scale (SWLS)

The SWLS is a five-item scale that was used to assess participants' global judgment of their satisfaction in various life domains (Diener et al., 1985) [6]. Participants answered each item on a Likert-type scale, ranging from 1 = *strongly disagree* to 7 = *strongly agree*. The Cronbach's alpha, mean, and standard deviation in the current sample were: $\alpha = 0.93, M = 22.72, SD = 7.54$.

Participants reported a) the days of the week they exercised, b) the duration of exercise on each day, c) a subjective rating of their exercise intensity (low, moderate, high), and d) a subjective stress rating of their week, ranging from 0 = not at all stressful to 10 = extremely stressful.

3. Results

Adherence was determined based on a calculation of the difference between a participant's reported exercise goal and her average weekly exercise. Because reported goals were subtracted from average weekly exercise, a score greater than or equal to zero indicated that a participant met or exceeded her goal, while a score less than zero indicated that a participant failed to meet her goal. Of the 10 females, exactly 50% met or exceed their goals. An independent-samples *t*-test indicated that there was no difference between adherents and non-adherents in terms of goals set, $t(10) = -1.28, p = 0.21$; adherents $M = 4.39$,

$SD = 1.20$; non-adherents $M = 4.78$; $SD = 1.24$. In addition, there was not a significant difference in the median age between the adherent group ($Mdn = 23$ years) and the non-adherent group ($Mdn = 22.5$ years).

A Pearson correlation of participants' motives for exercise and their exercise consistency across the four-week data collection period indicated that motives were largely unrelated to exercise consistency. Body-related motives were the only significant correlate, $r = -0.30$, $p = 0.02$, indicating that participants who reported greater body-related motives were less consistent in their week-to-week exercise behaviour.

An independent-samples t -test was performed to assess differences between adherents' and non-adherents' motives for exercise. Mean comparisons indicated that compared to adherents, non-adherents reported significantly greater health-related and body-related motives for exercise, $t(10) = -2.04$, $p = 0.05$; $t(10) = -2.07$, $p = 0.04$, respectively.

An independent-samples t -test was performed to assess differences between adherents and non-adherents on physical self-efficacy, positive effect, and satisfaction with life, as reported by participants in the "Welcome Survey" at the beginning of the data collection period. Contrary to expectation, mean comparisons indicated that adherents reported significantly lower physical self-efficacy, $t(10) = -2.36$, $p = 0.02$; positive effect, $t(10) = -2.07$, $p = 0.04$; and satisfaction with life, $t(10) = -2.74$, $p = 0.01$ of note, these factors were

significantly correlated with each other among adherents and non-adherents alike.

To assess change across time, a 2×2 (group \times time) repeated measures ANOVA was conducted for self-efficacy, positive effect, and satisfaction with life. Results indicated a significant group \times time interaction for self-efficacy, $F(1, 10) = 9.75$, $p < 0.01$. Follow-up comparisons indicated that the adherents experienced a significant increase in self-efficacy across time, $F(1, 5) = 8.00$, $p < 0.01$, while the non-adherents did not, $F(1, 5) = 1.49$, $p = 0.23$. Similar results were found for positive affect and satisfaction with life. For positive effect, the overall repeated measures ANOVA indicated a significant group \times time interaction, $F(1, 10) = 6.87$, $p < 0.05$, and follow-up comparisons indicated that adherents experienced a significant increase in positive affect over time, $F(1, 5) = 8.31$, $p < 0.01$, while non-adherents did not, $F(1, 5) = 2.31$, $p = 0.21$. Finally, the group \times time interaction was also significant for satisfaction with life, $F(1, 10) = 7.57$, $p < 0.01$. There was a significant increase in satisfaction with life among adherents, $F(1, 5) = 8.38$, $p < 0.01$, and there was no significant change in satisfaction with life among non-adherents, $F(1, 5) = 2.06$, $p = 0.16$. Ratings of physical self-efficacy, positive effect, and satisfaction with life at the end of the study were also significantly correlated among adherents and non-adherents alike.

An independent-samples t -test was also performed to assess group differences in the ratings of physical self-efficacy, positive effect, and satisfaction of life at the end of the data collection period. Mean

comparisons indicated that adherents and non-adherents did not differ on their ratings of these three variables at the end of the four-week data collection period: physical self-efficacy, $t(10) = 1.21, p = 0.23$; positive affect, $t(10) = 1.41, p = 0.16$; and satisfaction with life, $t(10) = 0.53, p = 0.60$. However, at this time, adherents' scores were greater than non-adherents' score (though, not statistically significantly so) on each of these three variables.

4. Discussion

Specifically, it was expected that adherent women would be more likely to express intrinsic motivation, while non-adherent women would be more likely to identify extrinsic motives for exercising. The results from the current study partially supported this hypothesis. Compared to adherent women, non-adherent women were more likely to endorse body-related and health-related motives for exercising; however, the results did not indicate that adherent women were more likely to express intrinsic motives for exercising. Further confirming the difference found related to extrinsic motives, the data also showed that overall, body-related motives were negatively associated with exercise consistency. Thus, women who reported greater body-related motives for exercising were less consistent in their exercise behavior over the course of the four-week study, and they were less likely to

meet their own exercise goals during that time period. It is relevant to note that adherent

Consistent with the hypothesis, adherent women showed significant increases in reported feelings of psychological well-being over time. Over the course of the four-week study, there was a significant increase in physical self-efficacy, positive affect, and satisfaction with life among adherent women. Thus, as they continued to meet their goals, they felt an increased sense of psychological well-being. From this data, it is difficult to determine if increased psychological well-being resulted in greater exercise adherence, or vice versa. Also, there is a possibility that these factors could share bi-directional relationships. Nevertheless, the significant and positive increase they reported in these factors is notable, particularly as they relate to the women's exercise adherence.

Overall, the results from this study provide two key messages: 1) that body-related and health related pressures have the potential to detract from women's abilities to persist towards exercise adherence, and 2) that psychological well-being improves with exercise adherence. It may be more helpful to women if societal messages aimed to promote physical fitness focusing on factors that are more intrinsic, such as competence, autonomy, and relatedness.

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Performance Improvement through Psycho Physiological Components in Sports

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Abstract

From the last 15-20 years there is a growing interest in the study of the theoretical and applied issues surrounding psychophysiological process underlying performance. The Psychophysiological monitoring, which enables the study of these process consists of the assessment of the activation and functioning level of the organism using a multidimensional approach. In sports it can be used to attain a better understanding of the components underlying athletic performance and to improve it. There are some psychophysiological components mostly used are Electromyography (EMG) , Electrocardiography (ECG), Electroencephalography (EEG), Electrodermal activity (EDA) and respiratory rhythm. These psychophysiological components are giving new dimensions to the coaches and Sports psychology experts for the improvement of the performance of athletes. To achieve the goal can be really struggling for the athletes and it's not easy for them to get top results in important competitions and especially for long time. In these situations Sports Psychologists can help athletes to reach and maintain the top performance. Improving and reaching at the top of performance during training time and during competitions is one of the main goals for coaches and athletes. To reduce competitive pressure it is necessary for the athletes to handle the pressure, feelings and emotions in tough situations. Some of the psychophysiological components are largely used in sports to better understand the performance of athletes and to improve it to maximum –

Electromyography (EMG)

Electrocardiography (ECG)

Electroencephalography (EEG)

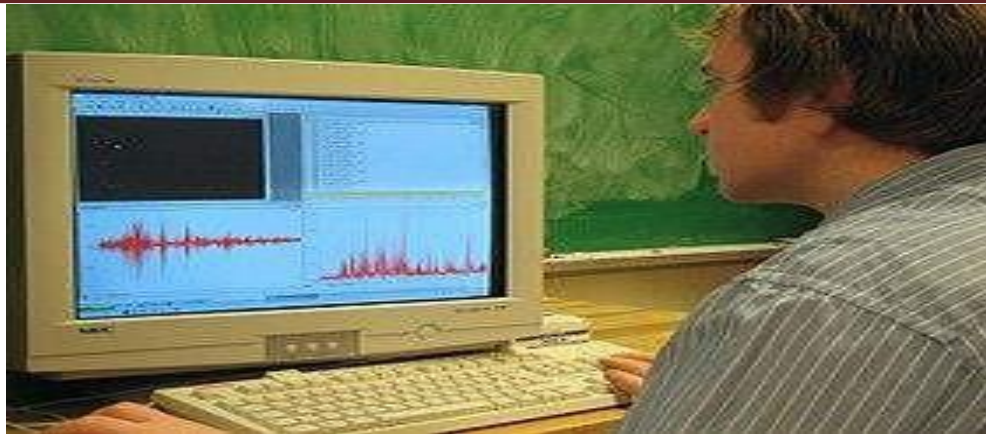
Electrodermal activity (EDA)

Respiratory rhythm

Key Words: - performance improvement, psycho physiological components

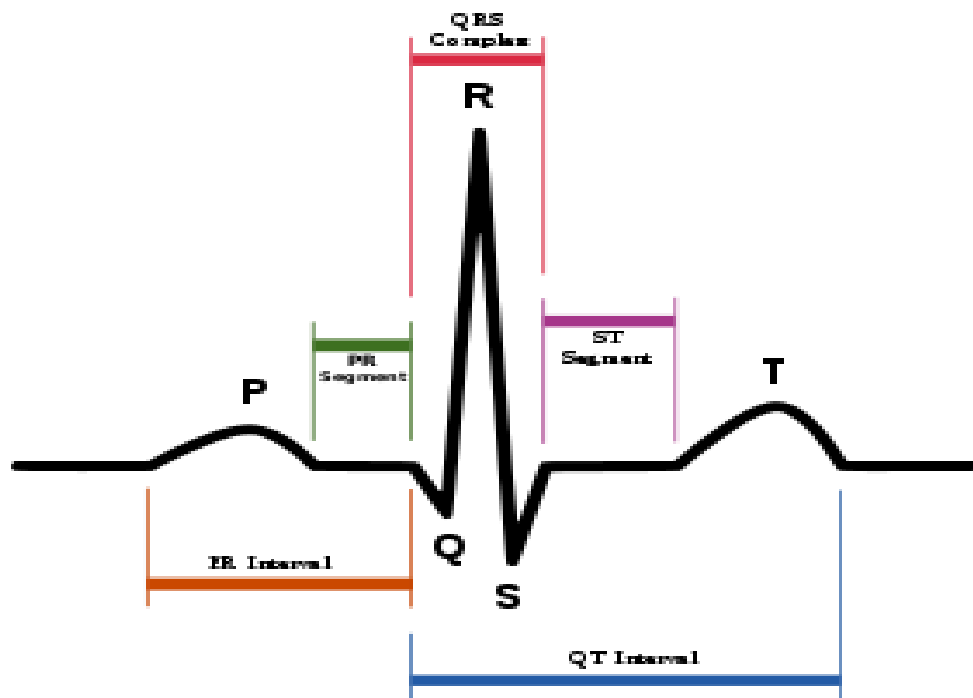
1. **Electromyography (EMG)** – This component is to analyze muscular signals generated by physiological changes in the state of the muscle membranes. The analysis to this type of component provides useful information to improve performance

in motor and sports activities. As per psychophysiological point of view muscle tension has often been associated with emotional experience and there are some target muscles such as trapezius, which are being monitored to get the information about the level of anxiety and general tension of the athletes.



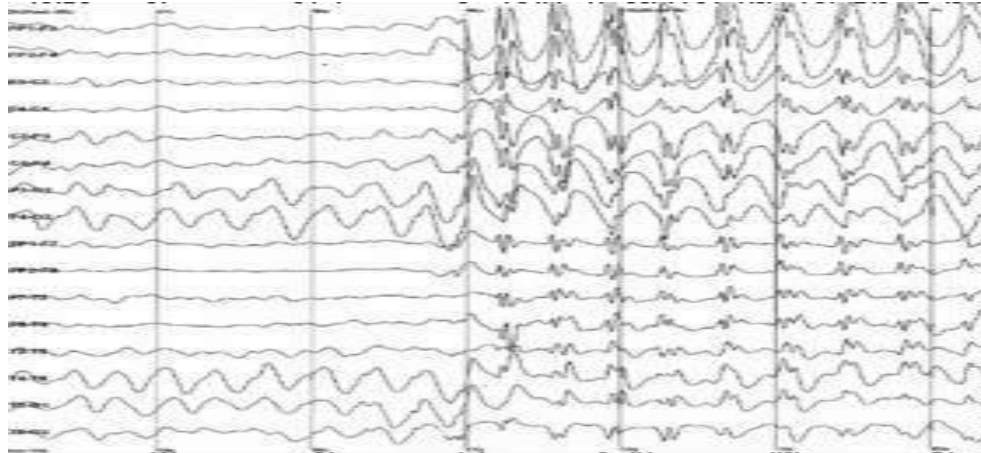
2 **Electrocardiography (ECG)** - This component is to measure Heart electrical signals and provides parameters such as Heart Rate (HR) or Heart Rate Variables (HRV i.e the time interval variation between two Heart Beats). For this a plethismograph is placed on the finger in place of traditionally connect electrodes to the chest. Through this Blood flow variations in the finger capillaries that represent the Heart beat are

recorded. New system is also introduced; chest strains wireless data assessed with the use of computer are used to monitor heart rate. In the field of sports psychophysiology Heart Rate Variables (HRV i.e the time interval variation between two Heart Beats) relates to arousal: Heart frequency increases, indeed under high stress and anxiety conditions.



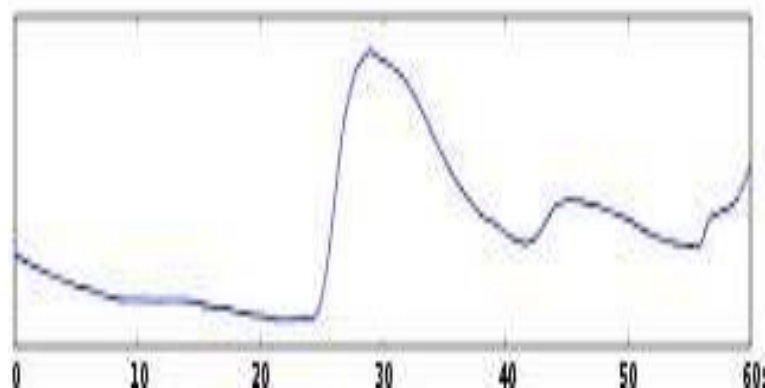
3. **Electroencephalography (EEG)** – is the mostly used component in sports. It's a neuro technique to record the electrical activity of the brain. These electrical activity measures through electrodes placed on the Head according to standard system of positioning. EEG studies show the specific

frequency of mental states like calm, arousal, attention etc. Electroencephalography (EEG) is used as a high resolution temporal technique to understand performance and its improvements in the context with sports sciences.



4. **Electrodermal activity (EDA)** – is also known as skin conductance is the property of human body that causes continuous variation in the electrical characteristics of the skin. The skin resistance varies with the state of sweat glands in the skin. Sweating is controlled by the sympathetic nervous system and skin

conductance is an indication of psychological and physiological arousal. Connection with automatic nervous system if the sweat glands activity increases it increases skin conductance too. In this way skin conductance can be measure of emotional and sympathetic responses.



5. **Respiratory rhythm** – Another useful psychophysiological component usually evaluated. A regular cycle of inspiration and expiration, controlled by neuronal impulses transmitted between the respiratory centers in the brain and the muscles of inspiration in the chest and diaphragm. The normal breathing pattern may be altered or influenced by a variety of conditions like anxiety, stress, emotions etc. caused by poor performances. Specific Heart rate self regulation training techniques are used to normalize the respiratory rhythm during competition time in sports.

Conclusion: - These psychophysiological components can help to improve performance at its best. These methods are also effective to improve patience, mental and emotional state. Helps to reduce pressure, anxiety and stress before and after the competition.

Now a days because of new techniques and new portable invented machines it is easy to test on the grounds in realistic situations during competitions which may be helpful for athletes and coaches to understand the problem and solve easily with the help of experts .

Portable Machines



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Narendra Modi's Views on Yoga

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Abstract

Yoga is a science. Regular Practice of yoga will develop physical fitness and prevent form illness and move towards wellness. The author focuses this paper the Prime Minister's views on yoga as revealed from his various steps to be taken to develop creativity among yoga and speeches delivered during his periods as a Prime Minister.

Key Words : Narendra Modi, Yoga, UNGA, International Yoga Day, India

Introduction

Yoga is an ancient Physical mental and spiritual practice that originated in India. Today it is practiced in various forms around the world and continues to grow in popularity. The India's popular Prime Minister Narendra Modi was giving the idea of celebrating the "International Yoga Day" and it was focused by Prime Minister Narendra Modi at United Nations General Assembly (UNGA) in September 2014. Later in December 2014, UNGA Unanimously (endorsed by record 175 member states) adopted India-led resolution (69/131) to observe 21st June as International Day of Yoga. The innovative approach of India Prime Minister Narendra Modi the whole world was celebrated first International Yoga Day on 21 June 2015. Modi is a dynamic personality political leader, his international outlook equipped with feeling of whole world brotherhood through the activity of yoga.

"Yoga is an invaluable gift of India's ancient tradition. It embodies unity of mind and body; thought and action; restraint and fulfillment; harmony between man and nature; a holistic approach to health and wellbeing. It is not about exercise but to discover the sense of

oneness with yourself, the world and nature. By changing our lifestyle and creating consciousness, it can help in well being. Let us work towards adopting an International Yoga Day" – Narendra Modi., UN General Assembly. The current Prime Minister of India Mr. Narendra Modi was first proposed the idea of International Day of Yoga on 27 September 2014 during his speech at the UNGA. The first International Day of Yoga was celebrated across the world on 21 June 2015. Prime Minister Modi said, Yoga is the journey from 'me' to 'we', yoga is the art of oneness, a journey from Aham to Vayam, from me to we i.e. "Aham (me) to Vayam (we)." He also said , that the practicing yoga gives us positive impact and positive energy, there is big chance coming in society, yoga can helps us to fight from stress and illness, freedom from medicines. Prime Minister Modi feels today when the world is grappling with challenge of terrorism yoga shows the way to lasting peace, through physical, mental and spiritual well being . He said yoga was not just a form of exercise, it's the way of peace, the regular practicing yoga leads to higher consciousness where me and we merge together and become one.

Yoga itself is a physical, mental and spiritual practice that originated in India about 6000 years ago. Swami Vivekananda, the first Hindu teacher to actively advocate and explain yoga to western audience, toured Europe and the United States. PM Modi is the great follower of Vivekananda, he said through the referring Vivekananda's definition of yoga, it helps one's body achieve oneness with one's mind and the self become one with the society at large.

Indian Prime minister Narendra Modi said, "We in Indian believe in both exploring the frontiers of science and technology, and researching the depths of our soul." Modi also said at the addressing a gathering of the forest research institute in Dehradun, today's fast changing time, yoga binds together a person's body, brain and soul. PM Modi appreciated of whole world because yoga awareness campaigns are organized by various nation on this day. Yoga is an old age practices by India that boosts the physical mental and spiritual wellbeing but presently it has created quite a lot of buzz all across the globe, yoga training is now a part of pop culture. The first yoga Day was celebrated on 21 June 2015, held at Raj Path in New-Delhi. PM Modi and other dignitaries performed around 21 yoga asanas and created two Guinness world records. The first record was for being the world's largest yoga class with 35985 people and the second one was for having maximum number for participating nationalities, which are 84.

Yoga is passport of health assurance, a key to fitness and wellness, says Prime Minister Modi. He also said, the practicing yoga can remedies world towards wellness to illness, a person does not want side

effects of medicines, the regular practicing of yoga he also prevent himself from illness and move toward wellness, yoga can freedom the society from medicine. According to PM Narendra Modi practicing yoga helps fight stress and find peace, yoga goes beyond boundaries of age, gender, caste, creed, religion and promises world to restraint and balance, yoga can prevent the fear of world and promises hope, strength and courage.

Yoga is the first step towards holistic healing. Narendra Modi suggested, that those who suffer from lifestyle diseases and fitness disorders yoga can be beneficial and prevent for this diseases, there is a huge range of exercises and yoga poses that give a holistic healing power to the body, mind and soul, yoga is the health assurance in zero budget. People are spend ample time to workout at the gym or attend fitness classes, but yoga is a blessing for human being, practicing yoga no need to big infrastructure or costly instrument, all you need is a quiet space and a mat.

PM Modi claimed that yoga has also played a big role in bridging India with the world. Yoga has become a part the education curriculum in several states across the country. Modi said, this increasing popularity of yoga spurred UNESCO to add yoga to its list of intangible cultural heritage, in December 2016; UNESCO described, yoga is an ancient physical, mental and spiritual practice that originated in India. Yoga is a Sanskrit word which means to join or to unite. In the early morning if the yoga practice by all on daily basis has numerous health benefits, yoga increased muscle strength and tone, flexibility, improved respiration energy and vitality. It also

helps to maintain balanced metabolism, reduced weights, improves cardio and circulatory health and improve athletic performance. Modi said, not necessary to perform yoga 24 hours a day, only fifty or sixty minutes yoga practice should be enough to bring harmony to the body, mind and intellect. In the occasion of Yoga Day 2018 PM Modi says in Ladakh, from Dehradun to Dublin, from shanghai to Chicago, from Jakarta to Johannesburg, Yoga is everywhere, presently yoga is a ray of hope for future of the world, its play's a important role in promoting health, hence June 21 would be observed as International Day of Yoga every year.

Aims and Objectives

International Yoga Day aims to raise awareness worldwide to the many benefits of practicing yoga . On the basis of the Prime Minister's speeches, international yoga Day addresses, lectures and massages the main aim and objectives of yoga as follows :

- To create the interest to practicing yoga among the general public, especially among the younger generation.

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- To forester the sense of yoga organized may arrange in the nation-wide and world – wide yoga movement and International Yoga Day.
- To gain from the regular practice of yoga through long term benefits in health, happiness and wellbeing.
- To create peace and harmony world – wide through the medium of yoga

Conclusion

On the basis of the aforesaid study it can be concluded that practicing yoga regularly is in our control and is available free of cost one must understood the benefits of regular practicing yoga and giving fifty to sixty minutes of 24 hours to keep oneself healthy for long life and efficient work ability. We should never denied that India Prime Minister Narendra Modi is the Pioneer of International Yoga Day, Modi's views, yoga can make a nation strong, because yoga can plays a vital role of physical fitness and wellness of people, only the physical fitness and wellness can make a nation strong . PM Modi also said. “ Today we do not need terrorism but yoga for peace.”

Comparative Study of Negative Mood Regulations between National, State and District Level Female Kabaddi Players

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Abstract

The aim of the present study is to compare mood regulation ability of national, state and district level female Kabaddi players. To conduct the study, 40 national (Ave. age 24.21 yrs.), 40 state level (Ave. 22.01 yrs.) and 40 district level (Ave. age 20.18 yrs) female Kabaddi players were selected as sample through purposive sampling technique. Negative Mood Regulation Scale prepared by Catanzaro and Mearns (1990) was used to assess negative mood regulation in selected female Kabaddi players. One Way ANOVA and LSD test reveal that ability to regulate negative mood was found to be significantly higher in national level female Kabaddi players as compared to state and district level female hockey players. It was concluded that superior negative mood regulation ability enables national female Kabaddi players to cope with adverse situation more easily as compared to state and district level female Kabaddi players.

Key Words: Negative mood regulation, females, hockey, national, state, district

INTRODUCTION

Traditional Indian sport Kabaddi is not only physically but also psychologically demanding. In a sport like Kabaddi individual brilliance is beneficial but the matches are won by collective efforts. During play referee's decision, team member's mistake, tactical and technical errors create unpleasant situation for players. In order to deal with it regulation of negative emotions may be important. Lane and Terry (2000) defined mood as a set of feelings, ephemeral in nature, varying in intensity and duration, and usually involving more than one emotion". This definition is criticized widely as it did not differentiate between emotion and mood.

More acceptable definition of mood regulation was provided by Parkinson, Totterdell, Briner, & Reynolds (1996). According to them emotions are caused by specific events localized in time, whereas moods build up as a consequence of either

a concatenation of minor incidents, persistent conditions in the environment, and/or internal metabolic or cognitive processes. As per Beedy and Terry's (2000) definition of mood, it encompasses factors such as (a) cause is not well defined. (b) Person may not be aware of the cause, (c) mostly cognitive and may be controlled. So, negative mood regulations are nothing but a person's perception towards circumstances around which direct his/her specific behaviour. It is individual judgment of certain situations and may be connected to depression, psychological stress, anxiety and varied psychological symptoms.

So many researchers have established relationship between negative mood regulations with performance outcome. Based on these studies, psychologists opined that depressed mood trigger anxiety, aggression, poor self esteem etc. which is sign of reduced coping mechanism of an individual. By virtue of

this relationship between negative mood regulation and performance, it was advocated that coping with negative mood is essential to perform at their best. The same notion was opined by Totterdell and Leach (2001) in their study.

It is very much an established fact that elite sportspersons possess certain psychological characteristics that differentiate them with rest [Mohammadzadeh and Sami (2014), Singh (2015), Arif and Mehandi (2015), Boora (2016). In a sport like Kabaddi researchers like Mishra (2015) have identified psychological variables that are conducive to sports performance. It is equally true that so far negative mood regulation in female Kabaddi players has not been assessed in the light of their level of achievements. Hence the present study was planned to assess negative mood regulation between national, state and district level female Kabaddi players.

HYPOTHESIS

Negative mood regulation among female Kabaddi players will differ significantly on the basis of their level of achievement.

Methodology:-

The following methodological steps were taken in order to conduct the present study.

Sample:-

To conduct the study, 40 national (Ave. age 24.21 yrs.), 40 state level (Ave. 22.01 yrs.) and 40 district level (Ave. age 20.18 yrs) female Kabaddi players were selected.

Purposive sampling was used in the present study.

Tools:

Mood Regulation Scale:

To measure mood regulation in selected female Kabaddi players, Negative Mood Regulation Scale prepared by Catanzaro and Mearns (1990) was used. It consists of 30 items to assess ability to regulate negative mood. This scale is highly reliable and valid.

Procedure:

- 40 national, 40 state and 40 district level female Kabaddi players were identified and selected for the present study.
- After obtaining consent from these subjects about their voluntarily written consent for participation in this study, Negative Mood Regulation Scale prepared by Catanzaro and Mearns (1990) was administered.
- The responses of female Kabaddi players were scored off according to method suggested by author. After scoring the data was tabulated as per pre defined study groups.
- One Way ANOVA was used to compare negative mood regulations between national, state and district level female Kabaddi players
- The analysis of data is presented in table 1 and 2 respectively.

RESULT AND DISCUSSION

Table 1

Descriptive Statistics on Negative Mood Regulation Scale in a Group of National, State and District Level Female Kabaddi Players (N=120)

Groups (Female Kabaddi Players)	N	Negative Mood Regulation	
		Mean	S.D.
National	40	132.00	12.65

State	40	125.05	10.28
District	40	125.60	12.52
		F=4.24, p<.01	

Results obtained through One Way ANOVA indicate that negative mood regulation of national, state and district level female Kabaddi players did differ significantly with each other. The F ratio of 4.24, which met the criteria of

statistical significance adds weightage to this finding.

Least Significant Difference Test presented in table no. 2 gives group-wise comparison of mean scores on negative mood regulation.

Table 2

Comparison of Mean Scores on Negative Mood Regulation in a Group of National, State and District Level Female Kabaddi Players (N=120)
Least Significant Difference Test with Significance Level .05

Mean (I)	Mean (J)	Mean Difference (I-J)
National Level Female Kabaddi Players	State Level Female Kabaddi Players	6.95*
	District Level Female Kabaddi Players	6.40*
State Level Female Kabaddi Players	National Level Female Kabaddi Players	-6.95*
	District Level Female Kabaddi Players	-.55
District Level Female Kabaddi Players	National Level Female Kabaddi Players	-6.40*
	State Level Female Kabaddi Players	.55

* Significant at .05 level

A perusal of entries reported in table 2 gives following inferences:

- National level female Kabaddi players exhibited significantly superior mood regulation ability (M=132.00) as compared to state (M=125.05) and district level sportspersons (M=125.60). The mean difference of 6.95 and 6.40 respectively were found to be statistically significant at .05 level.
- No significant difference was observed in negative mood regulations of state (M=125.05) and district level female Kabaddi players (M=125.60). The mean difference of .55 was not found to be statistically significant.

On the basis of analysis of data, following results are obtained:

RESULTS:

- National female Kabaddi players exhibited significantly greater ability to cope with negative emotions as compared to state and district level female Kabaddi players.
- Psychological characteristics i.e. negative mood regulation was not found to differ significantly between state and district level female Kabaddi players.

DISCUSSION:

A study conducted by Mishra (2015) found that elite male Kabaddi players

possess superior frustration tolerance capacity as compared to sub-elite male Kabaddi players. This reinstates Morgan (1979) theory that 70% of Olympic athletes are good at regulating their negative mood states. So national female Kabaddi players take negative mood signals as positive aspect so that they can eliminate the flaws in their game. Hence

national female Kabaddi players' better ability to regulate negative mood as compared to state and district level female Kabaddi players is not surprising.

CONCLUSION:

On the basis of results, it was concluded that negative mood regulation among female Kabaddi players differ significantly on the basis of their level of participation.

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Measurement of Anxiety among Sportspersons

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Abstract

Anxiety is a normal reaction to stress. It may help a person to deal with a difficult situation, by prompting one to cope with it. When anxiety becomes excessive, it may fall under the classification of an anxiety disorder. The study conducted in Rajarshi Shahu Mahavidhyalaya, Parbhani. 120 Sportspersons participated during the year 2016-18 in different sports events have been selected. Renier Martin's Sports Competition Anxiety (SCAT). Questionnaires have been applied. The result reveals that 35%, 49.16% and 15.84% players belong to low, medium and high level of anxiety.

Key Words: Anxiety, introvert, traits, Physical education and sports.

Introduction:

Anxiety is a physiological and psychological state characterized by cognitive, emotional and behavioral components. These components combine to create an unpleasant feeling that is typically associated with uneasiness, fear or worry. Anxiety is a generalized mood, a state, which is the result of threats that are perceived to be uncontrollable or unavoidable. It can be distinguished from fear on the basis that fear is a reaction to an external threat. Anxiety is often accompanied by physical effects like heart palpitation, nausea, chest pain, shortness of breath, stomach ache or head ache. Physically, the body prepares the internal organism to deal with a threat. Anxiety not only shows that internal signs but also can be noticed through the external signs. External signs of anxiety are pale skin, sweating, trembling, pupil dilation.

Objective of the Study:

To measure the anxiety level among the different sportspersons

Hypothesis of the Study:

Anxiety as an important introvert trait to participate and perform in Sports Competitions

Review of the Literature:

Bekiari (2011) conducted a study on the relationship of anxiety level and performance in NAIA Inter Collegiate Basketball Games. Five NAIA inter collegiate men's basketball teams and 53 players served as subjects. Two inventories measuring trait and state anxiety were administered to the players one half hour prior to the inter collegiate games. The relationship between anxiety level of NAIA basketball players and their performance in games indicated no significant levels. Players who possessed high levels of pre game anxiety were apparently able to dissipate it once the game began, not reflecting the anxiety in their performance. Turnovers per minute was the basketball performance indicator most consistently affected by anxiety, reading significant level in the following

situations (1) players who participated over 20 minutes, (2) in the relationship between the length of time played, her of personal fouls and turnovers, (3) Game started with anxiety represented by one test item and non starters by seven test items, (4) all hers with anxiety represented by five different test items. **Pandit (2017)** studied the anxiety rating scale – 2 and the competitive state anxiety inventory – 2 were administered to 100 male university intramural volleyball players 15 min. before a match began. For 50 participants, the above order of presentation was used for the other 50 the order was reversed. Correlations for cognitive anxiety, somatic anxiety, and self confidence between the two inventories were .47, .63 and .67, respectively, for scores from order 1 and .56, .56 and .84 for order 2. This study considered the influence of competitive anxiety and self confidence state responses upon components of performance. Basketball players (n=12) were trained to self report their cognitive anxiety.

Methodology:

Renier Martin’s sports competition anxiety (SCAT) Questionnaire was distributed to 120 inter Collegiate players of Rajarshi

Results: N=120

Shahu Mahavidhyalaya Parbhani who participated in different sports events during the year 2016-18 have been selected 24 hours before starting the competition. The directions were read by the researcher at a dictation speed to make the subjects understand about what they were exactly required to do. The SCAT has fifteen items out of which five are spurious questions which were added to the questionnaire to diminish response bias towards the actual test items. These five scores were not considered in the final assessment. The subjects were instructed to respond to each item according to how they generally felt in competitive sport situations. Every statement has three possibilities i.e. a) Hardly ever, b) Sometimes, c) Often. For each item score was “1” the maximum score may be 25 and minimum score may be 0. Scores obtained by each subject on each statement were added up which represented one’s total score on scores were added separately before and after motivation for basketball players. The entire basketball players have been grouped into low, medium and high anxiety categories based on scoring.

Table 1: Measurement of anxiety level among the sportsperson

Sr. No.	Categories	Anxiety Level	
		Frequency	Percentage
1	Low anxiety: upto 5 scores	42	35.00
2	Medium anxiety: 6 to 10 scores	59	49.16
3	High anxiety: Above 10 scores	19	15.84
	Total	120	100.00

Anxiety among different sportsperson has been presented in Table1. It is reported from table that before tangible motivation 35 percent 49.16 percent and 15.84 percent basketball players were in low.

Conclusion:

Sports anxiety is a psychological phenomenon which is formed to all sports

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men during and after competitive period. It is a common phenomenon and also a tentative state of mind. There for achievement of anxiety as an introvert and extrovert personality traits of basketball players is crucial in the highly competitive field of sports,

Differences in Selected Physiological & Psychological Measures between High & Low Resting Pulse Rate Groups

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Abstract

Relaxation status. Cardiac respiration endurance and explosive power measure the physical effective learning in school experience. The main objective of this study is to find whether High and Low Resting Pulse rate group are distinguished instead by the variables that affect the effectiveness in school at High School level. The pre-prandial pulse rate of all the 60 students of class X of a high school were taken and ranked from low to high. 15 students at the lower end constituted the Low resting Pulse rate groups (High Fitness) and 15 students at the higher end constituted the high resting pulse rate group (Low Fitness). All the differences in group mean measures in Aerobic capacity, Anaerobic capacity Breathing rate, Positive Breath Holding, Negative Breath holding, concentration, memory and highly significant in favor of low resting pulse rate groups. The implication of this finding is a student who maintains reasonably high level of physical fitness by appropriate sports behavior will acquire high levels of physical and psychological characteristic required for success in Academic Pursuit.

Key Words: Physiological & Psychological Measures, high & low resting pulse rate groups

Introduction

In this exhaustive treatise on Physical fitness Joki attributes all positive qualities of functional living tolerance to cold, heat, resistance to infection, emotional stability, etc. besides work capacity to Physical Fitness. Resting Pulse Rate is a criterion of Physical Fitness.

Similarly MC. Guigan and also Haugen attribute all qualities of functional efficiency to Relaxation. Resting pulse rate is also

considered as a criterion of relaxation status in the same way galvanic skin reflex is.

In the case of students, concentration, memory, anxiety, will power, besides functional potential represented aerobic and anaerobic capacities are assumed to contribute to efficiency in studies in the case of students of normal, intelligence.

The purpose of the study was to examine whether high and low resting pulse rate group are distinguished by selected

physiological and psychological variables conducive for efficiency in school studies.

Methodology

Sixty students of class X of a residential school in Shimla constituted the subject for the study.

The students were tested on the concerned variables as per standard procedures.

The students were ranked, Low to high on resting pulse rate scores. Fitness students from each and, approximate 27% of total no. of students, were taken to form low and high resting pulse rate groups. Concentration was measured by reading comprehension which is the type of concentration relevant for study habits. The subject was given a fixed time to read a passage in Hindi with high information content subsequently they were to answer short answer questions relating to the matter studied. No. of correct responses is the score of the subject in concentration.

A number of articles were exposed to the subject for a second subsequently he was asked to list the objects. The number of objects correctly listed is the score in memory.

Anxiety was measured by Taylor's Manifest Anxiety scale.

Positively and negatively breath holding times were self measured in seconds to subjective feeling of trance. They measure tolerance levels to oxygen debt and Lactic Acid build up. They are also taken to be criteria of Will Power."

Aerobic capacity was measured by Cooper's Twelve Minute run-walk test. Anaerobic capacity was measured by Margaret's step test. Together they represent capacity for sustained work output (Stamina). The group mean differences between the 2 groups in each of the criterion variables were tested for significance of difference by students' 't' test.

Findings

The results are represented in the table on next page. All the differences are highly significant at 1% level of probability.

Discussions

The findings are in agreement with the writings of Jokl and Mc. Guigan

Control of tension in somatic muscles influences tension in muscles of organs improving their efficiency, this in turn improves perception and making function represented by willpower, concentration, memory, anxiety, etc.

Conclusions

Level of Physical Fitness as measured by Resting Pulse Rate predicts levels of concentration, memory, anxiety, willpower, aerobic capacity and anaerobic capacity.

Monitoring resting pulse rate, a simple procedure and programme to maintain a fairly low level of resting pulse rate may ensure higher levels essential attributes for academic achievements at high school stage.

Table

Significance of Differences between Group means in selected criterion variables

Sr.No.	Variables	Score	Mean of		Difference	“T”
			Low Pulse Rate	High Pulse Rate		
	Preprandial Pulse Rate	No/sec	73	92	19	26.1596
1	Aerobic Capacity	Meters	2922	2784	138	4.83
2	Anaerobic Capacity	Kg.m/Sec	26.23	44.96	18.72	4.84
3	Breathing Rate	No/Sec	14.53	23.86	9.33	8.71
4	Positive Breath holding Time	Sec	47.53	28.80	18.73	28.94
5	Negative Breath holding time	Sec	33.40	21.20	12.20	11.21
6	Concentration	Number	29.20	18.00	11.20	18.01
7	Memory	Number	22.47	15.28	7.20	19.11
8	Anxiety	Number	31.13	14.40	16.73	17.21

“t” should be greater than 2.763 for significance at 1% level.

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**Effectiveness of Physical Education Academic Program on Psychological Characteristics
among Varsity Students**

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Abstract

The main purpose of the study was to access psychological and physiological characteristics among varsity students through self concept and stress. For this researcher had selected 20 subjects from University of Jammu. The age of the subjects was ranging from 18-28 years. The psychological variables selected in this study were Self concept, stress. To assess the selected variables i.e. for self concept Self concept questionnaires of Rosenberg, for stress questionnaire of Sheldon, The statistical technique t-ratio was used to analyze the data and the level of significance was fixed at 0.05. The whole work of the researcher depends upon the collection of the data that is why the collection of data is called the base around which the whole research work revolves. So the researcher is asked to collect the data in a very precisely manner as to face less difficulties during the whole researcher work.

Key Words: Varsity, self concept, stress, exhalation, inhalation

Introduction

Daily physical education class may provide the opportunity for students to meet Healthy People to guide for physical activity. Many schools districts, however, are reducing physical education Requirements and some are eliminating programs The percentage of schools requiring physical education in each grade decreases from approximately 50% in grade Physical education classes are being replaced with other classes in an effort to increase the students' academic achievement as measured by standardized tests. Despite this trend, no clear evidence indicates that academic achievement will improve if

physical education classes are cut. But it is not fact it is only misunderstanding and misconcept among general line administrators. (Ahamed Y, et, al 2007) Now a day we see Physical education classes provide an opportunity for students to be physically active during the school day. School-based physical education has many benefits, including increasing physical activity and improving physical fitness and muscular endurance. Increasing physical activity through physical education is also a proposed public health strategy to reduce childhood obesity. Although there has been no evidence to date to show that maintaining or increasing time in physical education class negatively affects academic

achievement in other subjects, there is concern that physical education classes could take time away from those subjects. More information is needed to address this concern and support public health objectives to maintain or expand physical education programs.(Cameron M, et, al, 2000)

We examined the influence of physical education in US elementary schools on direct measures of academic achievement in mathematics and reading from kindergarten through fifth grade. Our study was unique in at least ways: first, the measurement of academic achievement was a standardized test administered at time points. Second, we examined the association between physical education and academic achievement with a prospective cohort design. Finally, we examined participation in physical education as it existed in a representative sample of US students entering kindergarten in fall 1998 who were followed through spring 2004.(Davis CL, et, al, 2007)

Methodology:

For the purpose of this study 20 subjects were selected as subjects. The subjects for this study were selected from university of Jammu. The age of the subjects were ranging from 18-28 years. All subjects were from same university therefore, it was easy for researcher to assemble them. Psychological variables selected in this study were Self concept, stress. To assess the selected variables, i.e. for self concept Self concept questionnaires of Rosenberg, for stress questionnaire of Sheldon, The statistical technique t-ratio was used to analyze the data and the level of significance was fixed at 0.05.

Observation and Discussion:

The data collected on 20 subjects were computed by using t-ratio statistical technique .The result of these data has been depicted in the following table.

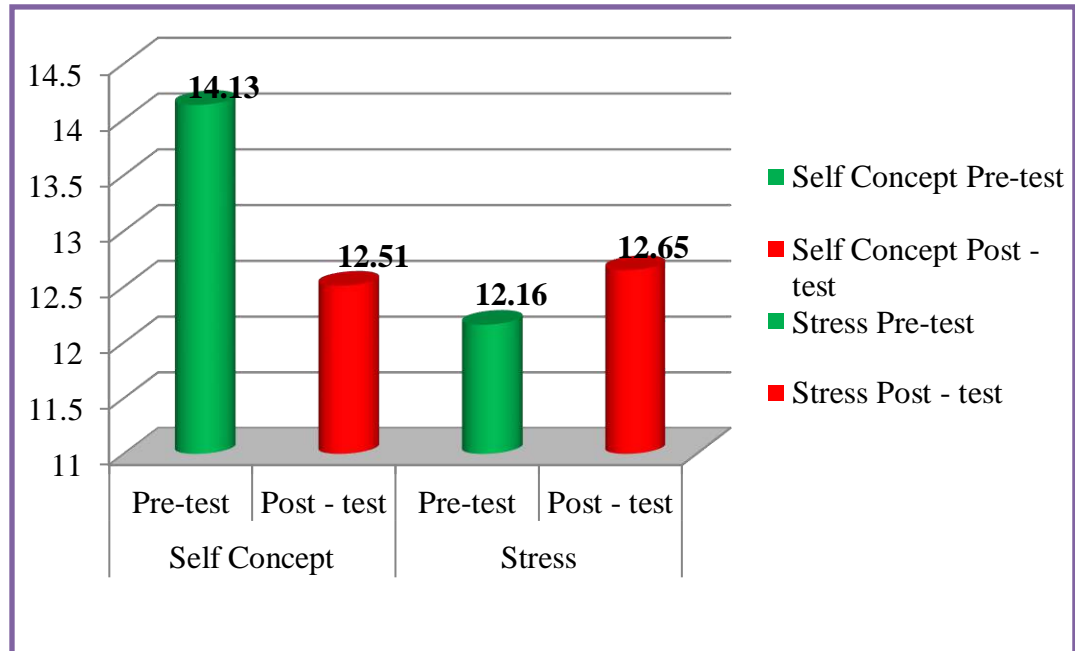
Tablet-1

Statistical comparison of the selected Psychological variables is as given under.

Variables	Test	Mean	S.D.	t-ratio
Self Concept	Pre-test	14.13	2.87	1.45
	Post - test	12.51	1.13	
Stress	Pre-test	12.16	2.26	0.5
	Post - test	12.65	2.18	

Graph-1

Graphically Representation of Mean show of Psychological Characteristics among Varsity Students



Discussion of Hypothesis:

The present study deals with the effectiveness of physical education academic program on psychological and physiological characteristics among varsity students of university of Jammu. Their range of age is between 18-28 years.

The hypothesis of the present study was that there would be insignificant effect of self concept and stress among varsity students. So the researcher's pre assumed hypothesis is partially accepted.

Conclusion:

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The researcher compared Psychological Characteristics among Varsity Students, within the limitations of the present study and on the basis of findings it is concluded that there is insignificant difference in Psychological Variables between the self concept, and stress of Psychological Characteristics among varsity Students. The researcher compared the particular Psychological variables during the particular Events; it is found that there is also insignificant difference in between self concept, and stress. Hence the researcher's pre assumed hypothesis is rejected.

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Psycho-Physiological Factors and Performance in Archery

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INTRODUCTION

Sometimes we see some kinds of astonishing feats in various levels of competitions and subsequently we are expecting but fail to achieve. Here, we might have missed arousal management strategies. Now days, managing arousal levels plays crucial role in performance of the players. The quality of a player's performance often depends upon how aroused the player is. Of course, archers are not the exceptions.

Arousal

Arousal is the synonymous with the condition of alertness; the aroused individual is in a physiological state of readiness. According to Posner and Boies (1971), "arousal is one of three important components of attention, selective attention and limited information processing capacity". When the player is keenly aroused, he becomes more attentive and narrowly focused. In simple language, while preparing ourselves for a specific activity, that might be cooking food in mass quantity, trying new dish or talking about sports a very awaited competition, our body will be in a specific state of alertness, although it might vary, depending on the type of activity and how motivated we are to do it, this is known as Arousal.

Many times Arousal and Anxiety, both are used synonymously. Anxiety is subjective feeling of apprehension and heightened physiological arousal. Anxiety is a negative emotional state in which feelings

of nervousness, worry and apprehension are associated with activation or arousal of the body.

Arousal is the degree of activation of the organs and mechanisms that are under the control of the body's autonomic nervous system.

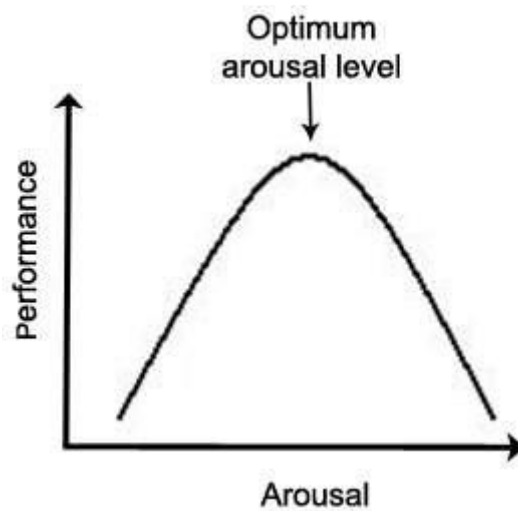
Neurophysiology of Arousal

The nervous system in humans contains two major divisions: the peripheral nervous system (or the nerves in the skeletal muscles of the body) and the autonomic system (or the nerves in the smooth muscles and glands of the body). The part of the nervous system directly related to activation and arousal is the autonomic nervous system. It is autonomic in the sense that we do not normally have voluntary control over the organs and glands innervated by it, such as heart rate, blood pressure, skin conductivity and respiration. The autonomic nervous system is itself divided into two divisions, the Sympathetic and the parasympathetic nervous systems. The sympathetic division is primarily responsible for changes in bodily functions associated with arousal. For example, it brings about sweating of the hands, increased heart rate, pupil dilation, increased respiration, release of glucose from the liver, and decreased kidney output. The sympathetic division tends to result in arousal of the organism, while the parasympathetic division selectively reduces the effects of the sympathetic division i.e. decrease in heart rate, decrease in respiration and in general,

a return to a homeostatic balance of bodily functions. The sympathetic nervous system responds very quickly to environmental or cognitive stimuli, while the parasympathetic nervous system is comparatively slow. In other words, when confronted with a sudden physical threat, the body's physiological response to it is nearly instantaneous. Conversely, it might take hours for body and mind to return to a relaxed resting state following a highly emotional and demanding athletic event.

Arousal level and performance

Popularly, the relationship between arousal and sports performance is represented best by the inverted-U Theory. This theory is founded by Yerkes and Dodson(1908). This theory simply states that the relationship between performance and arousal is curvilinear, and takes the form of an Inverted-U. This theory concludes that, performance is lowest when arousal is very high or low and highest when arousal is moderate, or optimum. This theory states that, the optimal level of arousal for a beginner should considerably lower than the optimal level for an expert performing the same task.



Archery



Archery is the sport using a bow to shoot arrows. This work comes from Latin *arcus*. In olden days it has been used for hunting and combat, but in modern days it is mainly a competitive sport.

While there is great variety in the construction details of bows (both historic and modern), all bows consist of a string attached to elastic limbs that store mechanical energy imparted by the user

drawing the string. Bows may be broadly split into two categories: those drawn by pulling the string directly and those that use a mechanism to pull the string.

If we talk about India, especially three types of bows are used, Indian Bow (Wooden bow),

Recurve, Compound bow.

Wooden Bow(Long Bow) is “traditional” bow, has straight limbs that form are when strung. Used by those interested in traditional shooting with little additional equipment and expenditure.

Recurve Bow is a bow with limbs that curve away from the archer when unstrung. A recurve bow stores more energy and delivers energy more efficiently than the equivalent straight-limbed bow, giving a greater amount of energy and speed to the arrow. It is a popular choice because it’s smooth and quiet.

Compound Bow uses a levering system, usually of cables and pulleys, to bend the limbs. The pulley/cam system grants the user a mechanical advantage, and so the limbs of a compound bow are much stiffer than those of a recurve bow or wooden bow. This rigidity makes the compound bow more energy-efficient than other bows, as less energy is dissipated in limb movement. The higher-rigidity, higher-technology construction also improves accuracy by reducing the bow's sensitivity to changes in temperature and humidity. Compound bows are designed to reduce the force required to hold the string at full draw, hence allowing the archer more time to aim with less muscular stress. Most compound designs use cams or elliptical wheels on the ends of the limbs to achieve this.

Modern bows can shoot arrows more than 200 (182 mtrs.) yards, at speeds more than 135 miles per hour. Any bow can be dangerous at any range and should be handled responsibly.

Fitness required for archery

As a game of concentration, archers require psychological stability as well as fitness and components like muscular strength, endurance and body balance. The muscles mainly involved are Back-Triceps, Teres major-minor, Trapezius, external oblique, Rhomboid, Infraspinatus, Latissimus Dorsi...Front-Deltoid, Pectoralis major-minor, abs etc. and muscles of lower body part. In overall coaching, most of the coaches ignore psycho-physiological factors.

Significance of psycho-physiological factors

When we talk about the relationship of Archers and their psychological response to the competition, we need to deal with the level of arousal. One should maintain the optimum level of arousal. In general, arousal has two kinds of effects on performance. First, it increases muscle tension and affects co-ordination. Too much tension is detrimental to performance. Secondly, arousal affects attention. Therefore, attention can become either too narrow with too much arousal, or too broad with too little arousal which makes person to pay too much attention to his activity. So archers should be coached with physical fitness as well as strategies to adjust psycho-physiological factors viz arousal, anxiety.

How to control psycho-physiological factors:

1. Progressive relaxation: It's a muscle relaxation procedure in which skeletal muscles are systematically tensed and relaxed

2. Autogenic Training: It is a relaxation training program in which the player attends to body feedback

3. Meditation: It is a form of relaxation that applies directly to the concepts of selective attention

4. Biofeedback: It is a program in which the player learns to elicit the relaxation response with the aid of physiological measurement equipment.

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Motivation in Sports and Exercise in National Coaching Scheme in Indian Sports

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Abstract

Sports have gained immense reputation all over the entire world and it has become a way of life. Sports serve an essential social and cultural purpose in the society and helps in all round growth of human individuality. It provides plenty extent and healthy means for leisure and recreation of human mind and civilization. A well body is always recognized as significant as a fit mind. It provide chance for social communication development peace and sympathetic among different people, nations, race, faith etc. Sports also provide stage for the people and nation to total with each other for achieving heights of fineness in human endeavor. From antique times, yoga, sports and games, aggressive arts etc. have been the independence of our nation's the past. It is not surprising therefore; that the same custom continued and sports ongoing receiving an immense deal of attention in India since self-government. In this research paper conversation over collision of national coaching system on Indian sports has been discuss.

Key Words: Motivation, Sports, Exercise

Introduction

India's Poor presentation in international Sports events is a solemn anxiety for all sports lovers. After every global event, be it Asian Games, the commonwealth Games or Olympic Games, a lot of hue and cry is raise in assembly, in the public and in the press. Why is it that, India which ranks third uppermost in taught scientific and technical manpower, next merely to the USA and USSR, lags after even small nation like the Germany or Japan. A vast nation like India with a population of additional than 100 crores, performs so poorly in global events, when small countries like South Korea with hardly a twentieth of India's population have own more gold medal then the total of this country's gold, silver and bronze

medals put jointly. The Rajkumari sports coaching scheme was initiate in 1953 and after eight years was compound with the National Coaching Scheme of the National Institute of Sports at Patiala. The NIS began to pass on coaching in all discipline and secured the services of famous coaches from abroad to teach Indian Coaches. The other nations in Asia, Europe and America sustained to combine the lead they had in the sports arena. As compare to this, there has been deterioration in India's presentation over the years despite spending considerable money and creating necessary communications in the country.

Need for the study:-

The National coaching scheme which was first introduced in September 1953 as Rajkumari Sports coaching scheme was

revise to meet the supplies of the developing nature of the sports in India first in 1962 and again in 1968. A large number of trainees have been taught under the National Coaching Scheme for improvement of Sports Standard in the Country. However, there is a rarity of reliable in order on the crash of the National Coaching Scheme of the Sports Authority of India in Promotion of the Sports Culture in the nation, so as to make an in-depth question into the achievement of the scheme. At the same occasion, such an in-depth study helps in identify the problems of coaches, deficiencies, constraints and bottlenecks from the point of view of revising the system where found ornament. The need was felt to study the impact of National Coaching Scheme of Sports Authority of India in Sports encouragement in the Eastern Region. The organization for Development of Backward Regions, Bhubaneswar was asked by the Planning Commission, New Delhi to assume the impact learn of National Coaching Scheme

Hypotheses:

The Study has the following hypotheses to be experienced.

- (i) Professional and rigorous coaching provide ample and strong means for developing sports persons.
- (ii) Necessary communications and incentives increase the competence of coaches as well as trainees in different sports events.

Objectives:

The following are the detailed objectives of the study.

- (i) To study the National Coaching Scheme (NCS), its objectives, completion

and deployment of coaches in different disciplines at dissimilar centres.

- (ii) To find out the role of coaches in assisting the states in establish and running of Regional Coaching center.

- (iii) To examine the involvement of coaches supplementary Sports Departments/

Universities/Associations/Boards by as long as coaching of National, Inter University and other teams for dissimilar sports competition.

- (iv) To ascertain whether the coaches have conduct the annual education camps and preparing the state teams.

- (v) To look into the help rendered to the NYK by the coaches in their labors to cover the rural youth in any programme prepared for sports growth.

Methodology:

Broadly, the Eastern Region of the country cover Orissa, Bihar, Jharkhand, Sikkim, Tripura, West Bengal and Andaman and Nicobar are low performing states in different national events apart from West Bengal. The SAI coaches are deploy in the State Training Centres, National Schools, Special Area Games, Army Boys Sports Companies, Academics, Studies at Delhi, State Coaching Centres, District Coaching Centre, Kendriya Vidyalayas, Navadyoya Vidyalayas, Akharas and others. For the reason of the study, five states are enclosed for survey work. The example design covered 100 coaches out of the coaches deploy in all the states. The Primary level data was carried out by field investigators by contact the coaches. Information was also collected through qualitative technique by professionals the length of with research assistant.

Discussions with sports official were mainly carried out by the professional, Collection of relevant information from various records, documents, annual information etc. were the main responsibility of the research assistants. The Primary data collection encompassing personal meeting with coaches was carried out under the management of senior researcher. Almost all the team members had good contact and experience in conduct impact studies. Before the team enthused for data collection, extensive training and compass reading programme was organised under the guidance of the Project Director support by research professional. At the same time, they were also oriented to the nature of the approach preferred in such study to elicit the compulsory in order from the respondents who are mainly sports experts. In the field, the team members worked directly under the supervision and control of research professionals mainly to ensure proper understanding of concepts, clarifications and refining the approach in field data collection. The analysis of the information pertaining to sample survey is based on tabulation. An effort has been made to find out the evils of coaches under the National Coaching Scheme and its collision on Sports Promotion in the Eastern Region.

Sports policy

The importance of contribution in sports and physical education activities for good health, a high degree of physical fitness, increase in individual productivity and also its value as a means of beneficial recreation promote social harmony and discipline is well established. The need of every citizen, irrespective of age and sex, to participate in and enjoy games, sports and recreational behavior is, consequently,

hereby known. The compulsory of raising the national principles in games and sports so that our sportsmen and women acquit themselves. creditably in international sports competitions is equally recognized. It is the duty of the Central and State Governments, so, to accord to sports and corporeal education a very high priority in the process of all round development. They would endorse and develop traditional and modern games and sports, and also yoga, by as long as the necessary facilities and infrastructure on a big scale and by inculcating sports awareness among the masses, so that by their regular participation in sports and physical teaching activities, the nation is made healthy fit and strong. A Separate Department for Sports was created by the Govt. of India in 1982 and the First National Sports Policy was announced in 1984. In custody with the contemporary and future needs, the Government has reviewed the old rule to bring a New rule on Sports. The Draft New National Sports Policy seeks to pursue the twin objectives of broad base and achieving fineness at national and global levels. The Policy seeks to spell out the requirements in more concrete terms. The proposed salient features of the draft new policy are as follows :

- (i) Lays down in more real terms the objectives and specific measures to be taken by various agencies.
- (ii) Defines the role of central administration and state government more clearly.
- (iii) Seeks to ensure that the federation work in a more transparent, democratic, expert and accountable way.

(iv) Attaches priority to promotion of games and sports in schools.

(v) Seeks to involve the Panchayati Raj Institutions actively.

(vi) Seeks to mobilize mass media for introducing a sport culture.

(vii) Sports disciplines base on proven probable.

(viii) Priorities seeks to prepare the annual calendar well in advance for providing required sustain to the sports persons for contribution in major events.

(ix) Lays greater emphasis on scientific support to sports persons.

(x) Provides easy right of entry to international quality sports tackle.

(xi) Lays greater emphasis on training and development.

(xii) Setting up of a National Sports growth Fund for mobilizing resources from other sources other than government.

Conclusion:

Physical learning, games and sports and yoga in educational institution were promoted right from the beginning of the planning era. During the Second Five Year Plan, National College of Physical Education and National Institute of Sports were expanded. In the sixth plan, sporting and development of talent was emphasized. In the Seventh Plan emphasis was given to adventure sports. Infrastructural development was taken up for the purpose. The Sports Authority of India implemented a number of programmes such as preparation of coaches, organization of centres for sports education medicine etc.

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Social Psychology of Sports

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Abstract

Social Psychology in Sport reflects a global perspective, a broad base of knowledge, and the latest thinking on topics such as social relationships group dynamics, team cohesion, leadership, communication, coach leadership, team cohesion, motivation and motivational climate, audience effects, and morality. This paper presents an overview of the unique structure and complexity of sport teams. It describes the unique characteristics of interpersonal relationships in sport teams, and provides information on how individual capabilities and motivational processes might influence group performance. It illustrates the consequences of social influence on group interaction and performance. Finally, the paper provides an outlook to future tendencies of group dynamics and the importance of interpersonal relationships in sport groups. This paper is intended to serve as an innovative application of sports and social psychology that not only expands the field of literature, but also serves as an accessible and useful tool from which athletes and coaches can benefit.

Key Words: group dynamics, group interaction, team sports, team cohesion

**“Coming together is a beginning
Keeping together is progress
Working together is a success”**

Introduction:

Working with teams and training groups is a common and major challenge for applied sport psychologists. Being the member of a team sports or doing sports activities individually athletes always belong to a community. Sports clubs or their sections secure the frame around the work needed for high achievement. Besides the support of coaches and sports partners performance also depends on the relationship with managements and staff members of a club. In each sports group and team the phenomena of social-psychology and

organizational-psychology play an important role to build up relationship with partners and team members.

Group dynamics in sport have provided insight regarding the importance of considering a team’s environment, structure, and processes for its effective functioning. An emergent property resulting from activities within the group is cohesion. Cohesion is a dynamic property reflecting members’ perceptions of the unity and personal attractions to task and social objectives of the group. Generally speaking, cohesion remains a highly valued group property, and a strong body of evidence exists to support positive links to important

individual and group outcomes such as adherence and team performance.

Given the importance attached to cohesion and other group variables for sport teams, coaches and athletes often attempt to engage in activities that facilitate group functioning. Team building is a specific approach designed to facilitate team effectiveness and individual member's perceptions of their group. Cohesion has been the primary target of team-building interventions in sport, although recent work on team-building outcomes suggested that the effects of these interventions on cohesion may be limited. The most effective team-building approaches include a goal setting protocol, last at least two weeks in duration, and target a variety of outcomes in addition to cohesion, including individual cognitions and team performance. There is a clear need to identify a team's requirements prior to intervening (i.e., a targeted approach), consider a variety of approaches to team building, and investigate the effects of team building via more stringent research methods.

What is teamwork?

I find teamwork to be of particular interest as it can be found across many different contexts – there are groups of people working towards common goals in every venue of professional life – yet there is something very unique about how teamwork functions in the sports setting. While much is drawn from social psychology, the theoretical models surrounding sports-specific teamwork are, like other areas of sports psychology, developed with the idiosyncrasies of sports environments in

mind. As this project will show, there is a plethora of studies and research looking into team dynamics and cohesion, but the notion of “teamwork” still leaves much to be explored. For this reason, I find it especially compelling to investigate as well as important to work towards a more comprehensive and all-encompassing understanding of what exactly it is and how it can be measured and increased for the purpose of helping sports teams (and their coaches) achieve their performance goals.

There are many theories contributing to an overall understanding of “teamwork,” especially through models which explain how groups function, what makes them effective or not in accomplishing given tasks and goals, and the dynamics that exist in groups of people across many different settings. The definition of “teamwork” in the sports and social psychology fields is one that is both debated and not fully developed. While many studies and considerable research looks into factors of cohesion and how groups work, a clear empirical definition of teamwork as well as testable ways to measure it have not emerged.

Social Psychology: Group Dynamics

Important parallels can be drawn from different factions of psychology, and I will connect developments in social psychology to the sports setting before getting into the theoretical models based more directly in the sports psychology literature. The social psychology models form the basis for and the components of group and team dynamics and the foundations of “cohesion.”

The latest research in the field, *Social Psychology in Sport* are:

- provides a complete and current analysis of the field, exploring the social aspects of interactions, relationships, influences, and perceptions;
- addresses a broad range of topics from theoretical, empirical, and applied perspectives;
- delves into established areas of interest such as group dynamics and coach-athlete and peer relationships; and
- dissects emerging topics such as relational efficacy, passion, and cross-cultural issues.

Cratty examining the relationship between cohesion and team-performance divided team sports into three groups (cited in Nagykáldi, 1998. p 97) while he analyzed the degree of cohesion generated by the tasks.

- Few interactions among teams and low coordination among their members (e.g.: archery, bowling, shooting, wrestling);
- High numbers of interactions and effective cooperation among players (hand-foot-valley-ball);
- Teams within both elements are present (jumping, rowing, exchange swimming).

The presence of cohesion supports athletes to harmonize their work. There are two things when cohesion works, that is, objectives to be achieved together and performance. These two factors are called cohesive force. Cohesion can come about if team members enjoy being together. To become high achievers both of these elements are needed as in case of problems there in no cooperation which would help

athletes swing over hardships. When only team cohesion is present then after some time teams can forget about their tasks and goals.

The two basic components of cohesion appear differently in the above mentioned cases. The power of cohesive force of the task is higher within teams where the members can cooperate whereas the social cohesive force is lower. The teams being equipped with the abilities of cooperation the level of task and social cohesive force are almost the same.

It takes time to have a well functioning team. According to Tuckman's teamwork theory teams grow through 4 clearly defined stages, from their creation of groups of individuals, to cohesive task-forced teams. He suggests the following stages:

1. Forming: the initial stage of team development during which everyone does his/her best to impress the others.
2. Storming: at this stage players may challenge each other and starts fighting for better position in the hierarchy.
3. Norming: this is the phase where team members start to come together, develop processes and establish ground rules.
4. Performing: the team is ready to perform their maximum.

Thinking through these stages thoroughly we can understand that team building is a time consuming process. No one is able to build up - with many newcomers- an effective team. A coach envisages problems if his/her players/athletes must perform very well when they are still in the storming stage.

Conclusion:

In conclusion, I hope that a comprehensive literature review that dives into both sports and social psychology fields provides a base of information about team and group dynamics, especially the factors of cohesion. This knowledge, then, is taken to create a new definition and model of teamwork and how coaches can effectively implement it

into their programs. This is simply the start of filling in what is missing from the field work in this area and many more developments are still needed. Particularly, devising a way to statistically measure and score team members and collective teams on scales of teamwork and adapting it to specific sports settings would be important next steps.

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Comparative Study on Creativity and Self Confidence among Players and Non-Players

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Abstract

The purpose of the study was to compare creativity and self confidence among players and non players. For this study 50 subjects in which 25 players and 25 non players were selected as a sample. The age of the samples ranged from 17-21 years and all the samples selected on random basis. The players were participated in different games where non players do not participated in any games. To assess the creativity of selected subjects B.K. Passi was used. To measure the self confidence level, self confidence inventory developed by R.K. Sharma was used. Both inventories are highly reliable and valid. To find out the significance difference, creativity & self confidence among players & non players, 't' test was used. The results found that there is no significant difference; creativity of players and non-players. Players have better self confidence level as compared to non- players.

Key Words: Creativity, Self confidence, Players and Non players etc.

Introduction:

Self-assurance is critical in practically every part of our lives, yet such a large number of individuals battle to discover it. Unfortunately, this can be an endless loop: individuals who need self-assurance can think that it's hard to end up successful. After all, the vast majority are hesitant to back an undertaking that is being pitched by somebody who was apprehensive, bobbling, and excessively remorseful. Then again, you may be influenced by somebody who talks obviously, who holds his or her head high, who answers addresses without a doubt, and who promptly concedes when he or she doesn't know something. Sure individuals motivate trust in others: their group of onlookers, their associates, their supervisors,

their clients, and their companions. What's more, picking up the certainty of others is one of the key courses in which a fearless individual discovers achievement. Fortunately fearlessness truly can be learned and based on. Furthermore, regardless of whether you're taking a shot at your own particular certainty or building the certainty of individuals around you, it's definitely justified even despite the effort! Confidence can be an extreme thing to develop. We've assembled some convenient tips to enable you to out. In case regardless you're experiencing serious difficulties even in the wake of attempting these self improvement thoughts, don't stress! We've likewise recorded the ways you can discover additional help and work on boosting your

certainty with the assistance of others. There are various things you can do to construct your certainty. Some of them are quite recently little changes to your attitude; others you'll need to take a shot at for somewhat longer to make them commonplace propensities.

Take a gander at what you've just accomplished: It's anything but difficult to lose certainty in the event that you trust you haven't accomplished anything. Make a rundown of the considerable number of things you're glad for in your life, regardless of whether it's getting a decent check on an exam or figuring out how to surf. Keep the rundown close by and add to it at whatever point you accomplish something you're glad for. When you're low in certainty, haul out the rundown and utilize it to help yourself to remember all the magnificent stuff you've done.

Consider things you're great at: Everybody has qualities and gifts. What are yours? Perceiving what you're great at, and attempting to expand on those things, will help you to assemble trust in your own capacities.

Set a few objectives: Set a few objectives and set out the means you have to take to accomplish them. They don't need to be huge objectives; they can even be things like heating a cake or arranging a night out with companions. Simply go for some little accomplishments that you can tick off a rundown to enable you to pick up trust in your capacity to complete stuff.

Talk yourself up: You're never going to feel sure on the off chance that you have negative analysis going through your head

disclosing to you that you're no great. Consider you're self-talk and how that may influence your fearlessness. Treat yourself like you would your closest companion and support yourself.

Get a diversion: Endeavor to discover something that you're truly enthusiastic about. It could be photography, game, cooking or whatever else! When you've worked out your enthusiasm, submit yourself to giving it a go. Odds are, in case you're intrigued or energetic about a specific action, will probably be inspired and you'll assemble aptitudes all the more rapidly.

Specific capacity models area those courses over which sentiments empower thought Additionally Understanding. For instance, emotions may associate for considering additionally allows people to an opportunity to be better decision creators (Lyubomirsky et al. 2005). A person who might be that is just a glimpse of a larger problem responsive internally should critical issues will go to the All the more dire parts from asserting as much then again her an accumulation, perspectives for energetic help segment might be with Moreover perceive how on consolidate or maintain a strategic distance from sentiments beginning with thought depending after setting What's more situation, this might be likewise related to enthusiastic speculation Besides Perception as a result of the restriction of the general population, nature's area Moreover condition specific case experiences to as much on the other hand her typical term.

Imagination is a wonder whereby something new and by one means or another profitable is framed. The made thing might be elusive,

(for example, a thought, a logical hypothesis, a melodic piece, or a joke) or a physical protest, (for example, a creation, an artistic work, or a canvas). Wise eagerness toward creativity incorporates a critical number of definitions, moreover thoughts relating with a number about controls: designing, brain research, intellectual science, instruction, hypothesis (especially hypothesis from asserting science), innovation, religious philosophy, humanism, etymology, advantages of the business examines, songwriting, Besides financial matters, covering those relations between Ingenuity Likewise all knowledge, mental Additionally neurological courses redid sort and imaginative capacity, imaginativeness Moreover emotional wellness; those probability to empowering creativity through preparing Moreover preparing, especially as expanded by innovation; those

Results:

development from guaranteeing Inventiveness for national budgetary advantage, and the arrangement for inventive resources for advance the ampleness about teaching support.

Methodology:

For the purpose of the study, 50 subjects in which 25 players and 25 non-players were selected. The age of the subjects is 17-21 years and all the samples selected on random basis. To measure creativity, creativity test prepared by B.K. Passi was used. To measure the self confidence level, self confidence inventory developed by R.K. Sharma was used. The scoring was done according to the rule laid down by the authors. To find out the significance difference, creativity & self confidence among players & non players, ‘t’ test was used.

Table no.1
Showing the mean of creativity among Players and Non-players

Item	Players		Non-Players		MD	‘t’
	Mean	SD	Mean	SD		
Creativity	58.2	4.9	54.3	4.3	3.9	0.56

From table no.1, the results found that, the mean value of creativity of player is 58.2 and non player is 54.2 that means there is no

significant difference in creativity among players and non players, because the calculated value of ‘t’ which is less than the tabulated value.

Table no. 2

Showing the mean of self confidence level of Players and Non-players

Item	Players		Non-Players		MD	‘t’
Self Confidence	Mean	SD	Mean	SD	5.5	2.89*
	18.3	2.46	12.8	2.78		

From table no. 2, results revealed that players have better self confidence level (M=18.3, SD= 2.46) as compared to non-players (M=12.8, SD=2.78). The calculated ‘t’ value is 2.89; which is greater than the tabulated value, so both the group differ at level.

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Conclusions:

- 1.) There is no significant difference; creativity of players and non-players.
- 2.) Players have better self confidence level as compared to non- players.

Study of Aggressive Behaviour between Arts Students, Social Science Students and Sports Persons

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Abstract

The purpose of this study was to compare the Aggressive Behaviour between Arts Students, Social Science Students and Sports Persons. For this study researcher has taken Sixty (60) Students (20 Arts Students, 20 Social Science Students and 20 Sports Person or Players of any faculty) were selected from Vasantao Naik Government Institute of Arts and Social Sciences, Nagpur (Maharashtra) with the help of purposive and random sampling method. The age of the students were ranged between 18 to 25 years. Subjects did not use any ergogenic aids or supplementations and also they were all free from any injuries during the collection of data. The Standard Questionnaire of Aggression Scale constructed by R. L. Bhardwaj, was used to collect the data. Collected data was analyzed by comparing the means of Aggression level and in order to find out the significant difference of Aggressive Behaviour between Arts Students, Social Science Students and Sports Persons the analysis of variance (ANOVA). The Level of Significance was kept at 0.05. Result shows revealed that there was significant difference were found in Aggression Level amongst Arts Students, Social Science Students and Sports Persons as obtained F-ratio was 18.98 which was greater than that of required tabulated 'F' value of 3.158 at 0.05 level of significance with (2,57) degree of freedom. Hence, Post Hoc test was applied to see the Mean Difference in Aggression Level amongst Arts Students, Social Science Students and Sports Persons. The significant differences were found among Arts Students and Social Science Students as well as in Social Science Students and Sports Persons whereas insignificant differences were found among Arts Students and Sports Persons.

Key Word: Aggressive Behaviour, Arts Student, Social Science Students, Sports Persons.

Introduction

Aggression is as old as the human race beginning with Cain's murder of Abel and extending throughout history. People have fought each other in tribal wars, ethnic and religious wars, and in worldwide conflicts. Today, man continues exterminate to large segments of humanity or prepares to do so. It appears that the technical and culture—advance of man has led to move violently, aggressive destructive behavior which has led to remarkable increase in

research devoted to this phenomenon in the last twenty years.

Aggression is closely associated with human behaviour and is necessary for an every individual to live and struggling life for higher achievements. Struggle in life or in sports for supremacy, dominance, and excellence obviously involves aggression. When hostility takes above aggression, the situation becomes alarming and it takes the phase of an anti-social behaviour.

Aggressive behavior may cause physical or emotional harm to others. It may range from verbal abuse to physical abuse; it can also involve harming individual property.

Aggressive behavior may violate social boundaries. It can also lead to breakdowns in one's relationships. It can be obvious or reticent. Occasional aggressive outbursts are common and even normal at the right circumstances. However, one should speak to his physician if he experience aggressive behavior frequently or in patterns.

Aggressive behavior in student is unacceptable; it goes beyond the scope of colleges normal boundaries. Examples of rebellious or hostile behavior by a student consist of: losing temper easily, constantly arguing with teachers, deliberately engaging in activities that irritate others, blaming others students or teachers, always acting unkind or cruel. However, responding to a student's aggression with anger makes matters or situation worse. Students rely on their teachers for cues on how to control impulses and behave in classes. A loud and angry teacher who tries to intimidate an angry student into behaving cannot build empathy with students and remains totally distracted from teaching.

Many students don't know how to communicate their needs to parents or teachers and have not learned non-aggressive ways to solve their raised problems. Aggressiveness in students may be caused by several things: as a self-defense reaction, stressful situation, lack of routine work, excessive frustration or anger, over - stimulation, or by reflect aggressive behaviors of others who live around them. Some students engage in

aggressive play every time; some students act aggressively when he is frustrated or angry, i.e. when they obtain a failing grade. Students who are verbally aggressive usually become physically aggressive when in conflict. Once we know the reasons why students behave aggressively we may intervene to limit the aggressive behavior in several ways. Hence, the researcher has taken the study "Study of Aggressive Behaviour between Arts Students, Social Science Students and Sports Persons".

Materials and Methods

Subject

Sixty (60) Students (20 Arts Students, 20 Social Science Students and 20 Sports Person or Players of any faculty) were selected from Vasant Rao Naik Government Institute of Arts and Social Sciences, Nagpur (Maharashtra) with the help of purposive and random sampling method. The age of the students were ranged between 18 to 25 years. Subjects did not use any ergogenic aids or supplementations and also they were all free from any injuries during the collection of data.

Administration of the test

The following tools were used to collect the data on:-

The Standard Questionnaire of Aggression scale constructed by R. L. Bhardwaj was used to know the Aggressive Behaviour between Arts Students, Social Science Students and Sports Persons of Vasant Rao Naik Government Institute of Arts and Social Sciences.

Statistical Analysis:

Collected data was analyzed by comparing the means of Aggression level and in order

to find out the significant difference of Aggressive Behaviour between Arts Students, Social Science Students and

Sports Persons the analysis of variance (ANOVA). The Level of Significance was kept at 0.05.

Table – 1

Analysis Of Variance of Aggression between Arts Students, Social Science Students and Sports Persons

Variable	SV	SS	DF	MS	F
Aggression	between	389.73	2	194.86	18.98*
	error	585	57	10.26	

*Significant at 0 .05 level

Tabulated 'F' $0.05_{(2,57)} = 3.158$

Table – 2

Post Hoc Test

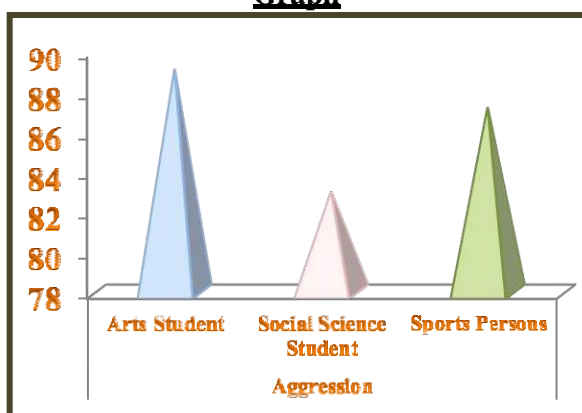
Variable	Arts Students	Social Science Students	Sports Persons	MD	CD
Aggression	89.1	83		6.1*	3.198
	89.1		87.2	1.9	
		83	87.2	4.2*	

*Significant at 0 .05 level

Above table revealed that there was significant difference were found in Aggression Level amongst Arts Students, Social Science Students and Sports Persons as obtained F-ratio was 18.98 which was greater than that of required tabulated 'F' value of 3.158 at 0.05 level of significance with (2,57) degree of freedom. Hence, Post Hoc test was applied

to see the Mean Difference in Aggression Level amongst Arts Students, Social Science Students and Sports Persons. The significant differences were found among Arts Students and Social Science Students as well as in Social Science Students and Sports Persons whereas insignificant differences were found among Arts Students and Sports Persons.

Graph



Conclusion:

As the result revealed that significant difference were found in Aggression Level amongst Arts Students, Social Science Students and Sports Persons. Post Hoc test was applied to see the Mean Difference in Aggression Level amongst Arts Students, Social Science Students and Sports Persons. The significant differences were

found among Arts Students and Social Science Students as well as in Social Science Students and Sports Persons whereas insignificant differences were found among Arts Students and Sports Persons. By seeing the Mean we can say those Arts students were more aggressive followed by Sports persons and Social Science students.

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Comparative Study of Pre Competitive Anxiety Height, Weight, BMI of High and Low Performance Inter University Athletes

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Abstract

In his discussion of competitive anxiety Spielberger relates the concept of anxiety specifically to athletes, the main purpose of the present study to compare the pre competitive anxiety height, weight, bmi of high and low performance inter university athletes. The main objective of the present study of find out the difference between the North Zone and South Zone inter university athletes. Age of the selected subject ranged between 18 to 25 years. Inter University sports man (Athletes). The pre competitive anxiety 19.13, 19.66, Height 173.31, 171.20, Weight 70.52, 61.96 BMI, 23.23, 21.01 of high and low performance inter university athletes respectively.

Key Words: Scat Pre Competitive Anxiety Height, Weight, BMI

Introduction

In his discussion of competitive anxiety, Spiel Berger relates the concept of anxiety specifically to athletes. He defines competitive anxiety as the 'tendency to perceive competitive situation as threatening and to respond to these situations with feelings of apprehension or tension. According to Spiel Berger, fear of failure and fear of physical harm appear to be the most prevalent determinants of A- state in competitive sport. Rainer Martens has expanded Spiel Berger's work by developing a specific test to assess the level of anxiety in sport participants. The test was based on the model depicting the relationship between competitive A-trait and the competitive process.

Anxiety and Performance:

Athletic

A Feeling of worry or fear is there especially about the future. The medical definition of anxiety describes it is a state consisting of psychological and physical symptoms brought about by a sense of apprehension of a perceived threat state anxiety on the other hand refers to temporary felling of anxiety in a particular situation

Height

The measurement from the bottom to the top of a person or thing. The fact that somebody is tall or high.

Weight

Human body weight refers to a person mass or weight. Body weight

is measured in kilogram a measure of mass throughout the world although in some countries such as the United States it is measured in pound.

BMI

Body mass index (BMI) is a value derived from the mass (weight) and height of an individual. The Bmi is defined as the body mass divided by the square of the body height and is universally.

2 Material and Method

Purpose

The main purpose of the present study is to compare the pre competitive anxiety height, weight and BMI of high and low performance inter university athletes of the North Zone & South Zone.

Objective

The main objective of the present study is to find out the difference between the North Zone & South Zone All India Inter University Athletes.

Significant

Finding of this study may assist the knowledge of pre-competitive anxiety height, weight and BMI of high and low performance.

Hypothesis

Researcher's hypothesis is that there is significant difference of pre

competitive anxiety height, weight and BMI among athletes representing different zone.

Scope

The Study was delimited to 25 North Zone Athletes and 25 South Zone Athletes who were selected from all India University Athletes Meet. Age of the selected subject ranged between 18-25 years.

Selection

For the present study 25 North Zone and 25 South Zone athletes were selected by using simple random sampling method.

Criterion Measures

The criterion measures chosen for testing of selected subjects were sport competition anxiety test (SCAT) developed by Reiner Martins (1990). Weight and height of the selected subjects were measured using appropriate methods.

Design of the Study

The design of the study was random group design.

3 Statistical Technique Used

To determine the significant difference among high achievers sportspersons and low achievers sport persons 't' test and one way analysis of variances (ANOVA) technique was used.

Observations: Table 1

COMPARISON OF MEASUREMENTS AMONG ZONE GROUP

Variable	North Zone (n=25)		South Zone (n= 25)		t	Level of Significance
	Mean	S.D.	Mean	S.D.		

SCAT	19.13	3.13	19.66	3.13	1.30	NS
HEIGHT	173.31	7.51	171.20	7.14	2.22	.05
WEIGHT	70.52	17.28	61.96	11.65	4.47	.01
BMI	23.29	4.65	21.04	3.12	4.39	.01

't' value at .05 = 1.96 and .01= 2.57

The comparison made by researcher was among north zone and South zone on the SCAT, height, weight and BMI. The result states that on SCAT 1.30 is value for 't' indicates that, there is significant difference at .05 level among north zone and South zone on sports competitive anxiety test. The mean for north zone 19.13 and for South zone was 19.66.

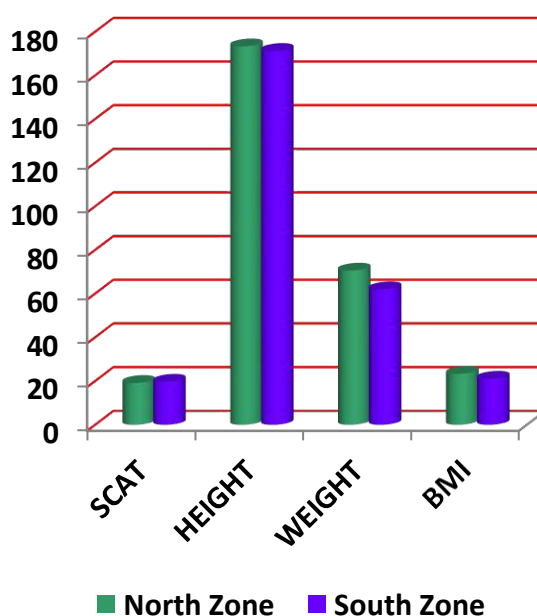
The mean for athletes on height among north zone is 173.31 and South zone is 171.20 whereas 't' is 2.22 which stated that there is no significant difference on height component among north zone athletes and west zone athletes.

On the basis of weight mean for north zone is 70.52 whereas for South zone it was 61.96. The 't' value is 4.47 reveals that there is significant difference between the groups at .05 level of significance of athletes.

The last comparison on BMI among north zone and west zone where 't' value is 4.39 stated that there is significant difference at .05 level. The data represented in tabulated form in table no.1 and graphical form in figure no. 1 below.

Figure No. 1

Comparison of measurements among zone group



4 Discussion and Finding

From the statistical analysis the finding of the study is significant difference found in pre competitive anxiety height, weight, bmi of high and low performance inter university athletes. Which is tabulated t value of SCAT 1.30, height 2.22 weight 4.47 and BMI 4.39?

5 Conclusion

On the basis of analysis and finding the following conclusion were down,

Athletes represented different zone unable to show significant difference on sports competition anxiety. **High** performer athletes have shown their superiority on height compare to low performer athletes. Low performer athletes were found to be inferior on weight as compare to high performer athletes. Athletes represented different zone have shown significant difference on weight beyond .01 levels.

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Stress and Aggression Level between Academic and Professional Students

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Abstract

This paper presents the comparative study of stress and aggression level between academic and professional students of RTM Nagpur University. 60 male as well as female subjects were selected for the collection of data which include 30 students from each course either professional as well as Academic courses from Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. For the collection of data, the subjects were given full administration of the tests which was used for the collection of data in the study. Stress is a state to which the natural body equilibrium i.e. Homeostasis is disturbed caused by any threat to organism. With the limitations of the study and from the statistical analysis of the collected data it is concluded that. After the systematic collection and analysis of data it is found that there is a significant difference in Stress and Aggression level of Professional and Academic students of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. In the earlier time the researcher was hypothesized that there will be a significant difference in Stress and Aggression level of professional students and academic students of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. Hence the hypothesis given by the researcher is accepted. Aggression is a part of human behavior and is necessary for an individual to live and struggle for higher achievements. The Stress and Aggression are part and parcel of life. Every situation is associated with stress and every action is associated with Aggression. The stress and aggression level of academic students are different than that of professional students. The finding of the present study has revealed that there is significant difference in Stress and Aggression level of professional students and academic students of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

Key Words: Stress, Aggression, Academic And Professional Students

Introduction:

Stress relates to the force applied to a system that invariably brings about some change or modification. Psychological stress is often thought of as the perceived demands of a situation in relation to the resources of the individual to cope with those demands. When the demands are judged to outweigh the person's resources, stress is the result. McGrath (1970) suggested that stress results

when there is a substantial imbalance between [environmental] demand and"

response capability, under conditions' where - failure to meet the demands has important consequences'. Some psychologists prefer to think of stress as the process itself; various emotional reactions might result from the stressor (i.e. The demand itself).For example, 'facing a tough opponent' (the stressor) is appraised as

stretching one's resources (the stress process).

Signs and Symptoms of Stress: The following have been found to be the main signs and symptoms of stress:

1. High blood pressure
2. Nervousness and tension
3. Chronic worry
4. Inability to relax
5. Excessive use of alcohol or smoking
6. Problems with sleep
7. Non-cooperative attitudes
8. Feelings of inability to cope
9. Emotional instability

Physiological Symptoms: They may be enumerated below:

1. Headache/Migraine
2. Insomnia
3. Lack of appetite
4. Digestive disorders
5. Coronary heart disorders.
6. Sexual disorders
7. Temperamental changes.

Purpose of the study:

1. The main purpose of the study is to investigate the stress and aggression level of academic and Professional students of RTMN University.

2. The purpose of the study is to find out the level of aggression among the professional students.
3. The purpose of the study is to find out the level of stress among the professional students.

Significance of the Study:

1. The present study was significant to know the stress level among the academic students of RTMN University.
2. The present study was significant to know the level stress level among the professional students.

Hypothesis: It is hypothesized that there will be significant difference in stress and aggression level of academic and professional students of RTMN University.

Selection of Subjects: 60male as well as female subjects were selected for the collection of data which include 30 students from each course either professional as well as Academic courses from Rashtasant Tukadoji Maharaj Nagpur University, Nagpur.

Sampling Method: The subjects were selected by using simple random sampling method.

Table No.-1

Comparison stress level of Professional and Academic Students

Name of Course	Mean	S.D.	M.D.	D.F	O.T.	T.T
Professional	68.24	10.218	7.45	88	3.95	2.00
Academic	60.77	7.525	7.45			

Level of Significance = 0.05

Tabulated 't' 0.05 (88) = 2.00

Table No 1 reveals that there was difference between mean of Professional group and Academic group because mean of Professional group = 68.24 which is greater than the mean of Academic group= 60.77 so the mean difference where found as 7.45 to check the significant difference between Professional and Academic group the data was again analyzed by applying 't' before

applying 't' test standard deviation was calculated between Professional and Academic group. Where SD of Professional group = 10.218 and SD of Academic group = 7.525 and the calculated value of 't' where found 3.95 which is greater than tabulated t=2.00 at 0.05 level of significance. This shows that Professional students are having stress level than Academic students.

Table No.-2

Comparison Aggression Level of Professional and Academic Students

Name of Course	Mean	S.D.	M.D.	D.F	O.T.	T.T
Professional	93.155	15.37	4.18	88	1.12	2.00
Academic	88.97	19.53	4.18			

Level of Significance=0.05

Tabulated't'0.05 (88)=2.00

Table No 2 reveals that there was difference between mean of Professional group and Academic group because mean of Professional group = 93.155 which is greater than the mean of Academic group= 88.97 so the mean difference where found as 4.18 to check the significant difference between Professional and Academic group the data was again analyzed by applying 't' before

applying 't' test standard deviation was calculated between Professional and Academic group. Where SD of Professional group = 15.37 and SD of Academic group = 19.53 and the calculated value of 't' where found 1.12 which Less than tabulated t=2.00 at 0.05 level of significance. This shows that Professional students are having Less Aggression level than Academic students.

Table 3

Comparison of percentage of students of Academic and Professional Stress Level

Stress Level	Academic	Professional
Norms	percentage	percentage
High level of Stress	0.00%	13.33%

Moderate level of Stress	100%	86.66%
Low level f Stress	0.0%	0.00%

The percentage of Stress Level of Academic students in High level of Stress category is 0.00% and the Stress Level of Professional students in the same category is 13.33%. The percentage of Academic students in Moderate level of Stress category is

100% and the Stress Level of Professional students in the same category is 86.66%. The percentage of Stress Level of Academic students in the Low level Stress category is 0.0% the Stress Level of Professional students in the same category is 0.00%

Table 4

Comparison of percentage of Academic and Professional Students in Aggression Level

Stress Level	Academic	Professional
Norms	percentage	percentage
Very High level of Aggression	82.22%	93.33%
High	17.77%	6.66%
Average	0.00%	0.00%
Low	0.00%	0.00%
Very low	0.00%	0.00%

The percentage of Aggression Level of Academic students in Very High level of Aggression category is 82.22% and the Aggression Level of Professional students in the same category is 93.33%. The percentage of Academic students in High level of Aggression category is 17.77% and the Aggression Level of Professional students in the same category is 6.66%. The percentage of Aggression Level of Academic students in the Average category is 0.0% the Stress

Level of Professional students in the same category is 0.00% and other both category in Academic as well as professional are 0.00%.

Conclusion:

With the limitations of the study and from the statistical analysis of the collected data it is concluded that. There is found significant difference in stress and aggression level of Professional and Academic students of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

Recommendation:

1. The recommendation of the study is to know stress level of Professional students.
2. The recommendation of the study is to know stress level of Academic students.
3. The recommendation of the study is to know aggression level of Professional students.
4. The recommendation of the study is to know aggression level of Academic students.
5. The study is recommended to know either the Professional students are having more stress and aggression or the Academic students are having more stress and aggression level.

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Motivation in Sports Psychology

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Abstract

Each and every one of us has an untapped energy source that can be drawn upon to bring about superior results. Enhancing motivation is fundamentally about a change of attitude, developing a positive 'can do' mindset and engaging in systematic behaviours – the short-term process goals – that facilitate improvement. If you have a leadership role in sport, you will have considerable influence on how motivated your athletes or team might feel. You can instill a good work ethic, recognize individual effort and instigate transparent reward structures that reinforce people's sense of competence. To work best, the techniques mentioned in this article need to be moulded around specific circumstances and the needs of individual athletes. Always strive to be original and innovative in the application of motivational techniques. In the present paper the researcher has tried to probe how motivation can inspire the sports personalities and can bring stupendous success in the arena of sports and personal life.

Key Words: Behaviour, motivation, goal, reward, coaches, sports, performance, techniques

Introduction

Motivation is an internal energy force that determines all aspects of our behaviour; it also impacts on how we think, feel and interact with others. In sport, high motivation is widely accepted as an essential prerequisite in getting athletes to fulfill their potential. However, given its inherently abstract nature, it is a force that is often difficult to exploit fully. Some coaches, like Portugal manager Luiz Felipe 'Big Phil' Scolari, appear to have a 'magic touch', being able to get a great deal more out of a team than the sum of its individual parts; others find motivation to be an elusive concept they are forever struggling to master.

What is it that makes individuals like the 45-year-old sprinter Merlene Ottey, who competed in her seventh Olympics in Athens 2004, churn out outstanding performances year in, year out? Elite

athletes such as Ottey have developed an ability to channel their energies extremely effectively. Indeed, motivation is essentially about the direction of effort over a prolonged period of time.

There are numerous approaches to the study of motivation. Some are based on schedules of positive and negative reinforcement (e.g. BF Skinner's and Ivan Pavlov's behaviorism) while others focus on an individual's sense of mastery over a set of circumstances (e.g. Albert Bandura's self-efficacy theory). This article explores the constituents of motivation using a contemporary approach, popularized by Americans Edward Deci and Richard Ryan, known as self-determination theory, which emphasizes the role of individual choice.

The article will also outline some of the key findings from recent literature and provide four evidence-based techniques

relating to the enhancement of motivation. You will be able to tailor the motivational techniques to enhance your participation in sport or the performance of others. You will learn that motivation is a dynamic and multifaceted phenomenon that can be manipulated, to some degree at least, in the pursuit of superior sporting performance.

Different types of motivation

One of the most popular and widely tested approaches to motivation in sport and other achievement domains is self-determination theory. This theory is based on a number of motives or regulations, which vary in terms of the degree of self-determination they reflect. Self-determination has to do with the degree to which your behaviours are chosen and self-initiated. The behavioural regulations can be placed on a self-determination continuum. From the least to the most self-determined they are a motivation, external regulation, introjected regulation, identified regulation, integrated regulation and intrinsic motivation.

A motivation represents a lack of intention to engage in behaviour. It is accompanied by feelings of incompetence and a lack of connection between one's behaviour and the expected outcome. For example, a motivated athlete might be heard saying, 'I can't see the point in training any more – it just tires me out' or 'I just don't get any buzz out of competition whatsoever'. Such athletes exhibit a sense of helplessness and often require counseling, as they are highly prone to dropping out.

External and introjected regulations represent non-self-determined or controlling types of extrinsic motivation because athletes do not sense that their behaviour is choiceful and, as a

consequence, they experience psychological pressure. Participating in sport to receive prize money, win a trophy or a gold medal typifies external regulation. Participating to avoid punishment or negative evaluation is also external. Introjection is an internal pressure under which athletes might participate out of feelings of guilt or to achieve recognition.

Identified and integrated regulations represent self-determined types of extrinsic motivation because behaviour is initiated out of choice, although it is not necessarily perceived to be enjoyable. These types of regulation account for why some athletes devote hundreds of hours to repeating mundane drills; they realise that such activity will ultimately help them to improve. Identified regulation represents engagement in behaviour because it is highly valued, whereas when behaviour becomes integrated it is in harmony with one's sense of self and almost entirely self-determined. Completing daily flexibility exercises because you realise they are part of an overarching goal of enhanced performance might be an example of integrated regulation.

Intrinsic motivation comes from within, is fully self-determined and characterized by interest in, and enjoyment derived from, sports participation. There are three types of intrinsic motivation, namely intrinsic motivation to know, intrinsic motivation to accomplish and intrinsic motivation to experience stimulation. Intrinsic motivation is considered to be the healthiest type of motivation and reflects an athlete's motivation to perform an activity simply for the reward inherent in their participation.

According to Hungarian psychologist Mihaly Csikszentmihalyi, the highest level of intrinsic motivation is flow state. Flow is characterized by complete immersion in an activity, to the degree that nothing else matters. Central to the attainment of flow is a situation in which there is a perfect match between the perceived demands of an activity and an athlete's perceived ability or skills. During flow, self-consciousness is lost and athletes become one with the activity.

An overbearing or unrealistic challenge can cause excess anxiety, which means that coaches need to ensure that athletes set realistic goals. Conversely, if athletes bring a high level of skill to an activity and the challenge that it provides is relatively low, such as Barcelona and Brazil's Ronaldinho playing in a minor football league, this can result in boredom. To promote flow, it is important to find challenges that are going to stretch athletes just a touch further than they have been stretched before.

A study examining the relationship between athletes' goal orientations and their levels of intrinsic and extrinsic motivation indicated that British collegiate athletes with task-related or personal mastery goals were far more likely to report high self-determination than athletes with ego-orientated or social comparison-type goals.

The study provided tentative support for the proposition that focusing on personal mastery and self-referenced goals promotes intrinsic motivation to a greater degree than focusing on winning and demonstrating superiority over others. This has important implications for practitioners who work with children,

given the wealth of evidence that suggests that a focus on personal mastery and intrinsic motivation (enjoyment) brings the most positive motivation outcomes.

A very recent study showed that during competition deemed to be important, intrinsically motivated athletes developed task-oriented (positive) coping strategies. Conversely, extrinsically motivated athletes tended to avoid dealing with key issues and were far less likely to achieve their goals. In another study, researchers adopted a qualitative approach to answer the question 'why does the "fire" of elite athletes burn so brightly? They sought to demystify the differences between high achievers and also-rans in the world of sport. Their interviews with 10 elite Australian track and field athletes revealed three overarching themes:

Elite athletes set personal goals that were based on both self-determined and extrinsic motives; they had a high self-belief in their ability to succeed; Track and field was central to their lives – everything rotated around their involvement in the sport.

Using a statistical procedure known as 'cluster analysis', colleagues and I have identified two types of 'motivation profile'. The first was characterised by high levels of both controlling and self-determined types of behavioural regulations and the second by high self-determined and low controlling motivation. A comparison of the two profiles on the motivation outcomes of enjoyment, effort, positive and negative effect, attitude towards sport, strength and the quality of behavioural intentions, satisfaction, and frequency of attendance showed that participants in the first profile

reported higher levels on all eight positive consequences when compared to those in the second profile.

This finding suggests that the simultaneous presence of high extrinsic and high intrinsic motivation is likely to yield the most positive benefits for adult athletes. However, it is critical that extrinsic motives are nurtured on a firm foundation of high intrinsic motivation. Without high intrinsic motivation, athletes are likely to drop out when they encounter problems such as injury, non-selection or demotion.

We conducted a follow-up study confirming the profiles identified in 2000 and came up with a similar solution using a new sample of adult athletes.

Motivational techniques for coaches and athletes

1. Goal setting

Athletes should be encouraged to set a few ambitious but achievable long-term goals; perhaps to represent their country in a major championship in three or four years. Through empowering athletes to set their own goals, they are more likely to accept the challenges that lie ahead and pursue the goals with enthusiasm (13); To keep athletes on track with their long-term goals, they should also set appropriate medium-term goals. For example, following a bronze medal-winning performance at the 2004 Athens Olympics, UK heptathlete Kelly Sotherton set herself the medium-term goal of winning the 2006 Commonwealth title in Melbourne (which she achieved) en route to pursuing her long-term goal to be crowned Olympic champion at the 2008 Beijing Games; By far the most important goals in practical terms are those for the short-term, as it is

these that keep athletes focused on the checkmarks which are seminal to achieving superior performance. Therefore, short-term goals should be predominantly process-oriented. For example, when Manchester United's Wayne Rooney injured a metatarsal six weeks before the start of the soccer World Cup, he set a series of process goals in his race to regain full fitness. These included daily physiotherapy sessions, remedial exercises in an oxygen chamber, non-weight-bearing aerobic activities, monitoring of nutritional intake and so on; Goals need to be monitored and revised on a regular basis. One of the biggest mistakes that coaches make in setting goals is that they are often too rigid in their approach. The goal setting process works best when there is some flexibility and the individual athlete or team takes ownership of each goal. Thus, coaches and managers are better off exercising some democracy when setting goals, particularly if working with more experienced athletes.

2. Using extrinsic rewards

According to SDT, the key aspect in using extrinsic rewards effectively is that they reinforce an athlete's sense of competence and self-worth. Thus, a reward should be informational in nature rather than controlling. If a reward comes to be controlling, it can significantly undermine intrinsic motivation. For a reward to be informational, it is advisable that it has relatively little monetary worth (i.e. it is a token reward), such as a 'woman of the match' or 'athlete of the tour' title. Also, the reward should be presented to an athlete in front of all potential recipients with some emphasis placed on the prestige associated with it. Other popular ways of using token rewards include etching

athletes' names on annual honours boards for their contributions, or awarding a special item of clothing.

3. Motivational music

A particularly good way to motivate athletes in training and prior to competition is through the use of music they perceive to be inspirational. Sydney Olympics rowing gold medalist, Tim Foster, now a respected coach, uses music to punctuate all of the indoor training sessions that he leads. Specifically, during circuit training or rowing ergometer intervals, he puts on loud/fast music, while during recovery periods he plays soft/slow music. Therefore, work and recovery times are regulated by music. Research from Brunel University indicates that this approach increases work output, reduces perceived exertion and improves in-task affect – the pleasure experienced during the activity.

4. Positive self-talk

Positive self-talk is a technique that can be used to enhance motivation across a wide range of achievement domains. It makes use of an athlete's powerful inner voice to reinforce their self-esteem or important aspects of their performance. With appropriate repetition, self-talk can positively alter an athlete's belief system. I

use three types of self-talk in my work with athletes and will illustrate each with an example to assist you in coming up with your own.

The first type is known as task-relevant self-talk, which serves to focus an athlete's attention on the task at hand. A karateka I worked with used the mantra 'pillar of power' to reinforce his strong posture. The second type is known as mood-related self-talk, which impacts on how athletes feel. An international water skier came up with 'butterflies in formation' to represent how the butterflies in her tummy would work for her rather than against her. The third type is known as a positive self-affirmation statement and the most famous exponent of these was the legendary boxer Mohammed Ali who repeated the claim, 'I am the greatest' so many times that even his opponents believed it.

'I figured that, if I said it enough, I would convince the world that I really was the greatest.' Mohammed Ali

Conclusion-: It has been found the motivation plays a vital in the performance of the sports personalities. Highest the level of motivation better the performance of the players. It keeps him away from negative thoughts and works as a booster in bringing amazing results.

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Science of Meditation

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Abstract

No one has ever argued that meditation is “bad for you” and intuitively we have always known it’s a good thing to do — if only to relieve stress. You could even say that we are “conditioned” to put off anything remotely “good for you.” We grab the fast food fries instead of a healthy salad. We try to bury our unhappiness and stress in an unending stream of diversions: television, fast food, booze, drugs. Then, when something bad happens — for example our doctor diagnoses us with a terrible condition — we bury that stress in more diverting entertainment, more alcohol and more fast food. Arguably, a large part of Buddhist practice, is designed to sever our attachments to cravings — with the goal of escaping suffering — and also, to alter the conditioning of our minds and bodies for “healthier” routines. Meditation is a practice at the centre of this goal. Just like your muscles need exercise, so do your focus and concentration.

Key Words: unhappiness, stress, meditation

Introduction:

Meditation has surged in popularity in recent years, from a fringe interest to a mainstream trend championed by therapists, scientists, and celebrities. As part of this, misconceptions and dismissals have given way to the emerging recognition of meditation as a science. There are, however, those who would challenge this view. As both a scientist and a meditator, we feel a duty to respond. The human mind is undeniably a suitable subject for scientific study, and one purpose of meditation is careful observation of one’s own mind. This observation reveals consistent patterns that meditators share with one another and with teachers who direct their practice. Over thousands of years, meditators have tested, refined, and reworked their models of the mind based on new insights as later generations developed new meditative techniques. Thus, over time, an organized

body of knowledge has accumulated describing the nature and behavior of the mind at a very fine level of resolution. This is one sense in which certain forms of meditation qualify as science.

What is Meditation?

Meditation is a practice of concentrated focus upon a sound, object, visualization, the breath, movement, or attention itself in order to increase awareness of the present moment, reduce stress, promote relaxation, and enhance personal and spiritual growth.

Meditation may involve generating an emotional state for the purpose of analyzing that state such as anger, hatred. Meditation is the practice of turning your attention to a single point of reference. It can involve focusing on the breath, on bodily sensations, or on a word or phrase known as a mantra. In other words, meditation means turning your attention away from distracting

thoughts and focusing on the present moment.

Meditation: How to Do It

There are tons of different ways to meditate. There's guided meditation, mantra meditation, Zen meditation, mindfulness meditation, Tai Chi meditation, transcendental meditation.

So here's your quick guide from The Art of Charm on how to start meditating right way in a manner that's going to provide you with immediate benefits.

- **Set the right environment.** Turn off your phone. Close the laptop. Don't play music. Make your environment as quiet and tranquil as possible. Plan to do anything you can to avoid interruption.
- **Set an alarm.** Pick a time, starting with ten minutes, though the longer the better. Half an hour is great if you can do it. Set your alarm and forget it. Don't worry about how long you've been meditating or how long you have to go.
- **Get your physical stress out.** Progressive muscle relaxation is a great way to prepare for meditation. Spend five or ten minutes doing this before you meditate and it will make a huge difference.
- **Find a comfortable position for sitting.** You can sit in a chair, on a pillow, or on the floor. The main thing is that you need to be sitting up, not lying down, as the latter is almost always a recipe for falling asleep. If you want to find a "mystical" pose to help you get in the mood, go for it, but it's not necessary.
- **Settle into position.** Take a couple seconds to settle into position. Wiggle around a little bit. But once you're set, stay there. In fact, learning to sit still — without moving, scratching, or otherwise adjusting yourself — is a lot of what the early stages of learning to meditate are about.
- **Close your eyes.** Some forms of meditation don't require this. For now, close your eyes.
- **Breathe.** A lot of meditation is really just about breathing. There are different ways to do this, but one basic way is what's called "four fold breath." Breathe in for four seconds. Hold your breath for four seconds. Breathe out for four seconds. Hold for four seconds. Focus on getting this right for a bit and it will eventually become automatic.
- **Let thoughts flow through you.** A lot of guys think they need to fight against thoughts. Nothing could be further from the truth. Instead, just let them flow by like clouds through the sky. If it helps, say "thinking" when you have a thought and go back to focusing on nothing.
- **Do the time you committed to.** Don't be surprised if it's difficult to meditate at first. We're so used to being constantly stimulated that when we're finally not, it can be uncomfortable or difficult. But do whatever time you set out to do. It's not going to kill you. On the contrary, in many cases it can be the missing piece of the puzzle. Focusing on quieting our mind allows us to better use it when we need to, rather than

constantly being consumed by mental chatter.

The most commonly cited benefits of meditation are:

- Improvements in immune function
- Reduction of pain
- Reduction of inflammation, especially for arthritis, with some benefits also for cancer and other conditions
- Increases in brain matter, cortical thickness, and cognitive benefits
- Improvements in memory, and help with cognitive disorders
- Improvements in ability to regulate emotions
- Reduction of stress and the negative health issues associated with stress
- Enhances focus and attention and job performance
- Improves Emotional Intelligence

- Reduces depression and loneliness.

Conclusion:

Ten minutes a day in soothing, calming meditation can bring more health and cognitive/psychological benefits to your life and health. Yet the mantra of, “**Give up ten minutes of TV a night, meditate instead**” seems largely an unfulfilled aspiration with most people — like New Year’s resolutions. Good intentions die easily.

As with anything else you’re introducing in your schedule, it’s important to make time for this. One way you can do this is just by blocking it out on your schedule. Then you’re going to find it harder to come up with reasons to not meditate. Even if you can’t do it every day (though you’ll find the best results that way), you can treat it like going to the gym — do it three or even five times a week. Try out different durations, types, and frequencies of meditation and jot down how you feel before and after the practice—and see what seems to work for you

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Introvert Personality Traits of Sportspersons

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Abstract

Introversion is “the state of or tendency toward being wholly or pre dominantly concerned with the interest in one’s own mental life”. Introverts tend to be more quiet, reserved and introspective. Unlike extraverts who gain energy from social interaction, introverts have to expand energy in social situations. After attending a party or spending time in a large group of people, introverts often feel a need to “recharge” by spending a period of time alone. Researchers have found that people high in this trait tend to have a smaller group of friends. While extraverts generally have a wide circle of friends and acquaintances, introverts typically choose their friends much more carefully. Their closest relationships tend to be profound and significant. They also prefer to interact with people on a one-on-one basis rather than in a large group setting.

Key Words: Introvert, traits, physical education and sports

Introduction:

The terms introversion was popularized through the work of Carl Jung and later became central parts of other prominent theories including the big 5 theory of personality. The introversion dimension is also one of the four areas identified by the Myers Briggs Type Indicator (MBTI). The common modern perception is that introverts tend to be more reserved and less outspoken in groups. They often take pleasure in solitary activities such as reading, writing, using computers, hiking and fishing. The archetypal artist, writer, sculptor, engineer, composer and inventor are all highly introverted. An introvert is likely to enjoy time spent alone and find less reward in time spent with large groups of people, though he or she may enjoy interactions with close friends. Trust is usually an issue of significance; a virtue of utmost importance to an introvert is choosing a worthy companion. They prefer to concentrate on a single activity at a time

and like to observe situations before they participate, especially observed in developing children and adolescents. They are more analytical before speaking. Introverts are easily overwhelmed by too much stimulation from social gatherings and engagement, introversion having even been defined by some in terms of a preference for a quite, more minimally stimulating environment. Introversion is not seen as being identical to shy or to being a social outcast. Introverts prefer solitary activities over social ones, whereas shy people (who may be extroverts at heart) avoid social encounters out of fear. Introversion is one of the major personality traits identified in many theories of personality. People who are introverted tend to be inward turning, or focused more on internal thoughts, feelings and moods rather than seeking out external stimulation. Introversion is generally viewed as existing as part of a continuum along with extraversion. Introversion

indicates one end of the scale, while extraversion represents the other end. Introvert Personality Traits are Reliability, Activeness, Thoughtfulness, Controlling and Anxiety.

Objective of the Study:

To study the introvert personality traits of sportsmen

Review of Literature:

Parson (2004) studied the personality traits of national representation level swimmers in Canada in 2004. Cattle 16 PF questionnaire was administered to the subjects, results showed that champion swimmers differ from the average population in 15 of the 16 factors areas. These appeared to be differences in personality between champion swimmers selected to represent Canada in 2004 and champion swimmers apparently possess marked extremities in personality factors scores. **Peterson (2012)** concluded that female athletes tended to be emotionally about and more serious than the average female. They were also intelligent, conscientious, aggressive and preserving.

Research Methodology:

The doctrinal research methodologies have been used for the present research article. As most of the information can be sought from the available literature i.e. books, journals, research articles for preparation of the same.

Results:

Researchers have found that people high in this trait tend to have a smaller group of friends. While extraverts generally have a wide circle of friends and acquaintances, introverts typically choose their friends much more carefully. Their closest

relationships tend to be profound and significant. They also prefer to interact with people on a one-on-one basis rather than in a large group setting.

It is important to note that introversion does not necessarily equate with shyness. The development of shyness and social withdrawal, authors Schmidt and buss write, "Sociability refers to the motive, strong or weak, of wanting to be with others, whereas shyness refers to behaviour when with others, inhibited or uninhibited, as well as feelings of tension and discomfort." Shyness indicates a fear of people or social situations. Introverts, on the other hand, simply do not like to spend lots of time interacting with other people. However, they do appreciate being around people to whom they are close. They find engaging in "small talk" tedious, but do enjoy having deep, meaningful conversation. Introverts tend to think about things before talking. They want to have a full understanding of a concept before they voice an opinion or try to offer an explanation. While extraverts typically learn best through trial and error, introverts learn best through observation.

Conclusions:

According to various research findings, extraverts outnumber introverts by about three to one. Introverts often find that other people try to change them or even suggest that there is something "wrong" with them. Nothing could be further from the truth. While introverts make up a smaller portion of the population, there is no right or wrong personality type. Instead, both introverts and extraverts should strive to understand each other's differences and similarities.

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Respiratory, Physical, and Psychological Benefits of Breath-Focused Yoga for Adults with Severe Traumatic Brain Injury (TBI): A Brief Pilot Study Report

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Abstract

Objective: This pilot study was designed to identify the potential benefits of breath-focused yoga on respiratory, physical, and psychological functioning for adults with severe traumatic brain injury (TBI). **Participants:** Ten individuals with severe TBI who self-selected to attend weekly yoga classes and 4 no-treatment controls were evaluated. **Methods:** Participants were assessed at pretreatment baseline and at 3-month intervals for a total of 4 time points over 40 weeks. Outcomes of interest included observed exhale strength, ability to hold a breath or a tone, breathing rate, counted breaths (inhale and exhale), and heart rate, as well as self-reported physical and psychological well-being. **Results:** Repeated within-group analyses of variance revealed that the yoga group demonstrated significant longitudinal change on several measures of observed respiratory functioning and self-reported physical and psychological well-being over a 40-week period. Those in the control group showed marginal improvement on 2 of the 6 measures of respiratory health, physical and social functioning, emotional well-being, and general health. The small sample sizes precluded the analysis of between-group differences. **Conclusion:** This study provides preliminary evidence that breath-focused yoga may improve respiratory functioning and self-perceived physical and psychological well-being of adults with severe TBI.

Key Words: yoga, traumatic brain injury, pranayama

Introduction

Traumatic brain injury (TBI) often leads to decreased quality of life.¹ Individuals with TBI frequently experience chronic pain, headaches, sleep disturbance,² and behavioral problems.³ In addition, reduced respiratory capacity often has pervasive effects on overall functioning.⁴ It has been suggested that patients with TBI might benefit from interventions that exceed the scope of conventional Western medicine.⁵ This study was designed to test whether participation in weekly, breath

(*pranayama*)-focused yoga classes might benefit individuals with severe TBI.

Although yoga has been associated with physical and psychological health benefits, these outcomes are most often supported by anecdotal information.⁶ As the practice of yoga has gained attention in mainstream medicine,⁷ increased effort has been devoted to validating its health effects.⁸ A recent bibliometric analysis provides evidence of the efficacy of yoga for improving physical and psychological well-being.⁹ In addition to having a modulating

impact on physiological and neurophysiological systems, yoga has been effectively used to treat depression,¹⁰ improve breathing in individuals with asthma,¹¹ and increase muscle strength, endurance, and flexibility.¹² Such findings suggest that yoga may offer multiple benefits to individuals with TBI, who are known to be at increased risk for respiratory illness¹³ and other physical and psychological difficulties. On the basis of evidence generated by earlier research, it was hypothesized that adults with TBI who participated in a yoga intervention program would demonstrate improvement in respiratory health and self-perceptions of physical and psychological well-being over time.

Methods

Participants

This convenience sample was drawn from adults with TBI who were clients of the Marin Brain Injury Network (MBIN) in university college of Physical Education Kakatiya University Warangal. MBIN runs a day-care and development center for people with adult-acquired brain injuries. Participants were classified as having severe brain injury on the basis of criteria from the Glasgow Coma Scale.¹⁴ Participants had acquired TBI in a variety of ways, from car or bicycle accidents to aneurisms. The nature of individuals' injuries was not controlled for in this study because of the small sample size. Individuals were at least 21 years old, exhibited severe physical disability, and had adequate cognitive functioning to be

able to understand instructions and to partake in the yoga practices. All were non-smokers who reported no recent history of flu or swine flu.

The director and/or staff of the Stress Management Center of Marin (SMC) have provided yoga classes for clients of the MBIN for several years. Classes are conducted at a time when an SMC staff member is available to volunteer. Adults in our study self-selected to participate in the yoga classes ($n = 10$; 6 males, 4 females), and those who were unable to attend at the scheduled class time were assigned to the control group ($n = 6$; 4 males, 2 females). Two initial members of the control were unable to complete the assessments because of factors unrelated to the study, which yielded a final sample size of 4 (3 males, 1 female). Neither the yoga nor control group participants had a history of attending SMC yoga classes. Those in the yoga treatment group attended weekly, 30-minute group training/practice sessions for 36 weeks over a 40-week period, whereas controls did not attend any yoga classes but were assessed during the same week as were participants in the yoga group. Mean attendance for the yoga group was 33 weeks, and standard deviation was 6.5 weeks.

Systematic group bias was reduced in that individuals from both groups expressed interest in attending classes; however, those in the control group were precluded from doing so because of scheduling conflicts. A participant's ability to attend classes was dictated by considerations such as caregiver availability, regular doctor appointments,

and other factors unrelated to this research. An equivalent yoga class was offered to control group members at the conclusion of the study.

Intervention

Yoga classes were intended to increase breath ease and awareness and to promote relaxation. Content was derived from several sources, including a version of the sun salutation, conducted in a chair, developed by SANKAR AND JANU NAIK⁵ and designed for individuals with heart disease or high blood pressure. A seated twist that was held for 3 slow breaths was added to the middle of the sun salutation sequence. This was followed by a modified side stretch and forward bend, all performed in a chair (see Appendix A). Practices were taught based on the assumption that many of the clients were likely to experience severe spasms of the body and limbs caused by their TBI, and that some participants were taking ant seizure medication. Primary side effects of many of these medications include dizziness and drowsiness. These symptoms were likely to be a concern if participants stood during the yoga practice. The particular emphasis of the yoga relaxation exercises was to help make breathing easier and increase breathing awareness.

The pranayama (breathing) protocol was developed based on input from an experienced yoga instructor and from SHANKAR AND JANU NAIK⁵, founder and director of the university college of Physical Education Kakatiya University Warangal Institute. The practice included repetition of several exercises to build stamina and entailed systematic,

coordinated contraction and release of the diaphragm, engagement of the intercostal muscles, and coordination of the two.

Participants were instructed to begin using slow sharp exhales then asked to link exhalations together in a series of sharp contractions and releases to 'work' the diaphragm. Lion pose followed, during which the tongue is extended and the breath is "coughed out" to clear and relax the throat. This exercise was succeeded by metered breathing during which individuals counted the duration of each inhalation and exhalation, with the goal of increasing the length of each breath and ultimately to increase lung capacity. Participants were also asked to sing and sustain a note for as long as possible while viewing the second hand of a clock. This exercise was repeated 3 times to build stamina. Concluding chants that could be sung in 1 breath and that were selected to increase respiratory capacity were sung 3 times.

Data Collection

Data were collected from each participant at a pre intervention baseline and 3, 6, and 9 months later. Information was gathered at the MBIN by a registered nurse who was blind to group assignment. Observed physiological measures included exhale strength assessed using a peak flow meter, breath-holding ability, breathing rate, holding a tone, and counted breaths (inhale and exhale). A brief history of recent respiratory illness and heart rate and blood pressure were also obtained. Self-reported physical and psychological well-being were measured using the SF-36

Physical and Mental Health Summary.¹⁶ Items were read to each participant and care was taken not to reveal which answers had been given during previous administrations. Those in the control group were assessed using identical measures and procedures at each of the 4 time points.

Institutional review board (IRB) approval for research with human subjects was obtained from the university college of Physical Education Kakatiya University Warangal. Research participants who received the protocol as part of the IRB review process were given a full description of the measures to be obtained in the study and were informed that the evaluation process would take approximately 20 to 30 minutes to complete. Participants were informed that they could withdraw from the research study or from the class at any time and were asked for written consent. Although all subjects had full cognitive functioning, not all were able to provide a written signature. In this case, they either made a mark and had the letter cosigned by their guardian, or the guardian signed on their behalf.

Results

Means, standard deviations, and *F* values for each of the respiratory measures for the yoga group are presented in Table 1. Control group values are presented for visual comparison. The yoga group demonstrated significant improvements over time with respect to 3 related measures of respiratory function, namely, breath holding, breath counting (inhaling and

exhaling), and holding a tone, as well as reduction in heart rate. In contrast, the control group evidenced little change with respect to most of the physical measures, though trends toward increased exhale strength and ability to hold a tone were observed.

Means, standard deviation, and *F* values for the physical and psychological adjustment scales are presented in Table 2. The yoga group reported significant improvements in physical functioning, emotional well-being, and overall health over time, as well as decreases in self-reported pain. The control group also had a positive trend relative to increased physical functioning and general health. Cross-sectional and longitudinal differences between yoga and control groups could not be analyzed because of the small sample sizes; therefore, results should be interpreted with caution.

Discussion

After 9 months of data collection, the results were encouraging. Overall, the yoga group showed significant improvement while many of the control scores remained the same or declined. Yoga group members indicated improvements on a number of self-reported items related to physical and emotional well-being. Increased subjective experience of an improved emotional state is particularly noteworthy given that individuals with TBI are often likely to experience seasonal affective disorders,¹⁸ yet longitudinal fluctuations in mood related to the time of year were not observed.

Table 1. Means and Standard Deviations for Observed Respiratory Measures and Heart Rate by Group

Measurement		Baseline	3 Mos.	6 Mos.	9 Mos.	F values Yogadf (3,27)
Exhale Strength	Yoga *	357.5 (109.3)	383.5 (141.4)	382 (138.9)	411.7 (135.9)	1.11, $p > .05$
	Control	392.5 (42.7)	398.8 (54.2)	398.8 (97.5)	417.5 (39.0)	
Holding a breath	Yoga *	46.6 (30.1)	56.4 (39.6)	59.3 (43.2)	66.7 (46.4)	4.98, $p < .05$
	Control	38.3 (18.8)	38.5 (19.2)	36.8 (6.2)	39.0 (4.6)	
Heart rate	Yoga †	73.7 (7.2)	70.8 (6.5)	65.3 (8.9)	67.0 (8.9)	16.71, $p < .01$
	Control	77.5 (6.1)	78.5 (7.0)	75.0 (12.6)	76.0 (7.5)	
Breathing rate	Yoga	14.4 (5.4)	16.4 (4.5)	14.6 (5.2)	16.3 (4.0)	0.43, $p > .05$
	Control	23.5 (11.8)	23.8 (11.7)	20.5 (3.4)	20.8 (3.8)	
Holding a tone	Yoga *	22.8 (10.7)	27.8 (14.1)	34.3 (26.3)	34.8 (18.5)	5.12, $p < .01$
	Control	18.3 (9.7)	17.5 (11.7)	26.8 (20.8)	21.3 (11.8)	
Counted breath in	Yoga *	12.2 (6.5)	14.6 (6.6)	19.1 (18.9)	25.1 (24.7)	3.61, $p < .05$
	Control	12.3 (1.7)	15.0 (4.8)	14.3 (7.2)	11.8 (2.4)	
Counted breath out	Yoga *	13.8 (6.6)	13.8 (9.3)	21.9 (26.3)	33.8 (29.2)	4.92, $p < .05$
	Control	12.3 (1.7)	15 (4.8)	15.3 (6.7)	13.8 (1.3)	

Note. *Significant increase $p < .05$; †Significant decrease $p < .05$

The researchers and MBIN staff were particularly interested in changes in psychological function as the rainy season began in northern California. We were encouraged that yoga group participants maintained improvements during the winter season, whereas the control group members were more likely to report mood problems during this period, suggesting that yoga may alleviate depression in patients with TBI.

Consistent with the initial hypotheses, the yoga group showed improvement over

time on 4 of the 6 breathing measures, as well as decreased heart rate, whereas the control group demonstrated a trend toward improvement on only 2 domains of respiratory fitness. Providing yoga classes appears to enhance physical well-being and respiratory strength for individuals with brain injuries. These findings add to the limited research results supporting yoga as a tool for improving functioning in individuals with other neuro- logical disorders.¹⁸

Table 2. Self-Reported Physical and Psychological Adjustment by Group

Measurement		Baseline	3 Mos.	6 Mos.	9 Mos.	F values Yogadf (3,27)
Physical functioning	Yoga*	48.0 (44.8)	66.3 (33.2)	60.0 (42.2)	78.0 (30.8)	7.18, $p < .01$
	Control	60.0 (43.2)	61.3 (41.1)	66.3 (41.1)	92.5 (9.6)	
Role limit. physical	Yoga	72.5 (41.6)	95.0 (15.8)	85.0 (24.2)	95.0 (15.8)	1.25, $p > .05$
	Control	93.8 (12.5)	100.0 (0.0)	81.3 (23.9)	100.0 (0.0)	
Role limit. emotional	Yoga	86.7 (32.2)	90.0 (22.5)	87.5 (22.7)	93.3 (21.2)	0.19, $p > .05$
	Control	83.3 (33.3)	100.0 (0.0)	83.3 (33.3)	100.0 (0.0)	
Energy/fatigue	Yoga	69.0 (22.3)	70.0 (20.8)	72.7 (20.0)	76.5 (23.0)	0.61, $p > .05$
	Control	49.5 (36.6)	46.3 (32.8)	53.8 (22.1)	47.5 (23.6)	
Emotional well-being	Yoga *	74.8 (17.7)	77.2 (14.6)	84.1 (11.5)	87.9 (9.7)	6.52, $p < .01$
	Control	75.0 (10.5)	87.0 (8.9)	74.8 (10.5)	79.0 (2.0)	
Social functioning	Yoga	83.8 (11.6)	88.8 (14.0)	85.5 (11.9)	92.5 (8.5)	1.41, $p > .05$
	Control	68.2 (42.6)	93.8 (12.5)	70.6 (22.0)	80.6 (22.4)	
Pain	Yoga †	89.8 (21.8)	91.5 (16.0)	86.9 (21.2)	88.3 (20.8)	0.26, $p > .05$
	Control	100.0 (0.0)	100.0 (0.0)	80.9 (13.7)	96.9 (6.25)	
General health	Yoga *	80.5 (8.6)	82.2 (11.1)	84.0 (10.2)	83.4 (11.2)	4.09, $p < .05$
	Control	58.7 (21.0)	70.0 (22.7)	72.5 (17.6)	83.8 (18.0)	
Health transition	Yoga	52.5 (34.3)	75.0 (23.6)	63.5 (17.2)	67.5 (16.9)	0.47, $p > .05$
	Control	48.8 (18.4)	50.0 (45.6)	62.5 (43.3)	62.5 (14.4)	

Note. *Significant increase $p < .05$; †Significant decrease $p < .05$

Limitations

This study was limited by the small sample size, which prevented analyses of between-group differences both cross-sectionally and over time. The lack of random assignment to either the yoga or control group also leaves open the question of a self-selection bias among participants. Given the limited ability to statistically analyze the data, findings are viewed as exploratory and should be interpreted with caution.

Conclusions

The study results provide preliminary support for the benefit of breath-focused yoga for adults with severe TBI. Improvements in breathing and self-reported psychological and physical well-being were noted for participants who attended yoga classes, whereas the same effects were not as prevalent among the control group. Although these findings cannot be generalized to younger individuals,

populations with less severe head trauma or those with TBI caused in conjunction with other psycho-emotional stressors, such as military combat, they do suggest the value of yoga for a population with TBI and add support to the growing number of studies validating the value of yoga for improving health status in a variety of populations. The authors are currently working in cooperation with the university college of Physical

Education Kakatiya University Warangal to study the effects of participating in this breath-focused yoga program on military veterans with TBI. Examination of the effects of breath-focused yoga for a large, diverse group of men and women will permit greater exploration of the mechanisms from which yoga may benefit individuals with TBI, as well as the longitudinal progression of these effects.

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Social Psychology for Physical Education and Sports

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Abstract

As sportsman interacts with other people in society, he builds up a set of feelings or attitudes in respect of the relative worth of persons, objects or ideas. On the basis of such feelings, he/she develops likes or dislikes in varying degree of intensity and ranks these likes and dislikes in the form of a hierarchy. It has been stated that attitudes, values, held by individuals, groups or society as a whole, as to whether material or non-material objects are good, bad, desirable or undesirable.

Key Words: Socialization, Psychology, Physical Education and Sports

Introduction:

In more recent times Erving Saffman referred to games as a "Situating activity system" or "focused gathering" having rules for role playing and interaction for all participants of course, serious and systematic psychological interest in the sport at the international level is only a recent development as is evident from the coming into being of the international council of sports and Physical Education (UNESCO).

Socialization in Physical Education and Sports

Every child is born into a social environment. Society transforms the untrained human into an effective member of Society using agencies, means and methods as -are socially acceptable. During Socialization in sports the individual learns the expectations of his / her Society. It is the process by which an individual is conducted in to his / her Social --and Cultural World. Through socialization, Player is formed in to a

Social being, and no one can avoid this process.

Purpose of Socialization in Physical Education and Sports

- 1) Acquisition of basic Physical disciplines: This involves learning to perform Physical body. Functions in Socially acceptable ways.
- 2) Understanding and appreciation of acceptable aspirations.
- 3) Acquisition of necessary Physical Education and Sports skill.
- 4) Understanding and appreciate role in Physical Education and Sports.

Objective of the Study:

To know the role of social psychology in physical education and sports

Hypothesis of The Study:

Social Psychology plays a prominent role in promotion of physical education and sports in the society.

Review of Literature:

Sutherland (1999) defines Social interaction as the “dynamic interplay of forces in which contact between persons and groups results in a modification of the attitudes and behavior of the participants.”

New Comb (2010) opined that Socio-Psychological treatment of sports is becoming more and more indispensable in recent times. It touches human life at many points. A large number of problems are closely associated with the place of sports in the development of society with the interconnection with other socio-psychological of sport mention that despite Americans commitment to the capitalistic system in virtually every newspaper save perhaps the wall street Journal. The economic section of the paper, if there is one it takes a back seat to the sports pages.

Research Methodology:

The doctrinal research methodologies have been used for the present research article. As most of the information can be sought from the available literature. i.e. books, journals, research articles for preparation of the same.

Results:

Socialization in sports roles is the result of the social environment in which an individual is brought up and the attitude of those around him. Role of family in

socialization of a child is universally recognized. Socialization in sports role is, to a large extent the responsibility of family besides provides role model and financial support. Family also provides encouragement to children in the matter of sports participation and motivates them to try for higher aspiration and standards in sports achievements. This means the positive attitude of parents towards physical education and sports is a powerful motivator for the children.

Modern sports have become a major influence in the world and in everyday life. In all parts of the world, prowess in sports is status symbol of a nation as well as of individuals. It provides channels of communication and friendly contacts for hundreds of thousands of men and women, boys and girls, in different parts of a country and of a different nationalities and culture.

Conclusion:

All the activities of a human being – physical, mental, intellectual, social, economic and political are inter – related and physical education helps greatly in the evolution of a ‘whole’ man. Physical education is the only process which helps every aspect of life. Physical education is quite natural. It does not come in the way of education.

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Comparative Study of Mental Health and Self Confidence between Sports and Non Sports Persons

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Abstract

Physical Education, as a part of human education has always existed in the human society in one form or the other. Since time immemorial, even before the dawn of civilization and culture, physical exercise has been very important aspect of human existence. A healthy individual is not only physically healthy, but also mentally healthy. The modern concept of health extends beyond the proper functioning of the body. It includes a sound, efficient mind and controlled emotions. Health is a state of being, sound or whole in body and mind. In this study, Fifty (50) subjects were selected for the collection of data which include twenty five (25) sports persons and twenty five (25) non-sports persons in Srinagar district of Jammu and Kashmir. The aim of study was to compare the mental health, self-confidence of sports and non- sports persons of Srinagar district.

Key words: Mental Health, self-Confidence; Immemorial, Civilization.

Introduction

Physical Education, as a part of human education has always existed in the human society in one form or the other. Since time immemorial, even before the dawn of civilization and culture, physical exercise has been very important aspect of human existence. In the primitive societies the necessity for survival i.e. protection from hostile environment and beasts, motivated man to keep himself more physically fit and strong enough in comparison to stronger forces of nature. The word physical refers to the body. It is often used in regard to various bodily characteristics such as physical strength, physical development, physical health and physical appearance.

Mental health is a level of psychological well-being, or an absence of a mental

disorder; it is the "psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment". From the perspective of positive psychology or holism, mental health may include an individual's ability to enjoy life, and create a balance between life activities and efforts to achieve psychological resilience. According to World Health Organization (WHO) mental health includes "subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self-actualization of one's intellectual and emotional potential, among others." A healthy individual is not only physically healthy, but also mentally healthy. The modern concept of health extends beyond the proper functioning of the body. It includes a sound, efficient mind and

controlled emotions. Health is a state of being, sound or whole in body and mind. It means that both body and mind are working efficiently and harmoniously. Man is an integrated psychosomatic unit, whose behavior is determined by both physical and mental factors. Mental health which today is recognized as an important aspect of one's total health status is a basic factor that contributes to the maintenance of physical health as well as social effectiveness. Self-confidence is the expected probability that a person will achieve a goal in a certain situation. For example, if a student estimates that his probability of achieving an exam is 90%, we would conclude that the student had high self-confidence in his ability to do well on an exam. If he had estimated 10%, then we would say he had low self-confidence about his ability to do well on the exam.

Methodology:

As every research demands a systematic method and procedure like-wise this chapter adopts the following procedures including information regarding research design, source of data, selection of subjects, sampling method, collection of data, criterion Measures etc. A research become successful accompanied and supported by some reliable and authentic data. The statistical analysis of the gathered data provides a well-knit picture of a complete and successful hypothesis as pre-selected by the researcher. The chapter has been divided into the following headings:

Source of Data:

For the present study subjects were selected from sports person and non sports person in Srinagar District for the collection of data.

Selection of Subjects:

Fifty (50) subjects were selected for the collection of data which include twenty five (25) sports persons and twenty five (25) non sports persons in Srinagar.

Results:

The statistical analysis and interpretation has done on the basis of data collection. The data has been analyzed by using independent 't' test and interpretation was drawn. The level of significance was set at 0.05 to test the hypothesis

In the chapter the data collected from sports and non sports persons from Srinagar District is presented in tables, graphs, figures and discussion and findings are also presented in this chapter.

Level of Significance:

To test the hypothesis the level of significance was set at 0.05 level of confidence which was considered adequate and reliable for the purpose of this study.

Findings:

The data was collected from the 50 subject's i.e. 25 subjects from Sports and 25 Non Sports Persons and after that the collected data was analyzed by comparing the means of Sports and Non Sports Persons and was again statistically analyzed by applying t-test to check the significant difference among selected variables. Therefore separate tables and graphs have been presented for each variable. Each table gives the mean of Sports And Non Sports Persons also the researcher found the standard deviation of Sports And Non Sports Persons and also their mean difference is been given in the table. The level of significance for the present study is kept at and also the degree of freedom is to be kept in mind for the calculation of tabulated 't' which is then compared with the calculated 't'. This is used for testing of

hypothesis which was given by the researcher previously.

If the value of the calculated 't' is more than the tabulated 't' then the hypothesis of the researcher will be accepted and if the value of the calculated 't' is less than the tabulated 't' then the hypothesis of the researcher will be rejected. Acceptance or rejection of hypothesis does not matter.

The whole work of the researcher depends upon the collection of the data that is why the collection of data is called the foundation stone around which the whole research work revolves. So the researcher is asked to collect the data in a very precisely manner as to face less difficulties during the whole researcher work.

Table-1

Comparison of Mental Health between Sports and Non Sports Persons

Group	Mean	S.D.	M.D.	S.E.	D.F.	O.T.	T.T.
Sports Person	57.96	19.77	1.36	4.98	48	0.274	2.00
Non Sports Person	56.6	18.80					

Graph-1

Graphically Representation Mean Value of Mental Health Between Sports and Non Sports Persons

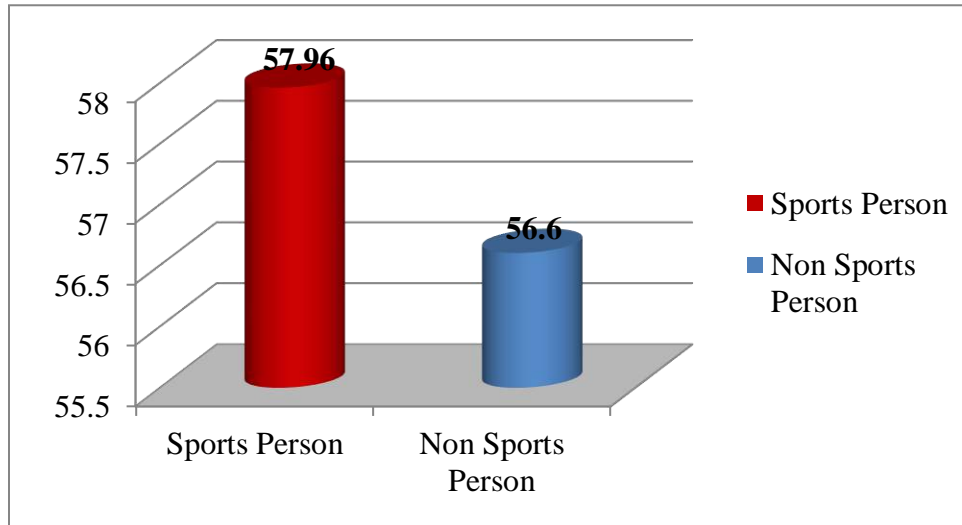
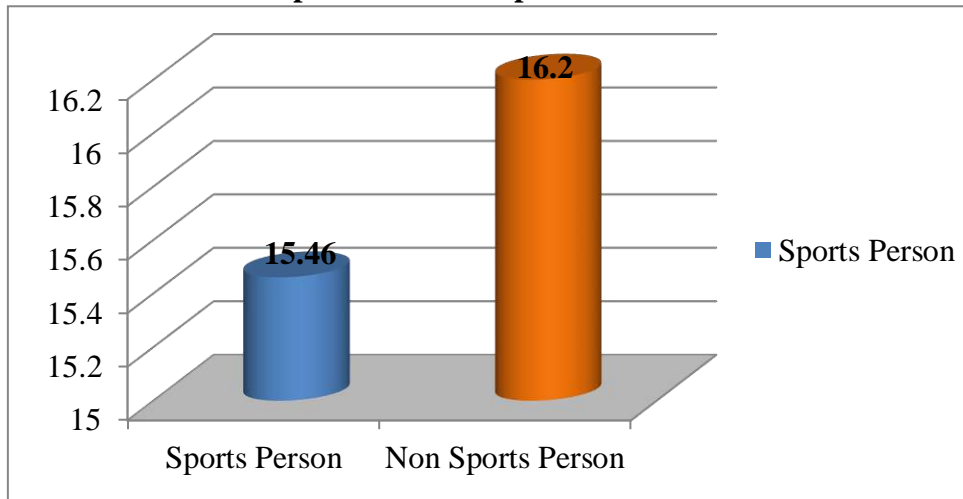


Table-2
Comparison of Self Confidence of Sports and Non Sports Persons

Group	Mean	S.D.	M.D.	S.E.	D.F.	O.T.	T.T.
Sports Person	15.46	10.27	0.73	2.58	48	0.28	2.00
Non Sports Person	16.2	9.75					

Graph-2
Graphically Representation Mean Value of Self Confidence Between Sports and Non Sports Persons



Conclusion:

From the above study it is concluded that in Mental Health the sports persons are having sharp mind and they are doing exercise regularly so they did not feel the mental fatigue easily and the non sports persons would feel easily as they are not attached with games and sports.

With the limitations of the study and from the statistical analysis of the collected data it is concluded that there was found insignificant difference in both variables mental health and self confidence of Sports

and Non-Sports persons while applied 't' test.

The researcher initially pre assumed that there will be a significant difference in the mental health and self confidence of sports and non sports persons of Srinagar District. After the statistical analysis interpretation of data it was found that there is insignificant difference. Because for both cases the calculated 't' is less than tabular 't' at the level of significance 0.05, so the pre assumed has been rejected.

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Yogic Concepts of Holistic Health and Wellness

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Abstract

Perfect health is the way of attainment of peace and happiness. The concept of holistic health is becoming popular in last few decades in modern medicine, but it existed in traditional healing methods from ages. The present paper discusses the yogic perspective of holistic health and wellness. It describes the concept of “five sheaths of existence (Panchkosha)” and yogic practices to take care of these sheaths. Yogic meaning of well-being is physical fitness, mental agility and spiritual verve. Yoga is curative, preventive and promotive science of health and wellness which encompasses all aspects of life. We must understand and practice yoga to achieve holistic health and wellness.

Key Word: yoga, holistic, wellness

Introduction

Achievement of complete health and disease-free life can help the attainment of the ultimate goal of human life: peace and happiness. Individuals subjectively experience the feeling of happiness and satisfaction. This affective reaction of satisfaction is not necessarily related to material gain or objective conditions of life. The practice of the ancient science of yoga is a tremendous gift from our Indian culture. Only in the late nineteenth century, we have begun to understand the vast potential and health benefits of yoga

Yoga is becoming popular among all: Restless, Sick or Healthy. It not only keeps one comfortable, fit and beautiful but also improves memory, intelligence and creativity. Specialists use it to unfold the deeper layers of consciousness in their move towards perfection.

Yogic Perspective of Holistic Health and Wellness

The preamble of World Health Organization, 1946, defines health positively, as complete physical, mental and social well-being, not merely negatively as the absence of disease or infirmity.² This statement has included the ability to lead “a socially and economically productive life” later. We are trying to reach “Health for All.” This definition structures health as a continuum. In other words, the wellness and illness are not two discrete entities as commonly understood but a continuous function indicating the state of wellbeing. There are many degrees of health between morbidity and optimal functioning in life. This is also reflected in the definition of health determined by recent international proceedings on physical activity, fitness and health: positive health is “associated with a capacity to enjoy life and withstand its challenges”, whereas negative health can be

defined as “any departure, subjective or objective, from a state of physical or psychological wellbeing short of death.

In Vyasa-Bhashya (first commentaries on Patanjali’s Yoga Sutras) “Health” is described as “a state of harmony between support structure (Dhatus), fluids (Rasa) and senses (Karana). The classical texts of yoga talk of wellness as a balanced condition, it gives the concept of connecting to the whole while existing as a part. The word ‘Yoga’ means ‘unity’ or ‘oneness’ and is derived from the Sanskrit word ‘Yuj’ which means to join (yujyate anenaiti Yoga).¹ This unity or joining is described in spiritual terms as the joining of the individual consciousness (Jivatman) with the universal consciousness (Paramatma). To achieve wellness, one must practice the holistic approach to health by balancing the body, mind and spirit through the self-disciplined life of Anasakti. The practices of asanas, pranayamas, mudras, bandhs, shat-karmas and meditation are ways to achieve holistic health. One has to achieve perfection in all the above elements before attaining union with the higher reality.

The Yogic view of health is exemplified in Shvetaasvatara Upanishad where it is said that the first signs of entering Yoga are lightness of body, health, thirstlessness of mind, clearness of complexion, a beautiful voice, an agreeable odor and scantiness of excretions

(laghutvamarogyamalolupatvamvarnaprasad amsvarasausthavamcaganghassubhomootrap ureesam Yoga pravrittimpathamamvadanti – Shvetaasvatara Upanishad: II–13). Yogi Svatomarama in the Hathayoga Pradipika reflects similar qualities, “Slimness of body,

the luster on the face, clarity of voice, the brightness of eyes, freedom from disease, control over seminal ejaculation, stimulation of gastric heat and purification of subtle energy channels are marks of success in Hatha yoga.” (vapuhkratsvamvadaneprasannataanaadasput atvamnayanunesunirmalearogataabindujayogni diipanamnaadiivishuddhir hatha siddhi lakshanam – Hathayoga Pradipika II–78).

In the Patanjali Yoga Darshan, an excellent description of the attributes of bodily perfection (kaya sampat) is available. It says that perfection of a body includes beauty, gracefulness, strength, and adamant hardness (rupalavanyabalavajrasamhanana kaya sampat – Yoga Darshan III: 47). The characteristic of good health is also mentioned as deep concentration on samana (energy of digestion) leads to radiant effulgence (samanajayatjvalanam – Yoga Darshan III: 41).

Yoga claims to endow perfect physical, mental, and social well-being even under stressful conditions. Thus the yogic meaning of well-being is physical fitness, mental agility, and spiritual verve. Yoga is curative as well as preventive and promotive science of health and wellbeing.

Concept of Existence and Development of Diseases

There are five sheaths of existence in the tradition of Yoga and in Upanishads there are five aspects of the existence of man (the concept of Panchkosha).⁵ The five sheaths are: The first the grossest sheath – Annamaya Kosh (anatomical), the second subtler sheath – Pranamaya Kosh (physiological), the sheath in which creative

power predominates – Manomaya Kosh (psychological), the sheath of the power to discern and discriminate – Vigyanmaya Kosh (cognition) and the sheath of highest state of evolution in which bliss is embodied – Anandmaya Kosh (conscious)

To remain healthy, we have to maintain harmony in all the sheaths of existence. It describes how one is the part of the whole and one's actions and thoughts influence the surroundings. For Annamaya Kosh one has to perform diets, Kriyas, loosening practices, and Yogasanas to take care of the parts of the body (7 Dhatus & rasa). Kriyas and Pranayama are practices for Pranamaya Kosh which is concerned with five pranas and five karmendriyas. Manomaya Kosh can be kept in balance with Dharana, Dhyana, Prayers, Chants, Bhajans to satisfy five gyanendriyas and chitta. For Vigyanmaya Kosh, practices like self-learning, bliss knowledge and Yogic counseling have been described to calm five gyanendriyaani and buddhi. The highest state of evolution Anandmaya Kosh (represents supreme energy) can be maintained by working in blissful awareness and Samadhi

In Anandmaya Kosh, a man is the healthiest with perfect harmony and balance of all his faculties. At Vigyanmaya Kosh, there are movements but channelized in the right direction. According to Yoga text, it is the Manomaya Kosh level where imbalance starts. This imbalance results in Adhis (mental illness) which breeds physical diseases called Vyadhis

According to yogic perspective, diseases or physical ailments (Vyadi) are of two types: 5 one is Adhija – generated by Adhis which is

further subdivided in Sara (essential type) and Samanya (ordinary type) and other is Anadhija – not caused by Adhis. Sara Adhijaare is responsible for the cycle of birth and death of physical body. These can be benefited with spiritual remedies like Atma Gyan and self-realization. Samanya Adhijaare psychosomatic ailments caused during interaction with the world. The remedies for these are mental as friendly and pleasant environment and suitable techniques. Anadhija includes infections, contagious diseases, and physical trauma. Physical remedies like medicines, mantras and right actions can provide help in such conditions.

Yoga as Way of Achieving Health and Wellness

Yogic procedures maintain normal body functions. Central nervous system ultimately controls the body through its relationship with autonomic nervous system and neuroendocrine processes. Yoga helps an individual to gain control over autonomic nervous system resulting in the homeostatic functioning of the body.

The experts of yoga have claimed that the perfect positive health, control on each part of body and mind and superhuman status can be achieved with regular practice. Here presenting the words of two renowned saints of all times.

Swami Vivekananda wrote

“There is not one muscle in the body over which a man cannot establish a perfect control. The heart can be made to stop or go on at his bidding, and each part of the organism can be similarly controlled.”

According to Shri Aurobindo:

“Yoga is a methodological effort towards self-perfection by the development of potentialities latent in the individuals. It is the process by which the limitations and imperfections can be washed away resulting in a superhuman race.”

Yoga is a holistic science of life, which deals with physical, mental, emotional and spiritual health. Various yogic concepts like Vasudevakudumbakam, Chaturvidhapurusharthas, Chaturashrama, Panchaklesha, Nishkama karma, Samatvam, Vairagya and others enable us to live as healthy a life as possible in a dynamic state of wellbeing. The regular practice of Yoga helps to reduce the levels of physical, mental and emotional stress and emphasize right thought, right action, right reaction and right attitude.

Eight limbs of yoga of Patanjali's Ashtanga yoga have encompassed all the dimensions of health. The Yama and Niyam: five dos and five don'ts help us better personal and social relationships as social beings. The five don'ts (Pancha Yama) are non-violence (ahimsa), truthfulness (satya), non-stealing (asteya), proper channeling of creative impulse (brahmacharya) and non-covetedness (aparigraha) and five dos (Panchaniyama) are cleanliness (saucha), contentment (santhosha), leading a disciplined life of austerity (tapas), introspectional self-analysis (swadhyaya), and developing a sense of gratitude to the divine self (ishwarpranidhana). Every attempt to follow these dos and don'ts will transform one into a better person, and family and society would accept him as a

valuable person. These values have a high potential to improve one's social health and bring happiness to life. The practice of asana and pranayama. The practice of asana and pranayama can take care of physical health. Hathyoga Pradipika (classical text on the practice of yoga) describes eighty-four asanas, and one or the other asana can be used to stimulate each part of the body. Asanas may be performed as physical exercise; they are different in terms of “placing the physical body in positions that cultivate awareness, relaxation and concentration”. Though hath yoga has given eight pranayamas but more than 20 pranayamas are in trend. Regular practice of pranayama helps regulate our emotions and stabilize the mind

Samadhi or enlightenment is the final destination of the journey of the yogic path where one can feel the one-ness with supreme energy. The person will reach the level of spiritual realm where one can tackle all emotions and worldly affairs with ease and comfort without losing calm.

The scientific studies also have shown that yogic practices are useful in attaining health and wellness. Yoga, accompanied by breath control increases cardiac output, decreases hepatic and renal blood flow, increases cerebral blood flow, decreases heart rate, and decreases diastolic blood pressure

Deep and slow breathing strengthen the respiratory muscles, increase their compliance, increase the oxygen intake and its diffusion in the lung, and ultimately lead to increase in the ventilatory perfusion.

Yoga influences cognition by increasing perceptual sensitivity, stunting of undesired

stimulus, and changing disoriented perception.

Yoga is a lifestyle as well as a philosophy which gives the process to achieve harmonious personality. The aim of Yoga is the blending of mind with the body so that they function coherently. The yogic postures appear to have been devised primarily to influence and rehabilitate the vital organs without giving fatigue to the muscles. So they consume little energy and produce

physiological benefits to the body. Thus, Yoga is a systematic process of gaining momentum to achieve a man in his entirety

Conclusion

The yogic concept of holistic health and wellness has infinite possibilities for providing answers to most health problems and achieving the goal of "Health for All". We must understand the science of Yoga: learn and practice with a holistic view.

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**Effect of Pranayama Practices on Blood Sugar of House Wives Age Group 35 To 50
Years**

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Introduction

In the present life style physical fitness is essential and has become a part of everyone's life. The working hours of different members of family makes house wife to follow a life which is driven by the needs of family members. This can result in irregular eating and resting time of such housewives. This affects their health and fitness. Due to changing food habits i.e. shifting from conventional staple diet to fast food which is available in packaged form affects the health of house wife. Housewives of Railway officers are subjected to additional burden of looking after a large amount of family duties as the husband's long working time and requirement of work keeps him away from home. Responsibility of managing the family largely on her own adds to internal physiological fitness deficiency to such housewives. This type of internal factors affects the physiological state of normality and can result in High Sugar level of Blood (Diabetes). Many housewives due to the facilities and privilege of full time house help available to house wives of Rail way officers lead a physically less active life as they do not have to strain their bodies for house hold chores. This leads high blood sugar or diabetes which affects their health by being overweight, reduced flexibility or mobility of body etc. Physical fitness has been defined as a set of attributes or characteristics that people have or achieve that relates to the ability to perform physical activity. Physical fitness

is a state of good health and well-being of an individual. It is also a state when the mind is at rest. The 5 components of physical fitness i.e. flexibility, cardio vascular endurance, muscular strength, muscular strength, body composition are used in schools, gyms and health clubs to measure the human bodies' level of physical fitness. Good health is a valuable asset for one and all. It can be kept in proper form by regular practice of pranayama. The practice of Pranayama controls high blood sugar, the emotions, producing mental peace, makes human body flexible and increases muscles strength etc.

The word Pranayama means vital force, it is formed by two words Prana and Yama. Prana means a subtle life force, which provides energy to different organs (including mind) and also controls many vital life processes (circulation, respiration etc). A yama signifies the voluntary effort to control and direct this Prana. Breathing is one of the vital activities governed by Prana on a gross level. This is the only Pranic activity available to us, which could be regulated voluntarily.

REVIEWS

Research evidences are readily available regarding Blood Sugar. Study in the context of control the blood sugar level through various Pranayama practices. Methods are available in various research journals, periodicals, articles and magazines. Research was collected all the reviews related from the library of physical

education department; University of Mumbai, internet and various journals.

¹30 obese women of age range 19-53, categorized into two groups, as per body mass index (BMI), were exposed to one-hour practice of asanas and pranayama in the morning for the period of 90 days. A significant reduction ($p < 0.05$) in BMI was seen in both the group. In group II (BMI greater than 35) the reduction was greater as compared to group I (BMI). Lean Body Mass (LBM), however, did not show significant change in both the group.

²The present experiment was conducted on randomly selected 30 female students, their age ranging from 14 to 16, intended to measure the effect of Suryanamaskar practice on the body composition of female students. Estimated body fat percentage was assessed by skin fold caliper at the biceps, triceps, and Suprailiac and sub scapular. The experiment was of 6 weeks, 5 days a week for duration of 30 min. Percentage of fat is taken according to the assessment of body composition chart by JVGA During and MM Rahman. Paired t test was applied at the result was tested for significance 0.05 level. The obtained 't' value between the pre-means of experimental group and

control group was 0.18 which is less than the required value of 2.14 (0, 05 level). The obtained 't' value between the pre and post –means of experimental group was 0.10 which is less than the required value of 2.14 (0.05). The 't' value of the pre and post means of control group was 0.40 which is less than the required value of 2.14 (0.05 level). It shows that both the having similar total body fat of body composition. The 't' value of the pre and post –means of experimental group and control group was 0.01 which is very less than the required value of 2.14(0.05 level). The finding reveals that no significant differences between the pre and post – test of experimental and control group, may be attributed to the fact that the selected age group was active participant and have hectic schedule which keep the fat percentage to a very low level. This indicated that the suryanamaskar practice have no effect on the body composition of female student.

METHOD

Need of the study

The housewives of Railway officers have very less physical activities in carrying out the domestic chores. They are provided with support services of full time house helps and servants. Their movements out of their house are also very less. They do not have to go to market for daily purchases, take and bring back children from school, tuitions or other extracurricular activities. These activities are either under taken by the house helps or facilities are locally available. It is observed that due to less of physical activity compared to other house wives, they lead a sedentary life. Long years of sedentary life and lack of physical fitness

¹Venkatareddy et al.(2003).Effect of yoga on weight and fat fold thickness in obese women.*Yoga-Mimamsa*2,p54

²Shivesh Shukla. (n.d).Effect of suryanamaskar practice on the body composition of female student. Retrieved on December 22, 2012, from <http://bjsm.bmj.com/content/44/suppl1/i71.2.short>.

lead to high sugar level in the blood. Pranayama provides a very popular mode of relaxation from physiological disorders.

Dependent Variables

In the present study dependent variable is the High Blood Sugar Level. Dependent variable is selected by the researcher to observe the effect of Pranayama on the Level of High Blood Sugar.

Independent Variables

The set of selected Pranayama such as Kapal Bhati, Anuloma Viloma, Shitkari, Shitali, Agnisar, Dhyana, Meditation, Shavasana, etc. were selected as independent variables.

Limitations

In this study subjects were house wives and they come from different families. So their food habits or diet factor and regular activities were not controlled by the researcher.

Delimitations

In this study researcher takes subject from western railway officers flats Mumbai Central (E) Mumbai. In research study many psychological variables are there. In this study researcher has taken high sugar level in the blood (diabetes) only.

Hypothesis

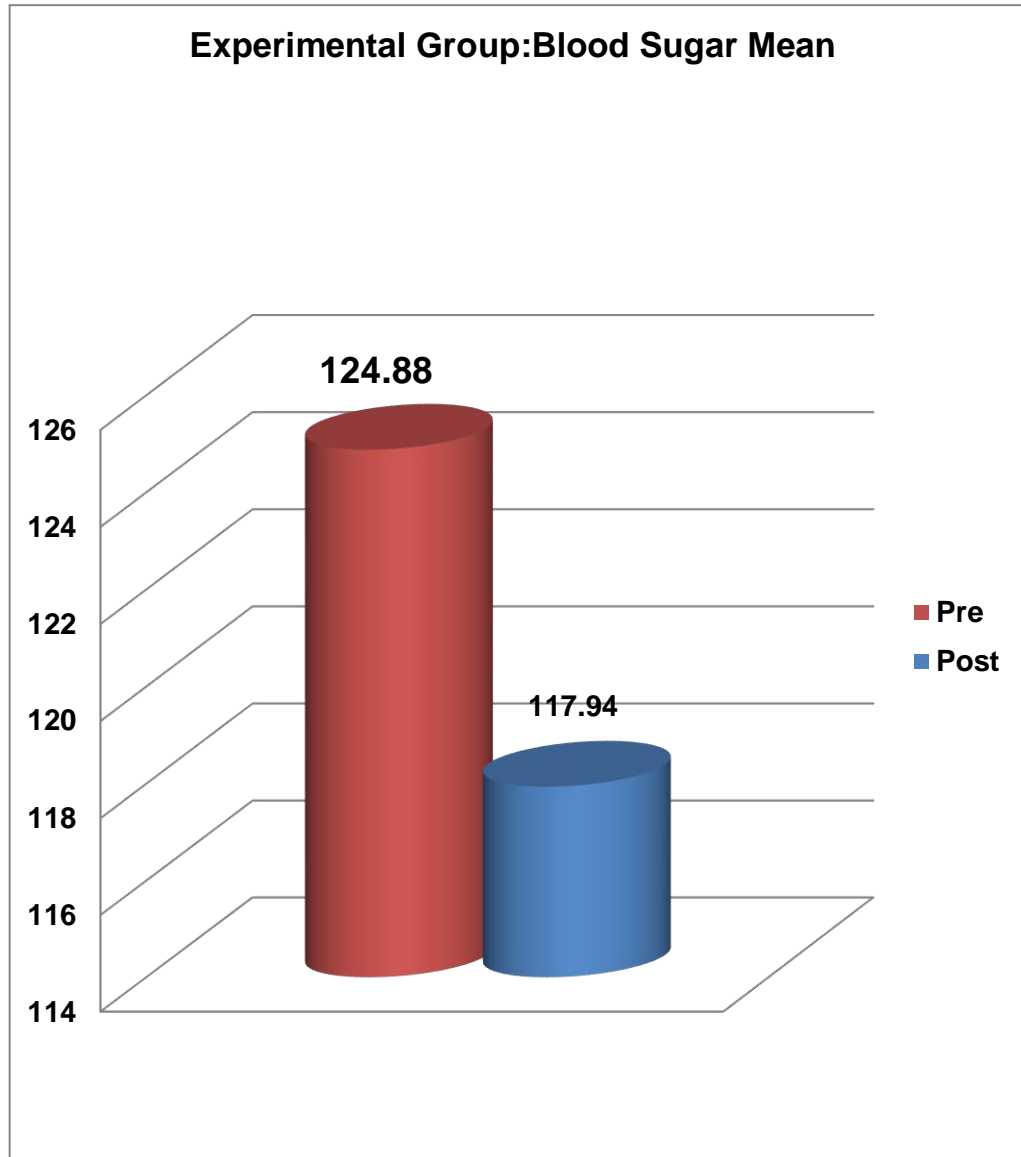
Pranayama practices may not be useful in reducing high level of blood sugar of house wives in the age group of 35 to 50 years.

Design of the study

The researcher has chosen experimental design. This experimental study consists of two groups. One is experimental group, and the other is control group. The subjects were housewives of Western Railway officers' flats, area of Mumbai Central (E), Mumbai. Subjects were chosen through Random selection process. Total no of subjects (n=100). In Experimental group number of subjects (n=50), and in Control group number of subjects (n=50). Experimental group has taken pranayama training and did regular pranayama practices. Control group did not take pranayama training or regular practices of pranayama. Subjects practiced Pranayama for 12 weeks (three months) and Monday to Friday (Five days in a week) in the evening for one hour. Digital Glucometer with one touch module was used for measurement of blood sugar level to collect the data.

Blood Sugar Level on Experimental Group - Mean:-Difference between means of pre and post three months yoga training on Blood Sugar of Experimental Group

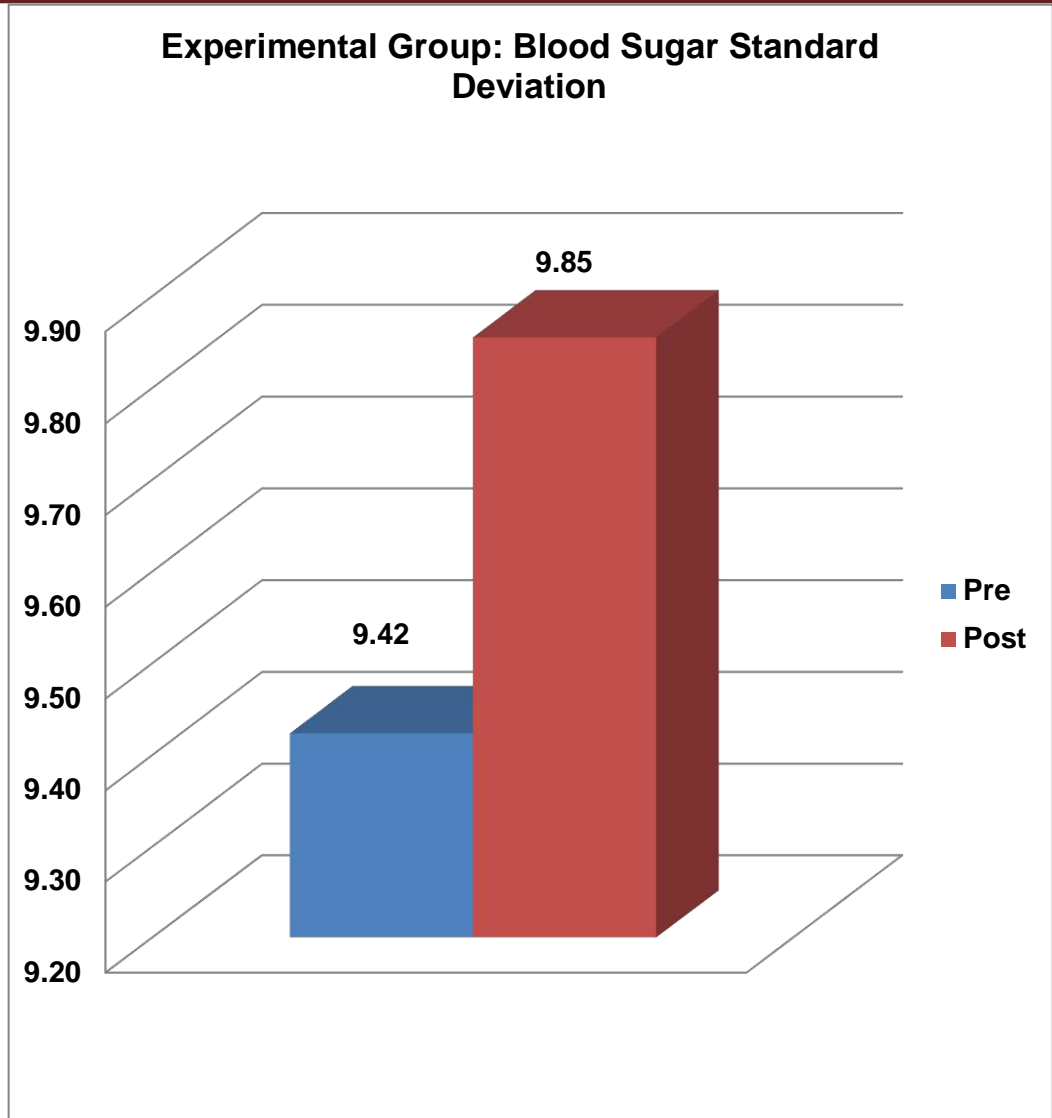
Variable	Mean		Difference
	Pre	Post	
Blood sugar	124.88	117.94	6.94



Experimental Group on Blood Sugar: Mean

Standard Deviation: - Difference between standard deviation of pre and post three months yoga training on Blood Sugar of Experimental Group

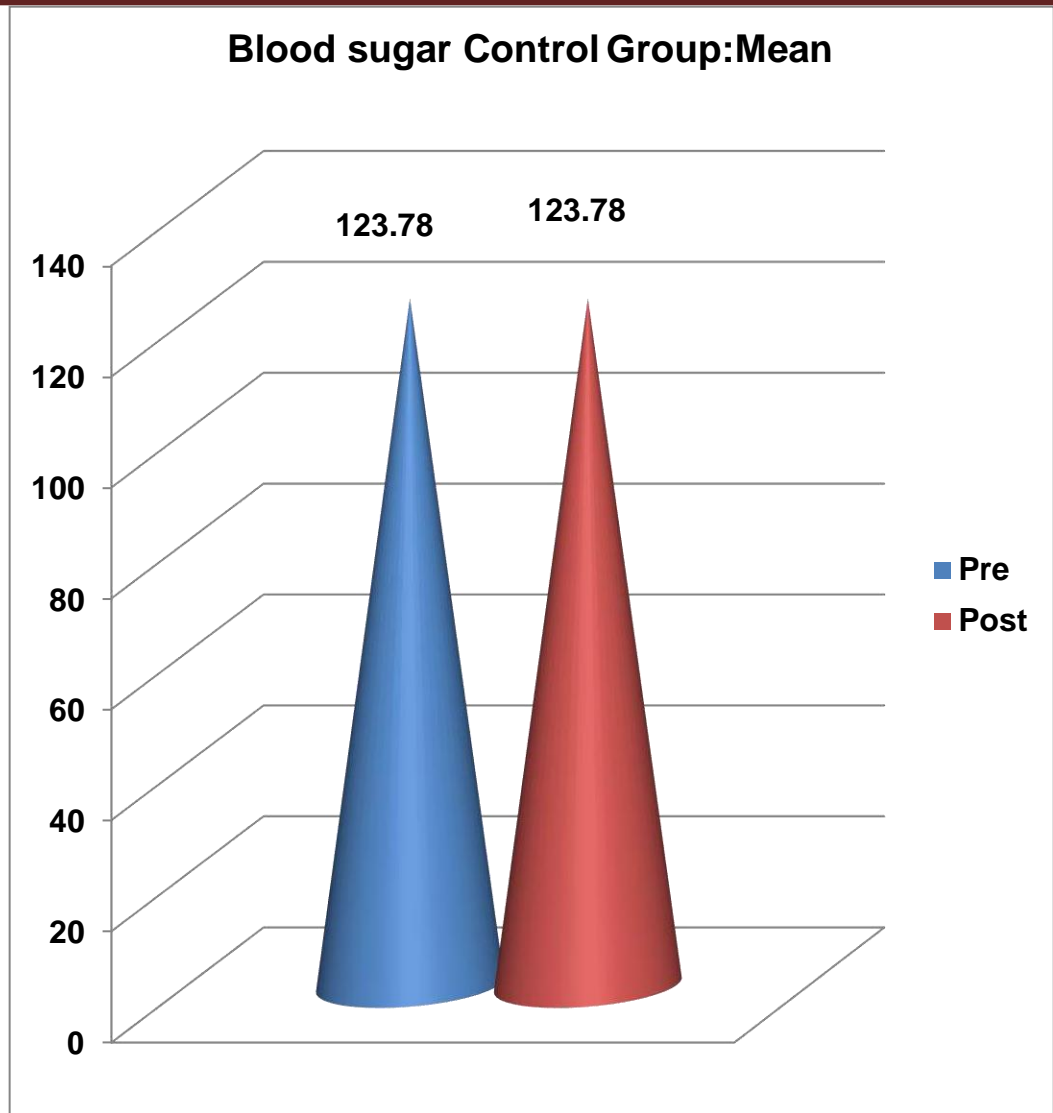
Variable	Standard deviation		Difference
	Pre	Post	
Blood sugar	9.42	9.85	-0.43



Experimental Group on Blood Sugar: Standard Deviation

Blood Sugar Level on Control Group - Mean: - Difference between means of pre and post three months without yoga training on Blood sugar of Control Group

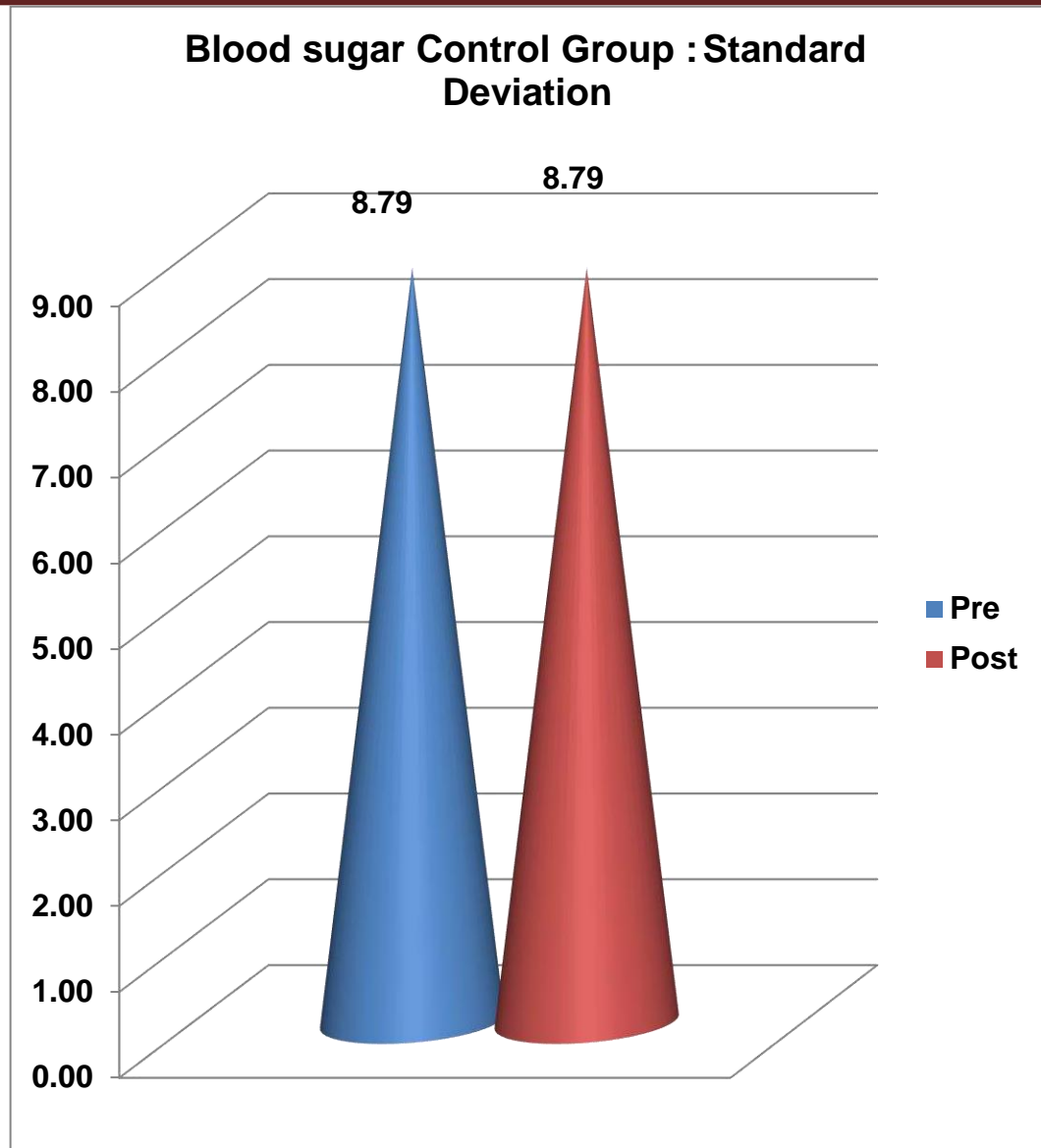
Variable	Mean		Difference
	Pre	Post	
Blood Sugar	123.78	123.78	0



Control Group on Blood Sugar: Mean

Blood Sugar Level on Control Group - Standard Deviation

Variable	Standard deviation		Difference
	Pre	Post	
Blood Sugar	8.79	8.79	0



Control Group on Blood Sugar: Standard Deviation

ANALYSIS

Analysis of Blood Sugar Level on Experimental Group (Diabetes)

The mean value of Blood Sugar level for the experimental group has reduced sugar level from 124.88 mm (pre yoga training) to 117.94 mm (post yoga training). The difference is 6.94. As the obtained value of t score=6.241 is statistically significant at 0.05 level, the reduction in blood sugar level on the experimental group, post yoga training period is significant.

Analysis of Blood Sugar Level on Control Group (Diabetes)

The mean value of Blood Sugar level measurement for the control group has remained same pre (123.78) and post (123.78) for three months period without yoga training, the difference is 0. There is no difference in the mean value. As the obtained value of t score=0 is statistically not significant at 5% level, there is no significant reduction in Blood Sugar level on the control group during the three months period without yoga training.

RESULTS

The mean value of High Blood Sugar level for the Experimental Group has reduced from 124.88 (pre-test) to 117.94 (post-test). The difference is 6.94. The obtained value of t-score 6.241 is statistically significant at 5% level of confidence with degree of freedom 19. Hence the reduction of sugar level of blood on the experimental group, post Pranayama training period is significant. But the mean value of Blood Sugar level for Control Group has shown no significant reduction. The mean value of blood sugar level was unchanged from 123.78 (pre-test) to 123.78 (post-test) difference is 0. So the result of Control Group is not significant.

CONCLUSION: The experimental study, related to the physiological aspects that Pranayama contributes to take care of one's high blood sugar level, high blood pressure. Not only physiological aspect but psychological aspects like mental stress, anxiety, concentration, mental balance,

motivation, attention, mind and body coordination etc. also can be improved by practicing pranayama. Therefore, the research scholar has undertaken the above study and analysis concluded that Regular Pranayama training and practice shows a significant effect on high blood sugar level (Diabetes) of house wives in the age group of 35 years to 50 years.

RECOMMENDATIONS

Above study results indicate that regular pranayama practice can control the high blood sugar level of middle aged house wives. So they can take regular classes of pranayama for reduction of sugar level of blood. Not only women; men, children also can practice pranayama to control physiological disorders, blood pressure, balance emotions, increase mental peace etc. Pranayama classes if opened for school children in the school, society can facilitate the pranayama classes for everyone, those who are interested to do pranayama.

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Anthropometrical and Psychological Difference among the Sprinters Long Distance Runner's Jumpers and Throwers of Andhra Pradesh Universities

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Abstract

This paper was aimed to compare the anthropometrical and psychological difference among the sprinters long distance runner's jumpers and throwers. For this purpose, 100 men intercollegiate athletes were selected from Yogi Vemana University, Acharya Nagarjuna University and Krishna University from Andhra Pradesh State and their age ranged between 18 and 25 years. 100 athletes consist of 25 sprinters, 25 long distance runners, 25 jumpers and 25 throwers. The selected anthropometrical variables arm length and leg length were tested through measuring tape, selected psychological variable anxiety and self-confidence tested through SCAT anxiety inventory and Hardy and Nelson questionnaire respectively. The data were collected in the academic year 2017-18 intercollegiate matches. The collected data were analyzed with ANOVA for find out the comparison among the sprinters, long distance runners, jumpers and throwers. Whenever the F ratio was significant further it was computed with post hoc Test in all cases level of significance was fixed at 0.05 level. It was concluded that there was a significant difference among sprinters, long distance runners, jumpers and throwers on self-confidence and anxiety and there was no significant difference among sprinters, long distance runners, jumpers and throwers on arm length and leg length.

Key Words: Sprinters, Long Distance Runners, Jumpers, Throwers

Introduction

Anthropometry is one of the most important tasks for physical educationists is to measure different parts and components of human body. The scientific terminology given to measure different parts and components of human body. The scientific terminology given to the measurements of man is "Anthropometry" which is a word synthesized from two Greek words-'Anthropos' means man and 'metreei to measure. Hence,

anthropometry means-the measurements of human body (**Kansal Devinder, 2008**)

Anthropometric measurements consist of objective measurement of structures and of functions of the body. The measurement of structures includes such items as weight, total height, the width, the breadth, the depth and the circumference (**Yobu, 2010**).

The term 'psychology' is derived from two Greek words 'psyche' and 'logos', wherein psyche means the soul or mind, and the, meaning of logos is to talk about,

or science or study. Thus, the literal meaning of psychology is the science or study of soul. Greek philosophers believed that soul was responsible for various mental activities such as learning, thinking, feeling etc. it was believed that soul was the essence or true being of an organism, the cause and the principles of life. As the relation of soul to the body and the functions of soul could not be explained, some philosophers tried to define psychology as a science of mind (Ajmer Singh 2006)

The anthropometric and psychological qualities are most essential for sports achievements. These qualities may differ from game to game and event to event. Hence the investigator interested to find out the difference of anthropometric and psychological difference among the sprinters, long distance runners, jumpers and throwers.

Methodology

This paper was aimed to compare the anthropometrical and psychological

Results and Discussion

difference among the sprinters long distance runner's jumpers and throwers. For this purpose, 100 men intercollegiate athletes were selected from Yogi Vemana University, Acharya Nagarjuna University and Krishna University from Andhra Pradesh State and their age ranged between 18 and 25 years. 100 athletes consist of 25 sprinters, 25 long distance runners, 25 jumpers and 25 throwers. The selected anthropometrical variables arm length and leg length were tested through measuring tape, selected psychological variable anxiety and self-confidence tested through SCAT anxiety inventory and Hardy and Nelson questionnaire respectively. The data were collected in the academic year 2017 to 2018 intercollegiate matches. The collected data were analyzed with ANOVA for find out the comparison among the sprinters, long distance runners, jumpers and throwers. Whenever the F ratio was significant further it was computed with post hoc Test in all cases level of significance was fixed at 0.05 level.

Table I

Showing the ANOVA calculation on selected variables

	Sprinters	Long distance runners	Jumpers	Throwers	SOV	df	SOS	MSS	'F' Value
Arm length	44.32	44	44.04	43.88	B	3	2.6	0.866	0.10
					W	96	821.04	8.552	
					T	99	823.64		
Leg length	80.08	82.08	83.08	83.68	B	3	186.75	62.25	2.16
					W	96	2758.96	28.739	
					T	99	2945.71		
Self confidence	41.52	40.08	42.6	43.52	B	3	164.19	54.73	3.46*
					W	96	1514.32	15.774	
					T	99	1678.51		
Anxiety	58	55.28	53.88	53.6	B	3	303.71	101.236	2.89*
					W	96	3355.68	34.955	
					T	99	3659.39		

*Significant, Table value with df 3 & 96 = 2.70

From the table I it was proved that the 'F' value of self-confidence and anxiety were 3.46 and 2.89 which were greater than the table value of 2.70 with degrees of freedom 3 & 96. Hence, there was a significant difference among sprinters, long distance runners, jumpers and throwers on self-confidence and anxiety. For find out the inter group difference further it was computed to post hoc test which was given in table II.

The 'F' values of Arm length and leg length were 0.10 and 2.16 respectively which were lesser than the table value of 2.70 with degrees of freedom 3 & 96. Hence, there was no significant difference among sprinters, long distance runners, jumpers and throwers on arm length and leg length.

Table II
Analysis of Post hoc test for selected variables

	Sprinters	Long distance runners	Jumpers	Throwers	M D	C I
Self confidence	41.52	40.08			1.44	3.19
	41.52		42.6		-1.08	
	41.52			43.52	-2	
		40.08	42.6		-2.52	
		40.08		43.52	-3.44*	
			42.6	43.52	-0.92	
Anxiety	58	55.28			2.72	4.40
	58		53.88		4.12	
	58			53.6	4.4*	
		55.28	53.88		1.4	
		55.28		53.6	1.68	
			53.88	53.6	0.28	

From Table II it was proved that throwers had better self-confidence compared with long distance runners and sprinters were more anxious than throwers.

Conclusion

1. It was concluded that there was a significant difference among sprinters,

long distance runners, jumpers and throwers on self-confidence and anxiety.

2. It was concluded that there was no significant difference among sprinters, long distance runners, jumpers and throwers on arm length and leg length.

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Role of Sports Teachers and Psychology in Students in India Parents to Inculcate Importance of Sports

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Abstract

As far as civilization is concerned, India has plutocracy. It has given more importance to all physical activities, sports & games to uplift one's performance and recreations. India's performance in sports is very less as compared to other nations; who don't have rich traditions in civilization. Hypothetically we can say that all sports teachers and parents always give importance to sports psychology. They always talk about how to maintain mental peace at the time of playing. They interact with students about Yoga and also take efforts in their regular exercise. All these statements can be tried to analyze, and this is the main object of this research paper. While discussing about the role of teachers and parents in sports psychology sector, we should know the actual meaning and nature of sports psychology.

Key Words: - Yoga, Meditation, Performance, Stress, Recouping after Injury, Enjoying Sports

Introduction

As far as civilization is concerned, India has plutocracy. It has given more importance to all physical activities, sports & games to uplift one's performance and recreations. All religious books and texts always speak about the mental and physical fitness of man for his success in life. Now the world is also accepting this Indian philosophy to derive mental peace in their lives. In sports, most of the western nations give and share knowledge of yoga, meditation & mental peace to get success in it. But if we look at India's performance in sports, it is very less as compared to other nations; who don't have rich traditions in civilization. Why is it

happening in India? Who is responsible? Who's role is important either Government, sports division, sports teacher, parents or students? All these questions cannot be dealt in one action. In this research paper we are trying and focusing only on role of sports teacher and the role of parents. Hypothetically we can say that all sports teachers and parents always give importance to the sports psychology. They always talk about how to maintain mental peace at the time of playing. They interact with students about Yoga and also take efforts in their regular exercise. All these statements can be tried to analyze, and this is the main object of this research paper. Before discussing about the role of teachers and parents in sports psychology

sector, we should know the actual meaning and nature of sports psychology

Meaning of Sports Psychology

The concept of sports psychology is made with two words, one is sport and another word is psychology. Psychology is a branch of social science. It deals with the changing behaviour of human being. It also tries to find out the problems and gives solution related to the human nature. A sport is term used for games, physical activities. Sports psychology is an interdisciplinary term which was firstly used in Germany. The first sports psychology laboratory was founded by Dr. Carl Diem in Berlin, in the early 1920s 1 “Coleman Griffith worked as an American professor of educational psychology at the University of Illinois where he first performed comprehensive research and applied sport psychology. He performed causal studies on vision and attention of basketball and soccer players, and was interested in their reaction times, muscular tension and relaxation, and mental awareness”.² In 1996, the European Federation of Sport Psychology (FEPSAC) produced such a broad definition, which slightly simplified, reads, ‘Sports psychology is the study of the psychological basis, processes and effects of sport.’³ This of course brings the question: what is sport and what is psychology? Although many athletes would insist that sport necessarily includes an element of competition, the term ‘sport’ is used, both in the FEPSAC definition of sport psychology, and throughout this book, in the broadest sense, any physical activity for the purpose of competition, recreation, education or health. Psychology is often defined as ‘the science of mind and behaviour’.⁴ The definition from the

American Psychological Association’s (APA, 2009) Division 47 (Exercise & Sport Psychology) website states: “Exercise and sport psychology is the scientific study of the psychological factors that are associated with participation and performance in sport, exercise, and other types of physical activity”¹ (What is Exercise and Sport Psychology?) Many of the regularly used textbooks define sport psychology by stating that it is “the study of ...” without defining the profession of sport psychology as well. 5

Sports Psychology deals with following Functions

Sports psychology covers many different aspects related to many games. Let's look at function dealt by sport psychology.

Performance

Sport psychology helps to uplift the performance of an individual. It enhances positive nature which reflects in actual. It creates positive attitudes like 'I'm good player' and 'I'm definitely gets win' Positive visualization makes healthy atmosphere in dressing room.

Stress

Sports psychology teaches how to handle one’s anxiety and stress before a game. Deep breathing exercises and meditation is also taught which provide relaxed mindset. These techniques also help to cope with the pressures from family, friends, coaches, and the sports organization.

Recouping after Injury

One has difficulty adhering to his physical therapy regimen after a sports injury; another must be able to help him with motivation and consistency in maintaining these appointments and exercises. One

experiences pain from his injury, parents must be able to teach him mental exercises like meditation that will help relieve some of the pain.

Keeping a Consistent Workout Regimen

Sport person should be able to help in line with motivation, consistency, and focus to keep up with his goal of working out 6 days a week to stay in shape.

Enjoying Sports

WE also speak with the head coach and offensive and defensive coaches about ways to keep practice fun and positive, so that the players continue to enjoy playing and have high self esteem and self worth as a member of the team.

Sports psychology seems to be a vital component of getting athletes in the right mindset for optimal performance and well-being, and its benefits were first being realized in the early-to-mid 1900s. The history of sports psychology began with experiments and research of athlete's performance to provide enhanced mental edge to compliment physical ability.

Role of sports teacher and parents in inculcating sports psychology:-

Sports have very long tradition in India. There are many Indians games like Kabaddi, Kho Kho, Aatyapatya, but now other western games have taken important place in world sports. The competition is very high. The tension, stress and balance of mind are key factors in the winning. In this perspective, the role of trainees, sports teachers & parents are important. Although government have included sports in education but ratio of interested students and choice as career option are very less. We see that most of the school, colleges have appointed sports teacher but the

production of good players are not as good as other countries produced. Most of the teachers are qualified but they are not able to create good players. They know about the techniques and rules regulation about the games but at international, national or even state level, the team which handled stress easily ,balance their mind, and overcome all other tensions, will always get winning positions. As far as knowledge of sports psychology, the sports teacher does not have enough knowledge. Because of This lack of knowledge, they are less in providing good directions to the students. The financial assistance by Government, Institution is not enough to fulfill the needs of sports teachers, is one of the main reason for not producing good players but the other factors are also important for creating good players. The Students have many problems. They are fighting with their financial, social, psychological problems. These problems are also reflected at the time of their practice. These problems will be overcome if the sports teachers are aware about the sports psychology. Provides the opportunity for physical activity, Physical education class is just one avenue during a school day. In this class period they can be active moderately or vigorously. They should be provided enough space, equipment, and students. Teachers should always try to maximize their skill, knowledge and physically fit. They should also teach how to get fun in home work, how to be active outside the class room.

In any activity or the life of children, the role of parents is very important. They should provide healthy atmosphere. They should always stand with their wards in all situations. Economic, social, Political & family problems should be kept away from

the life of any sports students. As far as education sector is concerned, most of the parents are aware. They know all opportunities and carrier options related to education sector but they are less aware or lenient towards sports sector. It reflects in their attitude when they interact with their wards. This should be minimized or changed which help to sportsmen. The knowledge of psychology is not making the change in attitudes of parents but also change behaviours towards their wards. They should teach them how to be relaxed. Parents can inculcate that it is just a game & all should be forgotten after ending the

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game. They should focus on future game. Parents should tell the actual meaning of success. Success means not just winning the game but it is also improving the abilities and skill of game. Parents should not compare their wards with other children but should always focus on their skills and motivate them.

All these should be done after getting the knowledge of sports psychology. The government should impart this knowledge though various programs to improve the role of sports teachers and parents in the life building of true sportsmen person.

Yoga for Psychological Support of Sportspersons

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Abstract

Sportspersons face uncertainty about the future if they have to choose sports against education or profession besides many other reasons. Sportspersons also often face high stress situations. These play into their emotions. Sports psychology studies the mental and emotional needs of sportspersons. Yoga as a tool, to support the psychological needs of sportspersons, is even more relevant in the present scenario. An attempt has been made to research and present the understanding of yoga and its relevance and extent of its support for the psychological needs of the sportspersons.

Key Words: Yoga, sportspersons, psychology, mental, stress, sports, training, performance

Introduction

Sports persons generally focus more on the physical training and discipline to master sports skills. Student sportspersons face uncertainty about the future, which often spreads well into the adult years. Sportspersons are typically comfortable in high stress situations and often pride themselves on that trait. However, having the ability to reduce stress in any situation can serve as a great tool for the individual and teammates. This aspect also plays into their emotions. The aim of sports psychology is to address the mental and emotional needs of sportspersons. This enhances their overall well-being and boosts their sports performance to higher levels. Yoga can be a tool to support the psychological needs of sportspersons especially the students. Yoga's physical postures and breathing exercises improve muscle strength, flexibility, blood circulation and

oxygen uptake which not only benefits general physical health but also mental health while also helping the practitioner become more resilient to stress. Meditation can serve as a guide to understanding emotions and how to deal with them.

Sports Psychology

Psychology is the science of behaviour. Sport and exercise psychologists are interested in examining, researching and providing theory and evidence based interventions and solutions to cognitive and behavioural difficulties experienced by sportspersons that impinge on their ability to perform to their highest potential. Afflictions of the mind such as experiencing competitive anxiety, dealing and coping with stress, handling pressure and nerves, staying in the present, remaining focused, coping with negative thoughts, low confidence, self-esteem and belief systems are all

common issues experienced by sportspersons regardless of the sporting discipline. Some psychological interventions recommended to deal with some of these common issues are developing pre performance routines, introducing positive self-talk, the use of mental imagery, goal-setting, concentration skills and deep breathing and relaxation exercises. The psychology of sports shows a special interest in the problems of psychological training of sportspersons in order to create the psychological basis necessary for the technical and tactical achievement, determined by the personality traits of the athlete, characterized by a way of thinking, feeling and acting.

Sportspersons and Psychological Considerations

The combination of sports and academics in general can be intense. Moving from middle to high school or high school to college can be stressful. However, research shows that sportspersons may experience greater levels of stress due to the demands of their parents and coaches. Student sportspersons, who experience these high levels of stress, are more likely to acquire poor health choices and habits, experience mental health issues or suffer from low self esteem. 10% of college sportspersons suffer from psychological and physiological problems that are severe enough to require counselling intervention (Hinkle, 1994). Even more alarming is the fact that college student-sportspersons tend to avoid seeking out available counselling (Murray, 1997). Many studies have been conducted to

research the struggles student-sportspersons face. Researchers have found that student-sportspersons have reported feeling uncertain in three common areas: personal uncertainty, social uncertainty, and future uncertainty. (Hinkle, 1994)

- As young sportspersons, student's personal uncertainty is at an all time high as they are uncertain about their body image, about the work-life balance, etc. Uncertainties developed during childhood can be transferred to the adult life. (Romo, 2014)
- Elements of social uncertainty, such as friends, are very common for student sportspersons. Social acceptance of performance on the court or field plays a large role with friendships and popularity, especially at the junior and high school levels.
- Future uncertainty, such as uncertainty concerning post-collegiate careers and whether the time spent pursuing sports will hurt career prospects, weighs heavily on choosing the right area of study. Juggling college sports and earning a degree can be very challenging due to the nature of the sport training schedule. The amount of pressure can be extremely unhealthy.

Most sportspersons are survivors and find ways to cope with stress and uncertainties using some form of stress relief techniques. Incorporating a regular yoga practice into the routines of these student-sportspersons can

decrease the amount of stress, uncertainty, and injury.

Yoga

The ancient practice of yoga is thousands of years old. It was a way of using the mind to restrain the senses and control the body. There are a number of variations of the original yoga tradition. The main tradition practiced is Hatha Yoga based on the Hatha Yoga Pradipika, which is a sort of manual of Patanjali's Yoga Sutras. It describes how to train the body, so that it can be used as a means of enlightenment. Yoga techniques were summarised by Patanjali so as to bring a practical form of yoga to the people. Sutras were written in short, concise meaningful sentences. As in modern day psychology they are explanations of the nature of the mind, how it works and the obstacles, difficulties and emotional disturbances that can affect its functioning in terms of self-knowledge and reflective action. Patanjali recommended an 'Eight-Limb Path' as a way to change the mind positively. He believed that one of the fundamental characteristics of the mind was its inability and refusal to stay in the 'here and now'. He described it as a monkey jumping from one branch of thought to another. The mind is always wandering and being rebellious, never focussing on the moment, but instead getting distracted by past events, future plans and all the sensations it has to process in the meantime. As it is the mind's job to think, it is relentlessly interpreting everything that is seen, perceived and experienced. It is led by thought patterns, habits, doctrines, perceptions and conditioning which

have been learned and instilled over the lifetime of the person. These behaviours, thoughts, attitudes have been reinforced through repetition, regardless of whether they are good or bad, right or wrong.

The mind becomes agitated and unfocused amidst all the thought processes. Patanjali's Eight-Limb Path was developed to still the mind. Stilling or quietening the mind doesn't mean we want to stop thinking. We do not want to shut out the mind, but rather enable it to be unaffected by its constant turnings and instead focus exclusively on a single thought or object. If this is achieved there will be clear perception, clarity and a conscious concentration in the present. However, the mind constantly puts obstacles in the way of our journey to that goal. In modern day psychology they might be referred to as self-defeating behaviours as a result of threatened egotism, self-regulation failure and emotional distress. They are ultimately afflictions of the mind that prevents us seeing things clearly. In order to free the mind of these afflictions we practice yoga. The Eight-Limb Path of yoga consists of:

- Yamas – dealing with the world around us. This is our moral code of conduct. These are the moral principles that govern the way you treat others and the world around you.
- Niyamas – dealing with yourself. These are five observances or rules of conduct, by which we should live our lives i.e. purity, modesty, contentment, discipline, self-study

and acknowledgement of our own limits.

- Asana – dealing with the body. These are the physical postures or exercises in yoga.
- Pranayama – dealing with breathing. This is the conscious control of energy by practising controlled breathing techniques.
- Pratyahara – dealing with the senses. This denotes the withdrawal of the senses. It teaches us to close the doors to the senses so that the mind can still be aware of external stimuli but no longer respond to them.
- Dharana – concentration. This is the ability to focus our entire concentration on one object, one question, or one consideration and keep it there.
- Dhyana – meditation. This is an interaction with the object of concentration whereby we become observers and view the object intuitively, free from subjective notions. It is an acceptance.
- Samadhi – The absolute: the inner freedom. This is the complete feeling of being at one with the world, knowledge of the true self. Ultimate enlightenment! Inner Happiness!

Yoga and Psychology

When people talk about yoga, they often refer to the physiological benefits of the practice, such as increased flexibility and decreased muscle stiffness. There have been several studies done to assess the effectiveness

of yoga for brain and mental health. The research has indicated positive aspects of yoga for sports psychology. Five of the prominent mental benefits of practicing yoga are:

- ***Improves psychological well-being*** - With the help of yoga, you can put aside unhealthy feelings of stress and tension. Yoga involves concentration on the breath and body, which makes it a great way to soothe a person's mind and relieve worries, discharge tension and stress. Yoga keeps a person free from such negative elements. As a result, a person who does yoga is better able to achieve improved psychological health.
- ***Helps cope with anxiety and depression*** - Relaxation, meditation, socialization, and exercise of yoga is helpful in reducing anxiety and depression. According to a Harvard University article, yoga is able to accomplish this by helping regulate a person's stress response system. Yoga provides the means to deal with and resolve anxiety and depression without resorting to medications.
- ***Enhances memory and improves concentration*** - Yoga is effective in improving memory and concentration. Dharana, the practice of concentration, is the perfect way to clear the mind and calm the senses. As the static noise in the head is removed and the mind is focused, you're able to remember things and concentrate better.

- ***Prevents onset of mental health conditions prevalent during adolescence*** - Adolescence is a stage in one's life when a variety of mental health problems are more likely to develop. Yoga, among others, has been seen as a helpful method that can be used to protect adolescents from mental illnesses. According to a study published in the *Journal of Developmental and Behavioral Paediatrics*; in comparison to the control group, the yogis displayed better moods, lower levels of anxiety and tension, better anger control, improved resilience, and enhanced mindfulness.
- ***Reduces the effects of traumatic experiences*** - Women who have been abused, as well as enlisted military personnel who have gone into battle with enemy combatants, usually develop a condition known as Post Traumatic Stress Disorder (PTSD). Patients who suffer from this mental illness frequently experience nightmares and flashbacks, to name a few of the symptoms. Particularly in cases where contemporary mental and pharmacological treatments have failed, Hatha Yoga has been shown to be effective in reducing PTSD symptoms, according to the American Psychological Association. Yoga might just be an answer for the negative effects of traumatic experiences.

Yoga and Sports Psychology

Sportspersons, especially students, can learn and develop a lot of the

psychological skills through the practice of yoga and it is always worth acknowledging the value it can add to any psychological intervention. There are many research studies that show that yoga has the potential to reduce stress, anxiety and depression. Recent studies also show an association between yoga and decreased serum cortisol (stress hormone) levels, as well as enhanced immune function, in healthy individuals. Apart from reducing stress, yoga practice promotes feelings of relaxation and enhances subjective well-being. Through the Eight-Limb Path in yoga an athlete can learn how to focus and concentrate the mind through the withdrawal of the senses and meditation. The breathing techniques are used as a way of centring the athlete to handle pressure and nerves, keeping the mind from wandering and staying in the present. Positive self-talk is encouraged through the yamas and niyamas which help increase confidence and self-esteem. Visualisations/mental imagery can be introduced during relaxation or 'shavasana' to develop performance outcomes. While 'sankalpas' or positive intentions are set during yoga nidra (yogic sleep) which can equate to goal-setting.

Yoga and Psychological Training for Sportspersons

Sportspersons have a training program, regardless of sport. Yoga should be used as a tool to compliment their training. In order to incorporate yoga into the training properly, there must be an inverse relationship between the intensity of training and yoga. In the off-season and base periods, training

intensity should be light, and focus should be directed toward strength building and correcting imbalances caused by sport specific exercises. As training intensity increases, the focus should become maintaining flexibility with yoga. Yoga should always enhance performance, so it is important to listen to the body during this period, always erring on the safe side by not pushing past the edge. During peak and competitive training periods, yoga should be toned down significantly. Focus becomes the intention of the yoga practice. This is also a great training period to incorporate meditation, visualization, and breathing practices at least every other day. (Roundtree, 2008)

The regular yoga practice for sport specific training and performance can benefit the individual sportsperson and team, as a whole. We need to pay special attention to the sportspersons' needs, as their sport training naturally creates physical and mental imbalances. Depending on the sport, an athlete is prone to becoming strong in one area and weak in others. Among yoga's many benefits, stress relief ranks at the top. Just about any system of yoga can help reduce stress levels. By linking breath with movement, we naturally link our patterns with state of mind. Practicing proper breathing patterns through asana can help subdue our levels of stress. By incorporating breathing techniques into the athlete's training regimen, we can reduce stress and increase awareness and clarity.

Technology has created a society of over stimulated beings. We all want immediate gratification and what we

want is always at our disposal. Although this can be a positive tool for professionals, it is a leading cause of stress and burnout. One of the 8 limbs of yoga, Pratyahara, allows us to turn our senses inward. This practice not only relieves stress but gives us a platform for visualization and meditation. Cultivating states of pratyahara and meditation through practice, give us the tool to detect stress before it engulfs us, allowing for more clarity and emotional control.

Besides the physiological benefits, other benefit, especially for youth, is mental and emotional control. The physical benefits of a regular practice are more commonly known. The mental benefit sportspersons acquire put yoga one step above all other training aspects. It is our job as teachers and coaches to encourage being still and quiet. Resting in shavasana or finding a sitting practice, allows the nervous and cardiovascular systems to do their jobs. A restored nervous or cardiovascular system will naturally increase performance on the playing field.

Yoga as a Visualization Tool

Visualization can be defined as a formation of mental images; the act or process of interpreting in visual terms or of putting into visible form. Visualization or mental imagery can be used to familiarize the athlete with the playing field or site of competition, recall images of goals or past successes, perfect skills, and reduce negative thoughts while focusing on positive outcomes. Visualization should not be used to focus on

outcomes, but to focus on the actions needed to achieve desired outcomes. Fear, focus, and sleep are other important factors that can benefit from visualization. With fear, lack of sleep, and stress, the immune system takes a hit. Sportspersons cannot afford to get sick. A steady meditation or calming yoga practice will help strengthen the immune system.

- Fear is a common feeling for sportspersons. Fear-based play can lead to mistakes. Fear consumes the mind and blocks the ability to perform. Meditation and visualization has been shown to calm the mind, surpassing the feeling of fear.
- Focus plays a large role in determining certain plays, calls, wins, and losses. Focus increases court awareness. As a player gets frustrated on the court, focus and intention will allow the sportspersons' mind to regain control of the situation. This practice will also encourage sportspersons to think in present tense, disregarding any failures that happened in the past or any game time in the future, focusing on the present situation and succeeding in the now.

- Sleep is a valuable tool that can be strengthened with a steady visualization or meditation practice. Quality, deep sleep can significantly affect sportsperson's performance on and off the playing field.

Conclusion

Student-sportspersons face uncertainty about the future, which often spreads well into the adult years. Studies to research the struggles student-sportspersons face have found that student-sportspersons feel uncertain in three common areas: personal uncertainty, social uncertainty, and future uncertainty. Yoga teaches them to listen to their bodies and helps sportspersons feel better by increasing strength, flexibility, and body awareness. Yoga is a holistic practice that encourages a body and mind connection. An intelligent yoga practice, when coupled with sport specific training, increases mental concentration and significantly reduces levels of stress and anxiety that help the sportspersons move inward and relax. Yoga offers a number of physical, emotional, and psychological benefits. The skills of yoga learnt are skills for life and not just for a specific sport.

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Behavioural Intervention for Stress Management in Sports

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Abstract

This paper covers stress management for athletes beginning with a brief behavioural conceptualization of athletic performance and analysis of stress. Examples of external and internal stressors are offered, as well as of stress responses from autonomic, somatic, and cognitive domains. Further discussed are specific types of stress management approaches used with athletes, and associated with external vs. internal sources of stress, and with the 3 stress response domains. Although the article focuses on the author's own conceptualization and experiences with sport interventions, relevant research results from the current literature are cited to provide a broader context.

Key Words: Athletic Performance, Stress, Stress Management

Introduction

Anxiety and the anxiety disorders have occupied a central place in psychological research (Ebert, Loosen, & Nurcombe, 2000; Edelman, 1992; Hersen & Turner, 2003; Koocher, Norcross, & Hill, 2005; Tyrer, 1999), and many treatments have been proposed (Barlow, 2002; Craske, 1999; Nutt & Ballenger, 2003; Silverman & Treffers, 2001). Cognitive-behavioral interventions have had a significant impact on anxiety and phobic disorders (L. Freeman, 2004; Kazdin & Weisz, 2003; Kendall, 2000; Suinn, 1990) and have provided a valuable foundation for sport psychology theory and practice (Gill, 2000; Lavalley, Kremer, Moran, & Williams, 2004; Murphy, 1995; Orlick, 2000; Schmidt & Wrisberg, 2000; Weinberg & Gould, 1995). This article provides a brief overview of anxiety and sport performance, with a focus on my cognitive-behavioral conceptualizations. Stress and anxiety are discussed within

this framework followed by some illustrations of stress management interventions relevant for sport performance. The illustrations are from my experience with Olympic and national team athletes. Research findings relevant to stress reduction in sport are briefly described.

Athletic Performance: A Behavioral Analysis

Athletic performance is a complex set of cognitive, emotional, and motoric responses that have been shaped through learning experiences. The most important outcome is reflected in performance under competitive conditions. Performance during practice sessions, no matter how perfect, is considered to be a sub goal. Athletic performance is similar to other performing arts, including theatre, dance, music, and public speaking, whereby the primary goal is to display one's skills during the actual play, recital, concert, or public appearance, and the principles of

psychomotor learning and performance are relevant to human performance in general (Domjan&Grau,2003; Healy & Bourne, 1995; Schmidt & Wrisberg, 2000).

Components of Performance

Sport performances are influenced by several component elements: the strength of correct athletic responses, the presence of interfering incorrect responses, and the athlete's level of transfer of responses from the practice environment to the competitive environment (Suinn, 1989). The level of potential skill and the pace of acquisition of such skill are influenced by factors such as the athlete's genetic competencies, past exposure to sport straining and performing (which teaches "learning to learn" athletic skills), the quality of coaching, training programs, nutritional planning, and so forth. For any single performance, other variables may restrict the level of actual achievement such as in the negative impact of jet lag, temporary health problems, or recent life stresses. Of major relevance to this article are the three components of correct responses, incorrect responses, and transferability of skills. Correct athletic responses involve those that make up the primary positive aspects of the sport: the motor skill itself, preparatory-arousal responses, cognitive or cue instructional responses, and attentional– concentration responses. Incorrect athletic responses involve interfering motor habits, inappropriate arousal or conditioned emotionality, and negative cognitions. The transferability of responses from practice settings to competitive settings is a function of the nature of the practice and its similarity to game stimulus conditions.

Correct Behavioural Responses

A high level of performance reflects a well-developed motor skill. In other words, the athlete will have learned the proper neuromuscular responses, sometimes identified as "proper technique," such as the arm rotation that maximizes the force of a karate blow, or the quick explosive movement that initiates a rapid start, or the appropriate timing that defines the diving or gymnastic routine. Another type of correct response involves the preparatory-arousal sequence, that is, the achievement of the athlete's optimal level of activation (Gould, 1994; Tenenbaum, 2003). This concept involves the Yerkes–Dodson "inverted-U" law, which demonstrates an optimal level of arousal, with levels above or below being associated with poorer performance (Hanin, 2000; Yerkes & Dodson, 1908). Thelwell and Maynard (1998) and Woodman, Albinson, and Hardy (1997) each conducted studies comparing performances within versus outside ones' optimal arousal level. They found that ratings of performances or actual game scores were both better when "in the optimal zone." Cue-instructional responses include such cognitive responses as game strategies or thought stimuli associated with triggering complex motor responses. In the latter case, the self-instruction of "be loose and dynamic" may precipitate simultaneously a muscular event, effort, style, and an emotional response. Finally, attentional– concentration responses are those that focus the neuromuscular and sensory–perceptual states to a narrowed set of cues and an equally narrowed set of responses related to the special demands of the competition (Moran, 1996). Kerr and Leith (1993) were successful in the use of

self-talk or self-instructional procedures to improve performances as well as increase the attentional skills of competitive gymnasts.

Incorrect Behavioural Responses

Incorrect athletic responses impair the performance of correct responses. For instance, if the athlete has not extinguished a tendency to flinch, then accurate shooting will be impaired. Similarly, if the athlete's arousal level is too low, then the motor performance may be diminished in intensity or preciseness. With inappropriately high arousal, motor coordination may be affected and concentration disrupted. In conditioned emotionality, the athlete

experiences negative emotions or mood states under specific cue conditions, for example, when confronting an opponent who has always proven better or in facing the next team while mired in a losing season. Negative cognitions may also impair performance. One correlate of negative thoughts is low self-efficacy ("I'm not good enough"). Recent data on athletics has confirmed that efficacy is indeed predictive of athletic performance. For instance, individual efficacy was predictive of performance of athletic tasks early in training, and team efficacy was associated with higher performance during actual competition (Feltz & Mugno, 1983; McAuley, 1985; (Myers, Feltz, & Short, 2004).

Transfer

It is important that skills displayed under practice conditions generalize to competition. Transfer is enhanced to the degree that the practice conditions are similar to game conditions (Healy, Wohldmann, & Bourne, 2005; Schmidt

& Wrisberg, 2000). There are a variety of ways in which practice can differ from competition: Practice "opponents" are not real opponents (but only sparring partners); environmental conditions are dissimilar (nothing can duplicate the noise level of basketball's Paley Pavilion or football's Texas Stadium with a hometown crowd). Research has also demonstrated that transfer is affected by training variables such as the use of immediate versus summary feedback; reliance upon grouped training versus alternating training methods; reliance on discriminative stimuli; and the role of fatigue, frustration, or overload (Alberto & Troutman, 1999; Healy et al., 2005; Schmidt & Lee, 1999; Schmidt & Young, 1987). During practice or training, when motor skills are being acquired, stressor anxiety may interfere with the proper learning of the correct motor skills. Following acquisition and prior to performance on competition day, the presence of anxiety may be experienced as excessively high arousal (being "hyper"), or as an "out-of-body" sensation. During performance, anxiety states can lead to loss of smooth motor coordination, can disrupt concentration and attentional focus, and may precipitate negative cognitions. In addition, frequent appearance of stress responses during competition can result in anxiety becoming a conditioned emotional response to competition cues, leading to sleep disturbances, excessive precompetition worry, and impaired performance. Finally, to the degree that the competitive environment is by nature a stress-related one, stress coping skills deserve attention as a routine part of an athlete's training. The presence of anxiety is not necessarily predictive of impaired sport performance (Kleine, 1990; Jones &

Swain, 1995). Researchers and practitioners have recognized that sometimes anxiety is facilitative rather than debilitating. This conceptualization builds partially on the Yerkes–Dodson law, interpreting anxiety as a drive state, such that an optimal level of anxiety might be facilitative and motivational. Hanin (2000) actually postulated that an optimal level of anxiety can be measured for individual athletes, this level falling within one half of a standard deviation of the athlete’s anxiety test score. Research based on this hypothesis has produced mixed results (Halvari, 1996; Hanin, 2000; McNally, 2002; Thelwell & Maynard, 1998). Whether the presence of anxiety is viewed as facilitative or potentially debilitating also seems a matter of appraisal. For instance, elite athletes tended to interpret their anxiety symptoms as more facilitative than athletes with lower skill (Eubank & Collins, 2000; Hanton & Maynard, 2004; G. Jones, Hanton, & Swain, 1994; G. Jones & Swain, 1995; Swain & Jones, 1996).

Stress and Anxiety: A Behavioral Analysis

I have elaborated on a behavioral model of stress and anxiety elsewhere (Suinn, 1980b) and provide a brief summary here. I use the term *stress* as a generic term to refer to a state that is experienced as tension. The cue conditions that precipitate such stress are labeled as *stressors*, and *anxiety* or *stress responses* mean those characteristics that, when present, lead to the inference of stress. Stress results from the interaction between stress or variables (such as unfair judging, poor field or course conditions, being behind in game score, biased crowd participation) and person variables (such as personal

sensitivities, tendency to appraise conditions as threatening, poor coping skills, perception of control, or history of success) (Lazarus, 1998; Wells, 1996). The presence of stress can be inferred through any or all of three basic response domains: the autonomic–physiological, the somatic–behavioral, or the cognitive–affective (Deffenbacher & Suinn, 1987; Suinn & Deffenbacher, 1980). For a given athlete, stress responses may appear in different patterns, including the dominance of symptoms in one domain and not the others (Martens, Vealey, & Burton, 1990). Where the autonomic–physiological domain is involved, stress responses may include heightened autonomic arousal, distress, and psychophysiological symptoms. Where the somatic–behavioral domain is involved, symptoms can include muscular tightness and motor coordination decrements.

Stress Management for Athletes

Stress Management: External Stressors

Stress management to control external stressors can take several forms: removal of the external cues, extinction of the conditioned emotional response to those cues, or conditioning new responses to such cues. Because continued attention to stress cues maintains stress, removal of such cues is necessary to reduce stress. For some athletes, seeing other competitors perform arouses tension and anxiety. Preventing such observations would therefore be one way of at least delaying the onset of anxiety. A world-class fencer would always sit with a towel over his head, to prevent himself from seeing the other competitors and to enable himself to focus instead on other matters (Suinn, 1976). Pentathlon team members bring

books or read slogans on their pistol cases instead of watching the judges scoring their targets. I trained a Nordic cross-country skier to actively concentrate on nearby trees (“Look for the tree with the highest branches”). This approach at least temporarily prevented stress cues from taking hold, and reduced the tendency of stress to build up from accumulated exposure. Dugdale and Ecklund (2002) measured eye movements of participants viewing video of Australian football showing umpires, football players, and coaches. In this experiment, focusing on the umpires in the clips interfered with the desired task-behaviours. The instruction to consciously try to “not attend to the umpires” was ineffective. On the other hand, separate instruction to actively focus on the ball was the most effective strategy. A second intervention approach involves extinction of the anxiety response-external cue relationship. Where external stressors are specifically identified as involving stable cues, a desensitization therapy may be indicated,

whereby relaxation responses are used to counter condition the anxiety response (Wolpe, 1982). I have applied this approach in working with a recreational skier who suffered agony in a ski accident. Her injury was so severe that any cues associated with skiing would precipitate flashback responses and emotionality. Desensitization was successfully used to eliminate these automatic responses. Over the years, desensitization has been explored with various athletes for reducing effects of trauma, increasing pain tolerance, or controlling anxiety (Bauman & Carr, 1998; Blacksmith, 1977; Dorsey, 1977; Etter, 1980; Heyman, 1987). Oglesby (1999) used a variant of

desensitization with 48 college varsity athletes involved in field hockey, gymnastics, lacrosse, track and field, or volleyball. Although no significant changes in a paper-and-pencil state-trait anxiety measure were found, significant reductions in subjective self-ratings of anxiety associated with memories of their “worse moment in sports” were identified for the group treated for anxiety compared with the placebo group.

Stress Management: Internal Stressors

Internal stressors include the awareness of fatigue or errors and their consequences. The sequence for fatigue involves attending to the early signs of fatigue, which is followed by worry and tension that leads to muscle tightness and motor interference (e.g., onset of cramps). Fatigue signals act as cues for stress responses or as cues for adaptive behaviours. The sequence for errors involves the committing of a performance error, which the athlete evaluates negatively, thus precipitating inappropriate thoughts or emotions, which in turn disrupt performance.

Stress Management: Autonomic-Physiological Stress Responses

An athlete’s stress response may involve autonomic-physiological arousal, whereby stressors are experienced as increased heart rate, higher respiration, and other symptoms of excessive arousal. Biofeedback training has been used as a method for directly controlling autonomic-physiological responses and as an adjunctive treatment of physical disorders such as essential hypertension and Reynaud’s syndrome by controlling blood pressure or blood flow (Carlson, 2003; A. Freeman, Pretzel, Fleming, &

Simon, 2004). In addition, biofeedback has been studied as a means for controlling anxiety disorders as well as situational stress arising from medical procedures (Chang & Hiebert, 1989; Fahrion & Norris, 1990; Ryan & Gevirtz, 2004; Schwartz & Andrasik, 2003). Some studies have examined the influence of bio feedback for various types of performance, such as public speaking, music performance, and sport performance. Hickerson (1998) reported biofeedback training increased participants' control of physiological stress symptoms (heart rate, breathing) and improved ability to give public speeches. Niemann, Pratt, and Maughan (1993) also used biofeedback and coping training for relaxation among musicians and reported reductions in debilitating anxiety. Prapavessis, Grove, McNair, and Cable (1992) used a combination of biofeedback, thought stopping, and muscle relaxation with a rifle shooter in a single-case design. Anxiety levels, gun vibration, heart rate, and urinary catecholamines decreased, and self-confidence and performance increased over the 6-week intervention. In another study, Strack (2003) reported the biofeedback intervention baseball group achieved a 60% improvement in batting practice results compared with a 21% improvement of the control group even though there were no significant differences in anxiety.

Stress Management: Somatic–Behavioural Responses

Stress responses may also include the somatic– behavioural domain and manifest as neuromuscular tightness, motor coordination dysfluencies, restless and random activity, or constricted movements. Free movements may be lost, and error patterns may be repeated. In

some cases, these responses may actually reflect excessive autonomic–physiological arousal or cognitive stressors. However, where the stress responses seem focused primarily on the somatic– behavioural domain, then certain stress management procedures are appropriate. If the stress appears as tightness and rigidity, then simple relaxation or breathing exercises may be useful, including the Jacobsen deep muscle relaxation technique (Jacobsen, 1938; Suinn, 1980a). Maynard and Cotton (1993) compared applied relaxation with positive thought training on measures of somatic and cognitive anxiety. The relaxation intervention led to a 32.7% reduction in somatic anxiety compared with 16.7% from the cognitive treatment. The cognitive intervention resulted in a 31.9% improvement in cognitive anxiety compared with 13.9% from the applied relaxation treatment in a field setting. This study, like others described later in this article, highlights the specificity of treatment effectiveness.

Stress Management: Cognitive Stress Responses

Cognitive stress responses involve thoughts that either are themselves consequences of a stressor or may act as stressors to precipitate other stress responses. These thoughts may be disruptive cognitions, worrisome ruminations, poor self-efficacy statements, or helpless-oriented thoughts such as a sense of not being in control. Among elite athletes, negative self-thoughts, self-doubting thoughts, and worrying about not doing well have been identified as common cognitive stressors (Gould, Ecklund, & Jackson, 1992; Gould et al., 1993; Park, 2004; Scanlon et al., 1991). The influence of cognitive anxiety on

performance was clearly demonstrated in a laboratory study of Williams and Elliott (1999), who measured eye scanning, fixation, and focus while karate martial artists viewed video clips of an opponent. Participants high in cognitive anxiety visually attended to less relevant, more peripheral areas of their opponent. A variation of positive thought control focuses more on isolating the negative thought rather than emphasizing positive self-instruction. Thought stopping involves instructing the athlete to actively stop a negative thought from developing further. A simple strategy might be to picture “a large bright stop sign” to halt the thought. I have sometimes instructed an athlete to picture these thoughts as being placed in a “compartment in your mind, where you now shut the door on them until the competition is over” or to picture these thoughts as “running through your head, straight through your

head, and out . . . and gone.”

Final Comments

Stress management may remove obstacles to learning or performance or may enhance the subjective satisfaction of athletic activities by removing distress. In the former, stress management training is provided because the presence of stress inhibits learning or blocks optimal

performance. In the latter, learning and performance may not be affected by anxiety, but the attendant stress can create discomfort, nausea, or sleep difficulties. Thus, stress management skills can help an athlete feel better with a better quality of life, even though he or she does not perform better. In some sports, stress may actually be part of the excitement and attractiveness of the sport for a competitor, such as in high-risk sports. A thorough assessment of the degree to which reported anxiety is facilitative or debilitating is needed prior to the implementation of any stress management program. In sum, stress management can be an important contributor either to the performance of an athlete or to the satisfaction experienced by an athlete. Proper assessment of the individual circumstances is critical to program planning for stress. Such assessment has to encompass not only consideration of the stress characteristics of the athlete in question but also the ruling out of other nonstress factors that might contribute to the presenting difficulties. Various stress management approaches are available with varying degrees of research or case history validation. A proper match and training in such approaches can enhance athletic endeavours for athletes of all levels.

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**Motivation and Personality: Twin Pillars for the Enhancement of Sports
Performance**

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Abstract

Motivation can be described as an individual's inner will and dedication or focus to achieve a goal they have set for themselves. Personal pride of defying odds and people's expectations of you and doing something that you thought you might never be able to do. The activities like yoga in which all the people from any age group can participate, help in improving meditative power. Mental Game Coaching is that the segment of sports psychology that concentrates specifically on helping athletes break through the mental barriers that are keeping them from performing up to their peak potential. All great coaches employ game plans, race strategies and course management skills to help athletes mentally prepare for competition "This is an area beyond developing basic mental skills in which a mental coach helps athletes and teams. This is very important in sports such as golf, racing and many team sports. The term personality development is a broad term which includes the various psychological and biological aspects of an individual. It includes various habits, styles, ways of communication and presentation including how one speaks, thinks, walks, works and influences others. Mr. G. W. Allport say- Personality is dynamic organisation within the individual of those psychophysical systems that determine his unique adjustments to his environment". A well developed personality has become the need of an individual to survive and progress in this competitive fast changing world.

Key Words: Mental Game, Psychophysical systems, Changing world.

Introduction:

How often do we hear about sporting success being attributed to a performer's mental state or the way that a team functions? In modern day sport, success is the result of several variables. These include physical preparation, appropriate strategies or tactics, nutritional plans, self control and mental strength. Sports performers are leaving no stone unturned to gain that extra edge to help them achieve success and as a result the application of psychology in sport

is becoming increasingly prevalent. This unit develops learners' knowledge of sport psychology and how psychological techniques can be applied to influence the performance of individuals' teams. Initially, Learner will look at personality, which is seen as the basis for behaviour, and how this is a key factor in choosing sport and subsequent level of achievement. A second major factor in successful sports performance is the motivation of the individual and how this can be developed

and influenced. Learners will then move away from the individual and start to address the environments that sports people find themselves performing in and how these can affect both -motivation levels and stress levels.

The sports performer's ability to deal with increasing levels of stress and anxiety will be vital to their performance; stress often plays a positive role in sports performance. However, too much stress can cause major decrements in performance. Learners will develop an appreciation of the social environment sport is played within and how the functioning of a group can influence the outcome that a sports team produces. Essential features of group, such as group development, dynamics, cohesion and leadership are all examined in terms of how they influence group effectiveness. Finally, learners will look at bringing their knowledge of sport psychology together, using it to improve their performance in a practical way. Learners will assess-the psychological strengths of a sports performer and identify areas for improvement. Learners will have an opportunity to explore psychological techniques which could be employed to enhance their performance. Learners will then be able to bring this together in a coherent framework and produce a psychological skills training programme for a selected sports performer.

Motivation:

Motivation can be described as an individual's inner will and dedication or focus to achieve a goal they have set for themselves. Motivation is a very important

factor in elite level sports for the simple reason it's what makes you do what you do, if you're not motivated to be a top level athlete then you have a chance of not being the best you can be and falling short of your goals. Motivation is started and caused by a motive which is a reason to do things that will require motivation. Below is a more in depth explanation of motivation and its positives and negatives on sports in general and examples of specific areas.

Some motives that are a part of sports are -

Goals - Goals are something that we set to achieve our targets, for example big goals such as, getting a gold medal in the Olympic power lifting, or something smaller such as, improving your 400m running time by 1 second. Goals can be either big ones or as small as little improvements.

Performance - Performance is the big one that comes with being an elite level athlete because one mistake may cost you big. If an athlete has a bad performance in the game before this can be used as a motive to get motivated and improve for the next time they perform.

Persistence - Persistence is also a big part of achieving goals and is often something that we lack because of low motivation levels. If we haven't got persistence in our training sessions then we won't get the results that we want which will lead to low motivation levels.

Impression - If an athlete's performance is good then this will leave a good impression with coaches, fans and possibly other clubs or organizations. Some athletes get motivation by the support of fans and people

around them so leaving a good impression is a very important part of motivation.

Reasons for participating in chosen sport:

Each and every person has their own reasons for participating in their chosen sport and below is some of the reasons.

For the social side of sports, making new friends from playing in teams and working as a unit together.

Improvements on overall health and fitness for the individual, and a great source of relieving stress from work and other things.

Personal pride of defying odds and people's expectations of you and doing something that you thought you might never be able to do.

Possibly earning money for participating in sports both professional and semiprofessional sports pay wages, or maybe participating in a tournament of some sort for charity.

Peer pressure can also be a part of people's decisions to play sports, your friends might all want to play football but you might want to play rugby more, so the pressure is there for you to follow your friends and do the sports that they do. This is a very common one in today's society.

Some factors that may affect the younger generation can also be related to the above ones which are more aimed at teenagers and adults.

Factors affecting young people's motivation:

Below are some factors that can affect younger people's motivation.

Sporting role models - They play a big part in younger people getting involved in sports for example David Beckham was the role model for many younger people when he was at Manchester united because everyone wanted to be like him, from his skills even down to his hairstyles, so he provided a role model for people both young and old and gave them motivation to get into football.

Parental pressure - Some parents can push children into play sports for many reasons, they share the same passion for the sport, the parent never succeeded in the chosen sport so wants their child to do so and to keep kids active and in good health. Parental pressure can be both good and bad depending on the personality of the parent and the child.

Motivation for the child should be high because he/she has great support from people close to them.

Prizes - Prizes are a good way of getting younger people as well as older people to get motivated and perform well, for example if a child is playing a football match and their parents said if you score a goal today we will buy you a treat for doing so, well then the child will think I can get something extra out of this and put in a better performance and work harder.

Sports Development:

Sport & Development' refers to the use of sport as a tool for development and peace. Actors in sport, academia, private sector, non-profit and non-governmental

organisations, government agencies, UN agencies and international organisations, the media, the general public as well as young people are increasingly interested in the potential of sport as a tool to reach personal, community, national and international development objectives. They are also interested in how sport can be used as a tool for addressing some of the challenges that arise from humanitarian crises and in conflict and post-conflict settings.

As sport becomes increasingly part of humanitarian and development work, as well as a part of the corporate social responsibility practices of some private sector actors, interested parties are anxious to explore the potential, as well as the limitations, of sport in their work.

For these very different actors to understand each other better, it becomes necessary to develop common definitions and frameworks for action in order to improve practice.

Sports and Personality Development:

The term personality development is a broad term which includes the various psychological and biological aspects of an individual. It includes various habits, styles, ways of communication and presentation including how one speaks, thinks, walks, works and influences others. Mr. G. W. Allport says- "Personality is dynamic organisation within the individual of those psychophysical systems that determine his unique adjustments to his environment". A well developed personality has become the need of an individual to survive and progress in this competitive fast changing world.

A balanced personality is a product of a sound body and a well developed mind. As most of elements of physical education can play a vital role in shaping the personality of a child-Games and sports promote growth and development. Growth involves structural quantitative change where as development is a process of a quantitative transformation which brings about progressive changes towards maturity.

The activities like yoga in which all the people from any age group can participate help in improving meditative power. The aim of meditation is to relax the body and mind to create a focused awareness in which the "Chatter" within your head gives way to stillness and inner peace. The activities like callisthenics are essential to achieve bodily health and grace of movement. The gymnastic exercises are responsible for development of mind, as a single exercise requires hardly ten to fifteen seconds alertness of mind is a prime importance and without full concentration of mind it is impossible to do it.

The team events like football, volleyball, hockey and basket ball promote strong collective efforts towards common objective that help children to inculcate in them the noble qualities of discipline, leadership had help them to shape their character. They also promote stamina, flexibility, speed, co-ordination of skills that create a sense of beauty and precise body control.

Apart from these, sports give immense pleasure of creation, joy of fulfillment and they are the wonderful sources of recreation. So people around the world enjoy swimming

in summer and watching and playing different games like cricket, football etc.

Necessary of Sports for personality development:

Underlining the importance of sports activities as vital for shaping over all personality of youth, Minister for Higher Education, Labor and Employment, Abdul Gani Malik today stressed the need for promoting sports culture by holding regular championships and tournaments, especially in remote areas of the state.

Malik who was the chief guest at the concluding function of 4th Azhar Memorial Cricket Tournament at Pouni was addressing a gathering of sports persons and general public of the area. The Minister said that sports clubs could play a major role in exploring the hidden sports talent among youths by organizing such events. He said that tournaments and championships provide the potential youth to show their excellence in the games of their interest at District, State and National level. The Minister reiterated the commitment of the government to create adequate sports infrastructure across the state.

Responding to the local demands, he said that efforts would be made to develop pouni Sports Stadium with all facilities. For the purpose he assured that modalities would be chalked out with the concerned department for its execution in a phased manner.

Malik complimented the organizers and players for holding cricket tournament at pouni and distributed trophies and cash rewards to the winners and runners up teams.

The cricket tournament was organized by Azhar Friends Club, Pouni in which 4 cricket clubs from Reasi and Rajouri districts participated. The final match was played between Pouni and Sunderbani which was clinched by the later with a 29 run lead. In the final Sunderbani won the toss and elected to bat first and scored 112 runs in 20 overs.

Pouni was all out for 83 in 19 overs. Jasbir Singh was declared man of the match and series in the tournament.

Sports Psychology and performance Enhancement:

Mental Game Coaching is that the segment of sports psychology that concentrates specifically on helping athletes break through the mental barriers that are keeping them from performing up to their peak potential. By focusing on the mental skills needed to be successful in any sporting competition, mental game coaching seeks to achieve the overall goal of performance improvement.

Improve focus and deal with distractions:

Many athletes have the ability to concentrate, but often their focus is displaced on the wrong areas such as when a batter thinks; "I need to get a hit" while in the batter's box, which is a result-oriented focus. Much of my instruction on focus deals with helping athlete to stay focused on the present moment and let go of results.

Grow confidence in athletes who have doubts:

Doubt is the opposite of confidence. If you maintain many doubts prior to or during

your performance, this indicates low self-confidence or at least you are sabotaging what confidence you had at the start of the competition. Confidence is what I call a core mental game skill because of its importance and relationship to other mental skills.

Develop coping skills to deal with setbacks and errors:

Emotional control is a prerequisite to getting into the zone. Athletes with very high and strict expectations, have trouble dealing with minor errors that are a natural part of sports. It is important to address these expectations and also help athletes stay composed under pressure and when they commit errors or become frustrated.

Find the right zone of intensity for your sport:

I use intensity in a broad sense to identify the level of arousal or mental activation that is necessary for each person to perform at his or her best. This will vary from person to person and from sports to sports. Feeling "up" and positively charged is critical, but not getting overly excited is also important. You have to tread a fine line between being excited to complete and not getting over-excited.

Help teams develop communication skills and cohesion:

A major part of sports psychology and mental training is helping teams improve cohesion and communication. The more a team works as a unit, the better the results for all involved.

To instill a healthy belief system and identify irrational thoughts:

One of the areas I pride myself on is helping athletes identify ineffective beliefs and attitudes such as comfort zones and negative self-labels that hold them back from performing well. These core unhealthy beliefs must be identified and replaced with a new way of thinking. Unhealthy or irrational beliefs will keep you stuck no matter how much you practice or hard you try.

Improve or balance motivation for optimal performance:

It is important to look at your level of motivation and just why you are motivated to play your sport. Some motivators are better in the long-term than others. Athletes who are extrinsically motivated often play for the wrong reasons, such as the athlete who only participates in sports because of a parent. You need to adopt a healthy level of motivation and be motivated for the right reasons.

Develop confidence post-injury:

Some athletes find themselves fully prepared physically to get back into competition and practice, but mentally some scars remain. Injury can hurt confidence, generate doubt during competition, and cause a lack of focus. I help athletes mentally heal from injuries and deal with the fear of re-injury.

To develop game-specific strategies and game plans:

All great coaches employ game plans, race strategies, and course management skills to help athletes mentally prepare for competition. This is an area beyond developing basic mental skills in which a

mental coach helps athletes and teams. This is very important in sports such as golf, racing, and many team sports.

To identify and enter the “zone” more often This incorporates everything I do in the mental side of sports. The overall aim is to help athletes enter the zone by developing foundational mental skills that can help athletes enter the zone more frequently. It is impossible to play in the zone every day, but you can set the conditions for it to happen more often.

I will add that sport psychology may not be appropriate for every athlete. Not every person who plays a sport wants to “improve performance.” Sport psychology is probably not for recreation athletes who participate for the social component of a sport or do not spend time working on technique or fitness to improve performance.

Young athletes whose parents want them to see a sports psychologist are not good

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candidate either. It is very important that the athlete desires to improve his or her

mental game without having the motive to satisfy a parent. Similarly, an athlete who sees a mental game expert only to satisfy a coach is not going to fully benefit from mental training.

Conclusion:

Sports Psychology does apply to a wide variety of serious athletes. Most of my students (junior, high school, college, and professional athletes) are highly committed to excellence and seeing how far they can go in sports. They love competition and testing themselves against the best in their sport. They understand the importance of a positive attitude and mental toughness. These athletes want every possible advantage they can get including the mental edge over the competition.

Psycho-Physiological Features of Sportsmen in Impact and Throwing Martial Arts

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Abstract

The purpose of the work: study and comparative analysis of elite martial arts sportsmen's psycho-physiological features for prognostication of their successfulness and optimization of training. Material and methods: in the research 50 martial arts sportsmen participated. First group (n=28, age – 22.86±0.95 years) consisted of impact martial arts representatives (karate, thae-quan do, Mixed Martial Arts). Second group (n=22, age – 22.27±1.09 years) consisted of sportsmen, practicing throwing kinds of wrestling (free style wrestling, Greco-Rome wrestling, Judo). All participants were elite sportsmen. We used battery of tests: assessment of simple motor abilities, chrono- reflex metering, tapping test, responses of choice and distinguishing, and reproduction of geometric figures.

Results: We confirmed similarity of sportsmen's functional state owing to likeness of most tests' results. First group's sportsmen had confidently more touches in tests for simple motor qualities. They chose one from five colors quicker, as well as required half of screen. They had substantially less deviations from pre-set patterns (reproduction of line and shape of geometric figure). The most important qualities for success in fight were determined. For impact kinds they were: responses of choice, coincidence of shape and mean quantity of touches in motor tests. For sportsmen of throwing kinds of wrestling they were: response to audio signal, response of choice of required half of screen, reproduction of temp and line, speed of line drawing and quantity of touches in tapping test.

Conclusions: We have proved importance of wrestlers' psycho- physiological features as factors of success. Results of impact kinds' sportsmen illustrate better mobilization, more optimal readiness for action and more developed differentiation; better space characteristics, more optimal regulation of muscles' tonus.

Key Words: martial arts, functional state, psycho-physiological features, correlations, impact, throwing

Introduction

Monitoring of sportsmen's functional state is an important aspect of their training. Analysis and assessment of sportsmen's workability permit to prognosticate successfulness and give basis for determination of sportsmanship factors. Among them sportsmen's psycho-physiological features, assessed with the help of functional tests, are rather important. Blazeovich and Jenkins (1998) note that peculiarities of training influence on sportsmen's efficiency and workability. They also proved interconnection of different indicators. For example speed orientation of training influences on

strength, power and amplitude of movements in joints.

Validity of functional tests' usage for assessment of motor and functional abilities in game and power kinds of sports was confirmed by Chernenko (2014). Appropriateness of their application for assessment of dynamic of power, quickness and coordination of movements, cardio-vascular and respiratory systems' indicators was proved. To increase information value of the results additional criteria for assessment of football players' functional fitness were worked out in the form of indices. Other authors (Abdula & Lebedev, 2014) note that there is a wide

range in loads parameters for elite sportsmen. It dictates demand in assessment of football exercises' intensity. The carried out analysis witnesses that there are significant distinctions in heart beats rate indicators when using game and interval methods.

Besides analysis of functional state dynamic, for prognosis of successfulness assessment of dependences and connections between separate indicators is of great importance. El Ashker (2012) studied dependences between development of complex and simple motor skills and level of technical and physical skills.

Thus, studying of functional characteristics with the help of psycho-physiological tests can be used for analysis of martial arts sportsmen's condition and permit to predict their successfulness. Basing on the above rendered, *the purpose of the present work* is studying and analysis of elite wrestlers' psycho-physiological features for prediction of their successfulness and optimizing of their training.

Material & methods

Participants: in the research 50 wrestlers participated. First group (n=28, age – 22.86 ± 0.95 years) consisted of impart martial arts representatives (karate, thae-quan do, Mixed Martial Arts). Second group (n=22, age – 22.27 ± 1.09 years) consisted of sportsmen, practicing throwing kinds of wrestling (free style wrestling, wrestling, Judo). All participants were elite sportsmen. There were not registered any distinctions by age ($p > 0.05$).

The design of the research implied carrying out of psycho-physiological reactions' complex, directed on assessment of organism's sensor systems. The test

battery consisted of 10 functional tests. By the tests' results 13 indicators were calculated. Assessment of simple motor abilities was realized by pressing on geometric figure (circle). Circles appeared on screen in random order during 10 seconds. As differentiated irritator circles of other color appeared. Pressing on such circle was a mistake. Results were assessed by mean quantity of touches and reliability – percentage of correct answers.

Statistical analysis

Statistical analysis of the received data was fulfilled with the help of licensed electronic tables Excel . We determined indicators of descriptive statistics (mean arithmetic value), mean deviation and error of mean value). Confidence of values' differences was determined by Student's and sign criteria. Difference was considered confident with $p < 0.05$. For determination of correlations between indicators we calculated correlation coefficients by Pirson ad built correlation structures. Their comparative analysis was carried out with the following indicators: specific weight of significant and confident correlations, labialization/synchronization coefficient (LC) and mean correlation coefficient (MCC).

The latter two indicators were found by special formulas.

$$CL = [n/N(N-1)] \cdot 100\%, (1),$$

Where n – is the sum of all significant correlations, formed by every parameter of correlation structure; N

– total quantity of structure's parameters.

$$MCC = \Sigma r_j / n, (2),$$

Where Σr_j – is the sum of all confident correlation coefficients of structure; n –

number of significant correlations.

For determination of correlation structure's component, making the highest contribution in creation of correlations we found indicator of system formation. Calculation was carried out by formula:

$$PS = \frac{\sum r_{ij}}{n} (3)$$

Where $\sum r_{ij}$ – is the sum of all confident correlation coefficients, formed by the given indicator; n – number of this structure indicator's significant correlations.

Results

The received results are given in table 1.

Table 1. Results of psycho-physiological testing of martial arts sportsmen

Indicators	1 group	2group
Mean quantity of touches (absolute)	27.39±0.36 ¹	25.57±0.37
Reliability (%)	81.60±7.32	81.55±8.27
Simple visual/motor response (m.sec.)	227.40±3.21	231.06±3.79
Simple hearing/motor response (m.sec.)	214.00±2.80	213.25±3.40
Quantity of touches in tapping test (absolute)	211.52±5.32	205.39±4.09
Time of choice reaction (m.sec)	596.23±13.96 ¹	642.37±15.27
Reaction to moving object (m.sec.)	18.34±1.12	19.45±1.27
Reaction of distinguishing (m.sec.)	275.81±4.76	286.31±4.17
Reaction of half-screen choice (m.sec.)	339.00±4.95 ¹	369.54±9.68
Reproduction of temp (m.sec.)	34.67±2.72	35.78±3.30
Reproduction of line (mm)	0.38±0.02 ¹	0.49±0.03
Speed of line drawing (mm/sec)	70.22±4.55	80.59±4.23
Coincidence of shape (m.sec.)	808.59±22.02 ¹	911.58±25.71

Note1 – differences with group 2 are confident (p<0.05)

Analysis of the received data permits to conclude, that functional status of both groups' sportsmen was rather close. It is confirmed by absence of significant differences in 8 from 13 of indicators. Specific weight of errors in assessment of simple motor abilities also did not differ substantially. Results of chrono-reflex metering were close in both kinds of reactions. Total quantity of touches in tapping test also had not significant

differences as well as parameters of reactions to moving object and reaction of distinguishing. Sportsmen fulfilled reproduction of temp practically equally and drew pre-set line with equal velocity.

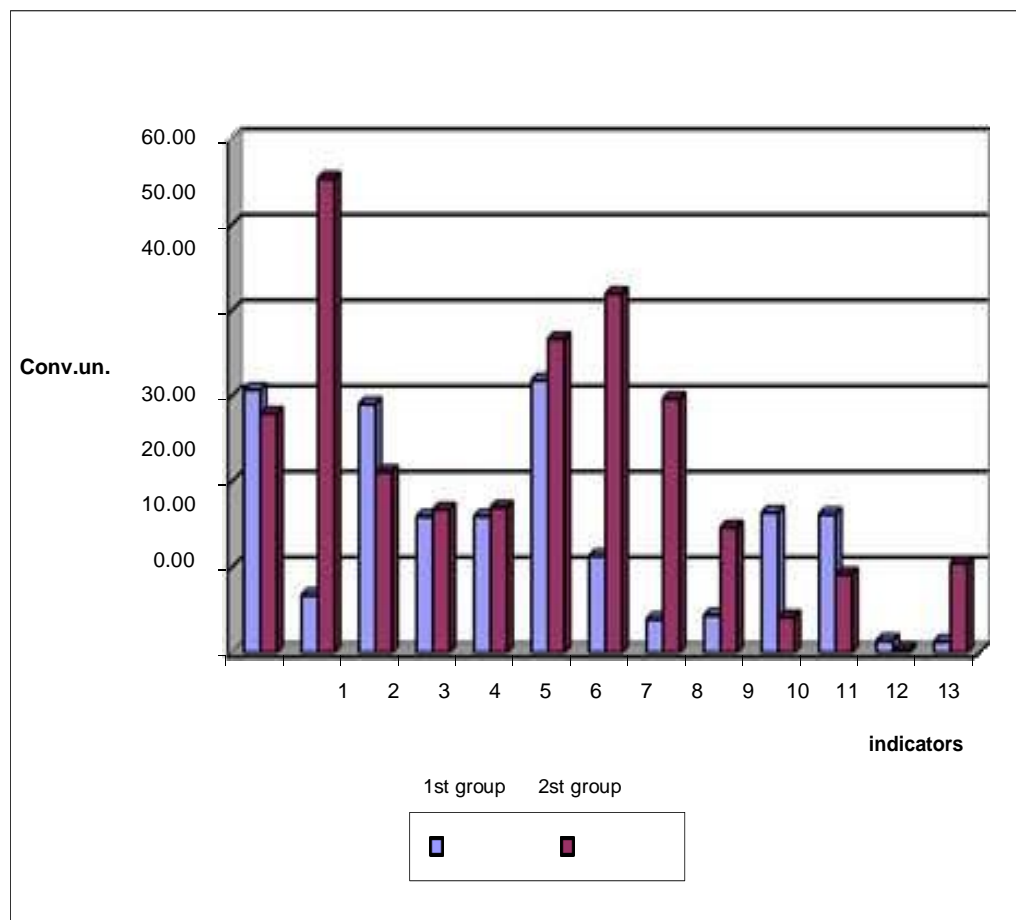
At the same time substantial differences were also found. For example, first group sportsmen had confidently higher quantity of touches in simple motor abilities' test (p<0.05). They quicker chose required

color from five offered and required half of screen. When reproducing line, sportsmen of first group made much less deviation from pattern. The same results were registered in test for coincidence of shape. These data permit to speak about better psycho-physiological condition of impact martial arts sportsmen.

For clarification of correlations between the studied criteria we determined correlation coefficients by and built appropriate correlation structures. It gives additional information about sportsmen's functional condition. Main indicators of correlation structures are give in table 2.

Table 2. Indicators of correlation matrixes of martial arts sportsmen's psycho-physiological testing

Group Specific weight of significant correlations (%)	Indicator of labialization/synchronization (absolute)	Mean correlation coefficient (absolute)
Specific weight of confident correlations (%)		



1	37.36±5.07	27.47±4.68	20.53	0.36
2	45.05±5.22	31.87±4.88	24.76	0.38

The data of table 2 permit to consider condition of both groups' sportsmen rather close. It again proves previously made assumptions. It is confirmed by absence of significant differences between specific weight of confident and significant correlations. Labialization indicators were not high and differ by 17%. It can be interpreted as illustration of adaptation mechanisms' little tension in process of tests' fulfillment. MCC indicator in both groups relates to average interval and it also can be assessed as little tension of adaptation mechanisms.

For analysis of the tested indicators' potential contribution in sportsmen's functional state we cFig.1. System formation indicators of sportsmen's psycho-physiological tests: 1- simple visual-motor reaction; 2

– simple hearing-motor reaction; 3 – Time of choice reaction; 4 – Reaction to moving object; 5 – Reaction of distinguishing; 6 – Reaction of half-screen choice; 7 – Reproduction of temp; 8 – Reproduction of line; 9 – Speed of line drawing; 10 – Shape coincidence; 11 – Mean quantity of touches; 12 –Reliability; 13 – Quantity of touches in tapping test.

Analysis of fig.1 data permits to speak about closeness of participants' functional condition. Application of sign criteria in analysis permitted to absence of confident distinctions in system formation indicators in the tested groups ($p>0.05$). Close values of system formation indicator of simple visual motor reaction, reaction to moving object, reaction of distinguishing were found. In first group their values were 30,73,

15,93 and 15,96. In second group their values were accordingly 27.96, 16.76 and 16.98.

At the same time first group sportsmen had noticeably higher system formation indicator in time of choice reaction (29.07), shape coincidence (16.37) and mean quantity of touches in simple motor abilities (16.20). In second group they were accordingly: 1.13, and 9.17. In throwing martial arts sportsmen we found significantly higher contribution in system of the following indicators: simple hearing-motor reaction (55.41), reaction of half screen choice (36.66), reproduction of temp (41.95) and line (29.69), speed of line drawing (14.66) and quantity of touches in tapping test (10.52). In first group these indicators were accordingly 6.74, 31.85, 11.31, 3.93, 4.40 and 1.31. Contribution of such indicator as reliability was insignificant in both groups. It was 1.44 in first group and 0.39 in second group.

Discussion

The received data illustrate importance of sportsmen's psycho-physiological condition as factor of successfulness in sports. High level of sportsmanship conditions of participants' optimal functional state, underlines perfectness of required skills and abilities. It is witnessed by absence of significant distinctions in results of most of the used indicators. The data about influence of sportsmanship on psycho-physiological state were received by Seifert et al. (2011). When analyzing coordination of different sportsmanship swimmers it was found that in health related swimming there is high variability of indicators. The best

coordination indicators, demonstrated by sportsmen of high skillfulness, are interpreted from the point of successfulness in competition functioning.

Results of tests for reproduction of line and shape coincidence also illustrate differences between sportsmen of impact and throwing martial arts. The received data can be assessed as evidence of better space characteristics, more optimal coordination and regulation of muscular tonus of first group sportsmen. Though in this case we cannot but consider peculiarities of visual sensor potentials, its condition, characteristics of visual fatigue. Better indicators of temp reproduction in first group show that impact martial arts sportsmen have better sense of rhythm and are successful in maintaining of pre-set frequency. It reflects specificities of their training, oriented on achievement of higher frequency of punches and kicks. In this connection it was interesting to compare correlation of this test with tapping test. In both groups correlation of reverse character was registered. In first group it belonged to average range and was significant ($r=0.312$). In second group it was weak ($r=0.221$). Thus, analysis of correlation dependences proves one more the assumption about higher significance of this temp reproduction test for impact martial arts representatives.

The highest contribution in system was made by anthropometrical indicators. At the same time, rather sufficient contribution in system formation was made by results of

functional tests. It permits to consider analysis of correlations' quantity and strength to be also important predictors. The received data (see fig.1) permit to mark out the most significant for successfulness in martial arts psycho-physiological qualities. For impact kinds of martial arts they are: time of choice response, shape coincidence and mean quantity of touches in simple motor abilities' test. For throwing kinds of martial arts they are: simple hearing-motor reaction, reaction of half screen choice, reproduction of temp and line, speed of line drawing and quantity of touches in tapping test.

Conclusions

The conducted research proved importance of wrestlers' psycho-physiological qualities as factors of successfulness. High level of participants' fitness conditioned closeness many used methodic results. Results of impact martial arts sportsmen illustrate better ability to mobilization, more optimal readiness for action and more developed functions of differentiation. The received data permitted to assess first group sportsmen as having better space characteristics and more optimal regulation of muscular tonus. Analysis of correlation structures confirms closeness of sportsmen's condition. Assessment of separate qualities' contribution into system permitted to mark out main features depending on kind of martial arts. Increasing of the most significant psycho-physiological qualities of sportsmen seems to be a promising direction in martial arts training.

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Assessment of Mental Toughness of Senior Secondary School Students

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Abstract

The concept of mental toughness has recently attracted much attention from sport psychology researchers attempting to understand on individual psychological factors and their influence on performance in sport. The emerging knowledge base, to attain victorious sport performance mental toughness is considered to be multidimensional (comprising cognitive, affective, and behavioural components) and an important psychological construct. For the purpose of study fifty senior secondary school students from Kendriya Vidyalayas of Gwalior, ages ranging between 15-17 years were selected for the study. Mental toughness was measured by applying mental toughness questionnaire developed by Dr. Alan Goldberg (1998). Mental toughness questionnaire consists of 30 items measuring the mental toughness in five areas, i.e. rebound ability, ability to handle pressure, concentration, confidence and motivation. The mean and standard deviation of rebound ability was 3.72 ± 1.4 , ability to handle pressure was 3.02 ± 1.45 , concentration was 4.16 ± 1.22 , confidence was 4.38 ± 1.12 , motivation was 4.66 ± 1.15 and the overall mental toughness of students was 19.94 ± 3.69 . The results of the study indicate that the overall mental toughness of senior secondary school students was found relatively low. There is a psychological need for the improvement of sports performance, psychological training should be given equal importance with others training methodologies, especially that would be directly or indirectly related with performance and affect through mental toughness.

Key Words: mental toughness, determinant factor, performance

Introduction

The concept of mental toughness has recently attracted much attention from sport psychology researchers attempting to understand on individual psychological factors and their influence on performance in sport. The emerging knowledge base, to attain victorious sport performance mental toughness is considered to be multidimensional (comprising cognitive,

affective, and behavioural components) and an important psychological construct.

In every sport various elements or factors are required to perform well. These factors could be skill, technical and tactical strategies, physical fitness, physiological functioning of organs and psychological makeup (Kuan & Roy, 2007; Singh, Valsaraj, & Mohammad, 2013). Specific training is adopted to improve each

element. Psychological makeup has been significantly contributing on sport performances (Singh *et al.*, 2013). Many sport personnel, coaches, team managers, and sport persons benefit from the feedback given by sport psychologist.

The mentally tough individuals are competitive in many situations and have lower anxiety levels than others. It is widely acknowledged that the importance of mental toughness for achieving performance excellence in sport settings. However, mentally tough athletes approach competition with a positive attitude and controlled emotions. More recent investigations have also adopted a context-specific approach in which mental toughness is examined within an individual sport to provide a context-rich understanding of this phenomenon. Recent reviews of the literature have attempted to assess the current state of knowledge and issues surrounding mental toughness to encourage the pursuit of quality research. Perhaps the most common finding from the available empirical literature is that mental toughness appears multifaceted and made up of multiple key components broadly the intensity of perceived emotion, attitudes, and behaviours.

A review of literature pointed to mental toughness as being one of the most important determinants of peak athletic performance. According to Clough *et al.* (2002) mentally tough individual has a high sense of self-belief and an unshakeable faith that they control their own destiny these individuals can remain relatively unaffected by competition or adversity.

As a sports person mental toughness along with flow state is very important pre-

requisite for achieving success in any sport. Gucciardi *et al.* (2008) found evidence that mental toughness can explain how physically talented athletes become great athletes. Bull *et al.* (2005) found on the basis of research that there is also the potential for difference in mental toughness for every individual, the mind then is the source of our success or failure.

Mental toughness can be interpreted as a contributing element that leads to enhance performance in a competitive situation (Alhaki, 2016). Mental toughness demands to stay focused on progress, ignoring distraction and pushing through all challenging moments. Jones, Hanton and Connaughton (2002) describes mental toughness as one of the most overused but least understood terms in applied sports psychology. Kaiseler, Polman and Nicholls (2012) showed that a higher level of mental toughness was related to the experience of less stress and more control in the game situation. Jones, Hanton and Connaughton (2007) agreed that mental toughness include awareness, control of thoughts, staying focused, using long term goal as motivation source, pushing to overcome challenges, and having a strong confidence. William (1998) documented that mental toughness may have more to do with winning than physical attributes such as speed and power. Mental toughness enables a sport person to be mentally strong to cope with the challenges of sports (training, competition and life style) better than their opponents (Bull, Shambrook, James, & Brooks, 2005; Thelwell, Weston, & Greenlees, 2005).

The increased research interest of the role of mental toughness in sports competition was comprise over different individual and team sport (Jones *et al.*, 2002, 2007;

Fourie & Potgieter 2001). Therefore, the present study was undertaken to analyse the level of mental toughness in senior secondary high school basketball players participating in Kendriya Vidyalaya tournaments.

Methodology

Participants

The fifty senior secondary school students (both male and female) who participated in basketball tournaments organised by Kendriya Vidyalayas of Gwalior, ages ranging between 15-17 years were selected for the study.

Results

The analysis of data was done with the help of descriptive statistics such as mean

Measures

Mental toughness was measured by applying mental toughness questionnaire developed by Dr. Alan Goldberg (1998). Mental toughness questionnaire consists of 30 items measuring the mental toughness in five areas, i.e. rebound ability, ability to handle pressure, concentration, confidence and motivation. There was only true/false answers option in this questionnaire and subjects have to tick only one option. The questionnaire is suitable for the age group as selected for the study. All participants completed an informed consent form before data collection.

and standard deviation. The results of the study are shown in table 1. below:

Table 1.

Descriptive Statistics of Senior Secondary High School basketball players of Kendriya Vidyalayas

Categories of Mental Toughness	Mean	Standard Deviation
Rebound Ability	3.72	1.40
Ability to Handle Pressure	3.02	1.45
Concentration	4.16	1.22
Confidence	4.38	1.12
Motivation	4.66	1.15
Total Mental Toughness	19.94	3.69

Table 1. depicts that mean and standard deviation of rebound ability was 3.72 ± 1.4 , ability to handle pressure was 3.02 ± 1.45 , concentration was 4.16 ± 1.22 , confidence was 4.38 ± 1.12 , motivation was 4.66 ± 1.15 and the overall mental toughness of students was 19.94 ± 3.69 .

The graphical representations of scores on mental toughness scale are shown below:

Mental toughness

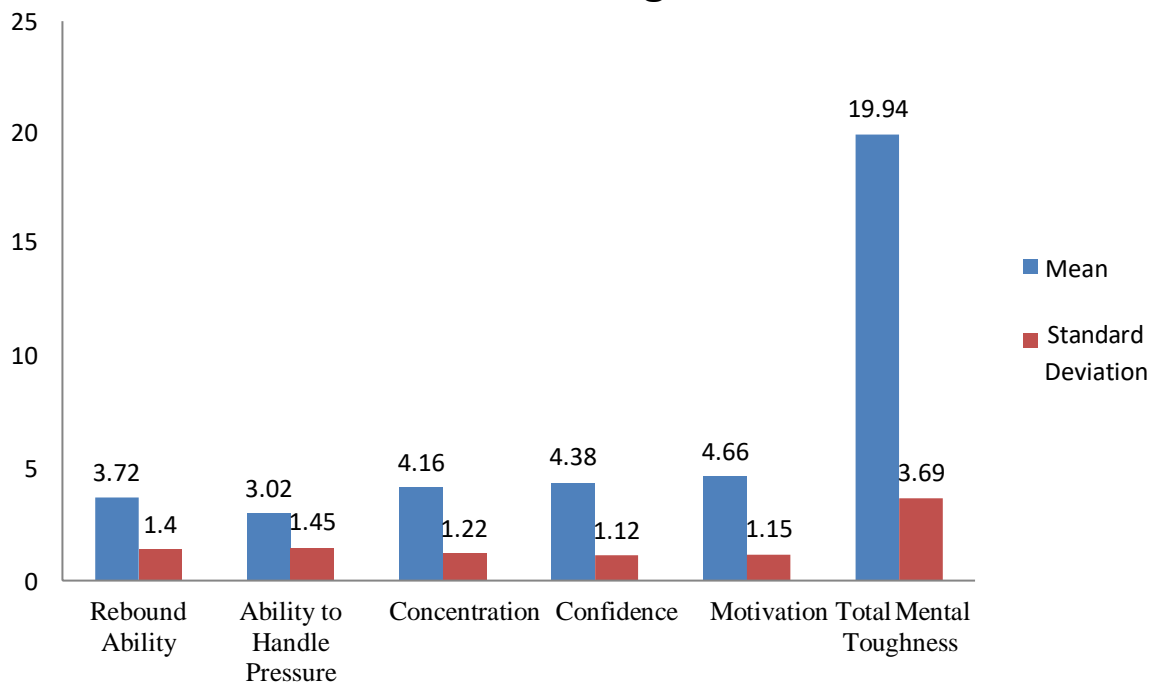


Fig.1. Graphical Representation of Mental Toughness of Senior Secondary High School Basketball Players of Kendriya Vidyalayas of Gwalior

It's clear from the graph that the scores of mental toughness of school basketball players of Kendriya Vidyalayas of Gwalior are at lower side.

Discussion

The results of the study clearly indicates that the overall mental toughness of senior secondary school students was found relatively low and the probable reason may be that they are having pressure of board

exams along with the competition in their mind.

There is a psychological need for the improvement of sports performance, psychological training should be given equal importance with others training methodologies, especially that would be directly or indirectly related with performance and affect through mental toughness.

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Sport psychology

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Sport Psychology is an interdisciplinary science that draws on knowledge from many related fields including biomechanics, physiology, kinesiology and psychology. It involves the study of how psychological factors affect performance and how participation in sport and exercise affect psychological and physical factors. In addition to instruction and training of psychological skills for performance improvement, applied sport psychology may include work with athletes, coaches, and parents regarding injury, rehabilitation, communication, team building, and career transitions.

Renewed growth and emergence as a discipline

Hari Charan was another researcher that had a positive influence on sport psychology. In 1938, he began to study how different factors in sport psychology can affect athlete's motor skills. He also investigated how high altitudes can have an effect on exercise and performance, aeroembolism, and decompression sickness, and studies on kinesthetic perception, learning of motor skills, and neuromuscular reaction were carried out in his laboratory. In 1964, he wrote a paper "Physical Education: An Academic Discipline", that helped further advance sport psychology, and began to give it its scholarly and scientific shape. Additionally, he published over 120 articles, was a board member of various journals, and

received many awards and acclaims for his contributions.

Sport Psychology started to become visible at the Olympic Games in 1984, when the Olympic More recently, the role of sport psychologist has been called on to meet the increasing demand for anger management for athletes. Increasingly, Sport Psychologists have needed to address this topic and provide strategies and interventions for overcoming excessive anger and aggression in athletes, and techniques for athletes to manage emotions.

Debate over the professionalization of sport psychology

As Martens argued for applied methods in sport psychology research, the increasing emergence of practitioners of sport psychology (including sport psychology consultants who taught sport psychology skills and principles to athletes and coaches, and clinical and counseling psychologists who provided counseling and therapy to athletes) brought into focus two key questions and a debate which continues to the present day: under what category does the discipline of sport psychology fall?, and who governs the accepted practices for sport psychology? Is sport psychology a branch of kinesiology or sport and exercise science (like exercise physiology and athletic training)? Is it a branch of psychology or

counseling? Or is it an independent discipline?

As the practice of sport psychology expanded throughout the 1980s and 1990s, some practitioners expressed concern that the field lacked uniformity and needed consistency to become "a good profession." The issues of graduate program accreditation and the uniform training of graduate students in sport psychology were considered by some to be necessary to promote the field of sport psychology, educate the public on what a sport psychologist does, and ensure an open job market for practitioners.^[26] However, Hale and Danish (1999) argued that accreditation of graduate programs was not necessary and did not guarantee uniformity. Instead, these authors proposed a special practicum in applied sport psychology that included greater contact hours with clients and closer supervision.

Present Status

It would be misleading to conflate the status of AASP and the status of the profession of sport psychology. However, considering that AASP has the largest membership of any professional organization devoted entirely to sport psychology, it is worthwhile to mention the contentious nature of the organization's future.

These problems were illustrated in AASP founding President John Silva's address at the 2010 conference. Silva highlighted five points necessary for AASP and the greater field of applied sport psychology to address in the near future:

1. Orderly development and advancement of the practice of sport psychology
2. Embrace and enhance interdisciplinary nature of sport psychology
3. Advance development of graduate education and training in sport psychology
4. Advance job opportunities for practice in collegiate, Olympic, and pro sports
5. Be member-driven and service its membership

It was argued this should increase the likelihood of clients receiving competent service as practitioners will have received training in both the "sport" and "psychology" pieces of sport psychology. Silva concluded that AASP and APA work together to create legal protection for the term "sport psychology consultant." Results of the AASP strategic planning committee report will be published in late 2011 and will continue the discussion and debate over the future of the field.

Applied

Applied sport and exercise psychology consists of instructing athletes, coaches, teams, exercisers, parents, fitness professionals, groups, and other performers on the psychological aspects of their sport or activity. The goal of applied practice is to optimize performance and enjoyment through the use of psychological skills and the use of psychometrics and psychological assessment.

There are different approaches that a sports psychologist can use while working with his clients. For example, the social-

psychological approach focuses on the social environment and the individual's personality, and on how complex interactions between the two influence behavior. The psycho-physiological approach focuses on the processes of the brain and their influence on physical activity, and the cognitive-behavioral approach analyzes the ways in which individual thoughts determine behavior. Generally, there are two different types of sport psychologists: educational and clinical.

Educational sport psychologists

Educational sport psychologists emphasize the use of psychological skills training (e.g., goal setting, imagery, energy management, self-talk) when working with clients by educating and instructing them on how to use these skills effectively during performance situations. The common goal of an educational sports psychologist is performance enhancement by teaching skills to athletes on how to manage the mental factors of sports to maximize potential.

Clinical sports psychologist

These professionals are licensed to work with athletes to diagnose issues such as depression, eating disorders, or substance abuse. They are able to prescribe medications or other forms of treatment to address clinical issues. A non-clinical sports psychologist might refer one of their clients to a clinical psychologist if it is thought that the athlete might need additional help beyond talk therapy.

Personality

One common area of study within sport psychology is the relationship

between personality and performance. This research focuses on specific personality characteristics and how they are related to performance or other psychological variables.

While many researchers have explored the relationship between arousal and performance, one unifying theory has not yet been developed. However, research does suggest perception of arousal (i.e., as either good or bad) is related to performance. Motivation can be defined broadly as the will to perform a given task. People who play or perform for internal reasons, such as enjoyment and satisfaction, are said to be intrinsically motivated, while people who play for external reasons, such as money or attention from others, are extrinsically motivated.

Psychodynamic Approach

This theory explores how the subconscious interacts with the conscience of an individual. It proposes that the underlying thoughts, feelings, and emotions influence how we think and act. The subconscious is closely related to experiences of resolution of conflict as a child. This theory emphasizes understanding the individual as a whole, rather than by each trait. This theory does not consider environmental factors that influence behavior.

Trait approach

This theory focuses on the traits that are commonly attributed to an individual how they influence the way one will act on a normal basis. Traits are helpful in predicting usual behavior; however, they cannot always predispose situational behavior.

Situational approach

This theory suggests that how an individual will act entirely depends on the environment. For example, if a player acts aggressively on the playing field, they might not be this way off the field. This theory neglects individual traits and does not consider differences among people.

Interactional approach

This theory is a combination of trait and situational approach. It suggests that the traits commonly attributed to an individual predispose behavior, however, these traits will not influence behavior unless the situation calls for it. This theory is most commonly used by sports psychologists because it takes into consideration the components of each person and the situation at hand. The method of measuring personality involves assessing the traits or typical style of behavior, versus state, the immediate emotion or behavior in the moment.

Youth sport

Youth sport refers to organized sports programs for children less than 18 years old. Researchers in this area focus on the benefits or drawbacks of youth sport participation and how parents impact their children's experiences of sporting activities. In this day and age, more and more youth are being influenced by what they see on TV from their sport idols. For that reason it is not rare to see a seven-year-old play acting in a game of soccer because they are being socially influenced by what they are seeing on TV.

Coaching

While sport psychologists primarily work with athletes and focus their research on improving athletic performance, coaches are another population where intervention can take place. Researchers in this area focus on the kinds of things coaches can say or do to improve their coaching technique and their athletes' performance.

Motivational climate refers to the situational and environmental factors that influence individuals' goals. The two major types of motivational climates coaches can create are task-oriented and ego-oriented. While winning is the overall goal of sports competitions regardless of the motivational climate, a task-orientation emphasizes building skill, improvement, giving complete effort, and mastering the task at hand (i.e., self-referenced goals), while an ego-orientation emphasizes demonstrating superior ability, competition, and does not promote effort or individual improvement (i.e., other-referenced goals). *Effective coaching practices* explore the best ways coaches can lead and teach their athletes. For examples, researchers may study the most effective methods for giving feedback, rewarding and reinforcing behavior, communicating, and avoiding self-fulfilling prophecies in their athletes.

Team processes

Sport psychologists may do consulting work or conduct research with entire teams. This research focuses on team tendencies, issues, and beliefs at the group level, not at the individual level.

Leadership in sports is pertinent because there are always leaders on a team (i.e., team captains, coaches, trainers). Research on leadership studies characteristics of effective leaders and leadership development.

Evolutionary perspectives

A decreased testosterone level may decrease dominant and competitive behaviors which when the status conflicts involved fighting may have been important for preventing physical injury to the loser as further competition is avoided. Testosterone levels also increase before sports competitions, in particular if the event is perceived as real challenge as compared to not being important. Testosterone may also be involved in the home advantage effect which has similarities to animal defense of their home territory. In some sports there is a marked overrepresentation of left-handedness which has similarities to left-handed likely having an advantage in close combat which may have evolutionary explanations.

Motivation in sport

Motivation in field of psychology is loosely defined as the intensity and direction in which effort is applied. The direction of motivation refers to how one seeks out situations or if they avoid things that might be challenging. Intensity refers to how much effort one puts into any challenge or situation. Motivation is tied closely to personality and can be categorized as a personality trait. There are three general theories of motivation: participant/trait theory, situational theory, and interactional theory. These theories are similar to those of personality.

Participant/trait theory

Motivation consists of the personality traits, desires, and goals of an athlete. For example, some athletes might be extremely competitive and have the desire to improve and win constantly. These athletes would be motivated by competition with themselves and others.

Situational theory

Motivation depends on the situation and environment. For example, some athletes might not feel the desire to work hard when they are on their own, but are motivated by others watching them. Their motivation would be dependent on whether or not there are other people around.

Interactional theory

This theory combines the ideas of participant/trait and situational, where the level of motivation of an individual depends on his/her traits and the situation at hand. For example, if an athlete might be intrinsically competitive and feels most motivated when participating in a match against many other people.

Depending on traits and situations, it can be easier for some individuals to find motivation than others. That being said, those who are able to find motivation more easily are not guaranteed success and athletes who struggle can adjust some things to improve their drive. Motivation can be facilitated by coaching or leaders, changing the environment, finding multiple reasons or motives to do something, and being realistic about what is achievable. High achieving athletes are more likely to be motivated to

achieve success rather than being motivated to avoid failure.

Arousal anxiety and stress

Although anxiety or stress is often believed to a negative thing, they are actually a necessary response for the body to survive. It is natural for the body to exhibit certain levels of anxiety and stress, however, it becomes a problem when it begins to inhibit activity. Arousal is the physiological and psychological activation of the body in response to an event. Trait anxiety exists in an individual when they experience unusually high response levels to a wide spread of situations that are not threatening. State anxiety is the momentary feeling of nervousness or worry that accompanies the arousal of the body. State anxiety can be defined cognitively, where nervous thoughts and worries occur for a moment. There is also somatic state anxiety, where the body experiences a physiological response to arousal. This sometimes manifests momentarily as a fluttering in the stomach or an elevated pulse. There are four major theories of arousal and anxiety.

Drive theory

This approach considers anxiety to be a positive asset. In situations where anxiety is high, performance increases proportionally. This theory is not well accepted because it is thought that athletes can be psyched up, but they can also be psyched out. This simply means anxiety can work to motivated some, but it can inhibit others. It is entirely dependent on the individual's personality, so it cannot be broadly applied to all athletes.

Inverted U theory

This approach proposes that the best performance occurs when stress is moderate (not too high or low). This idea is demonstrated in a graph where physiological arousal is plotted against performance. The curve resembles and inverted U because the performance is at its highest value where the arousal is at half of its highest value.

Zone of optimal functioning theory

This theory looks at each type each athlete and what level of arousal they need to perform best. This suggests that each athlete requires their own level of stress and arousal to feel motivated and perform well. This theory is specific but difficult to quantify.

The reversal theory

This theory states that the level of arousal entirely depends on the interpretation of the situation. Athletes who view situations as more of a challenge rather than a threat, they will not have such a strong level of stress and they will be able to perform better. The amount of stress is not as essential to performance as way that the athlete interprets the event.

Stress can stem from trait anxiety, event importance, self esteem, or uncertainty of the situation. Stress occurs in four stages: the environment presents an event or challenge (physical or psychological), the individual analyzes the event and perceives the threat level, the stress response occurs, and the behavior/outcome reflects the stress response. Some stress responses can be physical, such as muscle tension or somatic state anxiety. Other responses can be

psychological, such as cognitive state anxiety or attention changes.

Arousal regulation

The use of meditation and specifically, mindfulness, is a growing practice in the field of arousal recognition. The Mindfulness-Acceptance-Commitment (MAC) Theory is the most common form of mindfulness in sport and was formed in 2001. The aim of MAC is to maximize human potential for a rich, full and meaningful life. It includes specific protocol that involves meditation and acceptance practices on a regular basis as well as before and during competition. These protocol have been tested various times using NCAA men's and women's basketball players. In this case, the vocabulary and examples in the protocol were tailored to be more practical for a 12-year-old. After performed the MAC protocol for several weeks, the diver showed between a 13 to 14 percent increase in his diving scores. This finding is important because previously the majority of tests performed using the MAC protocol had been on world class athletes.

Goal setting

Goal setting is the process of systematically planning ways to achieve specific accomplishments within a certain amount of time. Research suggests that goals should be specific, measurable, difficult but attainable, time-based, written down, and a combination of short-term and long-term goals For instance, short-term goals should progress from those that are easy to achieve to those that are more challenging. Having challenging short-term goals will remove the repetitiveness of easy goals and will give

one an edge when striving for their long-term goals.

Imagery

Additionally, the more vivid images are, the more likely they are to be interpreted by the brain as identical to the actual event, which increases the effectiveness of mental practice with imagery. Good imagery, therefore, attempts to create as lifelike an image as possible through the use of multiple senses (e.g., sight, smell, kinesthetic), proper timing, perspective, and accurate portrayal of the task. Both anecdotal evidence from athletes and research findings suggest imagery is an effective tool to enhance performance and psychological states relevant to performance (e.g., confidence). This is a concept commonly used by coaches and athletes the day before an event.

There are two perspectives one can take when using imagery: first person, where one pictures doing the skill his/her self, and third person imagery, where one pictures watching the skill be done by his/her self or another athlete. Athletes can use whichever perspective is most comfortable for them. There are multiple theories of how athletes use imagery.

Psychoneuromuscular theory

This theory proposes that athletes activate the muscles associated with an action by picturing themselves doing the action. Activating the neurons that provide input to the muscles is similar to actually practicing the motion.

Vividness theory

This theory suggests that athletes use the five senses to take in information while

completing an action, and then using the memories of these stimuli to make their mental recreation of the event as realistic as possible.

Controllability theory

All strategies of imagery are functional, but each athlete might find one more effective than others. Each strategy can be utilized based on the individual needs and goals of the athlete. In order to be effective, the practice of imagery needs to be inculcated into regular routines as a supplement to physical training. Athletes must learn how to use imagery in a quiet, non-distracting place while picturing realistic and attainable images. Using trigger words can facilitate imagery and bring the athlete closer to the pictured goal.

Preperformance routines

Preperformance routines refer to the actions and behaviors athletes use to prepare for a game or performance. This includes pregame routines, warm up routines, and actions an athlete will regularly do, mentally and physically, before they execute the performance. These routines help to develop consistency and predictability for the player. This allows the muscles and mind to develop better motor control.

Self-talk

Self-talk refers to the thoughts and words athletes and performers say to themselves, usually in their minds. Self-talk phrases (or cues) are used to direct attention towards a particular thing in order to improve focus or are used alongside other techniques to facilitate their effectiveness. For example, a softball player may think "release point"

when at bat to direct her attention to the point where the pitcher releases the ball, while a golfer may say "smooth stroke" before putting to stay relaxed. The ability to bombard the unconscious mind with one single positive phrase, is one of the most effective and easy to use psychological skills available to any athlete.

Exercise psychology

Exercise psychology can be defined as the study of psychological issues and theories related to exercise. Exercise psychology is a sub-discipline within the field of psychology and is typically grouped with sport psychology. For example, Division 47 of the APA is for exercise and sport psychology, not just one or the other, while organizations like AASP encompass both exercise and sport psychology.

As an interdisciplinary subject, exercise psychology draws on several different scientific fields, ranging from psychology to physiology to neuroscience. Major topics of study are the relationship between exercise and mental health (e.g., stress, affect, self-esteem), interventions that promote physical activity, exploring exercise patterns in different populations (e.g., the elderly, the obese), theories of behavior change, and problems associated with exercise (e.g., injury, eating disorders, exercise addiction).

Recent evidence also suggests that besides mental health and well-being, sport practice can improve general cognitive abilities. When requiring sufficient cognitive demands, physical activity seems to be an optimal way to improve cognition, possibly more efficiently than cognitive training or physical exercise alone.

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Motivation in Sports & Exercise

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Abstract

Objectives: The objectives of this bibliometric study was to provide an overview of the intellectual structure of motivation research in the field of sport and exercise psychology (SEP), and to show how the intellectual structure of the field has changed over time. A secondary purpose was to explore the potential of longitudinal citation based science mapping within SEP, and further, in the sub-area of motivation research in SEP.

A cluster analysis was performed on the retrieved articles based on normalized bibliographic coupling (i.e., based on shared references topically similar articles was placed in mutually exclusive groups). The cluster analysis resulted in 19 clusters that were classified by a subject expert from the field of SEP. Further, the labeled clusters were visualized as research fronts along timelines subdivided into time slices – 1985-1994; 1995-1999; 2000-2004; 2005-2009 – showing the growth and decline of research topics within motivation research in SEP. Direct citations between the research fronts was extracted and visualized in order to explore information flow.

Key Words: Motivation, sports, exercise

Introduction

In this quantitative research review, bibliometric methods was used to map the intellectual structure of motivation research conducted in the field of sport and exercise psychology (SEP) between 1985 and 2009. The time frame of this study – 1985-2009 – was dynamically subdivided into one ten-year period, 1985-94, and three five-year periods, 1995-1999, 2000-2004, 2005-2009, in order to address the longitudinal perspective.

Motivation research in sport and exercise psychology

The object of analysis in this study was motivation research within the field of SEP. This section consists of two parts. In the first part a brief review of earlier research reviews concerning motivation research in SEP is conducted. In the second part the definitions of the field of

SEP and motivation research within SEP is presented.

Definitions

In order find a definition of the field of sport and exercise psychology I consulted a subject expert from the field of SEP.¹ With respect to the methods used in this study I wanted a broad definition of the field and was recommended to use the definition proposed by the European federation of sport psychology.

Sport psychology is concerned with the psychological foundations, processes and consequences of the psychological regulation of sport-related activities of one or several persons acting as the subject of the activity. The focus may be on behaviour or on different psychological dimensions of human behaviour, i.e. affective, cognitive, motivational or sensori-motor dimensions. The physical activity can take place in competitive, educational,

recreational, preventative and rehabilitation settings and includes health-related exercise. Subjects are all persons involved in the different sport and exercise settings, e.g. athletes, coaches, officials, teachers, physiotherapists, parents, spectators etc.

The field of SEP is characterized by a high degree of interdisciplinary and applied research. Three main areas can be discerned: (1) sport practice, (2) psychology, and (3) other sport sciences. The relationships between these areas are described in FEPSAC as follows:

1. Sport practice: Sport psychology is faced with issues that arise from exercise and sport practice. It tries to better understand these demands and attempts to give assistance in satisfying them.
2. Psychology: Sport psychology is an applied sub discipline of psychology. It partly draws upon knowledge adopted from different branches of psychology and contributes to the further understanding of psychology in general.
3. Other sport sciences: Sport psychology is one discipline of the sport sciences. The more sport psychology generates specific knowledge by empirical work in the field of sport and physical activity, the more the findings and methods of other sport sciences have to be accounted for. Some questions may be answered using interdisciplinary approaches.

Methods

The construction of a research front timeline consists of a number of steps. In this study I followed a sequence proposed by Morris et al.

1. Field delineation and data collection.
2. Remove outliers (i.e., articles that are not well integrated in the article set in terms of BC-counts)

3. Calculating similarities between all remaining articles in the dataset with normalized bibliographic coupling.
4. Applying cluster analysis to the network based on normalized bibliographic coupling.
5. Timeline visualization of research fronts.

The first part of this section introduces the most central methodologies in this study. The second part consists of descriptions of the actual procedures.

A similar procedure was conducted with respect to the SPORTdiscus database. A difference between the two databases was the “messiness” of the indexing and bibliographic records in SPORTdiscus compared to PSYCHinfo. The retrieved SPORTdiscus set contained a large amount of duplicate records and many irrelevant document types (i.e., non-journal articles) such as: abstracts; poster session; research notes; and other supplements. The main steps/results from the SPORTdiscus procedure are listed below:

- The following thesaurus subject headings were searched: "MOTIVATION (Psychology)"; "ACHIEVEMENT motivation"; and "INTRINSIC motivation", and refined to
- the six core journals and “journal article” between 1970-2009
- This search retrieved 895 bibliographic records
- After duplicates and non “journal article” records were removed and the query for WoS was created, 423 articles published between 1974 and 2009 could be identified and retrieved from WoS.

To evaluate the multi-database approach with respect to the problem with a skewed distribution of articles over time when using a lexical query approach in WoS

(i.e., with respect to which degree the multi-database approach was able to increase the amount of pre-1995 articles) I compared the number of retrieved articles from a nominalist lexical query¹¹ containing only the search term “motivation” within the six core journals (retrieving $N = 785$ articles), with the number of retrieved articles for the same period of time with the multi-database approach. The lexical query retrieved 35 articles between 1974 and 1989 and the multi-database approach retrieved 160 articles, when the overlap was removed, the total amount of pre-1995 articles increased by 125 articles (357%) with the multi-database approach using controlled vocabulary. This was considered a satisfying result.

With a potentially final core set at hand, the combined set of PSYCHinfo and SPORTdiscus ($N = 532$) was prepared for subject expert evaluation and refinement. The preparation involved two steps. First, abstracts from the combined set of PSYCHinfo and SPORTdiscus records were matched to the combined set retrieved in WoS. There was a total lack of abstracts between 1974 and 1991 in this set. In a comparison between the pre- and post-1995 time periods, abstracts were missing in 62% of the pre-1995 records and in 2% of the post-1995 period. The abstracts were matched with the WoS records based on the following criteria: ISSN + VOLUME + ISSUE + BEGINNING PAGE. A total of 125 records in the combined PSYCHinfo and SPORTdiscus WoS set lacked abstracts. 120 of the 125 articles could be matched with an abstract. Secondly, in order to ease evaluation and refinement a cluster analysis was applied to the final core set (Laurens et al., 2009, s 656-557). In order to partition the clustering (i.e., to determine the number of clusters to

obtain), I used an arbitrary threshold of 0.985 aiming for a fairly small number of clusters as suggested in (Bassecoulard, Lelu, & Zitt, 2007b, p. 865; Laurens et al., 2009, p. 657). The cluster analysis resulted in 52 clusters. Due to the character of the specialty of motivation research in SEP, I aimed for precision, rather than recall in the delineation phase. The clusters, containing 532 bibliographic records, were thus handed to a subject expert for evaluation and further fine tuning of the core set. The subject expert identified 125 articles that did not fit the definition for motivation research within SEP in this study, these articles were removed resulting in a clean core set containing 407 articles.

Visualizing the development of motivation research in sport and exercise psychology

Two timeline visualizations was created: timeline visualization I displays publication frequencies, indicating changes in terms of productive sub areas and their research themes over time, and timeline visualization II displays direct citations (information flow) between the time slices within the different research fronts. The timeline visualizations was created as variants of the model proposed by Morris and Boyack and Morris et al. where each timeline consists of a coordinate system where the y-axis denotes research fronts (i.e., clusters), while the x-axis denotes four time slices between 1985-1994, 1995-1999, 2000-2004 and 2005-2009.

Bibexcel was used to preprocess and analyze the bibliographical data used for the timeline visualizations. The actual visualizations were created in Pajek and post processed in a vector based program for graphics.

The research fronts of motivation research within sport and exercise psychology between 1985 and 2009

This section consists of a presentation of the 19 identified research fronts. The research fronts are presented from top to bottom after PC belonging in the timeline, and further, within each timeline, from oldest to newest. The presentation displays active period(s) of each research front, possible sub-themes or other interesting results identified with the keyword network, and position in the direct citation network (i.e., the degree to which a research front time slice have been influencing or have been influenced by others). The number within the parenthesis after each research front name denotes publication frequency.

Conclusions

The purpose of this study was to map the intellectual structure of the specialty of motivation research in SEP, and to show how the intellectual structure of this research specialty had changed over time. Two aspects of the intellectual structure were investigated: (1) the growth and decline of research fronts within motivation research in SEP, and (2) the flow of information between these research fronts. A secondary explorative purpose was to examine possibilities and limitations concerning a longitudinal analysis of motivation research in SEP.

This was achieved by (1) delineating motivation research in SEP with a multi-database approach based on controlled vocabulary, where articles from PSYCHinfo and SPORTdiscus was identified and retrieved in WoS, the article set was further expanded by citations-based extension, and (2) performing a cluster analysis on the retrieved articles based on bibliographic coupling strength, and further, exploring

the clusters plotted as research fronts along timelines in a coordinate system.

Some limitations, and potential improvements, were found:

1. It was concluded that the data collection and field delineation approach with multiple databases was successful in addressing the problems of low recall concerning the early time periods with the lexical query approach, and in comparison with the earlier review literature the early time slice of 1985-1994 seemed representative, however, some further procedures could be tested to improve recall during this period. Especially with respect to the indexing delays of the core journals in WoS it would seem appropriate to try to increase recall in future studies. The time period of 1985-2009 was chosen on the basis of retrieved articles, with an improved recall the longitudinal perspective could possibly be stretched further back. In the citation based extension phase I used direct citations to identify potentially similar articles by which the core set could be expanded. In order to increase the recall of articles potentially similar to the core set of articles, the rationale of bibliographic coupling or lexical coupling might be a more suitable choice. However, there is – to my knowledge – a limitation to this approach. While citation based extension based on direct citations are supported by WoS through the *Create citation report* function, the coupling strategies would require full access to the WoS database (Mogoutov & Kahane, 2007, p. 895), and such an access was not available during this study. Two more realistic suggestions would be to reiterate the citation based extension phase to increase recall, or try to use BC or lexical coupling on a limited subset of articles downloaded from WoS, in order to

further expand the core set (e.g., the core journals could be used to delimit a subset of articles, and by applying BC or lexical coupling, the core set could potentially be expanded, which would increase recall in the subsequent phase of citation based extension)

2. The phenomena of non-differentiated research fronts, or cluster fragmentation, could potentially be addressed with so called hybrid clustering methods, where traditional bibliometric measures such as BC are combined with lexical approaches in the mapping of science. It has been shown that the coupling-lexical hybrid

approaches tend to complement each other, adjust for weaknesses, and outperform “citation-only” and “text-only” approaches with respect to document-document similarity (Ahlgren & Colliander, 2009; Frizo Janssens, Glänzel, & De Moor, 2008). The use of a hybrid approach would also deem the threshold used in the cluster analysis to exclude outliers and enhance the cluster quality unnecessary. The excluded articles due to this threshold were to a large extent published during the time slice of 1985-1994. Thus, a hybrid approach would potentially enhance the representativity of the study as such.

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A Comparative Study of Locus of Control between National Male and Female Judo Players

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Abstract

The present study was comparative in nature. The main aim of the present study was to compare locus of control between male and female judo players. For the present study, 50 interuniversity male judo players (Ave. age 22.09 yrs) and 50 interuniversity female judo players (Av. age 22.36 yrs.) were randomly selected. To assess locus of control among selected subjects, Hindi version of Rotter's Locus of Control Scale prepared by Kumar and Shrivastava (1983) was adopted. Results reveal that female judo players had much stronger internal locus of control as compared to male judo players. It was concluded that female judo players do believe that outcome of the event basically arise from their own act and behaviour rather than some external factors where as male judo players tend to think that outcome of an event was influenced by some external factors rather than internal.

Key Words: Judo. national, locus of control

Introduction

There is a concept in psychology known as locus of control which now a days is most widely used in sports also. It is bracketed together with a person's belief system regarding the factors that he/she holds responsible for success or failure. Locus of control usually has two categories i.e. internal and external locus of control. When internal locus of control is strong person believes that success is outcome of his/her abilities while person with strong external locus of control, he/she believes that success or failure is mainly attributed to external factors such as luck, environmental factors etc. Naturally person with external locus of control will more likely to more anxious because they believe that circumstances are not in their control. It is believed that person with stronger internal locus of control are more

achievement oriented. Locus of control is also a social-cognitive construct and it is defined as probability of a behavior occurring based on a function of individual expectancies regarding the subjective values of an intended response by Rotter (1966). As per the concept of locus of control introduced by Rotter (1966), individuals can be differentiated between having an internal or external locus of control. Internal locus of control refers to an attribution of outcomes and causes to be based upon the person's own efforts. External locus of control bases its reinforcement as a function of external cues from the environment (i.e. luck, weather, etc.)

Like any other field success and failure are part and parcel in sports. One such sport in which apart from technical skills, physical proficiency other factors such as referee's

decision also plays a part is judo. So it is important to assess internal and external locus of orientation in judo players on the basis of gender so that proper psychological training can be provided to them. In sports settings various researchers like Sarah M. Lambert et al. (1999), Devlin H.J. et al. (2005), Slobodanka Gašić-Pavišić et al. (2006), Sousa et al. (2008), Wael Talaat Nabih Soliman et al. (2010) studied locus of control under various factors. Similarly researchers like Mesquita et al., 2008; Jaswant, 2015; Lum, 2017 studied mental imagery, coach/player relationship, stress, anxiety and physiological and biomechanical factors associated with expert performance in judo. Still study on locus of control in national level judo players are lacking in the background of gender. Hence to fill this research gap the present study was planned.

Objectives

The objective of the present study is to compare locus of control between national male and female judo players.

Hypotheses

It was hypothesized that locus of control in national judo players will differ significantly on the basis of gender.

Methodology:-

The following methodological steps were taken to conduct the study.

Sample:

For the present study, 50 national male judo players (Ave. age 24.11 yrs) and 50 national female judo players (Av. age 21.36 yrs.) were randomly selected. The selection of subjects was from national level judo tournaments / interuniversity competitions.

Tools

Hindi version of Rotter's Locus of Control Scale prepared by Kumar and Shrivastava (1983) was used to assess locus of control among selected judo players

Procedure:

Hindi version of Rotter's Locus of Control Scale prepared by Kumar and Shrivastava (1983) was administered to male and female judo players after fulfilling the ethical norms. The scoring was done as per author's manual. Independent sample 't' test was used to compare locus of control between male and female judo players.

Result

The obtained results of such statistical analysis are presented in Table 1.

Table 1

Comparison of Locus of Control between Male and Female Judo Players

Groups	Mean	S.D.	't'
Male Judo Players (N=50)	9.34	2.23	2.29*
Female Judo Players (N=50)	8.06	3.24	

** Significant at .05 level

From the above table it was evident that female judo players were found to be more internal in their locus of control (M=8.06) as compared to male judo players (M=9.34). The reported t value of 2.29, which is significant at .05 level, gives weightage to the above statement.

Results are bit surprising and contrary to those reported by Aguglia and Sapienza (1984) as well as Rao and Murthy (1984) in their studies. It is believed that women are more submissive and less achievement

oriented but social adaptation in males are lower than females. Hence the results need to be analysed in more in-depth study with large sample size and socio-demographic characteristics of sample.

Conclusion

On the basis of analysis of data and associated findings, it was concluded that female judo players possess more magnitude of internal locus of control as compared to male judo players.

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Analytical Study of Various Types of Aggressive Tendency of Players of Various Games

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Abstract

The purpose of the study was to investigate the various aggressive behaviours of players of various games. The sample included Sixty male players 20 Cricket Players, 20 Softball Players and 20 baseball Players of recognized club (Mandal) of Amravati were selected as subjects for the purpose of the study. Subjects were selected with random sampling methods. The age of the players were ranged between 20 to 30 years and at least participated in the State tournaments or interuniversity tournaments. All the players were voluntarily agreed to participate in this study. Data were collected by The Buss-Perry Aggression Questionnaire (BPAQ). Statistical analysis was done on the bases of ANOVA. The results shows that there are significant differences were found between different aggressive behaviour of Various players. In reference to Physical Aggression and Anger shows significant differences as the calculated value F is 10.4 & 6.82 which is greater than tab $F_{0.05}(2,57) = 3.158$. Whereas in reference to Verbal and Hostile shows insignificant differences as the calculated value F is 2.84 & 2.87 which is lesser than tab $F_{0.05}(2,57) = 3.158$. In conclusion we can say that Physical Aggression and Anger shows significant differences, Baseball Players shows high level of physical aggression and anger it may be attributed that baseball players required high level of concentration and presence of mind as compared to softball and cricket players or it may be depends upon various approaches as biological, regular practicing, environment, attitude, etc.

Key Word: Aggressive Tendency, Cricket, Softball and Baseball Players, Buss-Perry Aggression Questionnaire

Introduction

Aggression, in other sense, is behavior, or a disposition, that is forceful, hostile or attacking. It may occur either in reprisal or without provocation. In brief definitions that are used in social sciences and behavioral sciences, aggression is an intention to cause harm or an act intended to increase relative social domination.

The word aggression derived from the Latin root *aggrēdi*, “ad” means (to or toward) and *grādi* (walk). Literally, the word aggression means to walk towards or

approach to “move against” or to “move with intent to hurt or harm”. But aggression in sports is a word frequently used nowadays there is some confusion to its meaning. Aggression is seemed to be a vicious outbreak, such as a fight, but in sports it is always used when an athlete compete and gives hundred percent efforts.

Aggression has directional components as inwards and outwards. Some aggression is intended for inward and in its extreme form, may cumulate its self-destructive behaviour which including as a suicide. Other aggressive behaviour is intended for outwards towards other sports may be classified according to the degree of

aggression that is tolerated or encouraged within rules. Sports in which the competitions are obliged to alternately agree and then terminate their action may be more stressful than those in which alternating behaviour is not required.

There are a multiplicity of types of aggression, depending on the purpose and immediate situation that stimulates the aggressive response. The aggressive behaviour it can be physical, verbal, anger or hostility; and can be characterized as either positive or negative behaviour. As the given name suggests physical, it describes as physical harm, it expressed by raising a tighten fist, breaking a pen's tip, throwing a book or it may be hitting on a wall. Verbal aggression is stated as insults or warning of such action. The verbal aggressions may include shouting, arguing, cursing and sarcasm. Anger aggression may be described as a feeling of being threatened or mistreated. Anger occurs in numerous forms such as losing a match, feeling of not being selected, feeling of jealous, guilt and embarrassment. Hostile aggression refers to measures that are motivated by anger and the main aim is to cause harm or injury to opponents.

Aggressiveness is quite a complex structure and it can be seen to have lots of variables and factors. The importance of this research is to find out which type of aggressive behavior were most seen in Kabaddi players.

By finding the factors of various aggressive behaviours of national Kabaddi players we will be able to manage their aggressive behaviour.

Methods

Sixty male players 20 Cricket Players, 20 Softball Players and 20 baseball Players of

recognized club (Mandal) of Amravati were selected as subjects for the purpose of the study. Subjects were selected with random sampling methods. The age of the players were ranged between 20 to 30 years and at least participated in the State tournaments or interuniversity tournaments. All the players were voluntarily agreed to participate in this study.

Administration of the test:

The Buss-Perry Aggression Questionnaire (BPAQ) was used for collection of data which is a self-report scale consisting of 29 statements measure consisting of four subscales: Physical aggression consists of 9 statements, Verbal aggression consists of 5 statements, Anger consists of 7 statements and Hostility consists of 8 statements. The questionnaire answered on a 5-point Likert scale with items answered on a five point scale from extremely uncharacteristic of me to extremely characteristic of me. The Buss-Perry Aggression Questionnaire (BPAQ) is an explanatory factor analysis technique that is used to reveal physical, verbal, anger and hostility behaviour of players. Prior to the administration of the test all the instructions were imparted to all players that they had to follow while marking their responses and the same were collected back after having filled by the players.

Statistical Analysis

Analysis of Variance (ANOVA) with Least Significant Difference (LSD) post hoc test was utilized in order to determine the means significant difference between different aggressive behaviour of various players. The level of significance was set at 0.05 levels.

Table no 1

Variables	SV	SS	df	MS	F
Physical	between	116.63	2	58.31	10.4*
	error	319.55	57	5.6	
Verbal	between	12.23	2	6.11	2.84
	error	122.7	57	2.15	
Anger	between	15.63	2	7.81	6.82*
	error	65.3	57	1.14	
Hostile	between	12.93	2	6.46	2.87
	error	128.05	57	2.24	

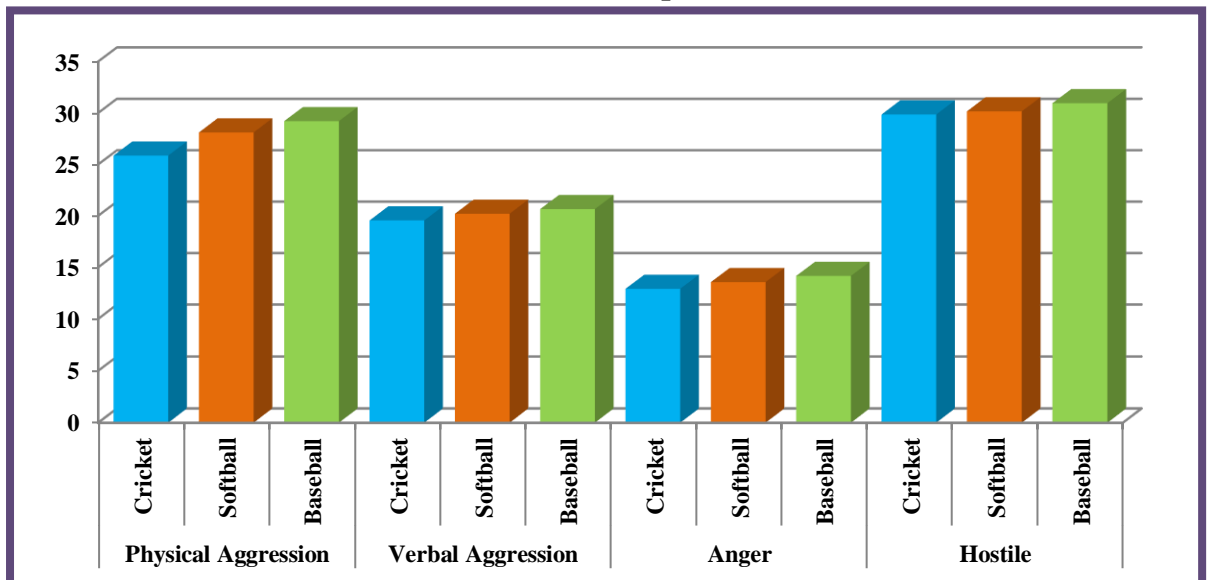
*Significant at 0.05 level of confidence

$F_{0.05(2,57)} = 3.158$

Above table revealed that there was significant differences were found between different aggressive behaviour of Various players. In reference to Physical Aggression and Anger shows significant differences as the calculated value F is

10.4 & 6.82 which is greater than tab $F_{0.05(2,57)} = 3.158$. Whereas in reference to Verbal and Hostile shows insignificant differences as the calculated value F is & 2.87 which is lesser than tab $F_{0.05(2,57)} = 3.158$.

Graph



Comparison of different Aggressive Tendency of Cricket, Softball and Baseball Players

Discussions:

The results of the findings indicate that there was significant differences were found between different aggressive behaviour of Various players. In reference to Physical Aggression and Anger shows significant differences, Baseball Players

shows high level of physical aggression and anger it may be attributed that baseball players required high level of concentration and presence of mind as compared to softball and cricket players or it may be depends upon various approaches as biological, regular practicing, environment, attitude, etc.

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Yoga in Physical Education & Sports

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Abstract

Yoga practice getting popular is looked upon its systemic improvement of physical fitness of an individual. Yet we lack in the experiment evidence about the utility of physical exercise and yogic exercises for promoting physical fitness.

It can be said that exercises are believed to contribute physical fitness; therefore it is necessary to consider the concept of yogic exercise in relation to physical fitness. Yoga is recognized as one of most important valuable heritage of India. Today the whole world is looking to yoga for answer to various problems that modern man is facing which was designed and practiced by our ancient stages for all round development of personality. Now a day's yoga is getting famous and support it use for figure and fitness. Few minutes of daily yoga provide well result in all round development.

Key Words: Yoga, physical education, sports

Introduction

Various training programmers have been developed to strengthen the big part of the body. Most of these programmers consist of vigorous and resistance exercise which emphasized more on cultivation of strength and endurance. Every individual differs in their capacity and level of physical fitness. Yogic practice getting popular is looked upon its systemic improvement of physical fitness of an individual. Yet we lack in the experiment evidence about the utility of physical exercise and yogic exercises for promoting physical fitness. It can be said that exercises are believed to contribute physical fitness; therefore it is necessary to consider the concept of yogic exercise in relation to physical fitness. Yoga is recognized as one of most important valuable heritage of India. Specific training schedule in sport has become very popular amount the player's coaches. It is a general practices that during preparatory

phase of sports training for competition, maximum efforts is given by sport coaches for enriching top performance among their players. Creating awareness about fitness in community is very important for people which need to realize the value of fitness because fitness is the mother of sport. More fit the sportsman better the performance.

Yogic Practices

Asana Pranayama Relaxation and Meditation techniques.

The Preparatory Exercises

Preparatory exercises remove stiffness from the joints and help the muscles to become flexible. Co-ordination between bones, muscles, joint and ligaments improves so that they work naturally and spontaneously. Problems in the knee joints hip joints ankle joints shoulder joints and wrist joints can all be remedied by these Asanas thus minimizing injuries.

Asanas:

Backward and forward bending Asanas increase the strength and flexibility of the spine. The spine is responsible for posture, free flow of energy, nervous activities and body reflexes. Balance of the whole body depends on the power and flexibility of the spine and adjacent muscles, by practicing these groups.

Psychologically, backward bending Asanas prepare the players to face any situation with courage and optimism, forward bends help to let go and go with the flow; and twists gently squeeze out hesitation and uncertainty. Inverted Asanas encourage a rich supply of blood flow to the brain and reverse the effect of gravity on the body. During the practice of an inverted Asana, the breath becomes slow and deep, maximizing the exchange of carbon dioxide and oxygen, which encourages correct respiration.

Pranayam

Pranayama or breathing practices are one of the most effective means of increasing lung capacity, energy and stamina. It also helps control over involuntary muscles, enhances concentration and balances emotions, when practiced systematically and regularly, the awareness develops that energy is not purely physical in nature and that efficient management of the Pranic energy can be developed through control of the breath.

How Yoga Helps Sports Person

Yoga helps a sports person to feel and understand the body processes more accurately, thereby learning what the body needs. By understanding this athlete can work on areas that need attention with confidence.

Yoga is useful for all types of sport to help prevent injuries. One gets extra agility which helps to avoid damage, provides more strength and improves a player's ability to react to a situation.

In Competitions athletes at all ability levels tend to have a fear of losing, of other competitor or of developing mental deterrents to excellent performance. Yoga trains us to be our best every single moment to hold ourselves at our highest standard and to go beyond our preconceived limitations.

Yoga postures work all around a limb and help to knit the muscle fibres this building resilience to injury. By anticipating areas of the body that are subject to stress, one can use Yoga effectively to pre-strengthen areas of concern.

Due to long term sport training, muscular imbalance can develop in the body which can lead to damage and injury. Yoga's practices are ideal in this respect because integration, balance and harmony are keywords of Yoga. These practices correct the one sided effect of training by promoting general harmonious development of the body and by improving the whole physical system.

Sports training tends to be very intensive over an extended period of time. This again can lead to a form of imbalance where muscles or the body as a whole become weak muscles or the body as a whole becomes weak through over exertion. Regeneration is a remedial process for regaining strength and for the prevention of injuries. Yoga regeneration exercises are based on the principle that after contracting for a specific time period in an isometric movement against specific resistance, muscles will release and relax,

But all this would be effective only if done consciously.

Conclusion

Sport are highly demanding and competitive and Yoga moves in the opposite direction with its apparent emphasis on relaxed approach and detached state of mind. However, the state

of mind and physical preparedness that Yoga brings is exactly the same state that the most successful players speak of when at the peak of their performance. Who cannot perform at his best while being relaxed, ready and confident? and who cannot gracefully accept victory or defeat if his body, mind and spirit has the equanimity of a Yogi?

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Role of Cognitive Behavioural Therapy in Building Resilience and Quality Of Life among Athletes with Disability

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Abstract

Athletes constantly endure a broad range of pressure to attain and sustain high performance, psychological resilience is vital in sports. It may be considered as a gauge to determine stress coping ability and, as such, could be an important objective of treatment in depression, anxiety, as well as stress reactions. Resilience encompasses behavioural and cognitive tendencies that reflect patterns of behaviour and character traits that develop in the course of various life experiences. The body and mind are strongly interlinked, and their relationship can have a positive impact on health and quality of life. Emotions and thought patterns can influence imbalances within the body. According to the Disability Discrimination Act (DDA), a disabled person is an individual with a mental or physical impairment that has a significant and prolonged unfavourable effect on his or her ability to perform normal everyday activities. Harnessing psychological resources can build the disabled athletes' ability to choose to be more positive, ability to pull themselves out of rumination, ability to withstand demanding schedules without burnout, etc. Therapies like Cognitive Behavioural Therapy (CBT), Hypnosis, Visual imagery, Meditation and Biofeedback help in striking the balance. CBT, in particular facilitates athletes to control negative emotions, irrational cognitions as well as behaviours effectively. The use of CBT would help athletes to combat dysfunctional feelings, thoughts and emotions as it helps people in all aspects of life (Rizeanu, 2012, 2014). This paper focuses on how CBT helps in accepting the limitations of being differently-abled by building the resilience and improving the quality of life of such athletes.

Athletes constantly endure a broad range of pressure to attain and sustain high performance, psychological resilience is vital in sports. It may be considered as a gauge to determine stress coping ability and, as such, could be an important objective of treatment in depression, anxiety, as well as stress reactions. Resilience encompasses behavioural and cognitive tendencies that reflect patterns of behaviour and character traits that develop in the course of various life experiences. The body and mind are strongly interlinked, and their relationship can have a positive impact on health and quality of life. Emotions and thought patterns can influence imbalances within the body. According to the Disability Discrimination Act (DDA), a disabled person is an individual with a mental or physical impairment that has a significant and prolonged unfavourable effect on his or her ability to perform normal everyday activities. Harnessing psychological resources can build the disabled athletes' ability to choose to be more positive, ability to pull themselves out of rumination, ability to withstand demanding schedules without burnout, etc. Therapies like Cognitive Behavioural Therapy (CBT), Hypnosis, Visual imagery,

Meditation and Biofeedback help in striking the balance. CBT, in particular facilitates athletes to control negative emotions, irrational cognitions as well as behaviours effectively. The use of CBT would help athletes to combat dysfunctional feelings, thoughts and emotions as it helps people in all aspects of life (Rizeanu, 2012, 2014). This paper focuses on how CBT helps in accepting the limitations of being differently-abled by building the resilience and improving the quality of life of such athletes.

Key Words: Resilience, Quality of Life, Cognitive Behaviour, Disabled Athletes

Adapted sports is increasingly serving as a forum through which individuals including physical and intellectual disabilities are able to participate in the sports that have been modified to meet the needs of persons. However, not all disabled sports are modified; several sports that have been specifically created for persons with a disability have no equivalent in non-disabled sports. The promotion of adapted sports is a largely investigated sport (Barak S, et al., 2014), Jaarsma EA, et al., (2014). Among the various possibilities of such activities, adapted sports has been shown to be an effective alternative, considering the social, physical, and psychological contributions usually reported by the participants (Blauwet C, Willick SE., (2012) Yazicioglu K, et al., (2012). These benefits have helped the athletes to develop and maintain physical and psychological functioning and a healthy lifestyle. By participation, it has resulted in fewer and less severe secondary health conditions, improvements in feelings of depression and anxiety leading to higher levels of positive mood, the development of physical fitness and physical skills, positive perceptions of physical competence and athletic identity.

Athletes in general and disabled athletes in particular, to constantly endure a broad range of pressure to attain and sustain high

performance, psychological resilience is vital in sports. Psychological resilience is regarded as a protection mechanism that functions in the face of negative stress inducers (Masten, 2001; Bonanno, 2004). Resilience may be viewed as a measure of stress coping ability and, as such, could be an important target of treatment in anxiety, depression, and stress reactions. Resilience includes cognitive and behavioural predisposition that indicate the individuals' thought and behavioural patterns that develop in the course of life experience. Resilience is linked with positive effects on physical and mental health even though the debate over its role as a predictor and /or outcome of successful life condition exists.

Resilience is the preference to see unforeseen changes as windows of opportunities rather than seeing them as a misfortune, remaining positive and productive during a crisis. This successful adjustment also implies an "alteration" of the person after a setback, evidently, seen as qualities that maintain objectivity in crisis. The ability to be resilient is to resist conflicts, on the one hand, and generate a behaviour or attitude positive to them, on the other hand (Raffo, G. y Rammsy, C, 2005). Resilient people are energetic, have a positive approach to life and are characterised by a high optimistic

emotionality. In reference to individuals undergoing loss of physical abilities often confront a challenge of having to become accustomed to a new way of life (Magnano, P. Craparo, G (2016) Resilience is related with the degree of acceptance and the level of self-esteem of each person Peterson, C (2000). It has been established that greater levels of resilience in athletes are linked to a higher probability of athletic accomplishments and positive emotional effects (Hosseini and Besharat, 2010). Unfortunately, the research found on resilience in people with physical disabilities was theoretical (White et al, 2008) or used other forms of assessment (Quale and Schanke, 2010), making a comparison of the results difficult. The latter study accounts that optimists who had been exposed to an event which left physical setbacks/sequellae have more resilience than pessimists (Quale and Schanke, 2010). Individuals with a physical disability may develop good levels of resilience in response to the challenges presented by their athletic activity.

Quality of life describes a person's general self-assessment or biased assessment of well-being or life fulfilment connected with bodily status and functional abilities, psychological health, happiness, financial and/or occupational status, satisfaction with interpersonal relationships. Contemporary research on the Quality of Life has highlighted that individuals with physical disabilities who are actively involved in adapted sports indicated better perception of these individuals in contrast to their inactive peers (Yazicioglu K, et al., (2012). Anneken V, et al (2010). Studies on the attributes that reflect a higher Quality of Life perception,

increased with the number of training sessions per week (Chatzilelecas E et al (2015) Laferrier JZ, et al (2015). Findings highlighted participation in the high-performance environment and longer periods of practising an adapted sport (V, Columna L, et al (2017). Resilience is the tendency to see unexpected changes as opportunities instead of seeing them as adversity, maintaining commitment and control. However, it is vital to note that, so far, the investigations of factors that influence Quality of Life perception among differently-abled athletes have been carried out considering individuals engaged in only one sport (Chatzilelecas E, et al 2015) Columna L, et al, 2017) or through grouping different sports into a large sample group (Laferrier JZ, 2015). Studies have proven that sports people with physical disabilities have a positive outlook on the quality of their lives. Alriksson-Schmidt et al (2007) believe that resilience works as a protective factor in persons with physical disability and thus contributes positively to the quality of life. According to Anderson (2009) the definition of "athlete" takes on meaning similar to that in able-bodied individuals and the development of an athletic identity is essential in enhancing social interactions and quality of life. People with physical disabilities who participated in adapted sports dealt with criticism, rejection and unfairness in a more objectively. They also had notably higher Quality of Life and Life Satisfaction scores compared to persons with physical disabilities not involved in any adapted sports.

The body and mind are strongly interlinked, and their association can exert a profound

impact on all aspects of health, wellness and quality of life. Emotions and thought patterns can influence imbalances within the body. Therapies like Cognitive Behaviour Therapy (CBT), Hypnosis, Visual Imagery, Meditation and Biofeedback help in striking the balance. CBT aims at improving the well-being and quality of life of the individuals. It is the clients' strengths, capabilities, and resources that are the most important in helping to bring about the change. Cognitive-behavioural techniques are effective in helping athletes to manage illogical cognitions which lead to negative emotions and behaviours. Application of rational emotive therapy in sports helps athletes eradicate dysfunctional thought processes and emotions.

CBT focuses on the personal strengths and adaptive abilities which in turn help in building long-term resilience which is a cornerstone of CBT. Resilience is the ability to persevere, to adapt and to bounce back from challenging circumstances. Resiliency helps us to enjoy life more, influences our overall well-being and helps in accepting ourselves and others better. Resilience enables us to survive the sadness, disappointments and pain that is an invariable part of one's life. In short, resilience greatly contributes to good mental and emotional health and helps us to survive and cope and feel in control even during turbulent times. Building resilience among the athletes with disability increases their self-awareness by teaching them to identify their beliefs and discover their connections to their feelings and behaviour, which serves as an important step in increasing resilience. Padesky and Kathaleen (2012) proposed the

model of CBT to build resilience through four steps which include a.) search for strengths b.) construct a personal model of resilience by turning strengths into general strategies c.) apply the personal model of resilience to areas of difficulty and d.) practice resilience.

The mind and body are closely linked, and their relationship can exert a positive influence on health as well as the quality of life. Emotions and thought patterns can influence imbalances within the body. We can consider anxiety, depression, anger, incoherence and fatigue as pessimistic moods and the vigour- inducing constructive engagement, joy, contentment, and pride as optimistic moods which make up the spectrum of mood states (Terry, lane & Nevill, 2005). Therapies like CBT, hypnosis, visual imagery, meditation and biofeedback help in striking the balance. Cognitive behavioural techniques are effective in controlling irrational thoughts, negative feelings and behaviours. Utilising Rational Emotive Behaviour Therapy (REBT) in sports helps athletes eradicate dysfunctional thought processes and emotions, as with people in any other domain (Rizeanu, 2012, 2014).

The role of thinking is very clear in the formation of excitements and behaviours. Also, sports participation of differently-abled persons reflects a positive state of mind, better quality of life perception and life satisfaction. Coping strategies using CBT to enhance self-esteem, self-efficacy, task orientation, optimism and intrinsic motivation are fundamental psychological factors of protection for the development of resilience.

Harnessing psychological, physical, social resources and implementing behavioural techniques can build differently-abled athletes' optimism levels, combat rumination, and endure hectic schedules without burnout and bounce back from adversity.

CBT enables athletes with disabilities to build resilience by fostering optimism, perseverance, internal locus of control, pragmatism and gain perspective of

situations. Such traits have been proven to help them to view adversities as challenges and face obstacles head-on. Furthermore, increasing opportunities for differently-abled individuals' to compete in sports improve their quality of life. In conclusion, sports psychology as a whole and CBT, in particular, can be utilized to channelise differently-abled individuals' thought patterns using effective and applied methods.

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Relationship of Arousal and Performance

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Introduction

Arousal is the key issue in sport psychology. Specifically, physical and technical performance depends on the level of performer's arousal. However, arousal is determined by psychological processes such as emotions, which, in turn, depend on higher cognitive functions like thoughts.

In sport setting, arousal is often linked to anxiety. Anxiety is a negative emotional state with feelings of worry, nervousness and apprehension that is associated with the arousal and activation of the nervous system. In general, arousal has two kinds of effects on performance. First, it increases muscle tension and affects co-ordination. Too much tension is detrimental to performance. Second, arousal affects attention. Therefore, attention can become either too narrow with too much arousal, or too broad with too little arousal which makes person to pay too much attention to his/her environment.

The following are the three theories which help us to understand the relationship of arousal caused by the psychological factors such as stress, anxiety, aggression, fear and tension.

- **Drive Theory**
- **Inverted U Hypothesis**
- **Individual Zone of Optimal Functioning**

1) Drive Theory: Drive theory states that the more arousal and anxiety an individual

experiences, the higher their performance will be.

2) Inverted U Hypothesis: This theory posits that there is a medium amount of arousal and anxiety that causes one to perform higher - too little anxiety/arousal and too much anxiety/arousal will cause performance to be poorer.

3) Individual Zones of Optimal Functioning: This theory takes into account that people have different levels of anxiety and arousal that are unique in making them perform at their best. Some people perform their best with low anxiety, some with a medium amount and others with a high amount. The amount of anxiety/arousal that an individual requires to perform their best is based on individual characteristics.

Arousal Regulation Techniques

- Progressive relaxation techniques
- Autogenic training
- Biofeedback training
- Meditation techniques

Progressive relaxation technique is a technique of systematically tensing and releasing of muscles, in order to create whole body relaxation. By consciously letting go of tension from our bodies and creating an environment which is peaceful and quiet, our bodies go from an activated mode into a deactivated one. The technique was developed by Dr. Edmund Jacobson in the 1930's and described in his book *Progressive Relaxation*. This technique is a muscle relaxation technique

and can relax the body within minutes. However, at the beginning it takes practice to learn to release the muscles. Once body knows how to tense and then relax muscles, we can relieve tension and stress on the spot.

Progressive relaxation is based on a fact that complete physical relaxation is the absence of tension. If we are completely relaxed it is impossible to be tense and anxious. Progressive relaxation can help us achieve a state of profound physical relaxation by soothing the chronic muscle tension that keeps the sympathetic nervous system in overdrive. There are four stages in progressive relaxation technique:

- Awareness of tension - by concentrating on an area of our body, we learn to recognize tension.
- Tensing the muscles
- Letting go of the tensing
- Awareness of relaxation - we concentrate on the particular area of our body, and we learn to recognize the feeling of relaxation.
- The best position for practicing progressive relaxation technique is lying down. Some people use this technique just before falling asleep, but we can use it at anytime of the day.

Autogenic Relaxation Technique

Autogenic means self-regulation or self-generation. It means that the power for achieving relaxation is all within us. During autogenic relaxation we will relax our muscles deeply. By relaxing our muscles, our mind automatically follows. And we find our self experiencing deep relaxation.

Autogenic Relaxation in Simple Steps

To practice this relaxation technique we need to find a quiet place. While seated in a comfortable position we repeat a particular autogenic phrase to our self. At the beginning, we do this for a few minutes at a time, several times a day. Gradually, we increase the time until we practice 20 minutes twice a day.

There are six parts to autogenic training, each focuses on a different part of the body and different sensation:

- heaviness in the extremities - "my arms and legs are heavy"
- warmth in the extremities - "my arms and legs are warm"
- heartbeat - "my heart is calm and regular"
- breathing - "my breathing is calm and regular"
- warmth in the solar plexus - "my solar plexus is warm"
- forehead - "my forehead is cool"

Biofeedback Training

Biofeedback is a method of measuring physiological functions we are not normally aware of (such as skin temperature, muscle tension, or brain waves) and then training ourself to control these functions.

- Depending on what particular physiological function we are working with, different techniques are used.
- The most common biofeedback techniques are:
 - Temperature biofeedback
 - EMG biofeedback
 - EEG biofeedback
 - Galvanic Skin Response

- With biofeedback we are in control. No needles and no medications. we learn to *listen and talk to our body* and make our nervous system an ally in our healing process

Meditation

- Meditation is a verb. It is doing. It is a practice of concentration. We may concentrate on our breath, a sound, object, visualization, movement, or sensations in the body. The goal of meditation is to increase the sense of well-being, reduce stress, activate the relaxation response, and enhance personal and spiritual growth.
- *"Meditation is a way of being. Meditation is not about trying to get anywhere else. It is about allowing oneself to be exactly where we are and as we are, and the world to be exactly as it is in this moment, as well."* John Kabat-Zinn
- We will understand what meditation is once we experience it. Here is a short exercise that will show we what is meditation.
- Find a quiet spot where we will not be disturbed.

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- Sit in a chair with our back straight, shoulders relaxed, feet flat on the floor.
- Close our eyes and turn our attention to our breath.
- Notice how the breath moves. Just observe our breath.
- Feel how our abdomen (or our chest) is rising and falling with each breath.
- Just observe. Don't force anything.
- Focus on the feeling of our breath - our body rising and falling with each breath.
- Continue for 5 minutes.
- Congratulations! We now know what is meditation and how to meditate.

Conclusion:

As per above description it can be concluded that level of arousal effect the performance of athlete in different manners. We can control arousal in sports by different technique like Progressive relaxation techniques, Autogenic training Biofeedback training and Meditation techniques

Avoid Failure Motivation in Physical Education and Sports

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Abstract

Modern techniques of motivation not only help in developing information processing ability of the performer but also greater pain tolerance and will power during training and competitions. Various studies conducted on motivation analyze and reveal that how various performers suffered untold difficulties due to lack of proper psychological training. Some of them could play well only on their home ground. For others it was necessary to have symphonic spectators. There were other opponents. A central issue in sports performance is motivation, it enables sportsman to display during feats and achieve inconceivable standards.

Key Words: Physical education, sports, motivation

Introduction:

The word “motivation” is a derivative of the Latin word ‘movere’ which means to move. Motivation is the reason or reasons for engaging in a particular behavior, especially human behavior as studied in psychology and neuro-psychology. These reasons may include basic needs such as food or a desired object, hobbies, goal, state of being or ideal. The motivation for a behavior may also be attributed to less apparent reasons such as altruism or morality. The term motivation is well established process by which an individual is inspired or coaxed to do something extraordinary. It is the tendency for direction and selectivity of human behavior to persist until a goal is achieved. It includes motives, needs, drives and urge. Motivation is of great practical significance in accomplishing all assignments of human shelter and survival under the sun.

Objective of the Study: To know the role of avoid failure motivation in physical education and sports

Hypothesis of the Study:

Avoid failure motivational devices are major source to improve the performance of athletes.

Review of Literature:

Lapridis et al. (2003) investigated the role of motivational climates, teacher autonomy support, perceived competence and autonomy on pupils’ self regulated motivation in physical education (PE) classes of Norwegian 10th graders. Path analyses revealed that a mastery climate and teacher autonomy support both (a) positively influenced intrinsically regulated motivation as measured by the relative autonomy index (RAI) and by the intrinsic motivation sub dimension, and (b) negatively influenced a motivation. Perceived competence, but not perceived autonomy, significantly and partially mediated these relationships. Unmediated by perceived competence. They further revealed that a performance climate was found to facilitate a motivation. A mastery climate, autonomy support, perceived competence and intrinsically regulated

motivation predicated enhanced levels of interest/enjoyment in PE. Intrinsically regulated motivation and perceived competence predicated after school physical activity. Findings suggest that blending achievement goal theory and self determination theory add to our understanding of motivational, affective and behavioral outcomes in school physical education. **Standage et al. (2003)** reveals the formal predominance of educational motives in boys but personal motives in girls for participation in sports, and the later showed greater effectiveness of verbal and tangible reward methods for improving performance in physical tasks.

Methods:

Avoid failure motivation consists of the following devices.

- (1) Remove worries.
- (2) Sound sleep during competition.
- (3) Take a loss harder.
- (4) Nervous and fidgety right before game.
- (5) Loss botheration.
- (6) Temporarily loose contact with reality.
- (7) Avoid mistake botheration.
- (8) Stay calm before game.

Results:

Avoid failure motivation has made its contribution for improving sports performance. It has helped coaches to coach more effectively and athletes to perform more proficiently. This psychological aspect of sports is gaining much attention among sports administrators. Sports competitions have assumed as extremely important place in the human society these days. With the beginning of the modern Olympic Games in 1896, tremendous changes have been

taken place in the methods and methodologies of training for athletic competitions at the national as well as international levels.

The obsession for winning medals in the Olympic and other international competitions has catalyzed the sport scientists to take interest in exploring all the aspects and possibilities which can contribute to enhance sports performance to under aimed heights. It has been established beyond doubt-much of the human physiology is controlled by human psychology and out physiological preparation in sports is consequential in the absence of say of human behavior as it related to competitive sport. The virgin realms of the mind should be explored otherwise neither excellence nor perfection can be ensured. It is now being claimed that regardless of how much ability, skill or fitness a person possessed for a particular task or sport, the success or quality of his performance will in the final analysis probably depend on his particular psychological makeup.

Conclusion:

The first pre requisite for success in any activity lies, as is well known is high motivation. Therefore, while preparing the athletes, it is important first to form and develop in his striving contestability induce in him an urge to systematic useful results. Desire for all round harmonious development of the personality through preparation for creative work and defense, the desire to make one's contribution to the progress of the sports and to glorify one's collective and countering by sporting achievement.

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Obstacles and Benefits of Meditation

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Abstract

Meditation is the very heart of yoga. It is the essence of yoga. It is at the core of the practice of yoga. It is both its main tool and its ultimate destination. It is a method of psychic training. Meditation is a priceless art of self-study. It is an essential part of spiritual regeneration. It is a devotional exercise of contemplation. Meditation is the final spiritual course. Meditation is a part of the science and an art of healing. Meditation means many things to many men. It turns a curse into a blessing. Meditation leads to pure blissful consciousness. Meditation is mind management. Meditation is the mother of concentration.

Key Words: Meditation, obstacles, Benefits

Introduction

Meditation is the term derived from the Latin word 'Meditari' which means "to think about or consider" or to "to heal" or attending to or paying attention to. Meditation is the technique for diverting the wayward, destructive mind into planned and constructive channels. It is the process of systematically allowing the mind to become still to enhance the relationship between consciousness and the world gradually subconscious mind and cleaning it out meditation introduces to attaining the highest state of wisdom is meditation. It is for letting the mind to go deep, awakening the silent seed of pure bliss consciousness deep within the nervous system. It is the process of systematically allowing the mind to become still for specific period of time each day. It is the process that helps us discover the treasure trove of potential locked up within ourselves. It is the technique that helps to connect the energy of the cosmos.

Meditation is just being blissful in the moment. It is experiencing that resent moment without resistance. It is the path that takes you inwards. Immediate is to open the door of the mind to the spaciousness that is our birthright is indispensable for the spiritual life as breathing is for the physical. It is the process that leads to the restoration of one's well being. It is the art of bringing the mind to a state beyond thought. It is the state of consciousness characterized by stillness and inner clam. It is one of the great means of controlling the rising of thought waves. The search for the eternal is called Meditation.

Obstacles to Meditation:

Obstacles mentioned in Vedantasara:-

1. Sleep (Laya)
2. Wandering of the mind (Vikashepa)
3. Reluctance to practice meditation (Kashaya)
4. Getting stuck in on intermediate joyful spiritual experience (Rasa Swada)

Obstacles mentioned by patanjali:

1. Disease (Vyadhi)
2. Lack of interest (Styana)
3. Doubt (Samshaya)
4. Delusion (Pramada)
5. Lethargy (Alasya)
6. Reluctance to give up sense pleasures (Avirati)
7. Erroneous conception (Bhranti-darshana)
8. Non-attainment of any level of concentration (Alabdha-bhumikatwa)
9. Inability to retain a level of concentration once attained (Anavasthitatwa)

More subtle obstacles recognized by patanjali

1. Ignorance of one's inherent divine nature (Avidya)
2. Egoism (Asmita)
3. Attachment (Raga)
4. Aversion (Dweshha)
5. Clinging to life (abhinivesha)

Obstacles experienced by spiritual aspirants

1. Temptation
2. Intense fear (Bhaya-bhairava)
3. Grief (Duhkha)
4. Despair (Daurmanasya)
5. Involuntary nervous trembling of the body (Anga-mejayatwa)
6. Irregular breathing (Shwasa-prashwasa-vikshepa)

Methodology

1. It is best to have a special room for Meditation. If this is impossible, maintain a separate place as a space to be used only for meditation, clean and tidy, quit and safe, free from distracting

vibrations and associations & natural environment.

2. Sit in a comfortable steady posture with spine and neck erect; sit on clean mat facing north or east to take advantage of favourable manage vibrations.
3. The most desirable time is brahmamuhurta, the hour between four and six a.m. in other words, sunrise and sunset hours are the best times for meditation; be regular;
4. Don't practice meditation when ill;
5. Advisable meditative postures are sukhasana, Padmasana, siddhasana, vajrasana, swasthikasana, and virasana. Chin-mudra, Ushas mudra, Bhairava-mudra or Bhairavi mudra may be used;
6. Elderly or less able people may prefer to sit in a chair with ankles crossed, Lying down is not recommended;
7. Inhale and exhale rhythmically; Meditation is much easier for those persons who have good physical health; Avoid negatively of the mind;
8. Try to select a focal point on which the mind can rest.
9. Allow the mind to wonder at first. It will jump around, but will eventually settle into concentration. If the mind persists in wandering simply disassociate from it, and watch it objectively.
10. If possible, take a shower before meditation; Don't sit for meditation Immediately after doing asanas and pranayama.
11. Sustained concentration leads into Meditation. Sustained Meditation leads into blissfulness (Samadhi)

Results:

Meditation lowers pulse rate and Blood pressure. It slows and depends on breathing quality. It reduces lactic acid on the body: it controls the electrical activity of the brain. Meditation creates an amount of balance in the nervous system. It tones up, steadies and soothes the nervous system. It purifies and enriches the blood. It vitalizes the body; it removes phlegm. It enables glands to return to a correct state of hormonal balance. It reduces oxygen consumption. It reduces carbon-di-oxide output. It leads to a hypo-metabolites mental relaxation. It is also a prevention medicine. Constriction of the blood vessel is decreased. Activities of sympathetic nervous system are reduce, keeps less dependent on dopamine a fell

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good hormone. It triggers the growth of grey matter in the brain known as neurogenesis. It helps new neutrons to be in the brain. In meditation, the ratio of oxygen to carbon-di-oxide in the blood remains constant. During sleep, there is a buildup of carbon – di – oxide in blood.

Conclusions:

1. Mind and matter are fused;
2. It enables to overcome moral weakness;
3. It leads to the hall of divine light;
4. It can give us supernatural powers;
5. It leads to get developed the delta waves in the brain.
6. It awakens the slumbering energies of the mind;
7. Thus meditation is essential for total well being.

**Effect of Yogic Practices on Stress and Aggression of Working Women during
Menstruation Period**

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Abstract

According to the ancient knowledge of yoga, harmony among the body, which includes subtle energy body, mind with emotional aspects, psychological and the thinking mind and the spirit or the soul leads to a perfect health. This health is severely affected during the menstrual period thereby resulting in high stress and aggression levels amongst these women. In view of this present investigation was carried out to study the benefits of yogic exercise on stress and aggression levels of working women. All the standard procedures have been used to collect the data for this study. On the basis of the statistical analysis of the data it is evident that there is decrease in stress and aggression level of working women due to yogic exercises.

Key Words: Yoga, psychological, health, menstrual period, stress, aggression

1.0 Introduction

Human beings are made up of three components—body, mind and soul corresponding these there are three needs—health, knowledge and inner peace. Health is physical need, knowledge is our psychological needs and inner peace is spiritual need when all three are present then there is harmony. According to yoga, harmony among the body that includes subtle energy body, mind that includes emotional, psychological and the thinking mind and the spirit or the soul leads to a perfect health. The harmony can be maintained by dealing with all the above aspects through yogic practices. In today's world of information most of the people find it difficult to devote time towards their health and fitness, which is especially very true with the working women. This has led to drastic increase in health problems and health related stresses—the number one killer in modern days. Unlike the early part of the century when infectious diseases were the leading

killers, today's health problems are mostly related to life style.

It is widely accepted that a regular practice of yoga can offers all kinds of mental and physical health benefits. For example, some, like improved flexibility, are clearly evident. Others, including mental clarity and stress reduction, may be more subtle but are just as powerful. When put together, all the benefits below contribute to an increased feeling of well-being, which helps explain why so many people find yoga so addictive. Yoga introduces to meditation techniques, such as watching the breath and how to disengage from thoughts. These skills can prove to be very valuable in intense situations off the mat, like childbirth, a bout of insomnia, or when having an anxiety attack. Yoga is also helpful in managing pain due to arthritis, carpal tunnel syndrome, back pain and other types of chronic pain. Each pose places emphasis on a particular set of muscles. Many yoga poses can target specific muscles that may need to be

stretched in order to reduce pain. Regular practice can increase flexibility and which may reduce pain overall and prevent further injury.

For many women menstruation is a serious concern. This is because they suffer physical discomforts such as cramps, weight gain, headache, backaches and breast tenderness and experience emotional changes, such as mood swings, depression, restlessness. Because the menstruation is commonly referred to as "the curse" it is not surprising that this unfavorable social reaction will color women's attitudes. Menstrual cramps are sharp pains in a woman's lower abdomen that occur when her menstrual period begins and may continue for two to three days. Symptoms can range in severity from a mild annoyance to severe pain that interferes with normal activities. Menstrual cramps are the leading cause of absenteeism in women (especially those younger than 30 years). Although over half of women who have menstrual periods experience some discomfort, 10% are temporarily disabled by symptoms. In view of the published literature, it is evident that the yogic practices are more affordable and harmless way to cope up with the discomforts faced by women. It also helps in reducing complication generated due to consumption of painkiller and other drugs. Hence, in view of this present investigation was carried out to study the benefits of yogic exercise on menstrual discomfort, especially stress and aggression levels of working women.

Research Methodology

Selection of subjects

Total 100 working women belonging to 25-40 year age group were selected as

subjects for the purpose of the study from the Nagpur City. Out of this 100 women, 25 each were teachers, govt. servants, self help group (SHG) members and homemakers (control group). The samples were selected by using random sample selection method.

Design of the Study

Present study was undertaken to investigate the effect of yogic practices on menstrual discomfort of working women. Hence multiple group design was used in the study. During the study period sixty minute duration yogic training was provided to these women daily for six months. The information regarding subject was collected from women prior to the administration of training program i.e. at the first day of training and after completion of training program i.e. after 6 months. The training program included Prarthana, Sukhama Vyayam, Asanas (Utthith Trikonasana, Badhakonasana, Suptavirasana, Ardhamatsyendrasana, Pashchimottanasana, Sarvangasana, Khandharasana, Bhujangasana, Shalabhasana and Dhanurasan followed by Pranayam, Bandha, Shavasana, Omkar and Shanti path.

Collection of data

The primary data collection in view of the objectives of the study involved preparation of research instrument (questionnaire). Though development and measurement of research constructs is neither simple nor straightforward, instrumentation techniques are available that allows us to construct research instruments that constitute acceptable levels of reliability and validity. The process of developing the research instrument for this study was based on

generally accepted psychometric principles of instrument design, and was carried out according to the standard methodology.

Questionnaire Development

A questionnaire was used for collecting feedback for this research activity to determine the effect of yogic practices on health of working womens, which in this case were problems during menstrual cycle. The questionnaire was developed on the basis of the objectives of the study. Questions/Statements were framed such that each statement would yield Single response. In the present study, Fixed

3.0 Results and Discussion

Impact of the Yogic Exercises on Stress levels of working women

Table 1: Effect of yogic training on stress levels of women working in different professions

Groups	Profession	Before		After		MD	't' Value	P Value
		Mean	SD	Mean	SD			
Experimenta I	Teachers	48	2.2	27	2.1	21	2.854	<0.05
	Govt. Employees	44	3.4	31	3.7	13	2.034	<0.05
	SHG Member	43	3.5	29	3.0	14	3.854	<0.05
Control group		49	4.4	46	4.7	3	0.017	NS

MD: Mean Difference; **SD:** Standard Deviation

Above table 1 shows comparative assessment of impact of yogic exercises on stress level of working women. Results indicated mean stress test score of the control group before yogic exercise was 49 ± 4.4 and after yogic exercise it was 46 ± 4.7 .

- **Teachers:** Mean stress test score of teachers before yogic exercise was 48 ± 2.2 and after yogic exercise it was 27 ± 2.1 .

Response (Qualitative) Rating scale/Continuum (such as Likert-type scale) was used. Prior to use of the questionnaire, a pilot study was conducted to estimate the reliability and validity of the research instrument.

2.5 Statistical Analysis of the Data

The data characteristics like, Mean, Standard deviation, etc. were determined using SPSS 18.0 Statistical package. The comparative assessment was done by using dependent 't' test. The significance level was chosen to be 0.05 (or equivalently, 5%).

- **Govt Employees:** Mean stress test score of govt employees before yogic exercise was 44 ± 3.4 and after yogic exercise it was 31 ± 3.7 .
- **SHG Members:** Mean stress test score of SHG members before yogic exercise was 43 ± 3.5 and after yogic exercise it was 29 ± 3.0 .

Impact of the Yogic Exercises on Aggression level of working women

Table 2: Effect of yogic training on aggression levels of women working in different professions

Groups	Profession	Before		After		MD	't' Value	P Value
		Mean	SD	Mean	SD			
Experimental	Teachers	24	1.4	17	2.2	7	2.309	<0.05
	Govt. Employees	26	2.3	18	3.3	8	2.847	<0.05
	SHG Member	20	1.2	15	1.8	5	2.201	<0.05
Control group		26	3.3	24	2.4	2	0.649	NS

MD: Mean Difference; SD: Standard Deviation

Above table 2 shows comparative assessment of impact of yogic exercises on aggression level of working women. Results indicated that mean aggression test score of the control group before yogic exercise was 26 ± 3.3 and after yogic exercise it was 24 ± 2.4 .

- **Teachers:** Mean aggression test score of teachers before yogic exercise was 24 ± 1.4 and after yogic exercise it was 17 ± 2.2 .
- **Govt Employees:** Mean aggression test score of govt employees before yogic exercise was 26 ± 2.3 and after yogic exercise it was 18 ± 3.3 .
- **SHG Members:** Mean aggression test score of SHG members before yogic exercise was 20 ± 1.2 and after yogic exercise it was 15 ± 1.8 .

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Conclusions

Impact of the Yogic Exercises on Stress levels of working women

- On the basis of the statistical analysis it is evident that there is decrease in stress level of working women (teachers, govt. employees as well as self help group members) due to yogic exercises.

Impact of the Yogic Exercises on Aggression level of working women

- On the basis of the statistical analysis it is evident that there is decrease in aggression level of working women (teachers, govt. employees as well as self help group members) due to yogic exercises.

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Yoga for Students to Improve Mental Strength

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Abstract

Yoga is not only diagnosed with diseases, but it can also be removed by adopting many physical and mental disorders. Yoga is the five thousand year old style of Indian knowledge. A regular practice will result in improved posture, increase in lung capacity, memory boost, and help you develop a positive attitude and discover your highest potential. Academic Improvement, Boosting Memory, Longer Attention Span, Improved Posture

Key Words : Yoga For Students, Mental Strength

What is Yoga?

Yoga is an ancient Indian way of life. In which the work of bringing body, mind and soul together (Yoga) is done. Through yoga, the body, mind, and mind can be completely healthy. Being healthy, you feel healthy yourself. Yoga is not only diagnosed with diseases, but it can also be removed by adopting many physical and mental disorders. Yoga improves the immune system and transmits neo-energy into life. Yoga keeps the body strong and flexible and also relieves stress, which is essential for everyday life.

The Sanskrit metal is derived from 'yuj', which means union of individual consciousness or soul, universal consciousness or union with soul. Yoga is the five thousand year old style of Indian knowledge. Although many people consider yoga only as physical exercise, where people fall, jerk, pull and adopt complex ways of breathing. It is, in fact, the most superficial aspect of this deep

science, which reveals the infinite potential of man's mind and soul, the meaning of yoga is vastly bigger than all of these. The complete essence of life style in yoga science has been assimilated.

Gurudev Sri Sri Ravi Shankar says, "Yoga is not just exercise and posture, it is a spiritual height touching emotional integration and mystic element, which gives you a glimpse of beyond all fantasies."

Do you want to know about yoga? For the list and information of yoga Yoga postures and postures keep both the body and mind active. What is yoga, how is yoga, how yoga works, how to do yoga to overcome various diseases, what are the benefits of yoga, to overcome obesity, more information about yoga and other benefits of yoga Read this category for.

Here is no doubt about the benefits of yoga We are well aware of the endless emotional and physical disorders that have

a mature faces due to unhealthy lifestyle choices and how the practice of Yoga will help them overcome these problems and a healthy lifestyle.

Unfortunately, today children and youth are also victims of stress, anxiety, digestive disorders, insomnia, etc., due to a highly competitive environment and work culture. Peer-pressure, examination pressure, long working hours, unregulated food habits

Learning Yoga at an early age is a lasting and immense benefits on the overall health and well-being of the student. It is so surprising that educational institutions have adopted Yoga as part of their daily routine. If you are a student or adult, you are sure to find Yoga to be beneficial in terms of achieving peace of mind, maintain increased energy levels, improve flexibility, and find inspiration to channelize your energies in the right direction.

A regular practice will result in improved posture, increase in lung capacity, memory boost, and help you develop a positive attitude and discover your highest potential.

Do you know who is the best yoga teacher in the city? No, you see the kids. It will be wonderful to know that to do Yoga posture you struggle on your yoga mats, they can easily make them small children. Whether it is a child or a child studying in another class, they do yoga all the time. As soon as he starts to grow he will stop doing yoga. They need to learn yoga again. Schools around the world have now started accepting that yoga is an important role for the physical and mental development of children and they are encouraging the

children to take an interest in this ancient practice.

Here, we discussed four of the most important benefits of yoga for students:

1. Academic Improvement

Research on the past years has shown Yoga to have stress-relieving powers on students, paving the way for improved academic performance with the practice of asanas, meditation and breathing exercises.

Students talked of decreased stress levels, and resulted in an increase in GPA.

2. Boosting Memory

With stress, anxiety and negative thoughts sidelined through meditation, Yoga brings forth thoughts that you need to be focused on. Studies have shown that Yoga has better results than brain training.

Historical wisdom is now combined with scientific studies to show that Yoga is a recommended therapy for students as well as adults.

3. Longer Attention Span

Active children may have a tough time. With regular yoga sessions, 20 minutes a day for a period of four weeks.

The yogic environment and theories. Children with ADHD have also shown long prolonged attention spans.

4. Improved Posture

Sitting hunched over the long hours leads to chronic pain and reduces breathing capacity. Yoga will make you more aware of your body and train your muscles to align properly.

Correctly aligning the body. Yoga poses aimed at balance, flexibility, and stamina, strengthens muscles and connective tissues enabling good posture.

The practice of Yoga will bring a positive change in mood and attitude, increased energy levels and the ability to focus on what is needed by setting aside distracting thoughts in a student.

There are many forms of Yoga and each has its unique style, goals and set of exercises and discipline required to achieve both mental and physical benefits.

And to practice Yoga the right way, one requires quality props, a durable and easy to maintain Cork Yoga Mats and other accessories. Students should be done regularly to live healthy and pure life. Know five such yoga postures that will make both your brain and body perfect:

Yoga is endangered for the fondness of every age. Stupendants should be done regularly to live healthy and pure life. Yoga enhances concentration with decreasing pressure of studies. Know five such yoga postures that will make both your brain and body perfection:

Few yoga exercises

1) पपपपपपपपप (Pranayama)

By doing pranayama daily, the brain stays free. You can focus well on your studies. Pausing and exhaling breath slowly by slow, comes in the form of pranayama. Pranayam also leads to our mental development.

2) पपपपपप (easy pose) :

It is considered the easiest way of yoga, in which the feet have to be crossed with straight crossing. Meditation is also done in this posture. But in this posture, the hand currency is also very important. This seat is effective in boosting your brain power.

3) पपपपपप (staff pose):

With this yoga, the spinal cord is straight. This is a great sum for Sitting Presth. By doing it daily also there is flexibility in the lower part of the body.

4) पप पपपपप (a single leg stand):

In ancient times, the problem of prayer used to be a poster. This posture can only lead to health benefits and also stresses our mental stress. It removes the laziness of your body and makes you nimble. By doing it every day, you can control your anger.

5) पपपपपपपप (cobra pose):

This seat is done by lying on the back of the stomach. You can make yourself slim-trim. Not only this, it is quite beneficial for your muscles. It also works in bringing flexibility of the body.

Among the beauties of yoga, it is also an advantage that the physical practice of Yoga for the elderly or young, healthy (fit) or weak person is beneficial and it leads everyone towards progress. Along with age your understanding of posture becomes more sophisticated. After working on external techniques and techniques of yoga, we start doing more work on internal subtlety and ultimately we are just going to the asana. For many people yoga can have many implications. In fact, it is a determination to help in deciding the "direction of your life through yoga"!

Comparative Study of Mental Toughness between Male and Female Players

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Abstract

Physical Education, as a part of human education has always existed in the human society in one form or the other. Since time immemorial, even before the dawn of civilization and culture, physical exercise has been very important aspect of human existence. A healthy individual is not only physically healthy, but also mentally healthy. The modern concept of health extends beyond the proper functioning of the body.

The main purpose of the study was to investigate the mental toughness between male and female players. The data pertaining to the study were collected by one standard questionnaires; Mental Toughness designed by Dr. Alan Goldberg was used. For the present study, the data were collected from the inter-collegiate of male and female players of budgam district in Kashmir division. The data pertaining to mental toughness collected from Sixty (60) subjects were selected from each group i.e. thirty (30) from male and thirty (30) female players, through purposive random sampling for testing the hypothesis. The data obtained from the responses given by the subjects on standard questionnaire of mental toughness was marked according to the key and analyzing by using 't' test to find out the significant difference in Mental toughness between male and female players at 0.5 level of significance. It was hypothesized that there would significant difference in mental toughness between male and female players.

The level of significance for the present study is kept at 0.05 level of significance and also the degree of freedom is also be kept in mind for the calculation of tabulated 't' which is then compared with the calculated 't'. This is used for testing of hypothesis which was given by the researcher previously.

The whole work of the researcher depends upon the collection of the data that is why the collection of data is called the base around which the whole research work revolves. So the researcher is asked to collect the data in a very precisely manner as to face less difficulties during the whole researcher work.

Key Words: Mental Toughness, Male and Female Players.

Introduction:

Mental toughness is a collection of attributes that allow a person to persevere through difficult circumstances (such as difficult training or difficult competitive situations in

games) and emerge without losing confidence. In recent decades, the term has been commonly used by coaches, sport psychologists, sport commentators, and business leaders. Coaches and sports commentators freely use the term mental

toughness to describe the mental state of athletes who persevere through difficult sport circumstances to succeed. For example, it is often simply applied as a default explanation for any victory, which is highly problematic as an attribution.

The new field of global mental health is "the area of study, research and practice that places a priority on improving mental health and achieving equity in mental health for all people worldwide". Some mental health clinics are now identified by the phrase behavioral wellness. Mental toughness is a controversial term, in that many people use the term liberally to refer to any set of positive attributes that helps a person to cope with difficult situations. Coaches and sports commentators freely use the term mental toughness to describe the mental state of athletes who persevere through difficult sport circumstances to succeed. For example, it is often simply applied as a default explanation for any victory, which is highly problematic as an attribution. Only within the past ten years has scientific research attempted a formal definition of mental toughness as a psychological construct and criticisms about the lack of specificity of this umbrella term abound.

Mental health is a level of psychological well-being, or an absence of a mental disorder; it is the "psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment". From the perspective of positive psychology or holism, mental health may include an individual's ability to enjoy life, and create a balance between life

activities and efforts to achieve psychological resilience.

Objectives of the study:

The main purpose of the study was to investigate the mental toughness between male and female players belongs budgam district in Kashmir division.

The allied purposes of the study are as under: to find out the mental toughness of male and female players from Kashmir division and also to compare the mental toughness between male and female players from district budgam in Kashmir division.

Hypothesis:

It is hypothesized that there will be significant difference between the mental toughness between male and female players belongs budgam district in Kashmir division.

Methodology:

The main purpose of this study was to investigate the mental toughness between male and female players. It was hypothesized that there would be significant difference in mental toughness between male and female players.

Sources of data:

The intercollegiate male and female player's falls under the jurisdiction of Budgam district in Kashmir division were selected as subjects.

Selection of the Subject:

Sixty (60) subjects were selected for this study, thirty (30) male and thirty (30) female players.

Sampling Methods:

The subjects were selected by using purposive sampling method.

Criterion Measures:

Following are the criterion measures which were responsible for collection of data, to testing the hypothesis.

Mental Toughness:

The standard questionnaire of Mental Toughness designed by Dr. Alan Goldberg has been used for the collection of data.

Statistical Analysis and Interpretation of Data

For the present study, the data were collected from the inter-collegiate of male and female players of budgam district in

Kashmir division. The data pertaining to mental toughness collected from 60 subjects were selected from each group i.e. thirty 30 from male and thirty 30 female players, through purposive random sampling for testing the hypothesis. The data obtained from the responses given by the subjects on standard questionnaire of mental toughness was marked according to the key and analyzing by using 't' test to find out the significant difference in Mental toughness between male and female players.

Level of Significance:

To test the hypothesis the level of significance was set at 0.05 level of confidence which was considered adequate and reliable for the purpose of this study.

Finding:

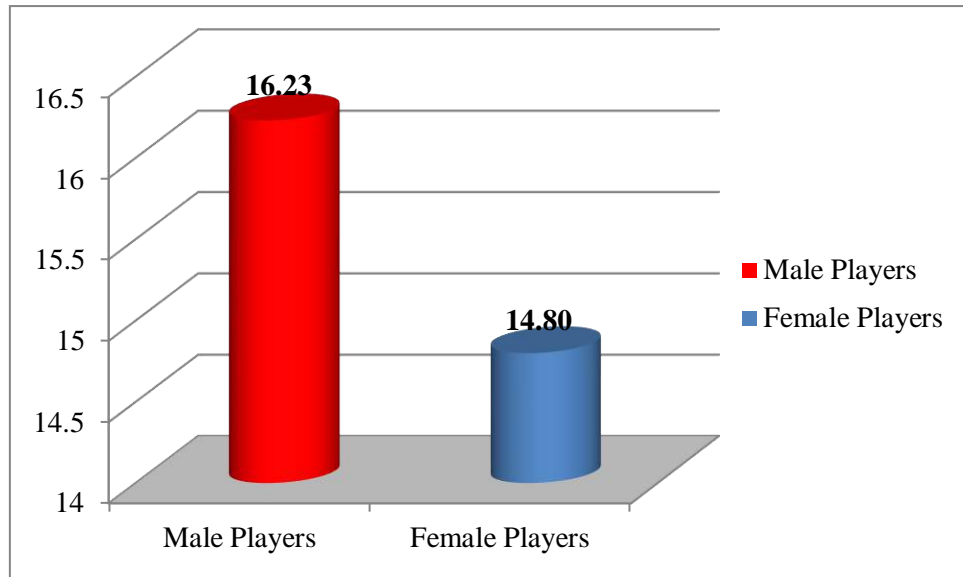
The data collected on 60 subjects was analyzed by applying 't' test to cardio-respiratory endurance, and exhale capacity between baseball and softball Players of District Budgam in Kashmir Division.

Table-1
Comparison of Mental Toughness between Male and Female Players

Group	Mean	S.D.	M.D	S.E	O.T	T.T
Male Players	16.23	2.02	1.43	0.50	2.85	2.00
Female Players	14.80	1.97				

Graph-1

Graphical Representation the Mean value of Mental Toughness Between
Male and Female Players



Conclusion:

Within the limitation of the present study and on the basis of the findings, the following conclusions were drawn.

The researcher of the comparison of mental toughness between male and female players,

it is concluded that there is a significant difference of mental toughness between male and female players Hence the researcher's pre assumed hypothesis is accepted.

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Career in Yoga

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Abstract

Yoga is an option which not only gets you the required work out but also relaxes you. Yoga is one the most natural ways of keeping the human body fit and in shape. At present, yoga has a very good effecting on our life and it is very demanding in today lifestyle and students are looking for career in this field. Yoga also opens various jobs in the given field such as research, management, hospital, academic, administrative, consultation, etc. The government has made it compulsory to have a Yoga teacher in every school.

Key Words: Yoga, Career, instructor, Mental Health, self-employed.

Introduction -

In simple words, Yoga is a Hindu philosophy that teaches a person to experience inner peace by controlling the mind and body. Yoga is a very popular activity among children, athletes and seniors.

Those who share their knowledge of the yoga are called as Yoga Teachers or Yogi.

The important part of Yoga is practiced physical exercises which called Asanas & breathing exercises which called Pranayam.

This natural system which began as back as three thousand years ago. Its benefits and making a difference health and happiness for the people.

Benefits of Yoga:

- Relief from stress.
- Increase concentration.
- Maintains healthy lifestyle
- Increase your flexibility.
- Gives you peace of mind.

- Gaining more control over emotions.

Yoga on Today:

At present, yoga has a very good impact on our life and it is very demanding in today lifestyle and students are looking for career in this field. There is a great career scope. Yoga is an ancient art and natural ways to keep our body fit and healthy. Yoga is not only helps physically, it also help to improve mental health.

Courses & Eligibility

- **Certificate Course in Yoga:** It is a one and a half month course with the eligibility of HSC passed.
- **Bachelor in Arts (Yoga):** Duration of this course will be three years with the eligibility of 10+2 from any stream.
- **Under Graduate Diploma in Yoga Education:** It is a one-year duration course with six months internship with the eligibility of graduate from any stream with a certificate in Yoga.
- **Post Graduate Diploma in Yoga Therapy:** It is a one-year duration

course with the eligibility of graduation with any stream from any recognized university.

- **Master of Arts in Yoga:** It is a two-year duration course with the eligibility graduation from any stream.

Skills Required

Apart from the academic qualifications, it is also necessary that you have some of the following skills which include:

- Good Communication Skills
- Interpersonal Skills
- Skills to motivate others to believe in yoga
- Strong Determination
- Will Power

Some job titles are:

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- Yoga Instructor
- Yoga Therapist
- Yoga Advisor
- Yoga Specialist
- Yoga Practitioner
- Yoga Teacher
- Research Officer- Yoga and Naturopathy
- Yoga Aerobic Instructor
- Yoga Consultant
- Yoga Manager

Conclusion:

Yoga is not only helps physically, it also help to improve mental health and as well as it provide great opportunity to build a career in various field. It can be government field or it can be professional field. So, yoga is good for career for self-employed.

Personality of Athletes and Non Athletes: A Comparative Study

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Abstract

Researcher has to measure and compare the Personality of Athletes and Non Athletes of various Govt. Degree Colleges of Jammu and Kashmir State, and to find the difference between the Athletes and Non Athletes of various Govt. Degree Colleges in terms of personality and Personality factors. For the present study, 120 Athletes and Non Athletes of various Govt. Degree Colleges of Jammu and Kashmir State, in which 60 were Athletes and other 60 were Non Athletes were selected with the help of random sampling technique. Only male Athletes will be selected. The researcher scholar was very much interested to study the comparison of Athletes and Non Athletes in terms of personality and personality factors. For the study the big five personality were selected to know that whether Athletes and Non Athletes have high level of personality traits i.e. Extraversion, Agreeableness Conscientiousness, Neuroticism and Openness. For the collection of data the researcher administered the Tom Buchanan's 'Big five personality Inventory' for personality variables. To determine the significance difference in the mean of personality factors between Athletes and Non Athletes 't' test was interpreted for the results. 'T' test was applied to assess the significance of difference between the means in Athletes and Non Athletes.

Key Words: Personality, Athletes, Non Athletes, Extraversion, Agreeableness, Neuroticism and Openness

Personality

Personality is their dynamic organization with the individual of these psychophysical systems that determine his unique adjustment to his environments. Individual has inherent needs, urges or drives serves as motivation of behavior towards satisfied goals. If the individuals fails to achieve one or more of these behavior goals, if occurs a disorganization of his personality unless a changed mode of action results in the satisfaction of the needs or unless the goal itself is modified.

Personality traits are dynamic and flexible dispositions resulting at least in part from the integration of specific expressing characteristics models of adoption to one's surrounding, the behavior of the individual's is regulated from within him and relatively independent of external environment influences. A person to be sympathetic in all his dealings.

Nowadays, researchers believe that they are five core personality traits. The "big five" are broad categories of personality traits. While there is a significant body of literature supporting this five-factor model of

personality, researchers don't always agree on the exact labels for each dimension. However, these five categories are usually described as follows:

1. **Extraversion:** This trait includes characteristics such as excitability, sociability, talkativeness, assertiveness and high amounts of emotional expressiveness.
2. **Agreeableness:** This personality dimension includes attributes such as trust, altruism, kindness, affection, and other pro-social behaviors.
3. **Conscientiousness:** Common features of this dimension include high levels of thoughtfulness, with good impulse control and goal-directed behaviors. Those high in conscientiousness tend to be organized and mindful of details.
4. **Neuroticism:** Individuals high in this trait tend to experience emotional instability, anxiety, moodiness, irritability, and sadness.
5. **Openness:** This trait features characteristics such as imagination and insight, and those high in this trait also tend to have a broad range of interests.

It is important to note that each of the five personality factors represents a range between two extremes. For example, extraversion represents a continuum between extreme extraversion and extreme introversion. In the real world, most people lie somewhere in between the two polar ends of each dimension. These dimensions represent broad areas of personality. Research has demonstrated that these groupings of characteristics tend to occur together in many people. For example, individuals who are sociable tend to be

talkative. However, these traits do not always occur together.

The Development of Personality

As suggested above, personality can be changed and altered. A poor personality cannot be the result of heredity in the sense that one inherits a good or bad personality. It is the result of our own outlook and response to things around us; this shapes our personalities. As Oliver Holmes said, "I am part of all that I have met." If one can learn to read, to write, and even speak by practice, one can also learn the skills of good personality. Unlike our physical bodies which grow almost automatically, personality needs constant self-direction. Some of the areas needing attention are: sincerity, personal integrity, humility, courtesy, charity and wisdom. These are musts in the life of the Athlete. They are the necessary ingredients of a successful Athlete. You may improve your personality, admitting that your personality can and should be changed. It was Harry Emerson Fosdick who said: "the beginning of a wise ambition lies in man's accepting himself as himself and not as someone else, and in trying to make the most and the best of that self and not another." Take an inventory of yourself. Personality wise, where do you stand? What are your weaknesses, your strong points and where in your life as a teacher, do you expect difficulty in making desirable changes. (a) Awareness that your personality must be improved. (b) Desire to improve your personality traits. (c) Analyze your good and bad traits. (d) Plan wisely and systematically for improvement. Be honest in your responses. Your results will be as

accurate as your willingness to be candid with yourself.

Sampling

For the study, 120 Athletes and Non Athletes of various Govt. Degree Colleges

of Jammu and Kashmir State were selected, in which 60 were Athletes and other 60 were Non Athletes with the help of random sampling technique. Only male Athletes will be selected.

Results of Personality

Variable	Groups	N	Mean	Standard Deviation	St. Error Mean
Extraversion	Athletes	60	31.2333	2.72071	.35124
Extraversion	Non Athletes	60	32.4000	2.53250	.32694

In the above table, there were 60 Athletes having mean 31.2333 and with standard deviation 2.72071 and standard error mean 2.72071, on the Personality factors like Extraversion. Similarly there were of 60

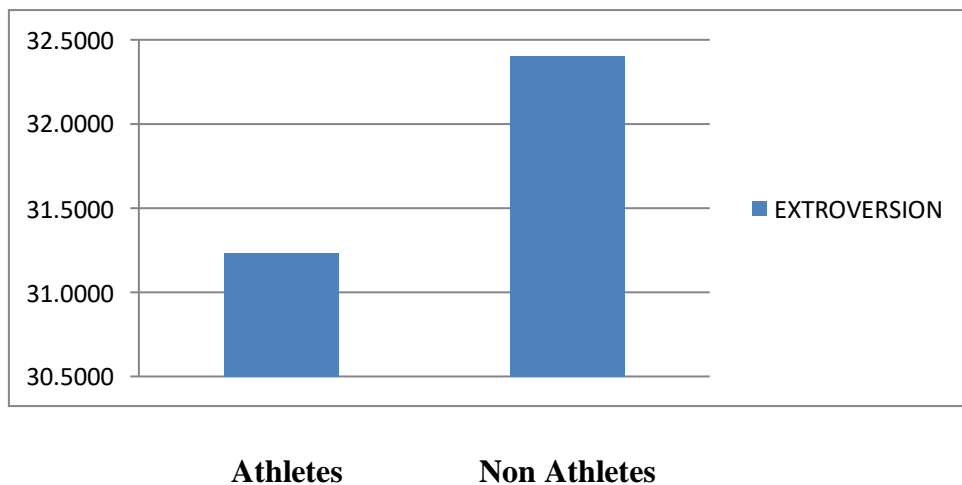
Non Athletes having mean 25.9833, with standard deviation 2.53250 and standard error mean 0.32694 on the Personality factors like Extraversion.

Independent sample ‘t’ test of Extraversion

t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
-2.431	118	.017	-1.16667	.47986

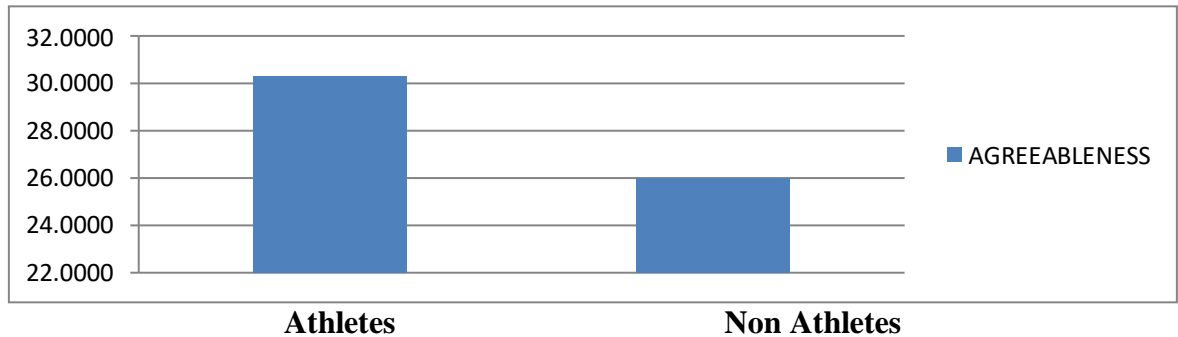
Mean differences for the Extraversion of Athletes and Non Athletes was 1.16667. This difference when tested by Independents test, ‘t’ value was found 2.431. Which was significant at 0.05 significance level for 118

degree of freedom? Therefore the research hypothesis, there is significant difference between Extraversion of Athletes and Non Athletes is accepted. (Figure below)



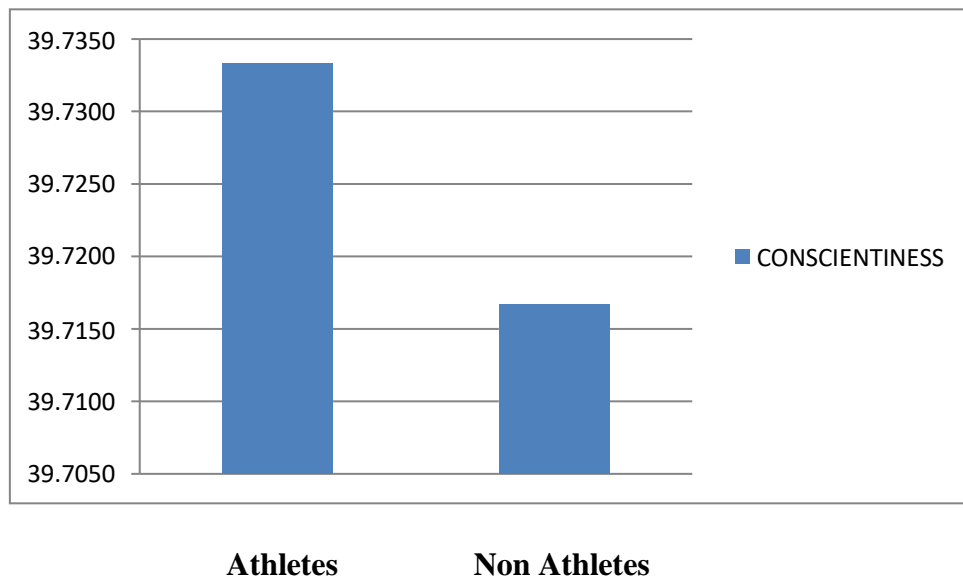
Agreeableness Score

Variable	Groups	N	Mean	Standard Deviation	St. Error Mean
Agreeableness	Athletes	60	30.3000	2.46535	.31828
Agreeableness	Non Athletes	60	25.9833	3.18094	.41066



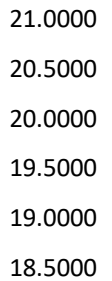
Conscientiousness score

Variable	Groups	N	Mean	Standard Deviation	St. Error Mean
Conscientiousness	Athletes	60	39.7333	2.74860	.35484
Conscientiousness	Non Athletes	60	39.7167	2.89413	.37363



Neuroticism scores

Variable	Groups	N	Mean	Standard Deviation	St. Error Mean
Neuroticism	Athletes	60	19.2833	2.66230	.34370
Neuroticism	Non Athletes	60	20.7667	2.99925	.38720

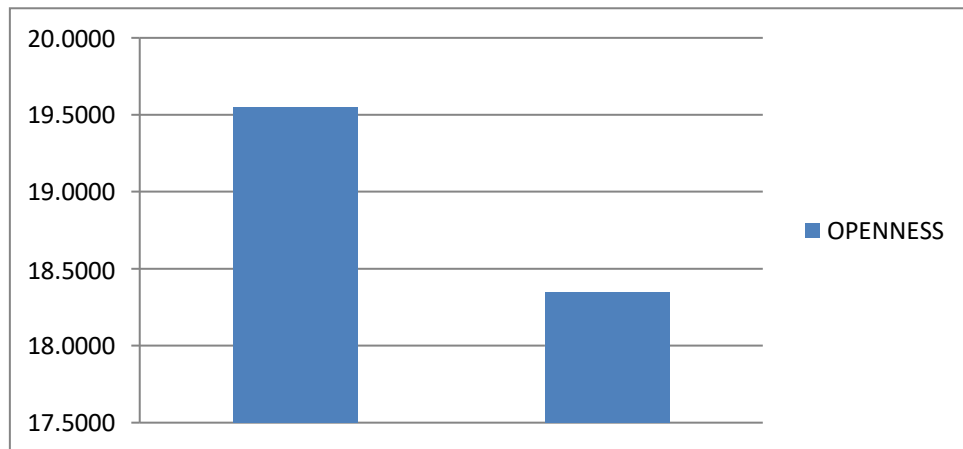


Athletes

Non Athletes

Openness scores

Variable	Groups	N	Mean	Standard Deviation	St. Error Mean
Openness	Athletes	60	19.2833	2.66230	.34370
Openness	Non Athletes	60	20.7667	2.99925	.38720



Athletes

Non Athletes

Discussion of Findings about Personality:

The mean scores of personality factor **Extraversion** shows that Non Athletes have

high degree of personality traits than Athletes. While the mean scores of personality Factor **Agreeableness** shows that Athletes have high degree of personality traits than Non Athletes. The mean scores of personality Factor **Conscientiousness**, shows that Athletes have high degree of

personality traits than Non Athletes. Mean scores of personality Factor **Neuroticism** shows that Non Athletes have high degree of personality traits than Athletes and mean scores of personality Factor **Openness** shows that Athletes have high degree of personality traits than Non Athletes.

In the present study we found that there is no significant difference between Athletes and Non Athletes in all personality factors. In the present study, we observed that Athletes got good results in personality factors agreeableness, Conscientiousness and Openness as compared to Non Athletes, and Athletes got good results in personality factors Extroversion and Neuroticism. Finally, Researcher concluded that Athletes were more reserved, less energetic, more friendly cooperative, methodical, more relaxed and imaginative as compare to Non Athletes. On the other hand Non Athletes were more energetic more aggressive, less cooperative less careful, emotional and more down to earth as compare to Athletes. Athletes got good results in personality factors agreeableness, Conscientiousness and Openness as compared to Non Athletes,

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and Non Athletes got good results in personality factors Extroversion and Neuroticism. Finally, Researcher concluded that Athletes were more reserved, less energetic, more friendly, cooperative, methodical, more relaxed and imaginative as compare to Non Athletes. On the other hand Non Athletes were more energetic more aggressive, less cooperative less careful, emotional and more down to earth as compare to Athletes.

Lastly, we can say that the personality of Athletes is very important in the academic interaction that evolves in teaching experiences. Having an accurate understanding of the personality traits that may influence Athlete satisfaction could serve to inform teacher preparation programs and best practices in leadership for in-service Athletes, potentially having the ability to increase job satisfaction. In the present study we found that there is significant difference in the personality of Athletes and Non Athletes, so we can conclude that their personality factors are not similar.

Effects of Yogic and Physical Exercises on Anxiety Level

Nikita Vishnoi

Dr. Anil Kawande

With modernization in society, modification in scientific knowledge, cultural conflicts, economic problems, industrialization, all adds up to problems for any individual which increases the anxiety level.

Anxiety is a disturbed state. Anxiety refers to emotional state of mind where a fear of danger or loss of suffering is prominent feature. It generally arises as a result of fear of something unknown which creates tension or disturbance.

Anxiety develops tension. This tension increases the muscular

Contraction caused by emotional state or increased muscular effort. The over anxious individual has a high level of cerebral and emotional activity coupled with nervous muscular tension that may eventually lead the individual to the exhaustion stage and¹⁾ perhaps to psychosomatic disorders.

It is desirable for all individuals to be able to²⁾ consciously control these tension levels. Most people would agree that the body senses a reduction in tension after any physically fatiguing activity. Electromyographic studies show that neuromuscular tension level decreases significantly with vigorous exercise particularly in individual having tension levels, the effects are usually transitory.

Yogic exercise and physical exercise are two different types of activities. Asanas are part of yogic exercises. Asanas are special patterns of posture that are considered to be

stabilizing the mind and body. Asanas are performed slowly, the final state being static. Physical exercise also has the similar physical movements and muscular involvement in asanas. However, these are performed to rapid counts, neither holding of posture nor attempting to relax in any part of movements. They also aim towards the relaxation of mind and release the tension.

Significance of the study

The prime interest of this study is to find out the effects of Yogic and Physical exercises on reducing Anxiety level. This investigation will determine the effects on Anxiety level by the two different selected methods of training that is yogic exercises and physical exercises.

Hypothesis:-

Practicing yogic exercise will have positive effect on reducing Anxiety level.

Practicing physical exercises will have positive effect in reducing Anxiety level.

Definitions of Terms

Anxiety Level

Anxiety is a state of emotional and physical disturbance induced in a person by a real or imagined threat. In psychiatry the term refers to disturbances caused by threats that are only apparent to the individual and cause him to behave in a way that is not relevant to the true situation.

Yogic Exercises

The yogic exercises comprising asanas are the poses assumed by body by slow stretching movement, the final pose being held for some time, steady and relaxed.

In the first Sutra of Patanjali three words occur namely, 'Sthira', 'Sukha' and 'Asanam'. The word 'Sthira' is normally used to denote physical stability and 'Sukha' to represent mental state of happiness. The former is objective while the latter is subjective in nature. Use of both words together suggest psycho-physical condition and the words 'sthira' and 'sukha' in the sutra on Asana are indicative of physical and psychological aspect of Asana. Though the Asana is practiced by the body, it is considered that it brings soothing effect on the mind.

Asana

Asana (posture) is the position which individual sets himself. It must be steady and pleasant.

Physical Exercise

Physical exercise is a change of position in space of the body as a whole or by part. The change takes place in the body with the help of various muscle groups.

Physical exercises can also be defined as exercises which involve a variety of agile and speedy movements which are basic to the activities of day to day living and in a number of games and sports.

Subjects

Sixty male students from seventh and eighth standard of Ramakrishna Vidya Mandir, Gwalior, were selected as the subjects for the study. This school was selected as the

Principal of the school agreed to make the subjects available for the purpose of the study and render all necessary help required by the researcher. The average age of the subjects was 12 years. The total number of students in grade seventh and eighth was 92, out of these 92 students, 60 students were selected for the purpose of the study. The selection was made following random selection procedure. The researcher got the list of the names of students in grade seven and eight and each name was written on a small chit of paper. Sixty chits were picked up and names contained in these sixty chits were included for the purpose of study.

All the subjects were required to undergo a medical examination and were found to be fit for the required experiments.

The subjects were randomly divided into three groups (Group A, Group B and Group C), each group consisting of twenty subjects. The subjects did not take part in routine physical education classes during the period of experiment. However, their dietary habits were different as they belonged to different socio-economic groups.

Analysis of Data

The statistical analysis of the data (Anxiety Scale Questionnaire for Anxiety level) collected on twenty subjects of group A trained in selected Asanas, twenty subjects of group B trained in physical exercise and twenty controlled subjects of group C.

Scoring of Data

The subjects score on Anxiety level tests given before and after the completion of experimental period constituted the score for the purpose of the study.

Level of Confidence

For testing the difference between and among the means gain of three groups, the level of confidence was set at .05.

Findings

The initial mean values in the case of Anxiety level of groups A, B and C were 36.95, 37.25, and 36.9 respectively. The final mean values of Anxiety level of group A, B and C were 24.3, 27.15 and 35.3 respectively at the conclusions of six weeks of experimental period. Thus the resultant decrease in means of group A, B and C were 12.15, 10.1 and 1.6 respectively. In group A

and B was found statistically significant at 't', for significance of difference between two means. The 't' value obtained in respect of group A was 10.65 and with respect to group B it was 5.23 and for the mean difference to be significant at .05 level of confidence the 't' value to be obtained should be greater than 2.03.

This shows that the mean gains in Anxiety level can be decreased significantly by administering programme of yogic and physical exercise.

The mean gains of group A, B and C are presented in Table 1.

Table 1

Group Mean Decreases in Anxiety Level Score After Six Weeks of Training

Group	M ₁	M ₂	d	S.E	't' ratio
A	36.95	24.3	12.15	1.14	10.65 ^a
B	37.25	27.15	10.1	1.93	5.23 ^a
C	36.9	35.3	1.6	2.70	.592

* Significance at .05 level of confidence.

In order to determine the differential effects of two different training methods i.e. Yogic and Physical Exercises on Anxiety Level and Mental Fatigue, an analysis of variance

was made taking into account the difference of initial and final scores.

The data relating to this is presented in Table 2.

Table 2

Analysis Of Variance of the Mean Differences of the Experimental Groups (A and B) and Control Group (C) In Anxiety LEVEL

Variable	source of Variation	Dt	sum of squares	Mean Square (Variance)	'F' Value

Anxiety Level	Between Means	2	858.3	429.15	24.96 ^a
	Within Groups	57	979.95	17.19	

* Significant at .05 level of confidence.

Table 6 shows that there is variability among the experimental group (A and B) and control group (C) which means that the training effects produced on the three groups using different training methods are not equal.

Scheffe¹⁷ Test was applied to find out which of the differences of paired means were

significant. The criterion against which the 't' value for difference between any of the two groups means was to be judged, according to scheffe formula i.e. $t' = \sqrt{(k-1)F}$, which works out to be 2.52. The 't' ratio equal and exceeding this value is indicated by alphabet 'a' in Table 3.

Table 3

Significance Of Difference Of Means Of Experimental Groups (A And B) And Control (C) In Anxiety Level Training

Variable	Groups compared	Difference of Means	SE	't' value
Anxiety Level	A, B	2.4	1.31	1.83
	A,C	11.4	1.31	8.702 ^a
	B,C	9	1.31	6.87 ^a

* significance at .05 level of confidence.

The value of 't' to be significant with 2 and 57 degree of freedom is 2.52.

there is no difference in Yogic and Physical Exercises in effecting in Anxiety Level. Even though mean gains are higher in the case of group trained by Yogic Exercises but they are not statistically significant.

Discussion of Findings

From the analysis of data it was evident that means of both the groups A and B showed

decrease in Anxiety level as a result at administration of the programme of instruction in yogic exercises and physical exercises. All these changes in variables was found to be statistically significant at .05 level of confidence and this became clear as the initial and final test across of group A and B were computed by 't' ratio.

To determine the effectiveness of two different methods i.e. yogic and physical exercise on Anxiety level, the difference of

initial and final across was taken into account and 'F' test was applied. The difference was found statistically significant at .05 level of confidence.

To determine which of these groups are different from others the scheffe's test was applied. In both the cases the yogic exercise was found to be superior than the physical exercises. Though the difference was not statistically significant. This may be due to the more relaxed and pleasant effect of Asanas.

Depending upon the statistical analysis of data the null hypothesis in relation of yogic and physical exercises to effect the Anxiety level were rejected as the training on both the methods have shown significant gains.

However, the further analysis to determine which group was superior over the others, have shown a result in support of null hypothesis on both the variables i.e. yogic exercises and physical exercises are not significantly different in effecting Anxiety level.

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The Impact of Attention and Arousal on Sports Performance

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Introduction

What is Attention?

Attention is the ability of an athlete to keep on task. It is often also called focus or concentration. Attention involves focusing mental effort on relevant environmental and maintaining that attention. In sport settings people like to use the term concentration.

for an athlete the environmental factor can be both external (opponent, coach, spectators) and internal (thoughts, imagery, physical sensation). In addition, concentration includes the ability to both narrow and broaden attention when necessary. External and internal factors provide the athlete with needed information for an optimal performance. In any situation, a huge number of factors are available to the athlete. Some of them are highly relevant and important for performance, others are irrelevant and can damage performance. For example, during a tennis match the position of an opponent is probably very important to attend factor, whereas angry comments provided by the same opponent are irrelevant. If the player starts to think about the unproductive emotions of the opponent, player will have proportionally less attention available for processing of the game situation. Attention or Concentration on irrelevant factor can result in a decrease in the quality of the performance. . As , the athlete's attention begins to narrow a good example of attention narrowing is factor

utilization. When the athlete is in optimal performance zone, player is able to concentrate on relevant factor and ignore the irrelevant ones. Thus, at some optimal point, attention narrowing gates out all of the irrelevant factor and allows the relevant factor to remain in focus, attention continues to narrow on relevant factor irrelevant factors are gated out, causing a increase in performance. However, under some conditions , the attentional focus is very broad and the athlete picks up both relevant and irrelevant factor .

Types of Attention

1. Involuntary (Random) Attention

This is a characteristically Attention with that effort and is involuntary. This is most common type and cannot sustain for a longer period, because as soon as new stimulus occurs the attention is shifted.

2. Voluntary(Non Volitional) Attention

This kind is of Attention is Voluntary. When we are purposely attentive to something its Voluntary. It is usually forced attention by some motives such as rewards or Punishment thus its unpleasant , random and unnatural.

3. Volitional (Habitual)

This kind of attention is Non volitional , it is spontaneous, it develops real interest in the activity or event itself, its effortless and without strain.

Attention in Sports

Athletes do not lose physical ability overnight. The reason for a change in performance is more likely to be related to fluctuations in cognitive processes, one of which being attention.

Generally the terms attention and concentration can get mixed up, however attention is the umbrella term for concentration, selectivity of perception and/or the ability to co-ordinate two or more actions at the same time. (Kremer et. al 2012)

Whether it is in the last ten minutes of play, the closing holes of a major tournament or the last mile of a marathon, an athlete needs to focus their attention on the correct things.

Focusing on the wrong stimulus can lead to lapses in concentration. An athlete's focus of attention can vary from internal to external which, according to Wulf (2007) can have an impact on learning and performance of new skills. He found that having an external focus of attention was more effective in this area compared to an internal focus of attention. An athlete with an external focus of attention will direct their attention to the effects their movements have on the environment. An athlete with an internal focus of attention will direct their attention inwards on their own movements.

However external and internal factors can also lead to lapses in concentration and poor performance. For instance distraction theories suggests that perceived pressure (from outside forces such as parents, coaches or spectators) can cause an increase in anxiety crowding the working memory

resources leading to inability to play at a high level.

Conversely self-focus theories propose that anxiety leads to an increase in athlete's levels of self consciousness causing them to focus their attention inwards causing them to over think their own actions.

A beneficial way to combat concentration lapse is to create a stressful situation in training or practice which might normally lead to a sharp decline in performance. Having people watch you practice a specific aspect of your sport for example can help increase confidence to the point where an athlete is not phased anymore having spectators watch them.

What Is Arousal?

In the context of psychology, arousal is the state of being physiologically alert, awake, and attentive. Arousal is primarily controlled by the **reticular activating system (ras)** in the brain. The ras is located in the brain stem and projects too many other brain areas, including the cortex.

You can think of the reticular activating system as a pacemaker for arousal. When the system slows down, you might feel lethargic, sleepy, or have difficulty concentrating on things. When the system speeds up, you might feel highly active, be alert, and be ready to respond to different things in the environment.

The ras and your arousal level are influenced by a number of different things, such as your emotions, the foods you eat, and the neurotransmitters in the brain.

The neurotransmitters *norepinephrine*, *serotonin*,

dopamine, and *acetylcholine* all play a role in the functioning of the ras. Higher levels of these neurotransmitters lead to higher states of arousal and attention to different stimuli.

For example, if you were hiking in the woods and started to hear sounds of an animal coming toward you, your ras would activate and levels of norepinephrine would increase. As the levels of norepinephrine increase, you would become more aroused and alert. Because the ras to other areas of the brain, it would also make you more alert to the sensory information in your environment. You might be more sensitive to the sounds of the animal or to other smells. The increased arousal would also prepare you to respond to the situation. You would be ready to run from the animal or fight it off if needed.

In some cases, though, our arousal level can get too high, then instead of preparing us to flee or fight, it might lead to freezing up.

For example, say that you have an important piano player coming up. Being nervous for the recital is a common reaction that prepares your body for the performance. The nervousness increases the activity of the ras and causes arousal. However, some individuals might become so aroused that they can't perform at all. They might even 'forget' how to play the piano! In this case, the individual's arousal level is too high and performance begins to deteriorate.

For other individuals, events like a piano recital, a basketball game, or a speech might not cause nervousness, though. In this case, the body doesn't respond *enough* for the event. There's no release of

neurotransmitters to increase arousal. When arousal level is low, the individual will not be able to perform because they aren't alert to things in the environment.

When we are aroused we are energized and 'feel alive'. There are three ways that arousal can be achieved: mentally, emotionally and physically, as described below.

Types of arousal

Cognitive arousal

Cognitive, or intellectual, arousal is about thinking and mental stimulation. This is the state where we are exploring, learning and discovering interesting things. We are driven into this cognitively aroused state by curiosity, novelty and general interest.

Some people are more easily stimulated by cognitive arousal than others. When aroused, some are more focused on learning whilst others (often 'experts') are more likely to act to display and defend their pre-existing ideas and knowledge.

Affective arousal

Affective, or emotional, arousal happens when we are emotionally charged up and feel passionate about something. We may be angry, excited, scared, joyful or feeling the stimulation of any other emotion.

Some people fall easily into affective arousal and may be considered to have a volatile temperament.

Physical arousal

Physical arousal occurs where our bodies are in a heightened sense of arousal, typically with adrenaline coursing through our system and activating our muscles. Physical arousal includes both sexual arousal and the bodily

activation we feel when we are engaged in sports and other physical exertions.

Although we generally seek positive emotions, there is also an attraction to negative emotion, as evidenced in the many stories and movies that engender fear, sadness, anxiety and so on. Likewise many physical sports engender anger, fear and so on. What often happens in these situations is that, by some curious process, the negative emotion gets converted into pleasurable excitement.

Brain and body

Physical arousal is managed in the brain by the brainstem, the oldest 'reptilian' part of the brain that manages wakefulness and basic bodily action.

Emotional arousal is driven by the limbic system, particularly the amygdale. Emotional arousal also engages the physical arousal system.

The thinking cortex has the greatest involvement in cognitive arousal. This mental arousal may also involve emotional and physical components.

Arousal is the key issue in sport specifically, physical and technical performance depends on the level of performer's arousal. However, arousal is determined by psychological processes such as emotions, which, in turn, depend on higher cognitive functions like thoughts. Arousal reflects general physical and psychological activity. For example, coma is a pathologically low state of arousal whereas agitation is an extremely high arousal. Usually, people are somewhere in between of those two extremes.

In sport setting, arousal is often linked to anxiety. Anxiety is a negative emotional state with feelings of worry, nervousness and apprehension that is associated with the arousal and activation of the nervous system. In general, arousal has two kinds of effects on performance. First, it increases muscle tension and affects co-ordination. Too much tension is detrimental to performance. Second, arousal affects attention. Therefore, attention can become either too narrow with too much arousal, or too broad with too little arousal which makes person to pay too much attention to his/her environment.

Attention and Arousal are inter dependent

How it affects performance

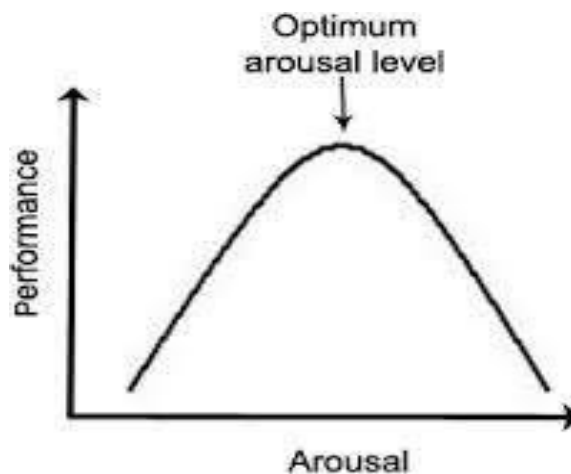
Arousal can help or hurt your overall performance. This psychological and physiological state affects your balance and coordination as well as your focus rhythm, decision-making speed, and muscular tension.

In order to achieve optimum arousal, it's essential to understand what this state is and how it affects your athletic performance. Most experts define arousal as a mental, emotional, and physiological state that prepares your body for action. It's the readiness for action that motivates an athlete to run faster, lift heavier weights, or hit their opponent harder.

Arousal and physical performance are strongly connected. You need the appropriate level of arousal for the things you want to do, whether it's working out, jogging, or digesting a meal. This state is closely related to stress, anxiety, motivation,

attention and other factors that affect your mood. Too much or too little arousal will work against you. Research indicates that this state can affect your performance in various ways. Several theories highlight the connection between arousal and sports performance:

- Drive Theory – According to the Drive Theory, the more arousal you experience, the higher your performance will be. This approach also explains why beginners find it difficult to perform well under pressure.
- Reversal Theory – Arousal effects on sports performance are influenced by how you perceive this state.
- Catastrophe Model – This theory explains the link between anxiety, arousal, and performance. If anxiety levels are low, you'll perform best at a medium level of arousal. If anxiety levels are high, your level of arousal will drop off suddenly. The catastrophe model takes into account both cognitive and somatic anxiety.
- Anxiety direction and intensity – According to this theory, a positive interpretation of anxiety leads to better performance.
- Multidimensional anxiety theory – Anxiety causes poor performance, regardless of your level of arousal. This theory is still being researched.
- Individual Zones of Optimal Functioning – The optimum level of arousal that an athlete requires to perform his best depends on his individual needs. Each individual will react differently to anxiety and arousal.
- Inverted U theory – Too much or too little arousal and anxiety will cause poor performance. A medium amount of anxiety and arousal will result in optimum performance. The relationship between these two factors is influenced by activity type, level of expertise, and personality types. For example, introverted people are more likely to perform well under low arousal conditions.



Each of these theories has its own strengths and weaknesses. Most experts seem to agree that when anxiety becomes severe, performance declines even if you keep arousal at optimal levels. The most widely used approach to the relationship between anxiety, stress, and physical performance is the inverted-U theory, which claims that these factors are interrelated. However, many health experts claim that these theories are oversimplifying the relationship between performance and competitive anxiety.

According to this law, performance suffers when arousal is either too high or too low. Instead, there's an optimized level of arousal which will produce optimal performance. This relationship between high arousal, low arousal, and performance is described by the Yerkes-Dodson law

Other emotions, like anger or happiness, can also change our arousal level. Anger is associated with higher levels of arousal and in many cases leads to decreased performance. Happiness, on the other hand, might lead to increased relaxation and low levels of arousal, also leading to decreases in performance.

How to train brain to control both strategies

Feedback can be used to facilitate both learning and performance. The timing and frequency of the feedback have different influences on performance and learning. While concurrent feedback is beneficial for competition, delayed feedback that is initially frequent and decreases with time will facilitate learning of complex movement patterns.

Psychological Techniques for Improved Performance

Guidelines for using goal setting

Long-term goals and short-term goals are interdependent.

Long-term goals provide a sense of meaningfulness for pursuing short-term goals. The attainment of short-term goals provides a hierarchical sense of mastery and success that builds self-confidence. Athletes should define process goals to focus on elements of their performance over which they have control.

Goal setting

Process goals over whose achievement the athlete has control Outcome goals over which the athlete has little control, such as winning Short-term goals increase the likelihood of success because they are relatively close to the athlete's present ability level Long-term goals provide relevance to short-term goals

Self-talk

A technique used to enhance self-efficacy, aid in directing proper focus, assist in regulating arousal levels, and reinforce motivation.

These are the things we say to ourselves, either out loud or in our heads; they can be positive, negative, or instructional.

Imagery

The cognitive psychological skill in which the athlete uses all the senses to create a mental experience of an athletic performance

Allows athletes to get used to uncertain environments over longer periods of time despite minimal real-world competitive opportunity.

How should athletes use arousal and Attention training techniques?

The purpose of employing such techniques is to allow the athlete to perform with an unburdened mind while matching his or her mental and physical intensity to the demands of the task.

The purpose of employing such techniques is to allow the athlete to perform with an unburdened mind while matching his or her mental and physical intensity to the demands of the task.

Conclusion

We have seen the relationships there between arousal mechanisms, attentional processes and competitive sports performance. Theoretical interpretations of the arousal-performance relationship have traditionally followed the inverted-U hypothesis. Based on this approach, the generally accepted view in sports psychology is that high levels of arousal are detrimental to good performance. A review of the relevant psychological literature reveals the limited nature of such an approach and draws attention to alternative perspectives such as those offered by the work of Apter and that of Cox and Mackay. These more recent theoretical approaches allow more sophisticated interpretations of the individual's experience of arousal to be realized. Important here are other aspects of the individual's psychological state (cognition and emotion) as these are thought to affect his or her interpretation of arousal.

Interestingly, the two theories, developed independently by Apter and by Cox and Mackay, appear consistent, one with the other, and have not previously been applied to the study of competitive sport. Several 'different research techniques were incorporated into a research design which used players of varying levels of ability to examine the various psychological factors important in their experience of and performance in competitive squash. The research techniques, some of which were innovative, proved effective in identifying the interaction of arousal and stress in relation to competitive performance. It was concluded that psychological preparation and experience (i. e. number of years, number of times per week played), along with personality characteristics and attentional strategies, contribute to success in competitive squash. Fluctuations in emotional responses characterized players whose performance was unsuccessful. By way of contrast, successful players' (-J. e. successful in terms of level of ability attained, skill performance and winning games) psychological responses were more consistent. They achieved and maintained optimum levels of arousal both prior to and during performance. Optimum level arousal was, for successful players, accompanied by low stress and positive hedonic tone when they were subject to the demands of competitive games. Overall, successful players (that is skilled players in Study 2 and winners from Study 3) were highly extravert and significantly less neurotic (Eysenck) than other groups of players.

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Dr. Sinku Kumar Singh, Psychology of Sports

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Effectiveness of Physical Education Academic Program on Psychological Characteristics among Varsity Students

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Abstract

The main purpose of the study was to access psychological characteristics among S.R.T.M University students. Materials and methods: For this study researcher had selected 20 subjects from S.R.T.M.U Nanded through simple random sampling. The age of the subjects was ranging from 18-28 years. Only one variable was selected for this presented study i.e. Self-concept. To assess the Self-concept, questionnaire of Rosenberg was used for the study. Results: the mean value and standard deviation in relation to self-concept of varsity students was 14.13#12.51 and 2.87#2.13, respectively. The t-ratio was found 1.45 in relation to self-concept of varsity students. The level of significance was fixed at 0.05. Conclusions: Insignificant effectiveness of physical education academic program on self-concept was found in relation to self-concept of varsity students.

Key Words: physical education academic program, psychological characteristic, self-concept

Introduction

Daily physical education class may provide the opportunity for students to meet Healthy People to guide for physical activity. Many schools districts, however, are reducing physical education Requirements and some are eliminating programs The percentage of schools requiring physical education in each grade decreases from approximately 50% in grade Physical education classes are being replaced with other classes in an effort to increase the students' academic achievement as measured by standardized tests. Despite this trend, no clear evidence indicates that academic achievement will improve if physical education classes are cut. But it is not fact it is only misunderstanding and misconcept

among general line administrators.

(Ahamed Y, et, al 2007)

Review

Mekonnen M et, al.(2016),The present study investigated the self-concept of deaf and hard-of-hearing (DHH) students in different educational settings compared with those of hearing students in Ethiopia. The research involved a sample of 103 Grade 4 students selected from 7 towns in Ethiopia. They were selected from a special school for the deaf, a special class for the deaf, and a regular school. The Self-Description Questionnaire I (Marsh, 1990) was used to measure the children's self-concept. The study results indicated that, in comparison with their hearing peers, DHH students had a lower self-concept in the areas of

general self, general school, reading, and parental relations. The DHH students in the special school showed a higher self-concept in regard to their physical appearance than the hearing and DHH students in the special class. There were no statistically significant differences between the groups in the self-concept dimensions of peer relations, mathematics, and physical abilities.

Lehnert B (2016) , The questionnaire "Fragebogen zur Erfassung des stimmlichen Selbstkonzepts (FESS)" was published in 2015 by Nusseck et al. It consists of 17 items measuring 3 scales on voice related self-concept. This paper examines the distribution of scale values in young adults by examination of medical students. Material and Methods: 96 FESS questionnaires were filled in by medical students. An additional item was added, stating whether it felt easy to answer the questionnaire. The distribution of the scales as well as percentile ranks is given in the paper. Results: In all 3 scales there were no significant differences between females and males, therefore they were analysed as one group. The distributions of all 3 scales show no relevant ceiling nor floor effects. Probands with lower scores in 2 of the

Table 1

Group	Mean	S.D	T-ratio
Pre-test	14.13	2.87	1.45
Post test	12.51	2.13	

three scales found it less easy to answer the questions. Discussion: The results encourage the use of the questionnaire in patients. There was no indication of relevant floor or ceiling effects and there was enough variance in each scale. If used in patients further investigation is needed on the result that patients with lower scores tend to find it more difficult to fill in the questionnaire. The percentile ranks published herein are valid for medical students at this stage. Until bigger normative data on more diverse populations are conducted we will use these data as an orientation to judge other young adults' scores, too.

Methods

For this study researcher had selected 20 subjects from S.R.T.M.U Nanded through simple random sampling. The age of the subjects was ranging from 18-28 years. Only one variable was selected for this presented study i.e. Self-concept. To assess the Self-concept, questionnaire of Rosenberg was used for the study.

Results

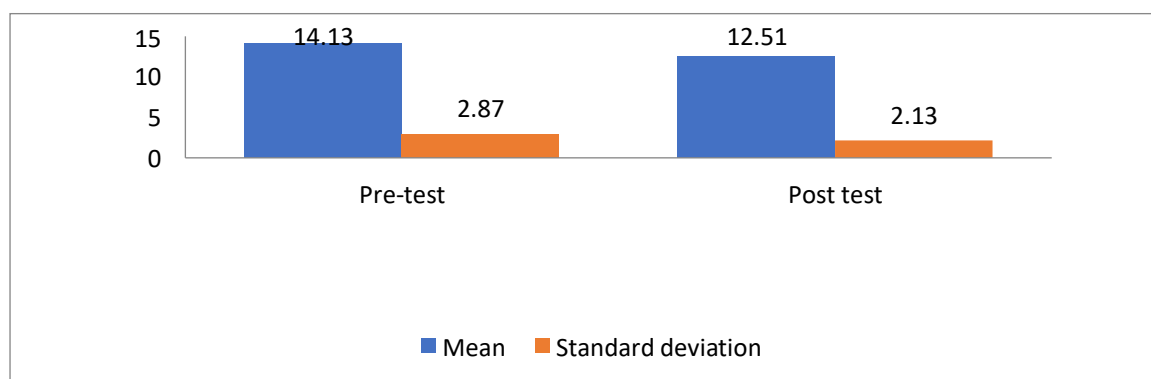
Mean Standard Deviation and T-ratio of Pre and post test of varsity students in relation to self concept

From the above table it was observed that the mean and standard deviation of Pre and post test of varsity students in relation to self concept was (14.13#2.87 and 2.87#2.13).

After applying “t” test it is found that the t-ratio was 1.45 which was significant at the .05 level of significance. So the hypothesis was rejected.

Figure 1

Mean and Standard Deviation of Pre and post test of varsity students in relation to self concept



Discussion

Non-Significant difference was found between the Pre and post test of varsity students in relation to self concept. Thus, there was non-significant difference found between the Pre and post test of varsity students in relation to self concept. The hypothesis given earlier was rejected.

Recommendations & Conclusions

In the light of the findings, it was concluded that non-significant difference was found between the Pre and post test of varsity students in relation to self concept.

The similar study may be repeated on the female subjects and other class of the society for different age groups. To make this study more authentic and valid, the study may be repeated on the larger sample.

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Effect of Specific Training Program on Maturation With Respect to Menstruation amongst the Rural Girls

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Abstract

Introduction: For this study the population samples were chosen from Village Ranjani. Dist. Jalna, Maharashtra. 40 samples were selected through stratified random sampling. These samples are divided in to four age wise groups C=11 years, D= 12 years, E= 13 years and F=14years. The design for this research is made up on the basis of the quasi experimental research characteristics. For this research researcher gathered the data through specific training programme in the form of Pre and Post numerical data. Training program was planned as 18 weeks, 5 days a week &, 60 minutes per day as per availability of time (morning or evening sessions). The statistical responses obtained by these four age wise Groups of rural girls C, D, E and F with respect to effects of specific training programme on Menstrual Cycle with respect to Maturation. The statistical values obtained by Group 'C', 'D', 'E' and 'F' in Pre & Post Tests with 'Yes' replies with respect to Menstrual Cycle are 00 & 00, 00 & 00, 01 & 01, and 07 & 07 respectively. The statistical values obtained by Group 'C', 'D', 'E' and 'F' in Pre & Post Tests with 'No' replies are 10 & 10, 10 & 10, 09 & 09, and 03 & 03 respectively. **Conclusions:** Statically no significant effect was found out of specific training program on Maturation with respect to menstruation of rural girls through specific training program amongst all age Groups (C, D, E, and F). Thus the Null Hypothesis is accepted. Due to specific training program no effect has been seen in Maturation with respect to menstruation amongst all age groups of rural girls, it's because of the natural tendency of human body. **Recommendations:** This research provided valuable information about maturation cycle and its factors amongst rural girls. This research proves that the maturation cycle of the rural girls starts for the age of 13-14 years, and this can guide parents and girls for taking the precautions related to menstrual cycles and will be ready to tackle with it. This study also denotes that this kind of specific training programme does not have any bad impact on girls health related to maturation cycle.

Key Words: Maturation, menstruation, rural girls

Introduction

Maturation is the physical, intellectual or emotional process of development. Maturation is often not quantifiable and it too is mostly influenced by genetics. In this research maturation is stands for the menstruation development in the rural girls. Researcher tried to reveal the facts and relation between physical activity and

menstruation. In this research a specific training was given to these groups. The plan designed for various exercises which improves specific motor abilities & Growth factors of Girls age between 11 to 14 years.

Significance of the Study:

1. The finding of this research may enhance the performance of rural girls.

2. The finding may help the rural girls to face the physical and mental problem during the menstruation.
3. The finding may help to physical activity needed for normal growth and development and for pubertal girl to reach their potential in muscle and bone development.
4. This research provided valuable facts about physical activity and its effects on menstruation.

Statement of the Problem:

In the rural area of Maharashtra the life style of the rural girls is tough in the lower economical class. These rural girls have lost of physical work in their houses, where their family roots automatically pushed them to the daily routine works, therefore researcher wants to know the “**Effect of Specific Training Program on Maturation with respect to menstruation Amongst Rural Girls**”. This study will provide an important data and information about menstruation amongst 11, 12, 13 and 14 years old rural girls.

Emergence of the Problem:

This problem is emerged because of the miss concept about menstruation amongst the rural population. This situation in the rural area has bad effects on sports and games. Therefore researcher decides to investigate that is there any bad effect caused by the physical activity with respect to menstruation cycles.

Limitations of the Study:

1. There was no control of researcher scholar on the diet of the subjects.
2. Heredity
3. Response to training and test
4. Social environment

5. Economic Status.
6. Load parameter of the specific training components is a limitation of the study
7. Since the trainees belong to deferent level of performance hence the prior experience of the players was considered as limitation of the study.
8. Meanwhile the trainer belonged to different training this was also considered as limitation of the problem.
9. The effects of weather conditions were considered as limitations.
10. No motivation techniques were used during administrating the test.

Delimitations of the Study:

1. The selected samples for this research were 11, 12, 13 and 14 years old girls.
2. Selected sample were of rural area from village Ranjani, Tq. Ghansawangi, District Jalana.
3. The study was delimited to Specific training program.
4. The research was only representing the status with respect to village Ranjani.

Objective of the Study:

1. To select the girls of rural area.
2. To develop specific training program for 11, 12, 13 and 14 years old girls.
3. To impart specific training program on the selected subjects.
4. To assess menstruation cycles through the routine survey during specific training program

Hypothesis of the Study:

H₀ There is no significant effect found in Menstrual Cycle with respect to Maturation due to specific training program amongst 11, 12, 13 and 14 years old rural girls.

Operational Definitions:

1. Special Training program: The designed plan of various exercises which improves specific motor abilities & Growth factors of Girls age between 11 to 14 years.
2. Rural Girls: It refers selected living area situated away from city and allotted to rural education by government of Maharashtra as rural girls.

Reviews of Related Literature

Hekmat Ebrahim Abed Kreem et. al. (2016) aimed to assess and improve the awareness level and practice of rural preparatory schoolgirls about menstruation and to evaluate the effectiveness of educational program about menstruation on girls. A sample of 600 school-age girls (12-16 years) at Assuit city. Subjects were selected by random method and were attending rural preparatory schools. A pre/post quazi-experimental design was adopted in this study. A self-administrated questionnaire and health education Arabic handout were used as a tool for data collection. Data results revealed that the mean age of girls was 14.25 ± 1.53 years, (83.3%) of girls reported that their friends was the main source of information about menstruation. there was significant difference in their level of knowledge on menstruation ($p < 0.000$) there is a highly statistical significant difference ($p < 0.000$) was detected between girls' practice in pre and post two months health education implementation. It was observed from the reactions given by the respondents on seeing the advertisement of sanitary pads on television that (39.0%) of girls said that they felt shy to see the advertisements in front of male members

of the family. The study concluded those girls' awareness level and practice has been improved after exposure to the program. The study recommended that a well-informed continuous, school education programme should be imparted to the students. Further, emphasis also needs to be given through workshops and seminars on adolescent reproductive health.

Tarhane S. and Kasulkar A. (2015) focused on the awareness of adolescent girls regarding menstruation, although adolescent period marks the beginning of women's menstrual and reproductive life, adolescent girls constitute a vulnerable group. Hygiene related practices of menstruation are of considerable importance as it has health impact in terms of increased vulnerability to reproductive tract infections (RTI). Therefore, increased knowledge about menstruation right from childhood may escalate practices and may mitigate the sufferings of women. With this in mind, the present study was carried out to gather information regarding menstruation, hygiene related practices of menstruation, and its related problems among adolescent girls. A cross-sectional study was carried out in 100 adolescent girls of age group 12-18 years. They were interviewed through pretested questionnaire. We found that 89% girls thought menstruation to be a normal process, 79% girls used sanitary napkins while 21% girls used clothes as absorbent during menses. Mother seemed to be the first source of information in 88% girls. The girls should be educated about the menstruation and hygienic practices which can be achieved by educational television programs, school/nurses health personnel,

compulsory sex education in school curriculum and knowledgeable parents.

Sandeep Kaur and Prabnoor Kaur

(2014) Primary dysmenorrhea is defined as difficulty in menstrual flow in the absence of any pelvic pathology. It is the most common gynecological problem among adolescent females. Incidence of primary dysmenorrhea was reported to be between 50% and 90% in different societies. Several studies have shown that the reduction of dysmenorrhea in women, who regularly exercise may be due to effects of hormonal changes on uterine epithelial tissues or an increase in endorphin levels. It appears that exercise has analgesic effects that act in a non-specific way. This study compared the effect of stretching and core strengthening exercises on primary dysmenorrhea. The present experimental study included 105 girls of age 19-25 years with primary dysmenorrhea were selected from lovely professional university and government college, Phagwara. The students were non Athlete and Volunteered for the study, the participants were randomly divided into 3 groups, 2 Experimental gp (1st exp gp n=35, 2nd exp gp, n=35) and control gp (n=35). In the Intervention group the subjects were requested to complete active stretching and core strengthening protocol for 8 weeks (4 days per week, 2 times a day, 10 min) at home. In the Pre-test & post-test all the subjects were examined for pain intensity (NPRS), pain duration and use of sedatives tablets during menstruation cycle and side bridge test. The study states that, Pain intensity is decreased significantly in both experimental groups that is in Gp1 (p=.0001) and Gp2 (p=.0001) with NPRS and PDQ in Gp 1 (p=.0001) and in Gp2

(p=.0001) after post readings of 4 weeks (p1) and of 8 weeks (p2) but the results of control group is non-significant. The result of the study conclude that active stretching and core strengthening both can be safely used as an alternative therapy for pain relief in dysmenorrhea and this action is not mediated through progesterone.

Methodology

In this chapter selection of subjects, administration of the tests, Data Collection, Statistical techniques, Tools of the study have been described for the present study. This research topic is based on Experimental research method, through specific training programme collecting Pre and Post numerical data is collected for statistical analysis.

Population and Sampling:

For this study the population was selected from Village Ranjani. Dist. Jalna, Maharashtra. Stratified random sampling was used in the selection the sampling for the study. The samples were selected from Ranjani village, which came under the rural area of the Jalna District. Samples were selected from S.B. high school, Ranjani, in the school total population of 11-14 year girls was 600. For the purpose of research 40 samples were selected through stratified random sampling. According to age group four groups were formed. 10 samples in each group were classified by age.

Variables of the Study:

- **Independent variables:** The specific training program and tests to raise the physical ability of the rural girls are independent variable of the study.
- **Dependent Variables:** Maturation with respect to menstruation of the

samples after imparting the training program is the dependent variables.

- **Intervening Variable:** The age factor, heredity, diet, and body composition these are the intervening variable.

Research Design:

The research design is made up on the basis of the quasi experimental research characteristics. Under the research design investigator collected data through specific training programme in the form of Pre and Post numerical data. After collection of the data, the analysis of data was done using Mean, Standard Deviation and t-Test.

Training Programme

Training program was planned as 18 weeks, 5 days a week &, 60 minutes per day as per availability of time (morning or evening sessions). The level of training intensity was increased from initial 10% to 30% during 18 weeks. subjects were trained according to protocol of three sets

4 to 8 repetitions & 3 to 5 minutes break between each set.

The exercise session was designed as follows:

- a) The warm up period was approximately 15 minutes: - This was combining walking, jogging and callisthenic types stretching exercises.
- b) The main activity period was up to 30 minutes: - Progressive aerobic activity that was increased the heart rate. Like 800 Meter Jogging, Standing broad jump, Bent Knee Sit Ups, Split Squat Jumps, Side Step Jumps, Vertical jump were involved.
- c) The cool down period was up to 15 minutes: - That was combining static stretching exercises and light jogging.

Analysis & Interpretation Of Data & Results Of The Study

The present section is dedicated to the demonstration of results along with the discussion of present study.

Table 1

Statistically demonstrate the effects of specific training program on Menstrual Cycle with respect to Maturation of rural girls classified in to four age wise Groups , Group 'C' 11 Years, Group 'D' 12 Years, Group 'E' 13 Years and Group 'F' 14 Years in the form of Mean Scores and Standard Deviations of Pre Test and Post Tests.

Group	Population	Maturation reply	Pre test	Post test
C	10	Yes	0	0
		No	10	10
D	10	Yes	0	0
		No	10	10
E	10	Yes	1	1
		No	9	9
F	10	Yes	7	7
		No	3	3

Table 1 shows the statistical values obtained by the four age wise Groups of rural girls C, D, E & F with respect to effects of specific training programme on Menstrual Cycle with respect to Maturation. The statistical values obtained by Group 'C', 'D', 'E' and 'F' in Pre & Post Tests with 'Yes' replies with respect to Menstrual Cycle are 00 & 00, 00 & 00, 01 & 01, and 07 & 07 respectively. The statistical values obtained by Group 'C', 'D', 'E' and 'F' in Pre & Post Tests with 'No' replies are 10 & 10, 10 & 10, 09 & 09, and 03 & 03 respectively.

Discussion of Findings

It has been hypothesized that, there is no significant effect found in Menstrual Cycle with respect to Maturation due to specific training program amongst 11, 12 and 13 years age rural girls Group (C, D and E). The results revealed (Table 1) that, The statistical values obtained by Group 'C', 'D' and 'E' in Pre & Post Tests with 'Yes' replies with respect to Menstrual Cycle are 00 & 00, 00 & 00 and 01 & 01 respectively. The statistical values obtained by Group 'C', 'D' and 'E' in Pre & Post Tests with 'No' replies are 10 & 10, 10 & 10 and 09 & 09 respectively. This numerical data reveals that, specific training program did not affect the menstrual cycles with respect to Maturation of 11, 12 and 13 years old rural girls because at the age of 11 to 13 the menstrual cycle is absent amongst these rural girls, Particularly from Ranjani village of Jalna district. Vincenzo De Sanctis, Sergio Bernasconi, et.al. (2014) supported the results of this study, in his study the girls' mean age was 17.1 years (SD 1.4 years) and the mean age at menarche was 12.4 years (SD 1.3 years); in this study research investigator also

reveals that, in the 11 and 12 years age old rural girls the menstrual cycle was absent. But amongst 14 Years age rural girls Group (F) the results revealed (Table 1) that, The statistical values obtained by Group 'F', through Pre & Post Tests with respect to menstrual cycle 'Yes' replies are 07 & 07, respectively and 'No' replies are 03 & 03 respectively. This numerical data reveals that, specific training program did not affect the menstrual cycles with respect to Maturation of 14 years old rural girls. Though at the age of 14 the menstrual cycle is majorly present amongst these rural girls, but because of the training program there is no change in the menstrual cycles of these rural girls, Particularly from Ranjani village of Jalna district. Jr Thorpe (2015) supported this result and stated that the maturation level of human female is getting in the earlier ages in this era of mankind, he stated that, the normal age of first period in the Western world has been getting lower, from an average of 17 over a century ago to around 13 today, through the finding of this result we can say the same situation is occurring in the eastern world too. This study reveals that, the menstrual cycles are appeared in the age of 13 to 14 years old rural girls of Jalna District particularly from Ranjani village.

Conclusion

- With respect to Maturation the Menstrual Cycle has been seen to some extent amongst the 13 years age rural girls.
- With respect to Maturation the Menstrual Cycle has been seen to most extent amongst the 14 years age rural girls.
- Statically no significant effect found was in Maturation due to specific

training program on rural girls amongst 13 Years age Group 'E'. Thus the Null Hypothesis is accepted. But very few rural girls of 13 years age, were found that their menstrual cycle has been started.

- Statically no significant effect found in Maturation due to specific training program on rural girls 14 Years age Group 'F'. Thus the Null Hypothesis is accepted. Approximately all rural girls of 14 years age, were found that their

menstrual cycle have been started in regular basis.

Recommendations

- Through this study researcher can recommend that the specific training programme is suitable for the girls during the menstruation cycle because during the study no bad effects was found on maturation with respect to menstruation cycles amongst the selected population.

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Yoga in Modern Medicine

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Abstract

Prevention is better than cure and yoga is widely recognized as an effective tool inculcating a healthy life style thus acting as vaccine against life style related disorders. As Yoga Chikitsa or Medical Yoga Therapy, ideally, is an individualized, personalized and holistic approach that takes into account not only the patient's mind, body but as part of patient's individualized treatment plan. It is different from a yoga class, starts with detailed history and physical examination and assessment from the health practitioner. The studies demonstrate that yoga intervention produced predictable changes in neurodegenerative disorders and neurobehavioral Science.

Key Words : Yoga Chikitsa, GABA, GSH, Telomeres, Practices

Introduction:

Yoga is amazing contribution of exploiting various bodily postures and regulation of oxygen consumption postures and regulation of oxygen consumption during the processes forms the basis of the age long success of this clan as a popular traditional medical technique.

Yoga is an important area for service as well as research in both clinical and pre-clinical departments over longer. It is popularized in relation to mental health and neuroscience.

Recognition of yoga as therapeutic method in modern medicine has started with the pioneering scientific research on yoga by Swami Kuvalyananda's work in the 1920s who published first experimental research in physiological effect of Asanas, Pranayama and meditation in Western biomedical terms. Subsequently, the Swami Vivekananda Yoga Research Institute near Bangalore (SVYASA) made Yoga therapy an accepted and wide spread one.

In 1999 the National Institutes of Health created the National centre of complementary and Alternative medicine (NCCAM). One of the major branches of complementary and alternative medicine is yoga with in mind-body intervention.

Incorporation of yoga in modern medicinal practice has identified by National Institute of Mental Health and Neuro Sciences (NIMHANS) setup advanced center with MOU and collaboration with Morarji Desai National Institute of Yoga in 2007. This led to opening of regular yoga service for the patients.

International acceptance of this trend resulted in formation of Yoga therapy centers, integration of yoga in hospital programs, professional trainings of staff for yoga therapy, Associations of Yoga Therapists, (India and abroad) publication of professional and scientific literature has made knowledge in this field widely available.

Recent-Research suggests that yoga has beneficial effects in mitigating the impact

of Neurodegenerative Disorders example include dementias degenerative muscle disorders, acquired brain damage related deficits, developmental disorders.

The theme was to examine the current state of medicalize Yoga and its application from a mental health perspective.

a) Medical Yoga Prescription :

It is considered the use of yoga practices for the prevention and potential treatment of medical conditions. It also incorporates appropriate, breathy techniques, mindfulness, meditation and study in order to achieve the maximum benefits.

As Medical Yoga therapy or Yoga Chikitsa, different from a yoga class, starts with a detailed history and physical examination and assessment from the health practitioner.

The ideal medical yoga prescription includes the yogic practices of breathing techniques, bodily postures, meditation techniques and self reflection/study, a healthy nourishing diet, reducing substances such as caffeine, tobacco, drugs and alcohol healthy sleep hygiene and appropriate support, which may include family, spouse, children, friends and or support groups.

b) Neurotransmitters and Yoga :

Yoga practices can increase multiple neurotransmitters and hormones such as GABA is one of the body's chief inhibitory neurotransmitters and acts an important player in the body's response to stress, fear, depression, anxiety and sleep regulation. Lower than normal levels of GABA in the brain have been associated with schizophrenia, depression, anxiety, post-traumatic stress disorders, and epilepsy and sleep disorders.

Multiple studies have shown that the practice of yoga and meditation may work in increasing GABA levels in the brain.

c) Telomeres and Yoga :

As meditation, mindfulness practices and yoga may work to keep our minds and bodies potentially stabilizing and even lengthening telomeres (end part chromosome).

Telomeres are small, repetitive and found at the end of chromosomes which protect the chromosome from deterioration and cell death.

As they shorten, proceeds with cell death, premature aging-related diseases including cardiovascular disease, stroke, obesity, Alzheimer's.

In 2008, Dean Ornish found a significant association between comprehensive lifestyle (including Yoga, Meditation, breathing, Stress Management and a healthy whole-food, plant based diet) increased telomerase activity in human peripheral blood mononuclear cells.

d) DNA and Yoga :

Regular practice of yoga correlating the study upon improvement mechanism of the antioxidant acting of glutathione status of body.

Glutathione (GSH) by nature is water soluble tripeptide found in all cells of the body, inside body, due to several endogenous and exogenous factors, oxidative damage to DNA resulting causes various necrotic and metabolic disorders including cancer.

Practicing pranayama every day in a routine manner not only increases the capacity of lungs but also increases the oxygen supply to the body which

positively impacts upon the production of ATP in mitochondria (most important requirement for the synthesis of endogenous Glutathione is ATP)

Result:

Yoga practices have been shown to be beneficial as Yoga Chikitsa in the treatment of a wide variety of psychological and medical conditions such as depression, anxiety, post-traumatic stress disorder, hypertension, cardiovascular disease musculoskeletal, chronic pain, balance problem because yoga has been found to be effective in reducing autonomic arousal and in counteracting the factors, which are known to affect stress disorders.

Clinical Implication:

Yoga techniques are associated with:

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- Decrease in Sympathetic activity with a corresponding increase in parasympathetic activity.
- Tone down mal-adoptive nervous system arousal and can be helpful practice for patients with post-traumatic stress disorder (PTSD)
- Effects on cognitive activity and Cerebral neurophysiology with release of Serotonin for 'feel good'
- Yoga can increase brain GABA levels and optimizes the symptoms of panic, anxiety, obsession, depression which helps in an individual's ability to calm down, relax and sleep.

Conclusion:

The Yoga is thus an alternative medicine in both preventive and curative therapy with high yielding and relatively low risk improvement to overall health.

A Study of Incentive Motivation of Basketball and Volleyball Players Participating in University Level Tournaments

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Abstract

Sports like basketball and volleyball have been increasingly organized and regulated very critically now-a-days. Moreover, currently, these sports have been going further from the physical aspect to the mental or psychological aspect of competing. Presently sports psychologists are conducting research to provide information in the ways that psychological well-being and vigorous physical activity are related. An efficient player with good physique, fitness, mastery over skills and good psychological qualities can achieve great results. In view of this the present study has been carried out to compare the incentive motivation of basketball and volleyball players participating in university level tournaments. From the study results it is evident that incentive motivation of the basketball players is relatively higher as compared to the volleyball players.

Key Words: Basketball, Volleyball, psychological qualities, incentive motivation

1.0 Introduction

Sports have been increasingly organized and regulated from the time of the Ancient Olympics up to the present century. However, in the current millennium, sports have been going further from the physical aspect to the mental or psychological aspect of competing. Psychology has made its contribution for improving sports performance further. Today, the main job of a sports psychologist is to recognize how participation in sport exercise and physical activity enhances a person's development. Currently, sport and exercise psychologists have begun to research and provide information in the ways that psychological well-being and vigorous physical activity are related. Not only that, but also, sport psychologists are beginning to consider exercise to be a therapeutic addition to healthy mental adjustment.

In modern competitive sports, the incentive motivation of sportsmen has

affected their performance. As the physical load during the training of sportsmen for international competitions is also intensified, the sportsmen, like other athletes are anxiety-prone while participating in competitive sports. Research studies in the literature indicate a high relationship between the concept a person has off himself and his achievement. The major premises underlying this information are that the manner in which a person sees himself is a product of how others view him and these perceptions are the major products in his various achievements behaviours. Due to advancement of scientific methods, techniques and tactics, every player of above selected games requires certain specific physical, physiological and psychological qualities and all these qualities are highly required without which it is impossible to play efficiently. An efficient player with good physique, fitness and mastery over the all skills but

lacking in psychological qualities will be unable to play effectively for longer duration. Hence, in view of the above, this study has been carried out to compare the incentive motivation of basketball and volleyball players participating in university level tournaments.

Research Methodology

Selection of subjects

To conduct this study, 150 men basketball (75 subjects) and volleyball (75 subjects) players those who had participated/represented Rashtasant Tukadoji Maharaj Nagpur University, Nagpur were selected. The age of the subjects ranged between 18 and 25 years. The design of the study will be random group design.

Criterion Measure

The incentive Motivation Scores of the Subjects will be obtained, by using Incentive Motivation Inventory developed by Aldermen and N.L. Wood. It is a test of player's strength of attraction for incentive operating within goal oriented situations. Incentive motivation test can provide information on the athlete's major reason for participating in particular sports. Motivation to participate in competitive sports is classified into seven major incentive systems, via, Excellence, Power, Sensation, Independence, Prestige,

Aggression and Affiliation. The subjects were provided with the inventory and were asked to answer all the 70 items carefully and before scoring it was observed that all the respondents have filled in the answers.

Collection and Statistical Analysis of the Data

The necessary data related with the study was collected 24 hours prior to the start of the competition in respective games. To compare the Incentive Motivation of the Basketball and Volleyball players, all players an independent 't' test was used. The level of significance was set of 0.05 level of confidence.

Results and Discussion

The following section provides the details of the results obtained for the incentive motivation aspect of the men Basketball and Volleyball players. The incentive motivation of the sportspersons was studied on different scales, which include excellence, power, sensation, independence, success, aggression and affiliation.

Incentive Motivation – Excellence Scale

Excellence is the quality of being exceptionally good in fineness, superiority or a special feature or quality that confers superiority in distinction, merit or perfection.

Table 1: Incentive motivation test scores – Excellence Scale

Games	Mean	± SD	Min	Max	MD	t	P
Basketball	24.2	± 3.1	16	31	3.1	3.021	< 0.05
Volleyball	20.1	± 2.2	14	27			

SD: Standard deviation; **Min:** Minimum; **Max:** Maximum; **MD:** Mean Deviation; **t:** T ratio; **P:** Probability

Above Table 1 presents comparative assessment of the incentive motivation test

scores-excellence scale of the basketball and volleyball players. The results

indicated that mean excellence scale score of the basketball players is 24.2 ± 3.1 . Overall variation in the excellence scale was observed to be 16 to 31. However mean excellence scale score of the volleyball players is 20.1 ± 2.2 . Overall variation in the excellence scale was observed to be 14 to 27.

The power scale is defined as the ability to do or act; this is also seen as the influence of an individual or group upon another. The aspect of power is perceived as the opportunities for sports persons to influence, change, and control the opinions and attitudes other people (primarily other sports persons) have towards them.

Incentive motivation – Power Dimension

Table 2: Incentive motivation test scores – Power Scale

Games	Mean	± SD	Min	Max	MD	t	P
Basketball	25.5	± 2.1	15	31	2.2	2.723	<0.05
Volleyball	21.3	± 3.2	14	30			

SD: Standard deviation; **Min:** Minimum; **Max:** Maximum; **MD:** Mean Deviation; **t:** T ratio; **P:** Probability

score of the volleyball players is 21.3 ± 3.2 . Overall variation in the power scale was observed to be 14 to 30.

Above Table 2 presents comparative assessment of the incentive motivation test scores-power scale of the basketball and volleyball players. The results indicated that mean power scale score of the basketball players is 25.5 ± 2.1 . Overall variation in the power scale was observed to be 15 to 31. However mean power scale

Incentive motivation – Sensation scale

Sensation refers to the irreducible sensory experience, such as might occur when a sensory receptor is stimulated by sensory experiences primarily in terms of novelty, uncertainty, and complexity.

Table 3: Incentive motivation test scores for Sensation scale

Games	Mean	± SD	Min	Max	MD	t	P
Basketball	25.7	± 3.2	16	30	1.5	0.957	Not Significant
Volleyball	24.2	± 3.1	16	28			

SD: Standard deviation; **Min:** Minimum; **Max:** Maximum; **MD:** Mean Deviation; **t:** T ratio; **P:** Probability

Above Table 3 presents comparative assessment of the incentive motivation test scores-sensation scale of the basketball and volleyball players. The results indicated that mean sensation scale score

of the basketball players is 25.7 ± 3.2 . Overall variation in the sensation scale was observed to be 16 to 30. However mean sensation scale score of the volleyball players is 24.2 ± 3.1 . Overall

variation in the sensation scale was observed to be 16 to 28.

Incentive motivation – Independence scale

Independence is a state of being independent, as for support, which could be physical or emotional. The persons who are independent are in a state of being

determined, influenced, or controlled by their own wishes. The higher degree of independence has beneficial effect on the performance of the individual. Since the study sample represents men participating in different sports, this factor of incentive motivation reveals the state of players in terms of their dependency or different needs.

Table 4: Incentive motivation test scores for Independence scale

Games	Mean	± SD	Min	Max	MD	t	P
Basketball	27.2	± 3.1	17	33	0.70	1.012	Not Significant
Volleyball	26.5	± 3.7	18	32			

SD: Standard deviation; **Min:** Minimum; **Max:** Maximum; **MD:** Mean Deviation; **t:** T ratio; **P:** Probability

Above Table 4 presents comparative assessment of the incentive motivation test scores-independence scale of the basketball and volleyball players. The results indicated that mean independence scale score of the basketball players is 27.2± 3.1. Overall variation in the independence scale was observed to be 17 to 33. However mean independence scale score of the volleyball players is 26.5± 3.7. Overall variation in the independence scale was observed to be 18 to 32.

Incentive motivation – Success scale

Success can be considered as achievement of a goal. However, in sports field, the concept of success can be very personal (perceived success) and is not always dependent on winning a competition or obtaining a very high standard of performance. This perceived success is the performer's own assessment of whether he or she has achieved goals

Table 5: Incentive motivation test scores for Success scale

Games	Mean	± SD	Min	Max	MD	t	P
Basketball	23.2	± 3.0	17	30	0.40	0.341	Not Significant
Volleyball	23.6	± 2.4	15	32			

SD: Standard deviation; **Min:** Minimum; **Max:** Maximum; **MD:** Mean Deviation; **t:** T ratio; **P:** Probability

Above Table 5 presents comparative assessment of the incentive motivation test scores-success scale of the basketball and

volleyball players. The results indicated that mean success scale score of the basketball players is 23.2± 3.0. Overall

variation in the success scale was observed to be 17 to 30. However mean success scale score of the volleyball players is

23.6± 2.4. Overall variation in the success scale was observed to be 15 to 32.

Incentive motivation – Aggression scale

Table 6: Incentive motivation test scores for aggression scale

Games	Mean	± SD	Min	Max	MD	t	P
Basketball	24.4	± 3.38	14	31	-2.26	-3.628	<0.05
Volleyball	26.7	± 3.92	18	34			

SD: Standard deviation; **Min:** Minimum; **Max:** Maximum; **MD:** Mean Deviation; **t:** T ratio; **P:** Probability

Above Table 6 presents comparative assessment of the incentive motivation test scores-aggression scale of the basketball and volleyball players. The results indicated that mean aggression scale score of the basketball players is 24.4± 3.38. Overall variation in the aggression scale was observed to be 14 to 31. However mean aggression scale score of the volleyball players is 26.7± 3.92. Overall variation in the aggression scale was observed to be 18 to 34.

Incentive motivation – Affiliation scale

Affiliation concerns with any factor that motivates an individual to join a group. Affiliation incentives include opportunities to make friends and to satisfy the need to feel wanted. Much of the success of sports professionals depends on their ability to satisfy the affiliation incentive of their members.

Table 7: Incentive motivation test scores for affiliation scale

Games	Mean	± SD	Min	Max	MD	t	P
Basketball	25.4	± 2.2	15	31	3.3	2.037	<0.05
Volleyball	22.1	± 2.9	16	30			

SD: Standard deviation; **Min:** Minimum; **Max:** Maximum; **MD:** Mean Deviation; **t:** T ratio; **P:** Probability

Above Table 7 presents comparative assessment of the incentive motivation test scores-affiliation scale of the basketball and volleyball players. The results indicated that mean affiliation scale score of the basketball players is 25.4± 2.2. Overall variation in the affiliation scale was observed to be 15 to 31. However

mean affiliation scale score of the volleyball players is 22.1± 2.9. Overall variation in the affiliation scale was observed to be 16 to 30.

Conclusions

Incentive Motivation – Excellence Scale

- From the study results it is evident that incentive motivation test scores-excellence scale of the basketball players is ($P < 0.05$) is higher as compared to the volleyball players.

Incentive motivation – Power Dimension

- From the study results it is evident that incentive motivation test scores-power scale of the basketball players is ($P < 0.05$) is higher as compared to the volleyball players.

Incentive motivation – Sensation scale

- From the study results it is evident that incentive motivation test scores-sensation scale of the basketball players is ($P < 0.05$) is higher as compared to the volleyball players.

Incentive motivation – Independence scale

- From the study results it is evident that there is no significant difference in the

incentive motivation test scores-independence scale of the basketball players and volleyball players.

Incentive motivation – Success scale

- From the study results it is evident that there is no significant difference in the incentive motivation test scores-success scale of the basketball players and volleyball players.

Incentive motivation – Aggression scale

- From the study results it is evident that incentive motivation test scores-aggression scale of the volleyball players is ($P < 0.05$) is higher as compared to the basketball players.

Incentive motivation – Affiliation scale

- From the study results it is evident that incentive motivation test scores-affiliation scale of the basketball players is ($P < 0.05$) is better as compared to the volleyball players.

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Vital Role of Psychology to Extract Quality Performance from Players in Kho-Kho Game

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Abstract

Kho- Kho an ancient game of India. While working in the Kho-Kho field it is notice that many psychological things are very important. Psychological tips are significant to get extraordinary result. Study of body posture, rules and regulations, official's way of working etc can be applied to extract quality performances of the kho-kho players.

Key Words: Kho-Kho, psychological tips, performance

Introduction: Kho- Kho an ancient game of India played in every part of India. Controlled sprinting , dodging , diving , post dive, taping , covering , post turning are a few skills exhibited during the game. The game can be played on any surface. While performing psychological tips are important to get extraordinary result.

Review: Relationship of anthropometric measurements, physiological variables and physical fitness with the performance of collegiate Kho-Kho players is studied.

History of the game: At the very beginning Baroda hind Vijay Gymkhana, Akhil Maharashtra Sharirik Mandal, Hanuman Vyayam Prasarak Mandal, Kho-Kho federation of India took efforts to promote this game and framing rules and regulation step by step, and demonstrate this game outside the country.

Method:

Sports, wear, sports kit, body posture, regular practices, knowledge of the rules and regulations, study of the officials way of working, venue, spectators, opponent study,

body language, advantage of lie appeal, skill, techniques, tactic and strategies, these are some important points can make strong impact on opponent psychologically, so these methods can be applied to extract quality performances of the kho-kho players.

Result:

Kho-Kho coaches and fraternity learn the above important points through their experience on field and accordingly use the above methodology which can extract good performance from the players.

Discussion : While working in the Kho-Kho field it is notice that many psychological things are very very important in the game Kho-Kho which should be properly discussed among coaches ,sports fraternity and players so that improvement in the knowledge will take place.

Recommendation: Along with high level physical fitness and practice Kho-Kho game, emphasis on the above methodology is very important and also it is recommended for using practically on Kho-kho field.

Conclusion: It is observed that in the region or any part of India Kho-Kho game is played. Many players practicing regularly and taking part in University, school, National and Inter-National level, more lacking part is no qualified coaches are

working, that is why the above points are neglected in the field. So it is important that these points are made known to the players and used so that there will be drastic change in the performance of Kho-Kho players.

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A Study of Impact of Yogic Exercises on Personality of Collegiate Level Sportspersons

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Abstract

The personality development of the college going students is very important as they are the future leaders of the nation. Though modern life has removed them from nature's rhythmic influence, the new edge education has made them mentally stronger. Although physical fitness and strength are important, the personality development also needs adequate attention. For this Yoga has been a very ideal way to follow and practice regularly. In the backdrop of above, an attempt has been made in this study to assess the impact of yogic exercises on the personality variables of the collegiate level students. The standard research methodology has been followed to ensure reliable and valid data collection. Overall, the statistical analysis of the data has showed that there is positive impact of yoga training on personality development of the college going students.

Key Words: *Personality development, Students, Yoga, Positive impact of yoga*

1.0 Introduction

Modern life has removed man from nature's rhythmic influence and the collegiate level students are not an exception. The internal rhythms the inherent clock-work like nature of the nervous and endocrine systems has become imbalanced through the effect of stress, tension resulting feeling of discomfort and lack of well-being and leading to inappropriate personality development. However, many have mentioned that if we follow physical exercise and yogic exercises for promoting physical fitness, it will also help in improving the overall personality of an individual. The term exercise is often applied to asana but asana should never be confused with an exercise. The work exercise gives us an idea of quick and

force movement of the body or its parts and repeated action which usually lead to an exertion, tension and fatigue. Asanas on the other hand is practice slowly and steadily which bring about physical and mental relaxation. Therefore, the purpose of body building is absent in asanas.

Generally, fitness means being in good physical condition and being able to function at one's best level. But more than the body is involved. Total fitness for living necessarily involves spiritual, mental, emotional and social, as well as physical qualities. Each is dependent upon and affected by the other. Most people by mistake, consider strength as the sole basis of fitness. Strength is important but there is, however, no fitness that solely rests on muscle strength with adequate strength only we can resist disease, postpone

fatigue and have enough vigour and vitality in order to perform our life routines efficiently. For this Yoga has been a very ideal way to follow and practice regularly.

Yoga is art of living and yogasanas are the scientific procedure. This is the only exercise which affects in most parts of the body. The health of our body and mind depends on the soundness of the health of our internal organs the heart, lungs, digestive system, glands, nerves system, muscular system etc. Yoga exercises gently tone and shape the body, improve posture, flexibility and contribute to feeling of well-being promotion to positive health, to the professional in increasing their skills and improve the quality of life. Yogic training is a system of psycho-physical training that has its goal the uncovering of mystical consciousness. Yoga is universal, in that and it can be practiced by followers of any religion or belief, yet it emphasizes exact discipline which both springs from yoga is thus integral subject which takes into consideration man as a whole. Yoga is training for the total integration of human personality. Thus, in view of the above, researcher has made an attempt to study the impact of yogic exercises on the personality variables of the collegiate level students.

Research Methodology

Design of Study and Selection of Subject

The design of the study was random group design. The subjects were selected from the Nagpur District. In all total 100 subjects were selected. Out of this 50 subjects formed one group i.e.

Experimental Group, while remaining 50 subjects formed the Control Group.

Yogic Training

Yogic training is a system of psycho-physical training that has its goal the uncovering of mystical consciousness. Yoga conveys the idea of harnessing oneself to a discipline and at the same time unifying the parts of the self with something greater and transcendental a concept which may be expressed as god. In this study, following yogic exercises were conducted, which are Bhujangasana, Dhanurasna, Sarvangasan, Salabasana, Viparithakarani, Matsyedrasana, Halasana, and Paschimotasana.

Psychological Tests Used

Personality traits of the collegiate level students were determined by using personality scale constructed by Dr. Agyajit Singh and Dr. H.S Cheema Patiala of NS SAI.

Tester's Reliability and Reliability of Tests

To ensure that the investigator is well versed with techniques of conducting the tests, the investigator along with the assistants had a number of practice sessions in testing procedure under the guidance of experts in this field. The tester reliability was evaluated together with reliability of tests. A Pearson's product moment correlation was computed between the two measures of each variable and these reliability coefficients.

Collection of Data

The data was collected for each variable. The tests used were explained to the subjects prior to their administration. Data

was collected for each subject personally by the research scholar.

independent 't' test procedure was used to assess the difference in mean values obtained from the subjects (Experimental and Control). All the data analyses were carried out with the help of SPSS 18.0 Software. The significance level was 0.05 (or equivalently, 5%).

Statistical techniques

The data characteristics (descriptive statistics) such as Mean, Standard deviation, etc. were determined. An

Analysis of Data and Results of the Study

Personality trait - Sociability

Table No. 1: Sociability of the collegiate level students

		Mean	SD	MD	t' Value	P Value
Yoga Practitioners	Before	8.8	1.1	1.5	2.021	<0.05
	After	10.3	1.2			
Non Practitioners	Before	8.6	1.2	0.2	0.037	NS
	After	8.8	1.1			

SD: Standard Deviation; **MD:** Mean Difference

Table 1 shows results of comparative assessment of sociability of yoga practitioners and non-yoga practitioners of the study area. Results indicated that before yoga training yoga practitioners have average sociability score 8.8±1.1

whereas after getting yoga training there average sociability score was 10.3±1.2. However before getting yoga training non-yoga practitioners have average sociability score 8.6±1.2, while after getting training average sociability score was 8.8±1.1.

Personality trait - Dominance

Table No. 2: Dominance of the collegiate level students

		Mean	SD	MD	t' Value	P Value
Yoga Practitioners	Before	10.3	1.5	2.8	2.081	<0.05
	After	13.1	2.2			
Non Practitioners	Before	9.5	1.1	0.2	0.064	NS
	After	9.3	1.1			

SD: Standard Deviation; **MD:** Mean Difference

Table 2 shows results of comparative assessment of dominance of yoga practitioners and non-yoga practitioners of the study area. Results indicated that before yoga training yoga practitioners have average dominance score 10.3±1.5

whereas after getting yoga training there average dominance score was 13.1±2.2. However before getting yoga training non-yoga practitioners had average dominance score 9.5±1.1, while after getting training average dominance score was 9.3±1.1.

Personality trait - Extra-version

Table No. 3: Extra-version of the collegiate level students

		Mean	SD	MD	t' Value	P Value
Yoga Practitioners	Before	8.8	1.2	-2.1	-1.339	NS
	After	10.9	1.1			
Non Practitioners	Before	10.1	1.4	-0.1	-0.317	NS
	After	10.2	1.3			

SD: Standard Deviation; **MD:** Mean Difference

Table 3 shows results of comparative assessment of extra-version of yoga practitioners and non-yoga practitioners of the study area. Results indicated that before yoga training yoga practitioners had average extra-version score 8.8 ± 1.2 whereas after getting yoga training there

average extra-version score was 10.9 ± 1.1 . However before getting yoga training non-yoga practitioners had average extra-version score 10.1 ± 1.4 , while after getting training there average extraversion score was 10.2 ± 1.3 .

Personality trait - Conventionality

Table No. 4: Conventionality of the collegiate level students

		Mean	SD	MD	t' Value	P Value
Yoga Practitioners	Before	8.1	1.3	2.5	2.008	<0.05
	After	10.6	1.3			
Non Practitioners	Before	8.4	1.1	-0.2	-0.283	NS
	After	8.6	1.3			

SD: Standard Deviation; **MD:** Mean Difference

Table 4 shows results of comparative assessment of conventionality of yoga practitioners and non-yoga practitioners of the study area. Results indicated that before yoga training yoga practitioners had average conventionality score 8.1 ± 1.3 whereas after getting yoga training there average conventionality score was 10.6 ± 1.3 . However before getting yoga training non-yoga practitioners had average conventionality score 8.4 ± 1.1 , while after getting training there average conventionality score was 8.6 ± 1.3 .

Conclusions

Personality trait - Sociability

- From the statistical analysis of the data it is concluded that there is positive impact of yoga training on sociability of yoga practitioners and non-practioners.

Personality trait - Dominance

- From the statistical analysis of the data it is concluded that there is positive impact of yoga training on dominance

of yoga practitioners and non-practionters.

Personality trait - Extra-version

- From the statistical analysis of the data it is concluded that there is positive impact of yoga training on extraversion of yoga practitioners and non-practionters.

Personality trait - Conventionality

- From the statistical analysis of the data it is concluded that there is positive impact of yoga training on conventionality of yoga practitioners and non-practionters.

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Impact of Yoga Package on Frustration of Sr. Sec. School Students

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Introduction

Stress, frustration, anxiety, anger, conflict etc. are increased from few decades because of so much competition and choices are available in front of each individual. Choices are available but there is no proper guidance, most of the people are moving blindly there is no proper spiritual guidance also. As students are growing personalities. Student's life is important, transitional phase of life and where there is a transition there is the imbalance. Imbalance leads to disharmony. So that in yogic terminology we can say student life is a phase of imbalance in manah shakti and prana shakti. So many psychological & physical problems is the result of imbalance between manah shakti and prana shakti. Excess energy at mental and pranic level causes withdrawal and other complications like anxiety, depression etc. If, any student having excess prana energy and not enough mental energy he or she will become disruptive and destructive. In frustration individual's desired goal is blocked.

Yoga is the need, to solve for today's world problems. Yoga is a process to get peace and happiness in life and the ultimate result is liberation. In the process of yoga we automatically make control over the mind and body, yoga is an ancient art and science that began in our country over thousands of years ago. It is a process in systematic way for spiritual unfolding, it starts from self and end to the self which is supreme. It trained

to mind to make focus on a goal of life. Develop self esteem for different situations, gives an attitude to stay with you everywhere in any situations.

Today's Scenario of Education

Now a day there is more education but there is more greed, selfishness, poverty, corruption and lack of sincerity and integrity because education is synonyms of examinations, empowerment and employment. There is no ennoblement, emancipation, and evolution and equilibrium between materiality and spirituality. Absence of holistic applications and an imbalance growth of knowledge, it deals only with external world around us and not related to the inner self of individual. Present education system, is directed towards only superficial surface achievements. It is designed for money making and promotes jealous, heartened, rivalry instead of kindness, compassion, cooperation and honesty. Then what exactly is the true meaning of education?

Frustration is a component of stress. This is like a blocker between the way of individual and the goal. Achieving of the goal is not always smooth, when blocker or barrier comes in the way to getting goal or fulfilling the set desires it is frustration. From birth to death frustration is inevitable in our life. We have a number of desires, which are not fulfilled due to certain obstacles. There is more or less minor frustration, which is encountered every day-a student missed the

bus causing a late arrival in school; parents is ill, the teacher is ill or not present in school, delaying in school assignment.

Psychologists defined the term frustration in a different way. Frustration is a hypothetical state.

Freud (1920) said frustration is occurred when ever pleasure seeking or pain avoiding behaviour was blocked.

Gilmar, B. Vonhaller (1966) said frustration is the state of an organism resulting when satisfaction of motivated behaviour is made difficult or impossible when goal is blocked.

Chuaplin (1979) defined frustration, it is blockage or thwarting of a goal directed behaviour anxiety and heightened sympathetic activities resulting from blockage or thwarting.

Frustration is a problem response behavior. This can be positive or negative either it can be internal or external. Frustration is a, fact with act, of restoration, until situation or treatment can revert at the individuals, own hand, without no worry. Frustration, fact restoration, with useful solution for situation, or treatment can reveal an attempt to the individuals own problems without no worry.

Purpose

The purpose of the study was to examine the impact of yoga package on frustration of school students. A secondary purpose of this study was to determine yoga as alternative therapy for stress related components as frustration and its complications. The study is to determine the effective use of yoga in education would help children to manage

their frustration and other stress related problems.

Objective Of The Study

To study the effect of yoga practices on frustrated students and prepare a yoga package for students psychological problems.

Significance Of The Study

The school students are the pillars of this world. As they, will become the leader & developer of the nation. Their excellence in all fields of life is, needed. Practice of yoga is very essential for them. Present modern time is the time where unknowingly psychological problems comes in front of students because of surrounding environment and so many problems which can be psychological, physical, emotional, behavioural etc make bother to students carriers.

The yoga package will make students to understood their problem and provide the solution for the problem.

Limitation of the study

1. All subjects were students of Sr. Sec. School.
2. The researcher limited her study to the Sr. Sec. School students.
3. Researcher limited her study to Bhopal city.
4. In yoga practice there was only practical aspect of yoga.
5. There was no proper theory class about yoga.

Definitions of Yoga

Brudhyajnavalkasmruti says “Yoga teaches us to realize our own problems, our draw backs our wrong ideas & views our faulty attitude wrong concepts”.

Yogavashishtha says "Yoga is a master key to solve problems of wrongly life". Yoga comes as calm down skilful method submit the mind.

Gita advises us to work with an attitude of total surrender to consciousness, purifying the process of our action. Also "Samtwan Yoga Uchyte" "Bhagwat Gita ii/50. "Equanimity of mind"

Y – Youthfulness

O – Organizing all systems of body and mind

G – Guarantee for health, happiness, harmony and success

A – Analysis for self and society

Yoga is youthfulness, organizing all different system of body and mind, guarantee for health, happiness, harmony with success and analysis for self and society.

Research methodology

Variable of study

1. Independent Variable: Yoga 2. Dependent variable: Frustration

Sample

The sample of the study covered students from sr. sec. schools of Bhopal in the age range 15 to 17 years. This sample had been collected from sr. sec. students before and after yoga practice.

Table no. 1.1

group Pre-test, Post-test

Pre test	Intervention	Post test
200	Yoga practice	200

Test and tools

Bisht Battery of Stress Scales (BBSS) by Abha Rani Bisht (1987) and its manual. The study was conducted on sr. sec school students of Bhopal. Bisht Battery of Stress Scale (BBSS) was administered on students with ages ranging from 15 to 17 years. BBSS was administered to identify stress and its components. This test was developed for the measurement of 13 types of stress. These scales were consisted of different items. Each item is of statement type (closed) to which students were to answer by ticking their option prescribed on the answer sheet. The students were assembled in a hall and made to sit in rows. Booklets containing statement items along with answer sheets were distributed to each student. Instructions were delivered by the investigator, statements were written in Hindi. Meaning of difficult words was also explained. The students were told to finish their test within given time.

DESIGN OF THE STUDY

To fulfill the aim of the study a methodology has been designed. This study consists of comparing a group between two different sets of conditions. This design consist a special one group pre and post data design.

The process of the design is illustrated by the following table.

Design is one

There is somewhat more structure, there is a single selected group under observation with measurement being done before applying the experimental treatment and then measuring after. For present study one group procedure of experimental method has been used because it involves data collection at pre and post basis of yoga practice.

Intervention

A yoga package (asana + pranayama +

meditation + mudra + kriya) was given to students.

Statistical technique

Mean and z test was used for testing the hypothesis and to analyze the data.

Result

Hypothesis -1.0: There is no significant effect of Yoga package on frustration of Sr. Sec. School students.

Table 1.2

Scores of effect of Yoga package on frustration of Sr. Sec. School students.

Variable		No. of Students	Mean score before yoga package	Mean score after yoga package	Z Value	Inference
Frustration	Frequency	200	430.55	425.71	2.32	Significant
	Quantity		445.06	435.78	4.09	Significant

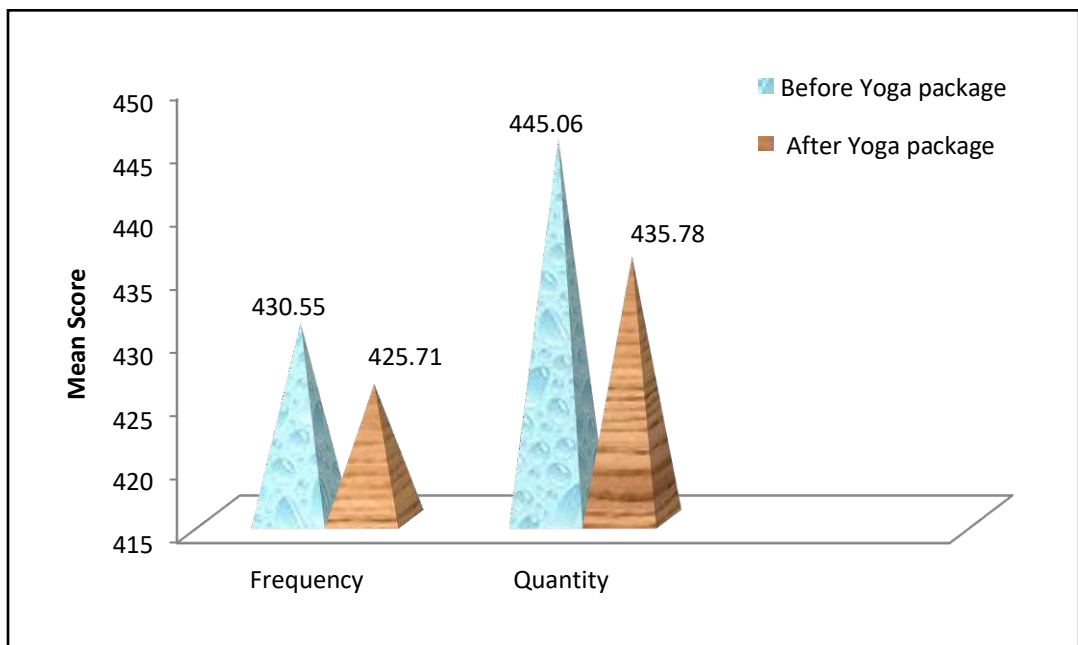


Figure 4.5: Effect of yoga package on frustration of Sr. Sec. School Students.

Table 4.5 reveals that mean scores of effect of yoga package on frustration of Sr. Sec. school students (N-200) before and after yoga package mean scores of frustration frequency are (430.55 and 425.71), frustration quantity (445.06 and 435.78). This shows that the before yoga package¹. students have more frustration (frequency, quantity) as compared to after yoga package. Z-value obtained is 2.32 & 4.09 which is². more than the critical value 1.96 and significant at $\alpha=0.05$. There is significant³. effect ($p>0.05$). The results indicate that the positive effect of yoga package on frustration of Sr. Sec. school students. Thus hypothesis 1.0 is rejected.

Result and Discussion

The present study observed significant change after yoga practice on frustration of school students. There was significant effect of yoga package seen on frustration, frequency and quantity of Sr. Sec. School students. Aim of research is to work on the finding that can be incorporated in the school education. Yoga could be incorporate

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to inculcate and enhance various psychological, emotional competences and efficiencies among students along with the present educational setup.

Recommendations

It is evident from the analysis that yoga practices are necessary for students facing psychological problem in their school time.

The study highlighted the need for yoga practice in schools.

There were changes found after the yoga practice so students should practice yoga on daily basis.

4. Practice of yoga can be applied for health promotion and to manage stress other problems.

Conclusion

It is evident that yoga package is helpful to manage frustration. The study shows significant decrease in frustration thus it is concluded that yoga practice is necessary to students to manage their psychological problems.

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Study of the Depression, Stress and Anxiety of Employees Working On the Computer

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Abstract

The purpose of the study was found out the depression, stress and anxiety on computer workers in Nagpur District. The researcher used survey research methodology for the study. In this research, the computer institute coming under the Nagpur district, as a source of data to the persons working on the private computer whose age was between 25-45 years old. In this research, 100 persons were selected as subjects. For the present study researcher had collected data from One Hundred persons with the help of purposive sampling method. The Anxiety, Depression and Stress Scale was constructed by Pallavi Bhatnagar, Megha Singh, Manoj Pandey, Sandhya, Amitabh to measure Anxiety, Depression and Stress among the persons working on the private computer. Analysis of the collected data was done with the help of different statistical tests. Raw Scores were converted to Standard Scores on the basis of the manual given for certified voting. In which standard table given in manual to replace Raw Score into Standard Score. The descriptive statistics, such as mean, standard deviation, Chi-Square Test etc. were determined from the collected data. All the data analysis was carried out with the help of Microsoft Excel 2007 Software. In view of the study results, it is observed that majority computer workers Moderate in the anxiety, depression and stress.

Key Words: Depression, Stress, Anxiety, Computer

Introduction:

Health is an integral element that everybody wants to achieve. The whole world wishes to be healthy and healthy, but due to illiteracy, impartiality and ignorance, people become victims of various kinds of diseases and problems whose impact falls on that person, the same country and all the world Falls. The present world has been entangled by these problems due to many inequalities. Because of the problems of atmospheric imbalance, the minds are facing very serious problems from the perspective of these

problems. The pieces of land in the present belief have been buried under the banner of humans. Due to which many problems have arisen.

If there is no mental and physical union, then many problems can be faced, such as anxiety, stress, depression etc. Poor health can increase the risk of stress, anxiety and depression. Stress, depression or anxiety is actually a disease in itself, along with the root of many diseases. Therefore, this paper has been done to learn about the depression, stress and anxiety of employees working on the computer.

Methodology:

The researcher used survey research methodology for the study. In this research, the computer institute coming under the Nagpur district, as a source of data to the persons working on the private computer. Whose age was between 25-45 years old. In this research, 100 persons were selected as subjects. For the present study researcher had collected data from One Hundred persons with the help of purposive sampling method. The Anxiety, Depression and Stress Scale was constructed by Pallavi Bhatnagar, Megha Singh, Manoj Pandey, Sandhya,

Amitabh to measure Anxiety, Depression and Stress among the persons working on the private computer.

Description of the scale:

The Anxiety, Depression and Stress Scale which was constructed and standardized by Pallavi Bhatnagar, Megha Singh, Manoj Pandey, Sandhya, Amitabh was used to assess the Anxiety, Depression and Stress of the subjects. It consisted of 48 items divided into three subscales and every statement has tow alternative answers ‘yes’ and ‘no’. Subscales which are:

Anxiety	Depression	Stress
19 items	15 items	14 items
1, 2, 7, 11, 14, 15, 18, 20, 21, 24, 25, 28, 32, 34, 35, 39, 41, 45, 47	3, 6, 9, 10, 13, 22, 26, 27, 31, 33, 37, 38, 42, 44, 48	4, 5, 8, 12, 16, 17, 19, 23, 29, 30, 36, 40, 43, 46

Statistical Analysis:

Analysis of the collected data was done with the help of different statistical tests. Raw Scores were converted to Standard Scores on the basis of the manual given for certified voting. In which standard table given in

manual to replace Raw Score into Standard Score. The descriptive statistics, such as mean, standard deviation, Chi-Square Test etc. were determined from the collected data. All the data analysis was carried out with the help of Microsoft Excel 2007 Software.

Table No. 1: Mean and Standard deviation of the anxiety, depression and stress among computer workers

Variables	Mean	Standard Deviation
Anxiety	8.95	2.95
Depression	8.15	2.41
Stress	7.95	2.25
ADS Total	25.05	5.70

From Table-1 it is clear that in computer workers the mean + standard deviation of anxiety is 8.95 +2.95. The mean + standard deviation of depression is 8.15 +2.41. The

mean + standard deviation of Stress is 7.95 +2.25 and the mean + standard deviation of total anxiety, depression and stress is 25.05 +5.70 respectively.

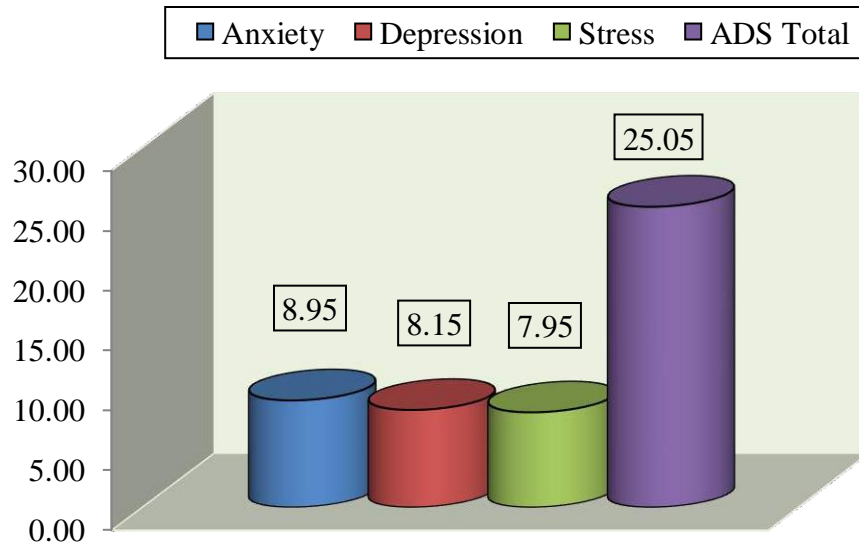


Figure No. 1: Figure showing the mean for anxiety, depression and stress level

Table No. 2: Showing Calculation of χ^2 For the Level of Anxiety

Category	Fo	Fe	χ^2
Normal	6	25	14.44
Mild	4	25	17.64
Moderate	48	25	21.16
Severe	42	25	11.56
Total Anxiety	100	χ^2	64.80

From the above table No.2 it is observed that the frequency observed for normal is 6, for mild it is 4, for Moderate it is 48 and for severe it is 42. The cell χ^2 for normal is 14.44, for mild it is 17.64, for moderate it is 21.16 and for severe it is 11.56. The total χ^2 for above given anxiety level is 64.80. The table value of χ^2 at 3 degree of freedom and

0.05 level of significance is 7.82. Because the obtained χ^2 is greater than the table value of χ^2 , it is concluded that the four frequencies differ from each other. Out of 100, 48 respondents moderate anxiety level. The observed frequencies for this anxiety level are shown in Figure 2.

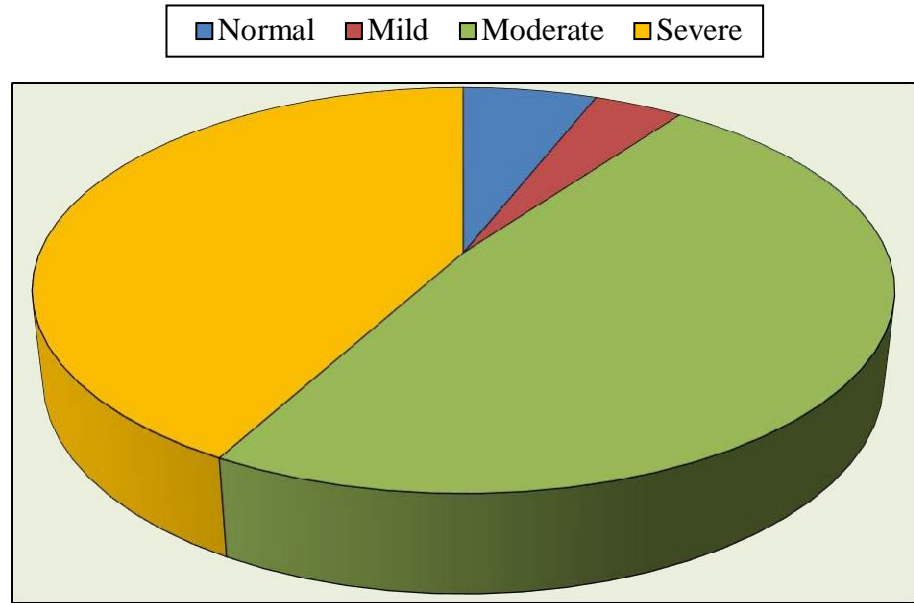


Figure No. 2: Figure showing the observed frequencies for anxiety level

Table No. 3: Showing Calculation of χ^2 For the Level of Depression

Category	Fo	Fe	χ^2
Normal	3	25	19.36
Mild	4	25	17.64
Moderate	64	25	60.84
Severe	29	25	0.64
Total Anxiety	100	χ^2	98.48

From the above table No.3 it is observed that the frequency observed for normal is 3, for mild it is 4, for Moderate it is 64 and for severe it is 29. The cell χ^2 for normal is 19.36, for mild it is 17.64, for moderate it is 60.84 and for severe it is 0.64. The total χ^2 for above given depression level is 98.48.

The table value of χ^2 at 3 degree of freedom and 0.05 level of significance is 7.82. Because the obtained χ^2 is greater than the table value of χ^2 , it is concluded that the four frequencies differ from each other. Out of 100, 64 respondents moderate depression level. The observed frequencies for this depression level are shown in Figure 3.

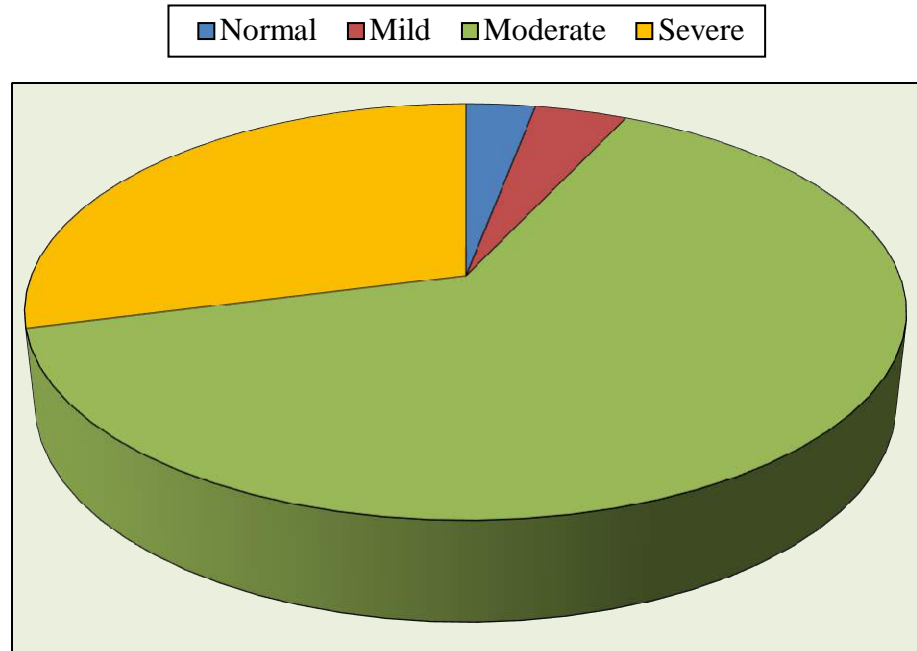


Figure No. 3: Figure showing the observed frequencies for depression level

Table No. 4: Showing Calculation of χ^2 For the Level of Stress

Category	Fo	Fe	χ^2
Normal	6	25	14.44
Mild	21	25	0.64
Moderate	45	25	16.00
Severe	28	25	0.36
Total Anxiety	100	$\sum Fe$	31.44

From the above table No.4 it is observed that the frequency observed for normal is 6, for mild it is 21, for Moderate it is 45 and for severe it is 28. The cell χ^2 for normal is 14.44, for mild it is 0.64, for moderate it is 16.00 and for severe it is 0.36. The total χ^2 for above given stress level is 31.44. The

table value of χ^2 at 3 degree of freedom and 0.05 level of significance is 7.82. Because the obtained χ^2 is greater than the table value of χ^2 , it is concluded that the four frequencies differ from each other. Out of 100, 45 respondents moderate stress level. The observed frequencies for this stress level are shown in Figure 4.

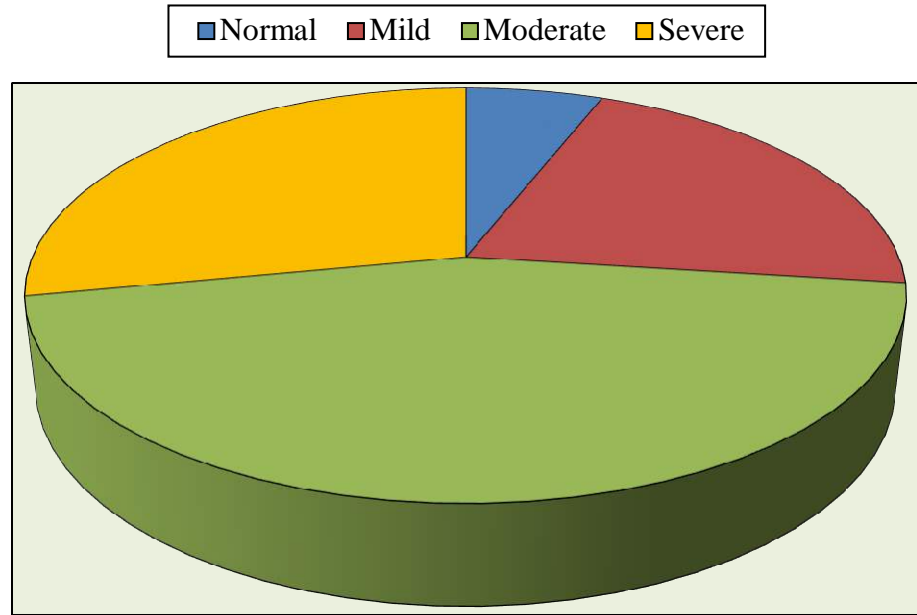


Figure No. 4: Figure showing the observed frequencies for stress level

Table No. 5: Showing Calculation of χ^2 For the anxiety, depression and stress

Category	Fo	Fe	χ^2
Normal	15	75	48.00
Mild	29	75	28.21
Moderate	157	75	89.65
Severe	99	75	7.68
Total Anxiety	300	χ^2	173.55

From the above table No.5 it is observed that the frequency observed for normal is 15, for mild it is 29, for Moderate it is 157 and for severe it is 99. The cell χ^2 for normal is 48.00, for mild it is 28.21, for moderate it is 89.65 and for severe it is 7.68. The total χ^2 above given anxiety, depression and stress level is 173.55. The table value of χ^2

at 3 degree of freedom and 0.05 level of significance is 7.82. Because the obtained χ^2 is greater than the table value of χ^2 , it is concluded that the four frequencies differ from each other. Out of 300, 157 respondents moderate anxiety, depression and stress. The observed frequencies for this anxiety, depression and stress are shown in Figure 5.

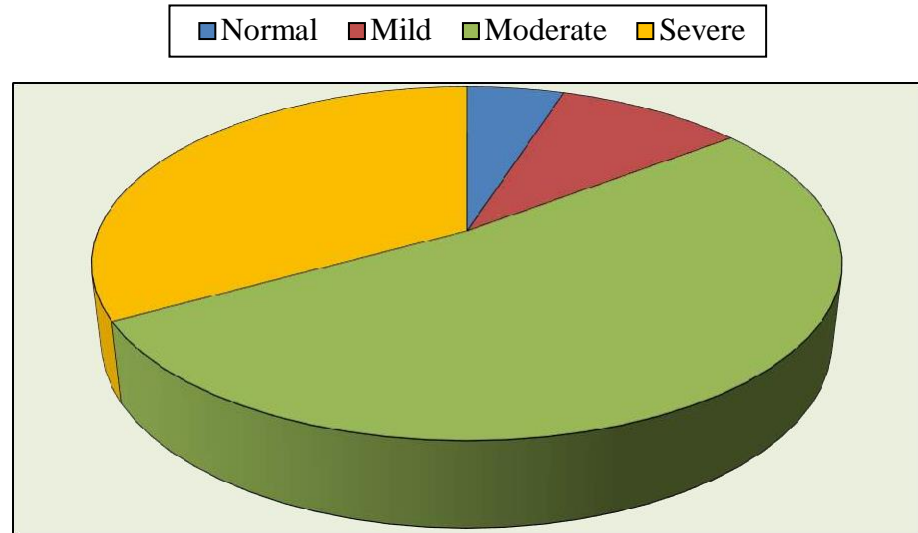


Figure No. 5: Figure showing the observed frequencies for anxiety, depression and stress level

Conclusion:

In view of the study results, it is observed that majority computer workers Moderate in the anxiety, depression and stress. Stress related to work, depression and anxiety is an important disease related to health. In today's era people are surrounded by stress and sometimes this tension gets so high that it takes the form of Depression. There is more dangerous disease than stress but many terrible diseases, is also cause by stress. Today, every person in his life only experiences depression once. Sometimes it

takes the form of a terrible disease when increases Depression. It falls into the Moderate category and the person who falls on the computer comes in the category of the severe category. From this, it is known that the evidence of depression, anxiety and stress is increasing. It should recommend some solid stature for the prevention, the suggestion of the inventor that employees working on the computer should reduce their burden and perform some physical activity, Exercise and Yoga activity, which can lead to stress, depression and anxiety.

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Stress: A Silent Killer

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Introduction:

I Hypertension (excessive stress) is recognized by knowledgeable persons as the 'Bane of Modern civilization'. Stress does not usually reveal / produce any apparent "Physical Pain" or other 'Warning' before doing its ultimate damage. But a 'Silent Killer' it is nevertheless. Stress is a major factor in high blood pressure, in strokes, heart attacks and Coronary Artery ailments. No other single factor is more responsible for the world wide epidemic of drug and alcohol abuse than the 'Scourge of Stress.' Stress is often a Central Catalyst' in health problems, in family problems and sometimes leading to mate and child abuse.

1. Who has not worried over how to make both ends meet and live a normal life?
2. Don't we have frustrations of pursuing what society call success?
3. Have not we suffered the Loneliness of losing the near and dear ones?

All such condition add up to what is best known as Disease of Change'.

What we need are effective ways of dealing with stress because stress is not going to simply go away. Only good news is that there is a winning strategy against stress.

Stress is not essentially a 'Negative Force'. Stress is not just what happens to us but how we react to what happens to us and this reaction is controlled by our mind and emotions.

II Role of Stress

To deal with any situation under modern day is to be under stress. According to Frost (1971), "Stress is a state in which the natural homeostasis (equilibrium) of the body disrupted." May be a threat to the organism, disease, trauma, heat, cold, thirst, fatigue etc. may cause stress. In fact 'Emotional Arousal' can also bring about stress. Hans Selye, quotes Kamlesh (1983), a world authority on stress opines – "most people who want to accomplish something, which are ambitious, live on stress and they need it". The right amount of stress can be a great motivating factor. Stress can also protect us to avoid hazardous situation.

Under different environmental conditions the human organism marshals inner forces (Brain, heart, muscular system) to meet the crisis producing a 'Positive condition' to overcome damage, accident or injury to organism. But if the crises become too frequent and too intense, to call the inner forces too frequently, then the stress becomes 'Debilitating' leaving the body unable to cope with such situations.

It is common sense aspect that when individuals are forced to repeatedly accept continual changes, especially such changes involving conflict and uncertainty, an adaptive reaction occurs in the organism which draws on hormones causing chemical reaction in the body which ultimately might adversely affect the reserves of energy. Having too much of stress (hyper stress) is

harmful to our physical and emotional well being. This is what is happening in the modern day world- excessive stress as a harmful agent in people's lives.

III. Research Findings and Hard Realities

Scientific evidences have isolated stress as a common factor in many cases of ailments. It is certain that different disease may befall a person more readily if he has faced emergencies/ disappointments first. Stress related illnesses cause not only man hours in our Private and Public Sector endeavors but also take a heavy toll of young lives. Most of the hypertension cases are related to human 'Life Style'- how people think act and care for themselves.

IV. Alcohol and Drug Abuse

Many individual turn to drugs- Alcohol, for alleviating the 20th century Scourge 'Stress' Such an effort itself has led to other imbalance and detrimental effects on the human organism. Karl Albrecht (U.S, Organizational Consultant) states- "The use of mood altering chemical in America and also in some developing Countries has run wild." In the present day, many turn to Alcohol and drugs to anesthetize stress produced by emotionally upsetting events or situations such as (a) Marital quarrels, (b) Poverty, (c) Fear (d) Loneliness. And (e) Job tensions. Resort to Alcohol and drug abuse is not a 'Panacea' for stress.

V. Need for Relaxation in life Style

One important key to cope with stress is 'Relaxation'. More and more psychologists Physicians are of the view that occasional recreation is an effective and essential part of living a relaxed life. Relaxation by a

change of activity restores individuals to invigorated life. In reality relaxation should involve:

- a) Exercise (Physical Activity)
- b) A Change of Pace.
- c) Momentarily getting one's mind off and not self prescribed Alcohol / Drugs).

VI. Physical Points to Consider

1. Since stress involves an individual's mental and emotional reaction to external events' any effective program must involve to one degree or another, a change of mind. There are other effective measures for reducing the debilitating effects of stress.
2. Be realistic – Do not run away from reality. We are aware that disappointments will start at us. None of us can succeed every time at everything we try. The stressful individual often fails to accept this simple fact. He/she may mentally magnify the problem out of proportion. It is possible an individual's problem may be real or serious – e.g. a broken marriage, unemployment. Financial constraints, problem with children, illness to mention a few. But dwelling on them to the point of getting paralyzed unable to take action does not solve the issues. The solutions must come through 'Emotional Maturity' 'seeking wise counsel' and getting control of one's life.
3. Complaining about 'Hard Work' constantly only reinforce stress. Focusing on the reward/ joy out of work will lead to a sense of satisfaction thus reducing tension/ stress. Such a positive

- attitude towards 'Stress Producing' will ease tension.
4. Avoidance of frustration is another factor to reduce tension. An individual who increases his efforts to master a situation which he can never control, is bound to get frustrated, parents' advice to their grown up adult children if goes unheeded, will only lead to frustration among parents. If parents continue to assert it will be only 'Effort without any accomplishment' and this will be a source of stresses.
 5. To act wisely and accept limitations in the situation faced is a genuine way of dealing with anxiety, tension and stress. There is no use of 'battling under 'No-Win' situational it is better to be goal oriented and look for rewards in efforts. If this is achieved the 'pressures faced day to day situations' will not seem difficult to bear.
 6. Management of time, giving priority to tasks to get the most worrisome things done first. Managing time to do things in much better than resorting to Drug Induced State of Euphoria'.
 7. Improvement of general health. A healthy physically fit person can cope with vast amount of pressure. Such a person with above average health and physical fitness is adapting. Positive and generally optimistic. Poor health and lack of physical fitness aggravate small irritation and lead to mental tensions. Improve general health and general fitness through exercise, diet, fresh air, sunshine etc. for proper self control.
 8. Incorporate alternative to stress. Everyone should learn to avoid stress producing situation. Life is filled with many areas of anxiety and unnecessary stimulation. We can easily choose to avoid such situation. The best recourse is proper 'Recreational Activities' and participation in them.
 9. Examination of Human values. Is it worthwhile to pursue values that interfere with family life/ marital happiness/ general health? It is for individuals to set wise goals and values in life to avoid tensions and live a contended life.

VII the Most Important Dimension

While physical technique ameliorate physical problems, to completely eliminate stress involves changing the basic way human nature functions. It is the outgoing optimistic approach to life that tend to reduce tension.

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Arousal, Attention and Personality of the Athlete

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Introduction

Arousal is important in regulating consciousness, attention, alertness, and information processing. It is crucial for motivating certain behaviours, such as mobility, the pursuit of nutrition, the fight-or-flight response and sexual activity (the arousal phase of Masters and Johnson's human sexual response cycle). It is also important in emotion and has been included in theories such as the James-Lange theory of emotion. According to Hans Eysenck, differences in baseline arousal level lead people to be extraverts

Attention is the behavioral and cognitive process of selectively concentrating on a discrete aspect of information, whether deemed subjective or objective, while ignoring other perceivable information. Attention has also been referred to as the allocation of limited processing resources.

There are four different types of attention: selective, or a focus on one thing at a time; divided, or a focus on two events at once; sustained, or a focus for a long period of time; and executive, or a focus on completing steps to achieve a goal. Nov 2, 2013.

What does it take to be a world-class athlete? What qualities do you need to have? Here are some words and phrases to use when describing great athletes in English.

It takes drive. You have to be driven to improve every day. You can't be satisfied

with your last performance. It takes discipline. You have to be disciplined. You have to follow a strict exercise and eating schedule. It takes competitiveness. You have to be competitive and want to beat your competitors. It takes self-confidence. You have to be confident in yourself and believe that you're a winner. It takes aggressiveness. You have to make moves on your own, not just respond to what other athletes do. It takes focus. You have to be able to focus on the task at hand and tune out any other distractions. It takes commitment. You have to be committed to your sport. You have to give up other hobbies and interests. It takes good time management. You have to be able to manage your time well. You practice for hours and hours each day, on top of school, work, and spending time with friends and family.

It takes some amount of raw talent. You have to be naturally talented at your sport. This is something that certain athletes are just born with. It takes determination. You have to be determined. You can't give up, no matter how hard it seems. When you lose a match or miss a goal, you have to get right back up and try again. It takes a high tolerance for pain. You have to be able to put up with a lot of pain, from pushing your body to its limits. It takes adaptability. You have to be able to adapt to different situations and new information quickly.

This study seeks to understand how social media is being used amongst sports organizations. More specifically, this study analyzes the dynamic of social media in the National Basketball Association (NBA). Existing research has established the importance of social media in sports and entertainment venues but fails to elaborate on how individual teams implement social media strategy, specific tactics, and the current climate around social media in sports communication. To establish best practices of social media in sports communication specific to the NBA, this study interviewed social media specialists from nine NBA teams. Eight best practices were established: give quality content; incorporate social media offline; gamify social media efforts; personalize fans on social media; collect fan data; fan source/crowd source; use fans to amplify message; and track, measure, analyze and adjust. These best practices explain the most effective ways to utilize social media in sports communication specific to the NBA. These best practices can also be translated across other sports teams, entertainment entities, and brands.

Methodology

This study was conducted through in-depth telephone interviews. Each interview utilized the same set of questions and generally approached each question in the same order. At times, questions were skipped over or asked later if the interviewee had sufficiently answered that question already or to simply maintain continuity in the conversation. All interviews were conducted over an eight-week period from February 8, 2012, to March 28, 2012. Each interview lasted for approximately 30 minutes. Detailed notes were written during each interview. The

data gathered was analyzed for consistent similarities and differences across the interviews. Data was also gathered by reviewing individual NBA teams' online social media efforts. Furthermore, the data were drawn upon for apparent gaps in social media usage. Nine social media managers or related specialists of NBA teams were interviewed for this study. Each interviewee oversees, manages, or analyzes the social media efforts of an individual NBA team. In addition, all interviewees are aware of the ongoing social media initiatives set forth by their respective team and contribute in the social media communication.

Subjects Interviewed

Mike Donnay, Senior Director of Brand Networks, Detroit Pistons

Greg Esposito, Social Media Specialist, Phoenix Suns

Jared Harding, Manager of Interactive Media & Digital Strategy, Denver Nuggets

Mike Hutchinson, Director of New Media, Washington Wizards

Nick Monroe, Senior Sale & Retention Executive/ Social Media Manager, Milwaukee Bucks

Andrew Nicholson, Manager of New Media, Sacramento Kings

Jerry Rizzo, Social Media Coordinator, Philadelphia 76ers

Chad Shanks, E-Marketing Coordinator, Houston Rockets Peter Stringer, Director of Interactive Media, Boston Celtics Findings/ Discussion Utilizing social media to assist the efforts of individual NBA teams is still relatively new. Many teams are in the beginning to middle stages of identifying the capabilities of social

media as it relates to the NBA and are experimenting with the evolving technology to more efficiently reach their stakeholders. There is a great opportunity for NBA teams to strengthen and expand their social media presence, which will create a better overall fan experience (Smith, 2012).

Recommendation

Many NBA teams have identified their own strategy and objectives in utilizing social media. Most organizations use social media primarily as a branding and marketing tool to easily reach their fans (Esposito, 2012; Rizzo, 2012; Monroe, 2012; Hutchinson, 2012; Shanks, 2012; Nicholson, 2012; Harding, 2012; Donnay, 2012, Stringer, 2012).

The growing digital space has become valuable in developing a community for fans, and promoting online and offline fan engagement. Additionally, NBA teams are looking to utilize social media as a customer relationship management tool (Esposito, 2012; Monroe, 2012; Hutchinson, 2012; Shanks, 2012; Donnay, 2012). NBA organizations have found that digital platforms can efficiently provide customer service and handle questions, concerns, problems, and related issues. Finally, NBA teams are attempting to monetize their daily functions via social media (Hutchinson, 2012; Harding, 2012; Stringer, 2012).

Ultimately, every organization strives to drive stakeholders to its website to increase ticket sales, merchandise sales, and sponsorship deals. The ability for social media to directly connect with audiences provides the opportunity for NBA organizations to directly impact the bottom line.

Another important component of NBA team's social media strategy is the magnitude of a given team's brand and their level of success (Hutchinson, 2012; Stringer, 2012). NBA teams with major brand recognition and elite players garner a greater digital following. Therefore, these teams can focus less on encouraging fans to engage with their social media channels but rather provide tools and initiatives to creatively influence the Best Practices: Social Media & Sports Communication 14 online conversation, and further concentrate on the monetization of their efforts. Additionally, NBA teams with recent winning success are likely to receive positive engagement in higher frequency. When a given NBA team is losing, the organization does not want its presence on social media channels to be a losing brand. Therefore, teams must adjust the online messaging and conversation accordingly based on the team. These aspects are critical to keep in mind as NBA teams implement social media strategy.

Conclusion

Most NBA teams stress that the most important aspect of a social media presence is the content; there must be quality content. For this study, we can define quality content in the social media realm to be authentic, exclusive information in varying forms, whether it is text, pictures, video, or anything else that is posted with appropriate length and frequency, and gives value to stakeholders. Social media is cluttered with content. Therefore quality content allows for a given team's message to stand out from all other visible content on social media feeds. It is vital that NBA team's social media platforms provide value to their audience

(Rizzo, 2012; Hutchinson, 2012). Quality content that is exclusive in nature is necessary. This exclusive content includes information that highlights the proximity to the team, behind the scenes information, and player contact; information that they cannot get elsewhere (Nicholson, 2012; Harding, 2012; Donnay, 2012; Stringer, 2012). NBA teams have found success in providing quality content by integrating their social media tools. For example,

many teams are utilizing the social media platforms YouTube and Instagram to post videos and pictures, respectively, through their Twitter and Facebook accounts (Rizzo, 2012; Monroe, 2012; Hutchinson, 2012; Nicholson, 2012; Harding, 2012, Donnay, 2012; Stringer, 2012). This integration of tools provides varying content to fans which further increases engagement and interaction.

**Comparative Study of Mental Imagery between Team Game and Individual Game Players
of C.S.J.M University Kanpur**

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Abstract

The purpose of the study was to investigate mental imagery between team game and individual game players of C.S.J.M University Kanpur. For these total 100 players (50 subjects team game players, 50 subjects of individual game players) who had participated at intercollegiate level and aged between 17 to 22 yrs were selected using purposive sampling technique. "Mental Imagery Questionnaire" a standardized sports psychological inventory designed by (Prof. M. Rajamanickam), was used for data collection. The collected data was analyzed using Independent sample 't' test. The results of the study showed that there was no significant difference in mental imagery between team game and individual game players of C.S.J.M University Kanpur and data was tested at 0.05 level of confidence. It was concluded that Team Game players showed significantly more Mental Imagery than the Individual Game Players.

Key Words: Mental Imagery, individual game, team game

1. Introduction

Sports are as old as human society and it has achieved a universal status in modern society. Mental Imagery can be defined as pictures in the mind or a visual representation in the absence of environment. It involves the athlete imagining themselves in an environment performing a specific activity using all of their senses like sight, hear, feel and smell. The image should have the athlete performing successfully and feeling satisfied with the performance. There are so many positive aspects to sport participation as a player sports events are also often used with mental imagery. The concept of mental imagery has attracted much attention from sport psychology researchers attempting to understand on individual psychological factors and their influence on performance

in sport. It now enjoys a popularity which outstrips any other forms of social activity; it has become an integral part of the education process. Many participate in sports activity for the fun or health and fitness. To others it is a profession with an ample finance and labeled with a degree of popularity. Sports have become a mass movement and a social phenomenon of great magnitude. Mental imagery helps the athletes to set their emotional state and the way they put the physical efforts. The activity enables the player to enhance the execution of the skill by thinking and imagining about it. Mental imagery of elite competitive situations is important to boost the high spirit to help a sports person to organize himself in a good way. Mental rehearsal of playing situations certainly helps in improving sports person emotional

state and his physical performance. Mental imagery is one of the most important issues in sport psychology. Corbin (1972) defined mental practice as the ‘repetition of a task, without observable movement, with the specific intent of learning. A problem with Corbin’s definition is its all-compassing nature. Although it excludes actual movement, it none the less inherently embraces a very wide range of mental processes, including verbal repetition of a movement sequence, thinking one’s way through a movement, and mental problem solving. In addition, the reference to intent of learning excludes several common uses of imagery, such as imagery for stress management, for the control of physiological functions, for pre-game mental warm-up or for injury rehabilitation.

Review: Short and Short (2005) conducted a study on differences between high-and low-confident football players on imagery functions. Research has suggested and shown that different athletes use the same image for different functions. The study questions the usefulness of the sports imagery Questionnaire (SIQ) as it consists of 30 images that comprise 5 functions. In the study, an original and a modified version of SIQ was used. The modified SIQ took

into account that different athletes could use the same images for different functions as it computed the SIQ function score according to the athletes perceptions. For the study 79 male football players were used as the sample for the study. The result showed that the imagery-confidence relationship differed according to how the SIQ subscale score was computed.

Method: For the present study descriptive comparative method was used to assess and compare the mental imagery between team game and individual game players of

University Kanpur. For these total 100 players (50 subjects team game players, 50 subjects of individual game players) who had participated at intercollegiate level and aged between 17 to 22 yrs were selected using purposive sampling technique. “Mental Imagery Questionnaire” designed by (Prof. M. Rajamanickam), was used for data collection. The collected data was analyzed using Independent sample ‘t’ test.

Result: The results of the study showed that there was no significant difference in mental imagery between team game and individual game players of C.S.J.M University Kanpur as the data was tested at 0.05 level of confidence.

Table 1: Comparative Study of Mental Imagery between Team Game and Individual Game Players.

Group	Mean	S.D.	M.D	S.E	Degree of Freedom	O.T	T
Individual Game	325.52	48.34	7.66	9.85	9	0.778	2.00
Team Game	333.18	50.17			8		

Discussion: It was concluded that Team Game players were significantly better in Mental Imagery than the Individual Game Players of C.S.J.M University Kanpur.

Recommendations and Conclusions: The researcher first assumed that there would be significant difference in the mental imagery between team game and individual game players of C.S.J.M University Kanpur and

after the statistical analysis and interpretation of data, it was found that there was no significant difference in the mental imagery between team game and individual game players of C.S.J.M University Kanpur. Further some researches can be done on mental imagery on contact game players and non contact game players and also on male athletes and female athletes.

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A Study of Flexibility Level between Badminton and Gymnastic Players of School of Physical Education, Devi Ahilya Vishwavidyalaya, Indore

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Abstract

Background: The purpose of study was to find out the Comparison of Flexibility Level between Badminton and Gymnastic male Players of Devi Ahilya Vishwavidyalaya Indore, Madhya Pradesh. **Materials and Methods:** Data was individually collected on 30 Badminton and 30 Gymnastic players (Age 18±25 years) at Devi Ahilya Vishwavidyalaya Indore, Madhya Pradesh. Simple random sampling was used for collection of data. The data were analysed using descriptive and t test. Only one variables of Physical fitness component were selected i.e. Flexibility and Sit and Reach test was used for the study. **Results:** The mean value of Badminton and Gymnastic Players was (13#6.19 and 17.7#4.48), respectively in relation to Flexibility. Calculated t-ratio was found .340 in relation to Flexibility. **Conclusions:** Significant difference was found between Badminton and Gymnastic male Players of Devi Ahilya Vishwavidyalaya Indore, Madhya Pradesh in relation to Flexibility.

Key Words: Flexibility, Badminton and Gymnastic

Introduction

Flexibility is the ability to perform a joint action through a range of movement. In any movement there are two groups of muscles at work:

1. Protagonist muscles which cause the movement to take place. 2. Opposing the movement and determining the amount of flexibility are the antagonistic muscles

Flexibility is important in fitness because it allows for better performance when playing sports or exercising and in your day-to-day activities, such as bending, walking and lifting. In this lesson, you will learn how stretching and certain types of exercises can help improve flexibility.

Definition:-Without adequate flexibility, daily activities, such as getting out of bed, lifting a child or squatting to pick something up can become more difficult to do. In addition, inadequate flexibility can

affect your athletic performance by preventing you from reaching the full potential, strength and power of your muscles.

Flexibility is defined as the range of motion of your joints or the ability of your joints to move freely. It also refers to the mobility of your muscles, which allows for more movement around the joints. Range of motion is the distance and direction your joints can move, while mobility is the ability to move without restriction.

Benefits of Flexibility Training:-Increases range of motion: Flexibility training helps improve the range of motion of your joints and muscles. Decreases your risk of injury When your muscles are flexible, you are less likely to become injured during physical activity. Reduced muscle soreness: Flexibility training can help reduce muscle soreness post-workout.

Stretching after you exercise keeps your muscles loose and relaxed. Improves athletic performance When your joints and muscles are flexible, you use less energy while in motion, which improves your overall performance. Flexibility is often overlooked in conditioning programs, but it is just as important to fitness as aerobics or strength training. One way to improve flexibility is to incorporate stretching into your fitness routine. Stretching during and after you work out can help ward off stiffness and keep you limber.

Here are a few things to remember when stretching:

- Always warm-up before stretching. Stretching when your muscles are cold could lead to injuries.
- Stretch your entire body.
- Hold your stretch for at least 15 to 30 seconds, but do not bounce.
- Stretch to the point where you feel some mild tension. If you feel any pain, stop and pull back until you feel no pain.
- Breathe normally when stretching; never hold your breath.

Review

Manmeet, (2010), conducts the study, "Comparative study of Physical Fitness Components of Rural and Urban Female Students of Punjabi University, Patiala". In the present, an attempt has been made to compare components namely speed, strength, endurance, agility and flexibility between female students belonging to rural and urban setups. It was carried out on 100 female students, 50 rural and 50 urban of Punjabi University, Patiala. The data was collected by use of measurements of height and weight as well as by application of

tests like jumping, stepping, running, flexibility test, etc. The data was analyzed and compared with the help of statistical procedures in which arithmetic mean, standard deviation (S.D.), standard error of mean (SEN), t-test were employed. Rural female students were found to be superior in strength, endurance, speed and agility. Urban female students on the other hand, were found to be heavier and superior in tasks like flexibility.

Chandra (1981), conduct the study, "A Comparative Study Of Selected Physical Fitness Components Of Football And Basket Ball Players", made a study, to compare the subjected physical fitness component i. e. speed extended flexibility explosive lea strength, Grass body co-ordination and cardio-Reparatory endurance of football and basket ball players, on the basis of analysis of data the following conclusion were drawn the basket ball players were comparatively superior to football players in extended flexibility and dynamic flexibility the foot ball players were found to be a higher in lea explosive strength, abdomen strength and grass body co-ordination.

Methods

The sample comprised of 60 Male subjects from two Games i.e. Badminton and Gymnastic. 30 Subjects from Badminton Game and 30 from Gymnastic Game players of Devi Ahilya Vishwavidyalaya Indore Madhya Pradesh and the age group was 18-25 years. The two simples may be treated as homogeneous with respect to age. For the present study, modified tools were used for data collection **Sit and Reach test, Steel Scale, and wooden Table.** To analysis the data mean, standard deviation and t-ratio were used to significant value of 0.05 levels. Only two

Games were selected as independent variables for the study.

- Badminton
- Gymnastic

Results

Table -1
Mean and Standard Deviation of Badminton and Gymnastic Players in relation to flexibility

Variable	Games	Mean	S.D
Flexibility	Badminton	13	6.19
	Gymnastics	17.7	4.48

Insignificant at .05 level of significance

From the above table it is observed that the mean of Badminton and Gymnastic Players is (13#6.19 and 17.7#4.48). After applying “t” test it is found that the t-ratio

is .340 which was significant at the .05 level of significance. So the hypothesis was may be rejected. This table has shown in figure1.

Figure 1

Mean and Standard Deviation of Badminton and Gymnastic Players in relation to flexibility

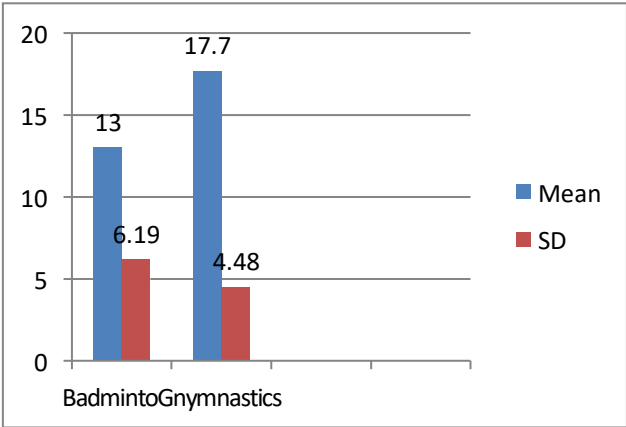


Table-2
Comparison of Badminton and Gymnastic Players in relation to flexibility

Test	Mean	S.D	T-ratio
Badminton Players	13	6.19	3.40
Gymnastics Players	17.7	4.48	

*Significant at .05 level of significance

Discussion

Significant difference was found between the Badminton and Gymnastic players in relation to Flexibility. This significant difference can be attributed to the fact that nature of the game (Badminton and Gymnastic) demands more or less equal amount of effort. The pace of the game is more or less similar. Thus, there was significant difference in relation to Flexibility level between Badminton and Gymnastic players. Moreover, the Badminton and Gymnastic players both were from the same institution and followed the same routine. Thus they must have got adapted to the same nature of

training provided in the institution. As a result there were significant differences in relation to Flexibility level.

Recommendations & Conclusions

In the light of the findings, it was concluded that significant difference exists between the mean of Badminton and Gymnastic players in relation to Flexibility level.

The similar study may be repeated on the male subjects and other class of the society for different age groups. To make this study more authentic and valid, the study may be repeated on the larger sample.

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Current Trends in Obesity: Body Composition Assessment, Weight Regulation, and New Techniques in Managing Severe Obesity

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Abstract

The worldwide obesity prevalent is an ever-rising apprehension, with almost a third of men fitting the standards for obesity. It is therefore significant to assess obesity and be able to categorize its sternness. The Body Mass Index classification is the maximum generally used tool for measuring obesity. Though, due to imprecisions in BMI in assessing body composition in the obese population, additional tools like anthropometry, bioelectrical Impedance Analysis and Quantitative Magnetic Resonance are being assessed. The parameter of obesity requirements a multidisciplinary approach, which associations diet, lifestyle, and pharmaceutical treatments. Equally in the morbidly overweight population, bariatric surgery is the only recognized treatment modality, with a usual extra weight-loss of over 60%. The particular types of bariatric processes place dissimilar importance on restraint of oral intake of nutrients versus dropping the absorption of those nutrients in the gastrointestinal tract. While these processes do achieve clinically important weight loss and comorbid resolution, their absence of availability, cost and prospective morbid problems have led to other techniques, specifically endoluminal techniques, emerging as possible candidates for the regulation of the obesity epidemic. In this article, we review the assessment of body composition in the obese population, the regulation of this obesity with bariatric surgery and emerging methods in the arena of bariatric.

Key Word: obesity, management, emerging technologies, endoluminal surgery.

Introduction

Obesity is a universal health problem for children, adults, and the elderly (WHO. Physical Status, 1995, Popkin BM, Doak CM. 1998). The last three decades have witnessed an alarming increase in obesity rates with the global prevalence of obesity realization epidemic proportions, an emphasis has been placed on identifying accurate measures of body composition. Many developing countries, where there has been a dramatic shift from under nutrition to

over nutrition, are also experiencing a marked rise in obesity and obesity-related diseases, including hypertension, type 2 diabetes, and cardiovascular disease is considered overweight, which is defined as a body mass index (BMI) ≥ 25 kg/m², and of those, it is estimated that one-half are obese (BMI ≥ 30 kg/m²)(Wardle J.1995).This rise in the prevalence of obesity is associated with an increased incidence of associated comorbidities, including: Type 2 diabetes mellitus, hypertension, hyperlipidemia, stroke, asthma, obstructive sleep apnea,

cancer and renal failure (Akpınar E, et al. 2007). In parallel with the rising obesity epidemic, the number of epidemiologic studies on consequences and determinants of obesity has grown exponentially. This unprecedented interest in obesity research has spurred the formation of a relatively new branch of epidemiology focused on obesity. These comorbid conditions are responsible for a profound loss in life expectancy within the obese population, in addition to an inflation of incurred health care costs (Napolitano A, 2008). The accurate assessment of body composition in the obese individual improves the stratification of disease risk, as well as aids in identifying effective prevention and intervention strategies. Overweight or obesity occurs when energy intakes exceed energy expenditure (through metabolism and daily physical activity) and are of particular interest because they are major risk factors for disease and mortality. A number of studies have established that overweight or obesity are associated with cardiovascular risk, cardiovascular-related mortality, cancer, disability during older age, and decreased life expectancy (Deurenberg P, Yap M, 1999).

Discussion

Assessment

Body composition is defined as the measure of fat and fat-free compartments at the molecular, cellular or tissue level. Associated with the normal-weight population, the obese individual understands a change in body composition that includes a development in total body fat content. Specifically, there is

arise in total body hydration and a relative expansion of the extracellular water element compared to intracellular water. These physiologic changes render traditional body composition markers in non-obese persons, such as tissue density and water & electrolyte concentrations, not applicable to obese individuals. The following aims to evaluate the accuracy of various body composition tools in the obese people. (Deurenberg P, Yap M., 1999; Akpınar E, Bashan I, Bozdemir N, Saatci E., 2007).

The widely most used measure for obesity and overweight are frequently strong minded using the body mass index (BMI). BMI is measure as the weight to height proportion expressed in kg/m². (Akpınar E, Bashan I, Bozdemir N, Saatci E., 2007). Obesity is categorized as obese or overweight by a multiplicity of cut-off values based on the mortality and morbidity associated with numerous levels of weight. It is well established that obesity is a possibility factor for chronic heart disease, hypertension, stroke, diabetes and some forms of cancer¹. BMI has been considered an accurate indicator of body composition due to a high correlation with percent body fat (%BF) (Deurenberg, P., 1996). Newly the World Health Organization has published specific BMI standards for overweight and obesity. A BMI value of 25-29.9 specifies overweight whereas a BMI value of 30 shows obesity. The classification of obesity is further categorized into obesity (BMI 30-34.9), severe obesity (BMI 35-39.9) and (BMI 40) morbid obesity, and BMI is more than 50 is super obesity². (Napolitano A, et al., 2008).

The best basic measure of body composition is anthropometry. This is the determination of indirect methods to estimate the size of fat mass, size, shape and fat content through measurements of height, weight, as well as head, neck and waist circumferences. (Akpinar E, Bashan I, Bozdemir N, Saatci E., 2007). The truthfulness of anthropometrics is reliant on the capability of the specific taking the measurements, and is limited by the incapability to differentiate fat distribution between subcutaneous tissue and visceral tissue. A closely related tool to anthropometry is the measure of skin fold thickness of subcutaneous tissue to assess body fat composition. (Scott WR, Batterham RL., 2011). This tool is also limited by the experience of the individual taking the measurements, as well as the specific regression equations that predict total body fat content by incorporating SFT. The majority of these equations were developed in normal weight individuals, with little validation in the obese population.(Akpinar E, Bashan I, Bozdemir N, Saatci E., 2007).

In recent times, numerous emerging methods have been established to assess of body composition in the obese people, these include Bioelectrical Impedance Analysis (BIA) and Quantitative Magnetic Resonance (QMR). (Mathus-Vliegen EM. 2008).

Bioelectrical Impedance Analysis not measure any biological mass or any biophysical model associated to obesity. It measures the body impedance (the effective resistance of a circuit), and is based on the changeable resistance of different tissues types within the body.(Shafer KJ, Siders WA, Johnson LK, Lukaski HC., 2009;

Deurenberg, P., 1996). Bioelectrical impedance analyzers use such calculations to define statistical relations based on biological relationships for a specific population, and as such the equations are beneficial only for subjects that carefully match the reference population in body size and shape. Bioelectrical Impedance Analysis has been applied to heavy weight or obese tasters (Scott WR, Batterham RL., 2011; Laferrere, B., 2011).in a few studies. The impedance measure is used to calculate total body water content & fat free mass, from which the fat mass can be calculated. This technique is not only safe, but also inexpensive and noninvasive. It can be conducted through varying frequencies, each with variable degrees of correctness in predicting %BF. The development of BIA equations validated in the obese population, have provided accurate prediction of body fat and valuation of body composition (Shafer KJ, Siders WA, Johnson LK, Lukaski HC., 2009; Deurenberg, P., 1996)

QMR is another developing method; it measures differences in hydrogen atom release signals originating from fat, fat free tissue, and free water. This tool is highly sensitive to small changes in fat mass compared with other measures, and has shown significant promise in the assessment of body composition in the obese population. (Napolitano A, et al.2008).

Regulation

Bariatric surgery has been proven to be the most current and supportable technique for the regulation of obesity, shown to be greater to both pharmaceutical, diet and lifestyle routines. (Maggard MA, et al.,

2005). The current suggestions for bariatric surgery are for patients with a BMI larger than 40 kg/m² or a BMI of larger than 35 kg/ m² with obesity-related comorbidities, namely diabetes. These surgical techniques are able to successfully control obesity through the interaction among three core mechanisms; Limitation, malabsorption and gut hormone variation. Preventive procedures simply control caloric intake, while mal absorptive processes re-route the gastrointestinal tract allowing for less re-absorption time of nutrients (Herron DM, Roohipour R., 2011). The last mechanism and the least familiar is the alteration in certain hormone levels subsequent bariatric surgery (Scott WR, Batterham RL., 2011) More definitely, the decrease in ghrelin levels and improved levels of Peptide YY combine to result in appetite suppression and improved satiety and the increased post-prandial relief of incretins lead to an improvement in glucose homeostasis (Laferrere,B.2011).

The most generally cited logical review on bariatric surgery reports that patients experience an regular excess weight loss of 61.2%.¹³ In calculation, a bigger than 80% determination in diabetes, hyperlipidemia, hypertension and disruptive sleep apnea has also been reported(Buchwald, H., et al.2004).The main bariatric procedures for the parameter of obesity are the roux-en-y gastric bypass, the laparoscopic sleeve gastrectomy, the laparoscopic adjustable band and the biliopancreatic diversion and duodenal switch. Each of these abovementioned processes vary in their weight-loss efficacy with changeable interplay of the different mechanisms of

actions. In order of excess weight loss, the mal absorptive procedures are the most popular including the biliopancreatic diversion (70.1%) and roux-en-y gastric bypass (68.2%), while the severely preventive procedures like the laparoscopic sleeve gastrectomy (47.5%) are the least (Gill RS, et al., 2012). Out of the bariatric processes being obtainable, the gastric bypass is arguably the most popular, offering both significant weight loss and comorbid resolution with acceptable impediment rates, and therefore has become the most generally performed bariatric procedure (Herron DM, Roohipour R., 2011).

Emerging techniques

Bariatric surgery has long shifted away from being an exclusively open procedure to now laparoscopy being considered the gold standard (Masoomi H, Nguyen NT, Stamos MJ, Smith BR., 2012). However, there still remains a concerted effort to further improve on this success and develop new laparoscopic and end luminal techniques that equal prior results but with less invasive procedures and a continued reduction in complication rates.

Laparoscopic gastric plication is a different bariatric surgery that includes sinking the size of the stomach by making a plicate gastric fold using a suture line (Abdelbaki TN, et. al. 2012). A similar technique to LSG, it removes the difficulty rate associated with a long staple line and has the benefit of being a theoretically reversible procedure (Abdelbaki TN, et. al. 2012). In a recent systematic review, EWL ranged from 53.4 to 67.1%, an equivalent result to the

other procedures. While it looks to be a promising method, there remains no long term data accessible, as well as the medical technique remains to be consistent (Herron DM, Roohipour R., 2011). Stomach placcation is also presently being considered with an end luminal suturing methodology (Schauer P, Chand B, Brethauer S., 2007).

Endoluminal methods are the natural development of negligibly intrusive operation, but their role in the instruction of obesity is still being estimated as these measures are in their early state. Endoscopic methods offer promise as less offensive procedure that lack the feared problems of their precursors, most notably anastomotic leaks. (Schauer P, Chand B, Brethauer S., 2007). Other significant advantages include its reversibility possible and its lacking of the confinements of an expensive operating room. Endoluminal techniques can be used for three broad classes; as primary processes for weight loss, as a presurgical staged process to decrease complications, and lastly as a postsurgical repair or revision therapy following a conservative bariatric surgery. (Abdelbaki TN, et. al. 2012).

The intragastric balloon (IGB), a technique connecting deploying and expanding a balloon into the stomach below straight vision using endoscopy, has long been the only endoscopic accessible for weight loss (Familiari P, et al., 2011; Genco A, et al., 2005).

With a described EWL of only 33% this impermanent technique is not as operative as the laparoscopic interventions and has been connected with simple nausea and vomiting, although the overall impediment rate was

reported as 2.8% (Genco A, et al., 2005; Cote GA, Edmundowicz SA., 2009; Mathus-Vliegen EM., 2008).

Transoralgastroplasty (TOGA) is a purely preventive, day surgery that involves sinking the size of the abdominal by creating gastric folds. At 1 year survey, Familiari et al. reported a EWL of 38.7% (Familiari P, et al., 2011). While this EWL is superior to the IGB, it is still not as successful as the surgical involvements, however followers would argue that the comparative safety of this procedure makes the inferior EWL more acceptable (Familiari P, et al., 2011). Another developing role for TOGA is for provisional therapy for failed bariatric processes due to weight regain (Manouchehri N, Birch DW, Menzes C, Shi X, Karmali S., 2011). Manouchehri et al. found that TOGA is an operative substitute to the RYGB as a provisional optional for a select patient cohort succeeding failed vertical band gastroplasty (Manouchehri N, Birch DW, Menzes C, Shi X, Karmali S., 2011).

The endoluminal sleeve is an expedient used to try to mimic the feat of the Roux-en-Y gastric bypass but has the added benefit of being adjustable, lacking no bowel resection. (Sandler BJ, et al., 2011). Sandler et al., with the support of laparoscopy, fixed a 120 cm long tube complete the pylorus, complete the duodenum and ending into the proximal jejunum, creating a gastroduenojejunal bypass. They described that out of 22 patients who underwent establishment, after 12 weeks patients experienced an average EWL of 39.7%.²³ While 5 patients required early removal of their bypass device prior to

12 weeks, there were no adverse impediments (Sandler BJ, et al., 2011). Interestingly, similar to the results seen with the RYGB, all diabetic patients in the trial were off their ant hyperglycemic prescription with euglycemic blood levels (Sandler BJ, et al., 2011). The authors decided that early results show this can be a safe alternate to bariatric surgery, although long term sleeve data needs to be together when available and with improved development and practice with this procedure, this method will hopefully no longer require the laparoscopic module (Sandler BJ, et al., 2011).

Other endoluminal skills are being examined for the regulation of obesity containing of electrical stimulation to suspension gastric emptying and ablation of the gastric antrum (Sandler BJ, et al., 2011).

Conclusion

The assessment of obesity is generally achieved using the BMI classification.

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Though, there is a dispute that there are new methods that are theoretically more truthful in the obese population. This BMI classification is presently being employed to control who succeeds for bariatric surgery, an effective treatment option for patients who are classified as either harshly obese with obesity comorbidities or morosely obese. With the progression of minimally invasive surgery, other methods are being evaluated for the instruction of obesity. There remains to be a consensus of the role of endoluminal methods. Extended term data on efficiency still needs to be determined, as well as a direct contrast to the predictable bariatric surgeries with a randomized trial. However early data seems to suggest there is a role for these processes to be played as a stand-alone, bridging or temporary procedure. Eventually, with the growth of obesity worldwide, conservative and emerging bariatric processes will continue to be a rapidly proceeding area in medicine.

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Comparative study of Aggression and Anxiety of various level of

Female Boxers

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Abstract

The purpose of the study was to compare Aggression and Anxiety of various levels of female boxers. For this sixty (60) female boxers, 20 from each participated in the Maharashtra State Tournaments (20 State Players), Inter Collegiate Tournaments of Rashtrasant Tukadoji Maharaj Nagpur University (20 Inter Collegiate Players) and Inter University Tournaments (20 Inter University Players) with the help of purposive sampling method were selected from Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. The weight categories of the boxers were ranged between 50 kg to 57 years (flyweight to feather weight). Subjects did not use any ergogenic aids or supplementations and also they were all free from any injuries during the collection of data. Following tools were used to collect the data on:- Aggression: The standard Questionnaire of Aggression constructed by R. L. Bhardwaj scale, was used to know the aggression level. Anxiety: The standard Questionnaire of Anxiety constructed by (SCAT) was used for the collection of data. In order to find out the significant difference between Aggression and Anxiety Level of different level of achievement of female boxers the analysis of variance (ANOVA) was applied at 0.05 level of significance. Result shows that there was significant difference were found in Aggression and Anxiety Level among State, Inter Collegiate and Inter University Boxers as obtained F-ratio was 5.651 & 4.751 which was greater than that of required tabulated 'F' value of 3.158 at .05 level of significance with (2,57) degree of freedom. Concluding we can say that Inter University Female Boxers shows high level of aggression followed by State Level Boxers and least in Inter Collegiate Boxers. Whereas, As for as anxiety is concerned the Inter Collegiate Female Boxers having the high level of anxiety because they are not in the conditions to express their views and internal views they are bound by the society and surroundings, as they are in the position of beginning of their sports career as compared to State Level Female Boxers and Inter University Female Boxers

Key Words: *Aggression, Anxiety, Female Boxers*

Introduction

Sports psychology has been developing rapidly in recent years. The value of a sports psychologist as an integral member of the coaching and health care teams is widely accepted everywhere. Sports psychologists can train specific skills to help players to enhance their learning

process and motor skills, cope with competitive pressures, fine-tune the level of awareness needed for optimal performance. Psychological training must be an integral part of an player's holistic training process, carried out in combination with other training elements. This is best skilled by a collaborative effort among the coach, the sport

psychologist, and the players; however, a knowledgeable and skilled coach can learn basic psychological skills and impart them to players, especially during actual practice.

In sports today, aggression plays a major role. According to various study it is apparent that sports is perhaps the only setting in which acts of inter personal aggression are not tolerated, but enthusiastically applauded by large segments of society. Aggression may be defined as the infliction of an aversive stimulus, either physical, verbal, or gestural upon one person by another. Professional sports are becoming increasingly more violent. Sports psychologists have discerned a number of influences that may be involved. Sports players have scripts for resolving problems with physical action, thus when problems arise, they immediately seek to act, aggressively if necessary.

Anxiety:

Anxiety, selected for the study, is one of the psychological factors. It differs from arousal in that it encompasses both, some degree of activation and an unpleasant emotional state. Thus, anxiety is the term used to describe the combination of intensity of behavior and direction of an impact or emotion. The direction of characteristics of anxiety is negative in that it describes subjective that are unpleasant.

Anxiety has been so great that players lose complete control of him and the situation. Researchers have speculated on the relationship of physical competence to performance. Improving his or her physical skills may improve the player's self-concept, when a player feels good

about himself; he is perhaps apt to perform more efficiently. In other words we can say that physical training programme may contribute to the development of a favorable self-concept of players. Fighting sports such as boxing, wrestling, judo, or karate, cause damage, it is considered to be an accidental. During competitions, referees are in charge for judging intentionality, introducing a prejudice in measure, as well as another criteria, rule breaking. Competition with high levels of aggression may also lead to lesions in the urge to achieve victory. Lesions are amplified in players with higher levels of anxiety, and that means a longer period to be return to training.

Various studies regarding the relation between anxiety and aggression in sport have shown interesting results, enlightening that cognitive errors in anxiety (cognitive anxiety) intervene connections between anxiety and aggression (aiming to cause emotional damages in indirect situations, such as abuse words). In addition, there were gender differences in those connections were founded. Some studies on comparison between anxiety and aggression in athletes and non-athletes and identified those variables more frequently in players. Besides, some study showed that the older the players show more aggressive behaviors are depicted. Hence, by reviewing various studies researcher has taken the study "Comparative study of Aggression and Anxiety of various level of Female Boxers"

Materials and Methods

Subject

Sixty (60) female boxers, 20 from each participated in the Maharashtra State

Tournaments (20 State Players), Inter Collegiate Tournaments of Rashtrasant Tukadoji Maharaj Nagpur University (20 Inter Collegiate Players) and Inter University Tournaments (20 Inter University Players) with the help of purposive sampling method were selected from Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. The weight category of the boxers was ranged between 50 kg to 57 years (flyweight to feather weight). Subjects did not use any ergogenic aids or supplementations and also they were all free from any injuries during the collection of data.

Administration of the test

The following tools were used to collect the data on:-

- **Aggression:** The standard Questionnaire of Aggression constructed by R. L. Bhardwaj scale, was used to know the aggression level.
- **Anxiety:** The standard Questionnaire of Anxiety constructed by (SCAT) was used for the collection of data.

Statistical Analysis

In order to find out the significant difference between Aggression and Anxiety Level of different level of achievement of female boxers the analysis of variance (ANOVA) was applied at 0.05 level of significance.

Table-1

Analysis Of Variance of Balance and Coordination among State, Inter Collegiate and Inter University Players

Components	SV	SS	df	MS	F
Aggression	between	814.8	2	407.4	5.651*
	error	4109.2	57	72.09	
Anxiety	between	29.23	2	14.61	4.751*
	error	175.35	57	3.076	

*Significant at 0 .05 level

Tabulated 'F' 0.05_(2, 57) = 3.158

Table-2

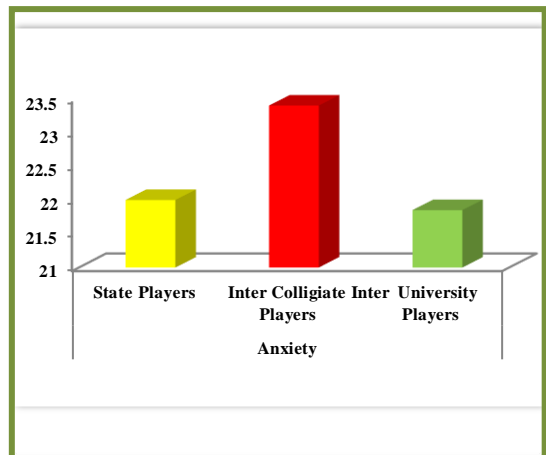
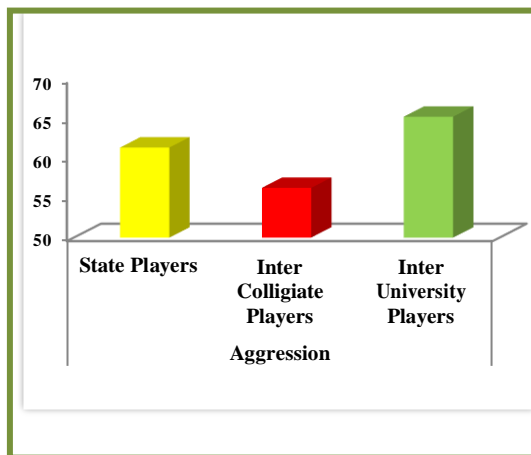
Post Hoc Test

State Players	Inter Collegiate Players	Inter University Players	MD	CD
61.4	56.3		5.1	8.48
61.4		65.3	3.9	
	56.3	65.3	9*	
22	23.4		1.4	1.75
22		21.85	0.15	
	23.4	21.85	1.55	

*Significant at 0 .05 level

Above table revealed that there was significant difference were found in Aggression and Anxiety Level among State, Inter Collegiate and Inter University Boxers as obtained F-ratio was 5.651 & 4.751 which was greater than that of required tabulated 'F' value of 3.158 at .05 level of significance with (2,57) degree of freedom. Hence, Post Hoc test was to see

Graph



Conclusion

Concluding the above study we conclude that there was significant difference were found in Aggression and Anxiety Level among State, Inter Collegiate and Inter University Boxers, it may be attributed that aggression varies from each other but remains a bit in everybody whether it may be player, student, teacher, businessman etc, we can conclude that in the view of different level of players Inter University Female Boxers shows high level of aggression followed by State Level Boxers and least in Inter Collegiate Boxers.

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the Mean Difference in Aggression and Anxiety Level among State, Inter Collegiate and Inter University Boxers. The significant difference was found only among inter collegiate players and inter university players in reference to Aggression whereas insignificant difference were found among remaining comparison in reference to Anxiety.

Whereas, As for as anxiety is concerned the Inter Collegiate Female Boxers having the high level of anxiety because they are not in the conditions to express their views and internal views they are bound by the society and surroundings, as they are in the position of beginning of their sports career as compared to State Level Female Boxers and Inter University Female Boxers as far as they were experienced Boxers, they can face any hardships in upcoming or running competitions, and they are free to express their views easily and without any hesitation.

Comparative Study of Academic Stress Among First Year and Third Year Batch Male Cricket Players of Shopian College

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Abstract

purpose of the study was to find out the comparison of academic stress level between first year and third year batch male cricket players of Shopian college. **Materials and Methods:** Data was individually collected on 40 male cricket players, 20 from first year batch and 20 from third year batch (Age 18 ± 25 years) at Govt Degree college Shopian. Stress questionnaire developed by Sheldon was used in the research. Simple random sampling was used for collection of data. The data were analysed using descriptive and t test. **Results:** The mean value and standard deviation of first year batch and third year batch cricket players was (32.5 ± 33.3 and 2.9 ± 3.00), respectively in relation to academic stress. Calculated t-ratio was found 0.45 in relation to academic stress. **Conclusions:** Insignificant difference was found between first year batch and third year batch cricket players of Govt Degree College Shopian in relation to academic stress.

Key Words: Academic stress and cricket players

Introduction

Stress is a normal physical response to events that make you feel threatened or upset your balance in some way. When you sense danger – whether it's real or imagined – the body's defences kick into high gear in a rapid, automatic process known as the “fight-or-flight” reaction, or the stress response. The stress response is the body's way of protecting you. When working properly, it helps you stay focused, energetic, and alert. In emergency situations, stress can save your life – giving you extra strength to defend yourself, for example, or spurring you to slam on the brakes to avoid an accident. The stress response also helps you rise to meet challenges. Stress is what keeps you on your toes during a presentation at work, sharpens your concentration when you're attempting the game-winning free throw, or drives you to study for an exam when you'd rather be watching TV. But beyond a certain point, stress stops being helpful and starts causing major damage to your

health, your mood, your productivity, your relationships, and your quality of life. Because of the widespread damage stress can cause, it's important to know your own limit. But just how much stress is “too much” differs from person to person. Some people roll with the punches, while others crumble at the slightest obstacle or frustration. Some people even seem to thrive on the excitement and challenge of a high-stress lifestyle. Your ability to tolerate stress depends on many factors, including the quality of your relationships, your general outlook on life, your emotional intelligence, and genetics.

Review

Chavajay P. et.al (2008) conducted the study that, “Acculturation stress reported by 130 international students attending a university in Utah for about 2 yr. was examined. On the Acculturative Stress Scale for International Students, few students reported experiencing acculturation stress, but responses to four

open-ended questions indicated many students perceived experience of acculturation stresses related to discrimination, feelings of loneliness, and academic concerns. The contrast of findings for the scale scores and the open-ended questions indicate the complexity of assessing international students' acculturation experiences of living and studying in the USA and suggest the usefulness of complementary methodologies for assessing such experience.

Tayama J, et.al (2012) Conducted the study that, "Physical activity and psychological stress were hypothesized to improve more in participants with high self-efficacy than in those with low and medium self-efficacy after a one-week intervention. 39 female university students participated. The intervention had two steps: a lecture on self-monitoring and goal setting (160 min.) and a one-week pedometer intervention. Analyses were conducted on tertile groups according to self-efficacy at baseline. Pedometer step counts were higher in the high self-

efficacy group than in the low self-efficacy group after intervention. Helplessness decreased time dependently after intervention only in the high-self-efficacy group. Because physical activity improved more in the high self-efficacy group after a one-week intervention, one hypothesis was supported.

Methods

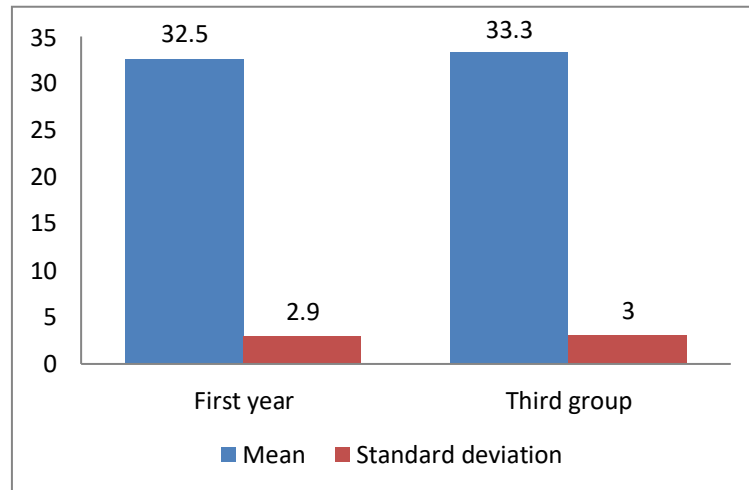
Data was individually collected on 40 male cricket players, 20 from first year batch and 20 from third year batch (Age 18±25 years) at Govt Degree college Shopian. Stress questionnaire developed by Sheldon was used in the research. Simple random sampling was used for collection of data. The data were analysed using descriptive and t test.

Results

The mean value and standard deviation of first year batch and third year batch cricket players was (32.5#33.3 and 2.9#3.00), respectively in relation to academic stress. Calculated t-ratio was found 0.45 in relation to academic stress.

Group	Mean	S.D	T-ratio
First year	32.5	2.9	0.45
Third year	33.3	3.00	

Table 1: Tabulated presentation of academic stress among first year and third year male cricket players.



Graph 1: Graphical presentation of academic stress among first year and third year male cricket players.

Discussions

Researcher has undertaken the study, "Comparative study of Academic stress among first year and third year batch male cricket players of Shopian College" and the subjects were selected from Degree College Shopian, Kashmir. The data pertaining to this study was collected by questionnaire of Sheldon on stress. In overall Numerical and statistical analysis of stress among first year and third year batch male cricket players, It was found that there was insignificant difference of Academic stress among first year and third year batch male cricket players of Shopian

College. Hence the hypotheses were accepted.

Recommendations & Conclusions

The result showed that there was insignificant difference of Academic stress among first year and third year batch male cricket players of Shopian College. Hence the hypotheses were accepted.

The similar study may be repeated on the female subjects and other class of the society for different age groups. To make this study more authentic and valid, the study may be repeated on the larger sample.

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Study of Self-Esteem of Football Players at Different Playing Position

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Abstract

The purpose of the study was to compare the Study of Self Esteem level of Football players at different playing position. Thirty (30) male football players from various football clubs of Gadchandur, Chandrapur (MS) were selected for this study. Subjects were selected with purposive sampling methods 10 each from different playing position i.e. 10 Defender, 10 Mid Fielder, and 10 Striker. The age of the subjects were ranged between 20 to 25 years. The Questionnaire of Rosenberg Self-esteem scale was used for data collection. Statistical analysis was done on the basis of ANOVA comparison of Self-esteem of football players at different playing position at 0.05 level of significance. Result shows that there is difference between the mean of self-esteem of football players at different playing position. To see this differences were significant or not One Way Analysis of Variances were implied. We found that there is significant difference between different playing positions of football players because calculated 'f' value is 7.79 which is greater than tab $F_{0.05}(2,27) = 3.354$. Since the 'f' ratio is found to be significant. From the Table of Post-hoc test we reviled that Midfielder and Striker shows significant differences as the Mean Difference 5.2 is greater than Critical Difference 3.22, whereas Defender and Midfielder & Defender and Striker shows insignificant differences as the Mean Difference 1.8 & 2.6 is lesser than Critical Difference

By seeing the Mean we reviled that Striker shows high level of self-esteem followed by Defender playing position and least in Midfield playing position. It may be attributed that Striker as they are attacking players practice more or they give more time on ground which may develop their psychological factors as compared to Defender and Midfielder means defensive players.

Key Words: Self Esteem, Football Players: Defender, Midfielder & Striker

Introduction

Psychological status is of great importance in playing sports with a high level of neurosis and attention. The success of football player's tactical activity is largely

determined by the high level of development of his basic features of attention, perception, self-esteem, etc. The most important feature of footballer is its high intensity that reaches the limit in the most vital moments of the game. Brain

mental functions, such as memory, thinking, perception, self-esteem, etc play the most important role. Therefore, the identification of psychological characteristics of footballer with different playing positions is of sufficient scientific and practical interest. Self-esteem is one of the psychological parameters which play an important role in footballer.

Self-esteem can be said as one's more or less sustained sense of liking oneself. Self-esteem refers to general feelings of self-worth or self-value of oneself. It is the way an individual feels about himself/herself and how he/she likes or dislikes to other people. Self-esteem is pride in oneself by which one is aware and accepts one's inherent strengths and positive qualities. In other terms it is the judgment that people make of themselves. It could be high or low. When an individual can accept his weaknesses and faults and simultaneously recognizes his strengths and positive qualities, the person will experience strong self-worth and high self-esteem.

Many studies show that high self-esteem can improve health. Some shows that high self-esteem in young people lead to increased participation in sports activities. But low self-esteem is associated to greater participation in dieting behaviours. Some researcher founded that their average levels of physical conditioning, sports ability and perceived body attractiveness decreased as their age increased. At that time, there may be decreases in activity, leading to increases in levels of obesity and fatness. Therefore, self-esteem may be significant in avoiding activity in increasing age. Some studies also found that the higher the person's self-esteem, the more likely they were to be concerned in some form of physical

activity, but low levels of self-esteem was linked to dieting behaviour e.g. Skipping meals, eating lesser, avoiding of high sugar/high fat meals, which could eventually lead an individual to maladaptive behaviours e.g. Eating disorders.

Players are vulnerable to the problem of attaching Self-esteem to one's performance because they are judged by how well you perform. Positive interface of coach with athletes improves Self-esteem or decreases Self-esteem because of vulnerable to variation in coaching behavior. But in sports like football, basketball, etc., Self-esteem has a greater impact, High Self-esteem is characterized by positive achievement, behavior, and sustained motivation. Low Self-esteem characterized by Dysfunction pattern of achievement. Behaviors suggesting that Self-esteem is a powerful character. Self-Esteem is a basic motivational factor in sports. A players is always undergoes in a form of positive or negative Self-Esteem. Positive Self-Esteem is characterized by the positive achievement, excellent behavior and sustains motivation. Negative Self-Esteem is always characterized by a functional pattern of achievement and bad behavior. Suggesting that Self-Esteem is a powerful variable and its impact on player's motivation in sports. Hence the researcher has taken the study "Study of Anxiety level of Football players at different playing position"

Method

Thirty (30) male football players from various football clubs of Gadchandur, Chandrapur (MS) were selected for this study. Subjects were selected with purposive sampling methods 10 each from

different playing position i.e. 10 Defender, 10 Mid Fielder, and 10 Striker. The age of the subjects were ranged between 20 to 25 years. The Questionnaire of Rosenberg Self-esteem scale which has 10 questions with four option i.e. Strongly Agree, Agree, Disagree and Strongly Disagree and 5 questions are reversed in valence. There is no time limit. The test was

distributed to the players and the same were collected back after having filled by the players.

Analysis

Statistical analysis was done on the basis of ANOVA comparison of Self-esteem of football players at different playing position at 0.05 level of significance.

Comparison of level of Self-esteem of Football Players at Different Playing Positions

Table – 1

SV	SS	df	MS	F
between	72.26	2	36.13	7.79*
error	125.1	27	4.633	

*Significant at 0.05 level

$F_{0.05(2,27)} = 3.354$

Post Hoc Test

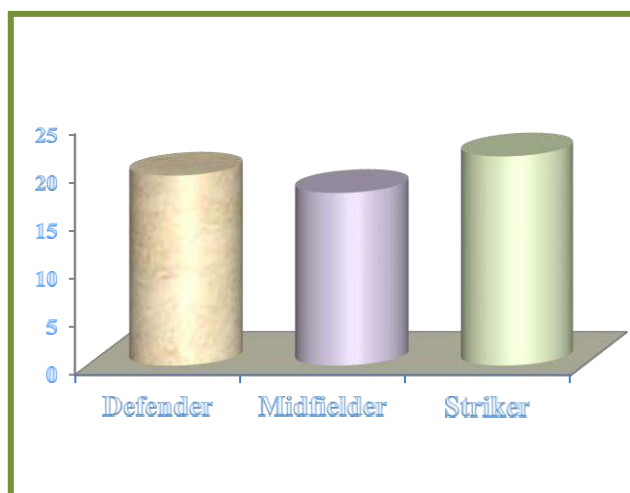
Defender	Midfielder	Striker	MD	CD
19.7	17.9		1.8	
19.7		21.7	2.6	3.22
	17.9	21.7	5.2*	

*Significant at 0.05 level

Above table shows that there is difference between the mean of self-esteem of football players at different playing position. To see these differences were significant or not One Way Analysis of Variances were implied. We found that there is significant difference between different playing positions of football players because calculated 'f' value is 7.79 which is greater than tab $F_{0.05(2,27)} = 3.354$.

Since the 'f' ratio is found to be significant. From the Table of Post-hoc test we reviled that Midfielder and Striker shows significant differences as the Mean Difference 5.2 is greater than Critical Difference 3.22, whereas Defender and Midfielder & Defender and Striker shows insignificant differences as the Mean Difference 1.8 & 2.6 is lesser than Critical Difference 3.22.

Graph



Level of Self-esteem of Football Players at Different Playing Positions

Conclusion

Concluding we can say that there is difference between the mean of Self-esteem of football players at different playing position. To see these differences were significant or not One Way Analysis of Variances were implied. We found that there is significant difference between different playing positions of football

players. By seeing the Mean we revealed that Striker shows high level of self-esteem followed by Defender playing position and least in Midfield playing position. It may be attributed that Striker as they are attacking players practice more or they give more time on ground which may develop their psychological factors as compared to Defender and Midfielder means defensive players.

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Comparative Study on Achievement Motivation and Self Esteem Level among Tribal and Non-Tribal Girls

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Abstract

The main objective of the study was to compare the achievement motivation and self esteem level among tribal & non-tribal girls. For this study 50 samples in which 25 tribal girls and 25 non-tribal girls selected from Himachal Pradesh State. The age group of the selected samples ranged from 13-18 years. All the samples selected from random basis. The selected girls were studying in different schools of Himachal Pradesh State. To assess the achievement motivation of selected samples, Achievement Motivation inventory developed by Km Roma Pal and also to assess the self esteem level of selected girls, self esteem inventory developed by R.K. Sharma was used. Both the inventories are highly reliable and valid. To compare the achievement motivation & self esteem level of selected samples 't' test was used. Results of the study have found that there is no significance differences on achievement motivation among tribal & non-tribal girls whereas on the other hand tribal girls have better self esteem level as compared to non-tribal girls.

Key Words: Achievement Motivation, Self esteem, Tribal & Non-tribal girls etc.

Introduction:

Achievement is relatively a new concept in the world of motivation. It is now widely used and heard in the area of education. Achievement motivation refers to the tendency to strive for success or the attainment of desired art. According to Allan (2002). Achievement motivation is conceived as a talent disposition which is manifested in overt striving only individual perceives performance as instrumental to a sense of personal accomplishment. Individuals high in achievement motivation are at their best when they can maintain a high level of involvement in ensuring the excellence of activities under their co-ordination or control. However they do relatively less well when required to manage excessive tasks or to function in highly

stressful environment. Have you ever wondered that hoe some people go on to achieve great success in a chosen field, yet others seemingly do not have the same sense of achievement motivation? What drives them to excel? Can we develop or promote that same level of achievement in ourselves or in our students? Achievement motivation is defined as the need to perform well or the striving for success and evidenced by persistence and effort in the face of difficulties (Spencer, 1983). Achievement motivation is regarded as a central human motivation. According to Hilgard (1996) students may have the desire to achieve and ability to accomplish the task, but feel the accomplishment has little or no value and feel doing it is not worth the effort or time.

Self-assurance is critical in practically every part of our lives, yet such a large number of individuals battle to discover it. Unfortunately, this can be an endless loop: individuals who need self-assurance can think that it's hard to end up successful. After all, the vast majority are hesitant to back an undertaking that is being pitched by somebody who was apprehensive, bobbling, and excessively remorseful. Then again, you may be influenced by somebody who talks obviously, who holds his or her head high, who answers addresses without a doubt, and who promptly concedes when he or she doesn't know something. Sure individuals motivate trust in others: their group of onlookers, their associates, their supervisors, their clients, and their companions. What's more, picking up the certainty of others is one of the key courses in which a fearless individual discovers achievement. Everybody feels restless sometimes. It's an ordinary feeling. For instance, you may feel anxious when looked with an issue at work, before taking a test, or before settling on an essential choice. Nervousness issue is extraordinary, however. They are a gathering of psychological sicknesses, and the pain they cause can shield you from going ahead with your life ordinarily. For individuals who have one, stress and dread are consistent and overpowering, and can

incapacitate. Be that as it may, with treatment, many individuals can deal with those sentiments and return to a satisfying life. Nervousness issue is an umbrella term that incorporates distinctive conditions. Social tension issue; additionally called social fear, this is the point at which you feel overpowering stress and reluctance over ordinary social circumstances. You focus about others passing judgment on you or on being humiliated or mocked.

Methodology:

For this study 50 subjects were selected in which 25 tribal girls & 25 non-tribal girls from Himachal Pradesh State. The age group of the subjects ranged from 13-18 years. All the samples selected on random basis. To measure the achievement motivation level, Achievement Motivation inventory prepared by Km Roma Pal and to assess the self esteem level, self esteem inventory prepared by R.K. Sharma was preferred. Both the inventories are highly reliable and valid. To compare the achievement motivation & self esteem level of selected samples 't' test was used.

Results and Discussion:

The raw data of achievement motivation & self esteem of selected subjects was appropriate statistical analyses are presented in given below:

Table No.1

Mean Difference of Achievement Motivation Score of Tribal and Non-Tribal Girls

Group	N	Mean	S.D	M.D	't'
Tribal Girls	25	23.3	5.20	1.9	1.38
Non-Tribal Girls	25	21.4	3.29		

't' at 0.05=2.02

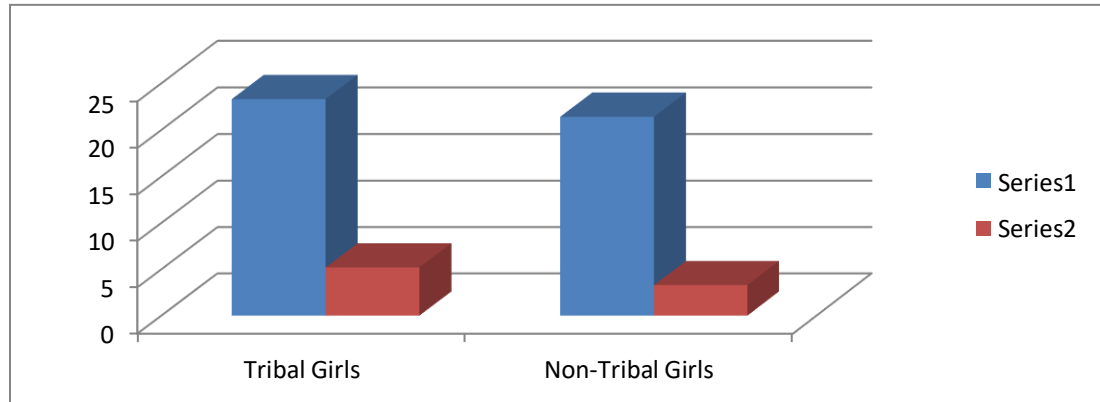


Fig.No.1

From table No 1; result found that tribal girls have achievement motivation level (M = 23.3, SD = 5.20) and non-tribal girls (M = 21.4, SD = 3.29). The calculated 't' value is (1.38) which is less than the tabulated value (2.02), so that there is no significance difference has been found at 0.05 level.

Table No.2

Mean Difference Of Self Esteem Score Of Tribal And Non-Tribal Girls

Group	N	Mean	S.D	M.D	't'
Tribal Girls	25	19.2	2.74	7.1	2.28*
Non-Tribal Girls	25	12.1	3.15		

't' at 0.05=2.02

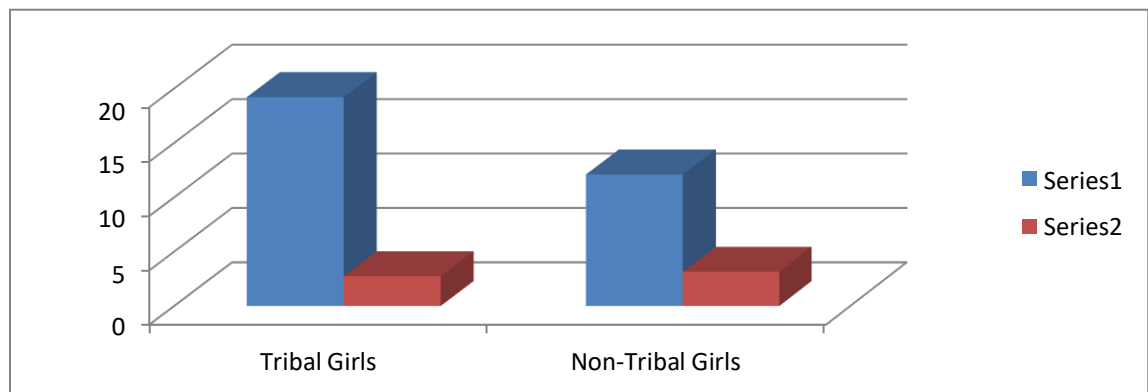


Fig.No.2

From table no. 2, results show that tribal girls have high self esteem level (M=19.2, SD= 2.74) as compared to non-tribal girls (M=12.1, SD=3.15). The calculated 't' value is (2.28) which is greater than the tabulated value (2.02), so that both the group differs at 0.05 level.

Conclusion:

It is concluded that there is no significance differences on achievement motivation among tribal & non-tribal girls; in other

words we can say that both the group have same achievement motivation level whereas on the other hand tribal girls have better self esteem level as compared to non-tribal girls.

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Influence of Motivation toward the Sport's Performance

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Abstract

The purpose of this study was to investigate the role of motivation toward the sports performance. Motivation is the foundation all athletic efforts and accomplishment without your desire and determination to improve your sports performances, all of the other mental factors, confidence, intensity, focus and emotions are meaningless. To become the best athlete, you must be motivated to do what it takes to minimize your ability and achieve your goals. Motivation is an internal energy force that determines all aspect of our behavior, it also impact on how we think, feel and interact with others. High motivation is widely accepted as an essential prerequisite in getting athletes to fulfill their potential. Knowledge regarding various types of motivation is essential to understand the true import of its meaning. How to motivate and athlete or a student is a question which requires the details and in in-depth study of various techniques/methods of motivation. Motivation occupies the central place in teaching and learning process. Every teacher, sports coach, or physical director is faced with the problem of motivating the players and athletes to learn, therefore it is essential to know the ways and means to achieving motivation.

Key Words: Motivation, Descriptive, Accomplishment, Elaborate

Introduction:

The word motivation is derived from a Latin word 'MOVERE' meaning 'TO CHANGE'; 'to move'. When we say that one is motivated, it means that he is driven or moved by an inner urge or force to archive the goal.

Motivation as a process through which an individual, stimulated goaded or coaxed to act in a particular fashion or manner towards a particular direction. Motivation is something that keeps the individual moving on an up in the struggle for the existence and learning – the acquisition of concept, skill and activities so important to sustain life and to play sport. We must have to have the

energy of motivation in order to move, improve and succeed on the journey of life.

Motivation is an internal energy force that determines all aspects of our behavior; it also impacts on how we think, feel and interact with other. In sports, high motivation is widely accepted as an essential prerequisite in getting athletes to fulfill their potential.

We may completely understand the journey but without action, nothing happens, without motivation, we would not yet out of bad in the morning..... ever again.

Importance of Motivation in Sports:

Importance of Motivation in Sports aimed at attaining excellence, getting ahead,

improving on past records, beating competitors, doing things better, faster, more efficiently, and finding unique solutions to difficult problems.

Motivation is emotional talent. It is the key to learning and training once released it can work wonders. It smothered fear; it steamrolls over obstacles. It turns zero into heroes in any field of endeavor and creates national and international champions from out of players for whom no one would ever predict success.

Eminent sports physiologist R. N. Singer has emphasized the importance of motivation in a simplified but essentially accurate equation

Performance = Learning + Motivation

People achieve great things in life when they are highly motivated. It is impossible to have achievements without some sort of motivation.

We study and achieve better academic standards because we know it will help us improve our career prospects in life, similarly, we engage in sporting activities for their positive outcome – better health, more fitness, higher skill, greater achievement, balance personality and good character and the like. The more rewarding the benefits of sports, the more strongly motivated we are to take part in them, to raise standard of performance and achieve higher success.

Acquire variety of skill and achieve excellence in sports, motivation is a prerequisite, without motivation most life business (activities) will come to stand still. Developing athlete in any sports requires a

person to undergo heart, rigorous, painful and sometimes injurious trainings for several hours a day for months and years on end. Only then can the high level success be achieved. To accomplish this, the tough athlete must have something that keeps them motivated all through and continually push their bodies and minds for what and come back from whatever struggle or set-back they may experience along the way.

Forms of Motivation: Motivation can be broadly classified into the following two kinds:

Natural Motivation or Intrinsic Motivation
Artificial Motivation or Extensive Motivation

This motivation becomes intrinsically in the form of internal device to improve skill, perform progressively better and better and ultimately achieve the goal (excellence).

Extrinsically motivation may come in the form of incentives, awards, rewards or encouragement from parents, coach, peers or significant others.

Natural Motivation or Intrinsic Motivation:

There are the three types of Intrinsic Motivation.

- **Knowledge:**

Being intrinsically motivated for knowledge occurs when athletes participate in activities because of the pleasure and satisfaction they get from learning, acquiring, and studying something new in their efforts. This would include, learning how to squat, or refining your pattern on dead lifts.

- **Accomplishment:**

Being intrinsically motivate for accomplishment occurs when athletes participate in activities because of the pleasure and satisfaction they get from mastering various skills.

- **Stimulation:**

Being intrinsically motivate for stimulation occurs when athletes participate in activities because of the pleasure and satisfaction such as danger, pain, or excitement.

Extrinsic motivation or Artificial motivation:

There are four types of extrinsic motivations:

- **Integrated Regulation:** Integrated regulation occurs when athletes perform activities to benefit different aspects of life, rather than for the pleasure of participating itself.
- **Identified Regulation:** identified regulation occurs when athletes participate in an activity because the activity is considered of high value and important to the participant, even if they do not enjoy the activity itself.
- **Interjected regulation:** Interjected regulation occurs when athletes participate in an activity because of various pressures.
- **External Regulation:** External regulation occurs when athletes participate in an activity only because they feel they have to, or because they may get a reward.
- **The excellence or achievement oriented highly motivated athletes will:**

- Demonstrate an extremely highly persistence at activities;
- Exhibit exceptional quality in performance;
- Complete the given tasks at a high rate;
- Take reasonable risk and look forward to accepting more challenging goals.
- Take responsibility for their omissions and commissions during practice and/or in competition.
- Consider success at a contest, how so prestigious, as a finish-line in achievement.
- **Signs of Low motivated athletes will:**
 - A lack of desire to practice as much as you should.

- Less than 100% effort in training
- Skipping or shortening training
- Effort that is inconsistent with your goals

- **The sport-motivation is greatly influenced by:**

Age, Sex, facilities (whether at school, or in the neighborhood), types of sport or exercise program, time at the disposal of the individual, sources of motivation, so on and so forth, the talented individuals, however, continue to keep the level of their motivation high as they perform well and excel in sport competitions, depending upon the backup they manage to get in terms of training, coaching, equipment, facilities etc.

- **Techniques to increase motivation of Athletes in sports:**

1. Setting of goals properly. Develop a reasonable goal and a reasonable plan.
2. Create a list of reasons why it is important to you to reach your goal and read this list (even when you don't feel like it) every morning and whenever

- when you're tempted to deviate from your plan.
3. Identify obstacles and problem solve in advance.
 4. Prepare for feeling of discouragement, disappointment and depreciation.
 5. Decide on how you will reward yourself when you reach sub goals.
 6. Use of effective methods/aids and devices in sports.
 7. Knowledge of the result and progress.
 8. Reward and punishment: AS for as possible the use of punishment be avoided because it is negative. Reward should be properly used by the teacher as well as the sports coach as it is a positive incentive, out too frequent and unqualified use of rewards is equally harmful for the learner.
 9. Competition: Competition is a powerful source of motivation.
 10. Appropriate learning situations and environment: This is to take place should be such as motivate the learner, the playground should be surrounded by neatly environment, so that the player are well motivated to take part in games.
 11. Scholarships: Providing scholarships to athletes is also considered to be an effective method for enhancing motivation.
 12. Reinforcement: Reinforcement is an important motivational tool.
 - a. Positive reinforcement or Reward,
 - b. Negative Reinforcement of Punishments
 13. Feedback: Providing appropriate feedback also has immense effect on motivation.
 14. Grading: classifying athletes on the basis of their performance levels also helps them in motivating to improve their performance.
 15. Role of mass media:- Mass Media also plays an important role in motivating athletes. TV and NEWS coverage of their performance and even of training sessions do provide them with a feeling of pride, prestige and recognition, such coverage not only provides boost to their self-confidence and competence, but also motivates other young athletes to emulate their feat.
 16. Innovative Curriculum: Through innovative curriculum planning both interest and opportunity to participate can be increased.
 17. Coach as a motivator: A coach who has participated in the sport himself who is highly skilled, and can plan the next completion athletes.
 18. Equipment
 19. Length of practice.
 20. Have a training partner.
 21. Positive self-talk
 22. Motivational music

Conclusion:

- The role of motivation in the field of physical education and sports can never be over emphasized. Motivation is one of the most essential, attributes for effective performance, it is a driving force which compels the athletes to accomplish difficult and challenging tasks.

There are number of factors which contribute to effective and successful performance one factor is to be selected as most important, it would undoubtedly be the motivation.

- Excellence in sports cannot be achieved over night. High level of sport skill is attained only after years of motivated practice. Is the result of unfold hours spent in the sports field. It is requires toil and sweat, physiological and psychological endurance, and ability to persist. An athlete has to face many problems including psychological pressure, fatigue, stress, strain and mood disturbances.
 - Without sufficient motivation an athlete will not perform well in competition, or train effectively on practice.
- Desirable level of motivation is necessary to sustain the athlete while unusual effort during training and competition.
- The basic conditions and concepts found highly related to sports motivation (especially top sport) include goal-setting, feeling a self-efficacy or competence, flow (a state of extremely positive psychological well being) extrinsic awards and rewards and attribution of causes for success or failure in athletic competitions.

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Study of Mental Health of Players of Various Games

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Abstract

The purpose of the study is to compare mental health of players of various games. For this study researcher selected Fifty (50) male players were selected who has participated Sant Gadge Baba Amravati University, Amravati Inter Collegiate Tournaments from Amravati for the purpose of the study. Subjects were selected with purposive sampling methods 10 each from different game i.e. 10 Kabaddi players, 10 Kho Kho players, 10 Basket ball players, 10 Volley ball players and 10 Cricket players. The age of the subjects were ranged between 18 to 25 years. Mental health was measured by self modified inventory. The original inventory was developed by Dr. Jagdish & Dr. A. K. Srivastava. Analysis of Variance (ANOVA) with Least Significant Difference (LSD) post hoc test was utilized in order to determine the means significant difference between different mental healths of academic students. The level of significance was set at 0.05 levels. Result shows that mental health of players of various games as obtained F-ratio was 8.545 which was higher than that of required tabulated 'F' value of 2.578 at .05 level of significance with (4,45) degree of freedom. The sequence of Mental Health in Players was (97.9) Cricket Players > (96.9) Volleyball Players > (93.7) Kho Kho players > (90.5) Basketball Players > (88.6) Kabaddi Players. In conclusion we can say that significant difference were found between the means of Kabaddi and Kho Kho players, Kabaddi and Cricket as well as Basketball and Cricket players mental health. Whereas, there is no significant difference was found between the means of rest comparison of player of different game regarding player mental health, as the mean difference was lesser than the critical differences. It may be attributed that Kabaddi and Basketball game requires high aggressive level which is the main reason that they become mentally weak as compared to Kho Kho, Volleyball and Cricket Players.

Key Words: Mental Health, Kabaddi, Kho Kho, Basketball, Volleyball and Cricket.

Introduction

The concept of health is somewhat complicated to understand. When we say somebody is healthy, it means that the person is normally doing his activities efficiently and does not outwardly show any signs of any disease in him. A healthy person is not only physically healthy, but also mentally healthy. The modern concept of health is extends beyond the proper functioning of an individual body. It includes a sound mind and controlled

emotions. Health can be stated as a state of being, sound in body and mind. It means that both the mind and body are working very efficiently and harmoniously. Man can be said as an integrated psychosomatic unit, whose behavior can be determined by both physical and as well as mental factors. Mental health today can be stated as an important aspect of one's total health status and contributes to the maintenance of physical health as well as social effectiveness. It termed as the normal state

of well-being, it is said to be positive but relative to quality of life. It is a condition through which one can show the characteristic of an average person who meets the demands of life on the basis of his own capacities and limitations. The word mental health implies that the degree of mental or psychological which an individual enjoys at a time is continuously changing. It is not mere an absence of mental illness that constitutes mental health. On the other hand we can say that, it is a positive, active lifestyle of an individual's daily life. This quality of life can be manifested in the behavior of an individual whose body and mind works together in the same direction. Individual's thoughts, feelings, actions, function harmoniously towards the common end. It means the ability of an individual to balance owns feelings, desires and ambition.

Mental health can be stated as the level of psychological well-being, or an absence of a mental disorder; it is the "psychological wellbeing state of someone, who is functioning at an optimum level of emotional and behavioral adjustment". From the perspective of the positive psychology or holism, mental health may include an individual's ability to enjoy life, and maintain a balance between life activities and efforts to achieve psychological resilience. World Health Organization has stated that mental health includes "individuals well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self-actualization of one's intellectual and emotional potential, among others." World Health Organization further states that the well-being of an individual is encompassed in the realization of an

individual's abilities, coping with normal stresses of life, productive work and contribution to their community? A person struggling with his own behavioral health may faces stress depression, anxiety, aggression, learning disabilities, mood disorders, or other psychological concerns. Various counselors, therapists, life coaches, psychologists, nurse practitioners or physicians can help to manage behavioral health concerns with treatments such as various therapies, counseling, or medication. The new field of universal mental health is "the area of study, research and practice that places precedence on improving mental health and achieving equity in mental health for all people worldwide". Some mental health clinics are now opened to identify the various problems regarding behavioral wellness.

Competitive games and sports are being focused upon by the researchers of different scientific fields in order to bring out the possibility of different variables which influence players performance. According to sports psychologist, experts, coaches, there are many factors that affect optimal performance levels of players. One of these factors is the players mental abilities or we can say mental health. However there uncountable mental factors that effect on players performance but over all we can say that if a player is mentally healthy, he can handle the every mental situation arises during practices or even competition. He can control every mental factor. In fact, mental health can enables the individuals or player to better stability, concentration, and self-confidence than their opponent and have a good ability of control and coordination under stressful conditions. Hence, researcher has taken the

study “Study of Mental Health of Players of different Games.”

Methods

Subjects

Fifty (50) male players were selected who has participated Sant Gadge Baba Amravati University, Amravati Inter Collegiate Tournaments from Amravati for the purpose of the study. Subjects were selected with purposive sampling methods 10 each from different game i.e. 10 Kabaddi players, 10 Kho Kho players, 10 Basket ball players, 10 Volley ball players and 10 Cricket players. The age of the subjects were ranged between 18 to 25 years. Subjects did not use any ergogenic aids or supplementations and also they were all free from any injuries during the collection of data.

Administration of the test:

This scale was developed by Dr. Jagadish & Dr. A. K. Srivastava. The inventory consists of 56 statements. The investigator selected 44 statements from the original mental health inventory. Senior most

teachers, educators were consulted for the finalization of tool. The scale consists of 44 items in which 16 are positive and 28 are negative statements. In the present scale 4 alternative responses have been given to each statement i.e. Always, Often, Rarely, and Never 4 scores to “Always”, 3 scores to “Often”, 2 scores to “Rarely”, and 1 score to “Never” marked responses as to be assigned for true keyed (positive) statements where as 1,2,3, and 4 scores for “Always”, “Often”, “Rarely”, and “Never” respectively in case of false keyed (negative) statements. Prior to the administration of the test all the instructions were imparted to all students that they had to follow while marking their responses and the same were collected back after having filled by the players.

Statistical Analysis

Statistical analysis was done on the basis of Analysis of Variance (ANOVA) to determine the significant difference between mental healths of academic students. The level of significance was set at 0.05 levels.

Table – 1

Comparison of Mental Health of Players of various games

Variables	Source	SS	df	MS	F
Mental Health	Between-treatments	639.68	4	159.92	8.545*
	Within-treatments	860.8	45	18.713	
	Total	1500.48	49		

*Significant at 0.05 Level

tabulated ‘f’ value at $df_{(4,45)} = 2.578$

Above table revealed that there was significant difference were found in Mental Health of players of various games as obtained F-ratio was 8.545 which was higher than that of required tabulated ‘F’

value of 2.578 at .05 level of significance with (4,45) degree of freedom.

Since the one-way analysis of variance was found to be significant in related to Mental Health, the least significant

difference (L.S.D.) was applied to assess the paired means difference among the players of different games.

Table- 2

Least Significant Difference Post-Hoc

Kabaddi	Kho Kho	Basket Ball	Volley Ball	Cricket	MD	CD
88.6	93.7				5.1*	4.98
88.6		90.5			1.9	
88.6			96.9		0.6	
88.6				97.9	9.3*	
	93.7	90.5			1.8	
	93.7		96.9		2.9	
	93.7			97.9	0.9	
		90.5	96.9		1.1	
		90.5		97.9	7.4*	
			96.9	97.9	1	

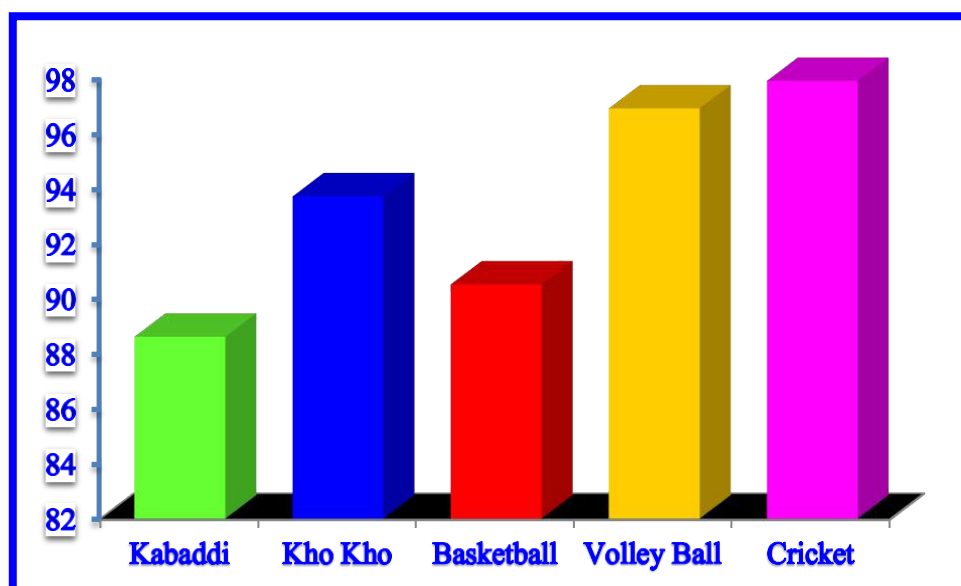
*Significant at .05 levels.

From the above table it was clearly revealed that significant difference was found between the means of Kabaddi and Kho Kho players, Kabaddi and Cricket as well as Basketball and Cricket players mental health, as the mean difference 5.1, & 7.4 was greater than the critical differences 4.98. Whereas, there is no significant difference was found between

the means of rest comparison of player of different game regarding player mental health, as the mean difference was lesser than the critical differences.

The sequence of Mental Health in Players was (97.9) Cricket Players > (96.9) Volleyball Players > (93.7) Kho Kho players > (90.5) Basketball Players > (88.6) Kabaddi Players.

Graph



Comparison of Mental Health of Players of various games

Conclusion

Concluding the above study, we revealed that significant difference was found in Mental Health of players of various games. By seeing the mean we can conclude that significant difference was found between the means of Kabaddi and Kho Kho players, Kabaddi and Cricket as well as Basketball and Cricket players mental health. Whereas, there is no significant difference was found between the means

of rest comparison of player of different game regarding player mental health, as the mean difference was lesser than the critical differences. It may be attributed that Kabaddi and Basketball game requires high aggressive level which is the main reason that they become mentally weak as compared to Kho Kho, Volleyball and Cricket Players.

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Sportsman's Spirit of Kho Kho Players: Chaser and Runner

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Abstract

The purpose of the study was to compare the sportsman's spirit level of Kho Kho players: Chaser and Runner. The sample of Forty (40) male Kho Kho Players were selected from various clubs or mandals of Amravati, who has at least participated in state level or inter collegiate level tournaments. Subjects were selected with purposive random sampling methods, 20 players who were mainly interested in chassing in kho kho game and 20 players mainly interested in running in kho kho game. The age of the subjects were ranged between 20 to 28 years. Subjects did not use any ergogenic aids or supplementations and also they were all free from any injuries during the collection of data. To measure the sportsmen's spirit level researcher has selected 'Sportsman-Spirit Test' which was constructed by L. N. Dubey. Statistical analysis was done on the basis of Mean for the comparison of sportsman's spirit of Chaser and Runner in Kho Kho game. A 't' test was utilized in order to determine the significant difference. The Significance of Level was kept at 0.05 Level.. Result shows that on the basis of mean there was difference found between the mean of Sportsman's Spirit of Chaser and Runner of Kho Kho players of various clubs or mandals of Amravati. To see this differences is significant or not at 0.05 level of significance. Researcher further calculated 't' test & above table shows that there was no significant difference was found between chaser and runner as the calculated 't' value 0.391 is lesser than the tabulated 't' value 2.024. Hence, the difference shows insignificant. It may be attributed that the player of kho kho game plays the role of chaser and as well as runner in chorus means the chaser of the first half of the game becomes runner in second half same way runner of the first half of the game becomes chaser in second half.

Key Word: Sportsman's Spirit, Kho Kho players: Chaser and Runner.

Introduction

Sportsmanship is an desire or ethos that a sport or activity will be enjoyed for its own sake, with proper contemplation for fairness, ethics, respect, and a sense of fellowship with one's competitors. A "loser" can be referred to an individual, player or team who does not take defeat well, while a "good sport" means being a "good winner" as well as being a "good loser" (someone who shows courteousness

towards another in a sports as well as in games).

Sportsmanship can be stated as an enduring and relatively stable characteristic or disposition such that individuals differ in the way they are generally expected to behave in every sport situations. In general, sportsmanship refers to qualities or characteristics such as fairness, self-control, courage, and persistence, and has been associated with an interpersonal concepts of treating others

and being treated fairly, or maintaining self-control even dealing with others, and respect for authority, rules and regulations, opponents team as well as own team even spectators. Sportsmanship is also looked as being the way of an individual who reacts towards a sport/game/player.

The spirit of fun and good fellowship

First of all, the men who play this great game have fun playing it. The desire to win is not permitted to assume a position of such vast importance in the minds of the players that fun is replaced by grimness, relaxation by tension, and cordial friendships by bitter enmities. The players on opposing teams fraternize both before and after their matches.

The spirit of moral conduct

Thus, we believe, perhaps the outstanding characteristic of volleyball today. When a player's finger barely touches the net, no official can possibly detect the foul. The player is faced with the necessity of making a moral choice between two diametrically opposed courses of action. Shall he conceal the foul or shall he admit it?

This is a stern test of moral fiber, for admission of the foul may lose a national championship. But so high is the level of human conduct in this sport that the hand goes up immediately, even though there is no rule requiring him to do so.

One of the traditions of the game, developing as it did in the Holyoke, Massachusetts, YMCA in 1895, is that of personal responsibility and integrity in calling fouls - even when the referee, umpire, or linesmen fail to see violations. From this standpoint it is truly a players' sport and incidents in the topflight national

competitions are on record where players have called their own fouls, missed by the officials, at times when it meant the difference between winning or losing a game and the match.

All this is "the spirit of player," a spirit of which we who have had some small part in its development may well be proud.

Kho Kho game is one of the most popular traditional sports in India. The origin of the game which most likely to be said as originated in Maharashtra but it is difficult to trace, but most historians consider, that it is a modified version of 'Run and Chase', a game which involved the skill of touching and running. Kho Kho game is also like any other traditional Indian game is inexpensive, simple and highly enjoyable. However, Kho Kho players need to be physically fit, agile, possess quick reflexes, agile movement and alertness to successfully compete. The nature of the game demands requires kho kho player should be able to pick up speed as quickly as possible and perform the movement rapidly. Speed is the quickness with which a player can be able to move his body from one place to another as fast as possible. During running and chasing in kho kho, players have to change their direction quickly and accurately for better performance. In spite of the physical qualities kho kho game also develops team or individuals spirit, a sense of solidarity, a highly sense of discipline and obedience.

Chaser: The players who sits in the squares are known as chasers. An attacker (active chaser) is a player who chases the players of the opposite side (runners) with a view to tag and touch runner.

Runners: The players other than the chasers side are known as runners. The

runners who are inside the limits for their turn of running and who save themselves from being touched by the chaser are also known as defenders.

Every individual posse's different sportsman spirit level, at different level i.e. international, national, varsity etc. likewise every individual may posse's different sportsman's spirit according to their different playing position's of a particular game. To see whether there is significant different or not the researcher has taken study as "Sportsman's spirit of Kho Kho players: Chaser and Runner".

Methodology:

Subjects

Fifty (40) male Kho Kho Players were selected from various clubs or mandals of Amravati, who has at least participated in state level or inter collegiate level tournaments. Subjects were selected with purposive random sampling methods, 20 players who were mainly interested in chasing in kho kho game and 20 players mainly interested in running in kho kho game. The age of the subjects were ranged between 20 to 28 years. Subjects did not

use any ergogenic aids or supplementations and also they were all free from any injuries during the collection of data.

Administration of test

To measure the sportsmen's spirit level researcher has selected 'Sportsman-Spirit Test' which was constructed by L. N. Dubey. There are 30 different situations in this test. Every situation has three alternative responses. The response indicates high sportsman-spirit should be awarded 2 marks, moderate 1 marks and the response indicating no sportsman's-spirit should awarded 0 marks. The test was distributed to the players and the same were collected back after having filled by the players.

Analysis:

Statistical analysis was done on the basis of Mean for the comparison of sportsman's spirit of Chaser and Runner in Kho Kho game. A 't' test was utilized in order to determine the significant difference. The Significance of Level was kept at 0.05 Level.

Comparison of Sportsman's Spirit level of Chaser and Runner of Kho Kho Game

Table – 1

Variables	Player	Mean	S.D.	S.E.	M.D.	D.F.	Obt 't'	Tab 't'
Sportsman's Spirit	Chaser	31.25	2.048	0.638	0.25	38	0.391	2.024
	Runner	31.5	1.986					

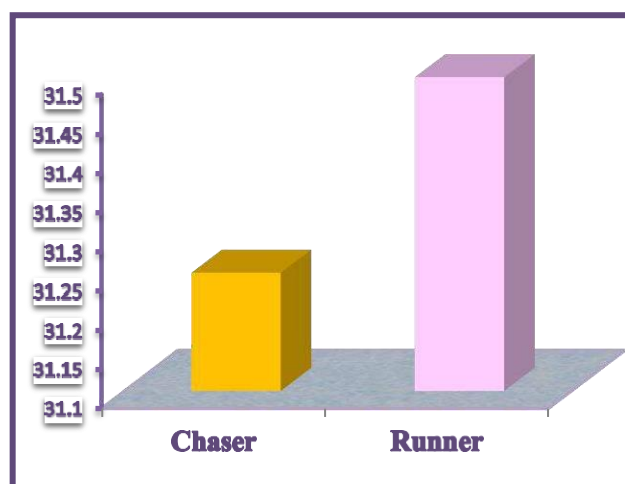
*0.05 level of Significance (38df)

tabulated 't' = 2.024

The above table revealed that on the basis of mean there was difference found between the mean of Sportsman's Spirit of Chaser and Runner of Kho Kho players of various clubs or mandals of Amravati. To see this differences is significant or not at level of significance. Researcher

further calculated 't' test & above table shows that there was no significant difference was found between chaser and runner as the calculated 't' value 0.391 is lesser than the tabulated 't' value 2.024. Hence, the difference shows insignificant.

Graph



Means of Sportsman's Spirit Level of Kho Kho Player: Chaser and Runner

Conclusions

It is conclude that on the basis of mean there was difference found between the mean of Sportsman's Spirit of Chaser and Runner of Kho Kho players of various clubs or mandals of Amravati. To see this differences is significant or not, researcher further calculated 't' test and result shows

that there was no significant difference was found between chaser and runner. Hence, the difference shows insignificant. It may be attributed that the player of kho kho game plays the role of chaser and as well as runner in chorus means the chaser of the first half of the game becomes runner in second half same way runner of the first half of the game becomes chaser in second half.

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Yoga in our Daily Life

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Current century is known as the fastest century, we all are running behind success. In the race to win, we have forgotten the time we are not giving full time to eat, sleep and rest. Due to this, we are facing many physical, mental problems in our routine life. In short, we have forgotten physical activities in this fast life. Physical activity can reduce many physical problems. Even we have forgotten natural laugh. That's why today laughing classes has begun. But natural is always natural. No doubt today people are too serious about their health, all are doing lots of physical exercises to fight against mental/physical problem.

In this modern world our environment is fighting for survival and we humans suffer from more and more physical and psychological stress, we cannot always control them but can learn how to face them and to this end Yoga is as good an invention it has ever been. The aim of yoga is attainment of physical, mental and spiritual health. The main credit of systematizing yoga goes to Patanjali who wrote the "yoga sutra" two thousand years ago. He has recommended 8 stages of yoga discipline.

Yoga has gained tremendous popularity in the last few years, it is the most rapidly growing health movement despite it was developed thousands of years ago. Age, religion, caste; sex is no bar with breathing and meditation techniques. There are many types of yoga and it may be hard for the

beginners which yoga type he or she wants to do. The most important benefit of yoga is the physical and mental therapy, the very essence of yoga lies in attaining mental peace, improved concentration power and a relaxed state of living.

Yoga is one of the best Physical/Mental exercise /activity from which anyone could get best mental/Physical balance It's not easy to ask what Yoga is.? Or what are the effects of Yoga? Yoga is a practical science and it is an open book, to know the benefits of Yoga one should practice it. Yoga is an ancient art based on a harmonizing system of development for the body, mind, and spirit. The continued practice of yoga will lead you to a sense of peace and well-being, and also a feeling of being at one with their environment. This is a simple definition.

The word "yoga" comes from the Sanskrit root Yuj, which means "to join" or "to yoke".

Human beings are made up of three components — body, mind and soul corresponding these there are three needs — health, knowledge and inner peace. Health is a physical need, knowledge is our psychological needs and inner peace is spiritual need when all three are present then there is harmony. Yoga is a practical philosophy involving every aspect of a person's being. It teaches the evolution of the individual by the development of self-discipline and self-awareness. Anyone

irrespective of age, health circumstances of life and religion can practice yoga. Yoga helps to discipline our sense of power with the “power of our own”.

Many thousands of years ago in India, Rishis (wise men and saints) explored nature and the cosmos in their meditations. They discovered the laws of the material and spiritual realms and gained an insight into the connections within the universe. They investigated the cosmic laws, the laws of nature and the elements, life on earth and the powers and energies at work in the universe -both in the external world as well as on a spiritual level.

They discovered Yoga with such rules. Hence we can say it is Heritage gift for us. But, I would like to bring some logically and noticeable matter regarding Yoga exercises and its relations to the solution of some physical/mental problems.

What is the Need?

As it was discussed above about the needs of Yoga in current life but main needs (as per my view) are mental peace, Satisfaction, Calm, Confidence, Physical Fitness, etc. As I have already mentioned that Yoga is a practical science and hence to know the benefits of Yoga one should do it regularly.

Chakki Chalan, Dhokni Kriya, Nauka Sanchalan, etc.

How yoga is important to build Health?

It's very simple to answer that we all are doing directly/indirectly yoga in our daily life, and from which we are gaining its benefits, if we see benefits of Yoga Asana the following benefits can be measured

Improves your flexibility, Builds muscle strength, Perfects your posture, Prevents cartilage and joint breakdown, Protects your spine, Better your bone health, Increases your blood flow, Drains your lymph's and boosts immunity, Ups your heart rate, Drops your blood pressure, Regulates your adrenal glands, Makes you happier, Finds a healthy lifestyle, Lowers blood sugar, Helps you focus, Relaxes your system, Improves your balance, Maintains your nervous system, Releases tension in your limbs, Helps you sleep deeper, Boosts your immune system functionality, Gives your lungs room to breathe, Prevents IBS and other digestive problems, Gives you peace of mind, Increases your self-esteem, Eases your pain, Gives you inner strength, connects you with guidance, Helps keep you drug free, Builds awareness for transformation, Benefits your relationships, Uses sounds to soothe your sinuses, Guides your body's healing in your mind's eye, Keeps allergies and viruses at bay, Helps you serve others, Encourages self-care, Supports your connective tissue, Uses the placebo effect, to affect change.

Yoga in daily life:

Many thousands of years ago in India, Rishis (wise men and saints) explored nature and the cosmos in their meditations. They discovered the laws of the material and spiritual realms and gained an insight into the connections within the universe. They investigated the cosmic laws, the laws of nature and the elements, life on earth and the powers and energies at work in the universe -both in the external world as well as on a spiritual level.

They discovered Yoga with such rules. Hence we can say it is Heritage gift for us. But, I would like to bring some logically and noticeable matter regarding Yoga exercises and its relations to the solution of some physical/mental problems.

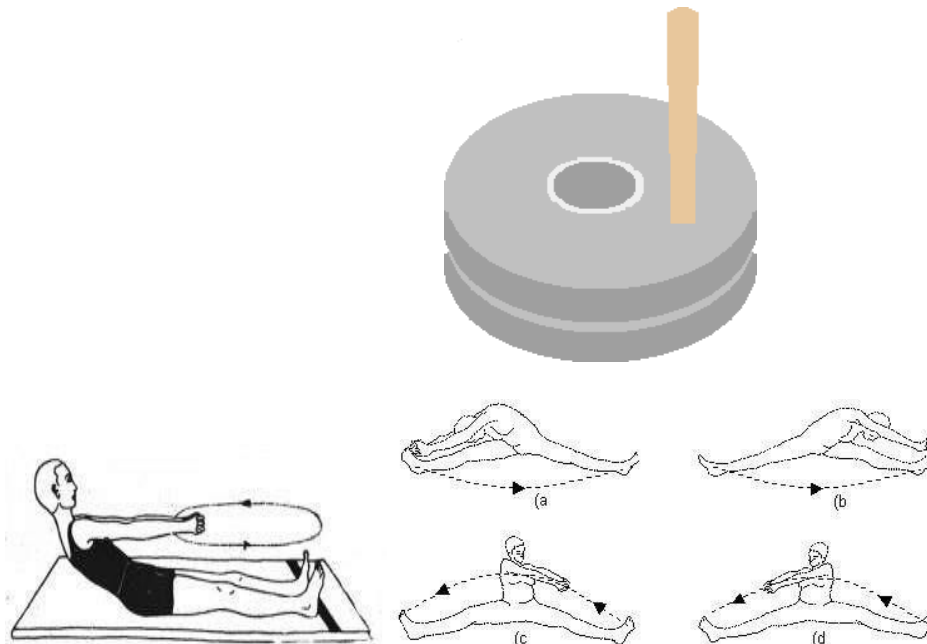
It is not important to discuss, what yoga is? Because today peoples of the whole world are following Yoga. But I would like to bring notice that few yogic exercises were used in past and due to modernism, the said

exercise are left and hence all exercises are included in yoga Today itself.

Come on let's discuss:-

Few exercises were our routine task/work/game and due to modernism many of them have been left and invented theirs new electronic version and hence many of us have many Physical and mental problems, few of them are:-

1. Mill Churning Pose Alternate name is Chakki Chalan



A few years ago, we had Home miller and we all used it, so during the Chakki Chalan, pressure was created on the side stomach and it gives massage to the internal organs. Hence maximum stomach problems were automatically solved, but after the creation of electric flour mill we are not using it and thus, maximum people are facing many problems like Obesity, cesarean, etc.

Benefits are:-

- It is an excellent exercise for toning the nerves and organs of the abdomen and pelvis.
- Good for Post-natal recovery.
- It is useful for regulating the menstrual cycle.
- It is also perform during the first three months of pregnancy.

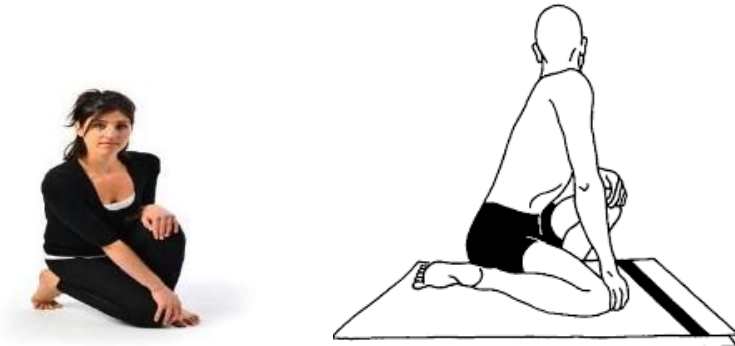
2. Nauka Chalan: Alternate name is Nauka Sanchalan



This day we have speed boat hence many of us are not using Paddles in the boat.
let's see benefits of Nauka Sanchalan exercise.

- Positive impact on the pelvis and abdominal area.
- Alleviates the constipation with abdominal massage.
- Beneficial for gynecological disorders.
- Shoulder, arms and buttocks gets attractive and taut look.

3 Booming and Mopping Alternate names are Crow Walk/Udarakarshan



In small town/villages early in the morning after drink, warm water, peoples are still using broom and mop, but this day we are using stand broom and wipers or servant is available

at our home. Hence many of us are not using it especially early in the morning. Hence the alternate exercise can be seen in yoga.

- This pose is very useful for abdominal ailments because it alternately compresses and stretches the organs and muscles of this region.
- It also relieves constipation
- And blood circulation in the legs improves.

In our childhood, many of us were playing with the poses like butterfly/ plane and run like a plane. But today our children are playing with Mobiles and china toys. Hence many children are facing some problems.

Let's see both the exercises in yoga with benefits

4. Aeroplane pose / Alternate name is Vimanasana / Virbhadrasana:



- Balancing the body on one leg in Airplane Pose helps in:
- Building strength in legs,
- Improving balance to avoid falls, and
- Increasing concentration.
- Raising one leg against the gravity and holding it results in:
- Increased lower back strength,
- Toned abs, and
- Flexed Hamstrings.
- Airplane pose gives emotional freedom as one feels stronger and in control once the pose is mastered.

This day's many farmers are using the latest technology to cut grass, hence many old machines have been left.

Chaff cutter/Wood Chopping/Washing Clothes are some of them. Let's see its alternate exercises in Yoga with benefits

6. Chaff cutter /Chopping wood/Washing the Clothes Alternate Names are

Bhujabali Shakti Vikasaka / Dhokni Kriya / Bhastrika



Benefits of Chaff Cutter/Wood Chopping and Washing the clothes exercise:

1. Reduce extra fat of hands
2. Best Exercise for shoulder (Full arm), back and Thigh

It can be more effective if it can be done with proper Breathing exercise like

1. increases the oxygen content in the blood
2. It removes blockages in the nose and chest.
3. It is good for asthma patients and removes inflammation of the throat.

A Comparative study of Stress and Anxiety of different round of Archer

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Abstract

Archery is the activity, practice or skill of using a bow to propel arrows. To perform better in archery, an archer must be stable by mentally and must controlled his emotions. The purpose of the study was to compare Stress and Anxiety of different round of Archer. For this purpose researcher has taken thirty (30) archer were selected, ten (10) from Compound round, ten (10) from Recurve round and ten (10) from Indian round. Archers were selected from Mahatma Jotiba Fule Archery Club, Ashti who regularly practice Archery. Subjects were slected by purposive and simple random sampling method. The age limit of the subjects was 20 to 25 Years. To see the level of stress and anxiety, a self constructed questionnaire was used for data collection. The questionnaire consisted of total 120 items. Out of those 120 items 60 items were designed to elicit the information on competition stress and rest of the 60 items were related to anxiety level during competition. To compare the stress and anxiety level of different round of archer researcher applied One Way Analysis of Variance (ANOVA). The level of significance was significant at 0.05 levels. Result shows that there was significant difference were found in Stress Level amongst Compound, Recurve, and Indian Round Archers as obtained F-ratio was 8.11 which was greater than that of required tabulated 'F' value of 3.354 at 0.05 level of significance with (2,57) degree of freedom. Whereas, Anxiety Level of Compound, Recurve, and Indian Round Archers shows insignificant as obtained F-ratio was 1.97 which was lesser than that of required tabulated 'F' value of 3.354 at 0.05 level of significance with (2,57) degree of freedom.

Key Words: Stress, Anxiety, Archer.

Introduction

Archery is the activity, practice or skill of using a bow to propel arrows. The word comes from the Latin word 'Arcus' bow (Bow and Arrows), arch, bend, arc. In ancient time, archery has been used for hunting and combat. But, in modern times, it is mainly a competitive sport and recreational activities. Archery is one of the oldest arts which is still practiced today. Archery is also known as a mental sport now a days, which requires high levels of focus, attention, etc. During Competitions, archers should go over shooting for a long time, and every shot

requires high level of attention. For good performance, i.e., high accuracy, stable position and posture, consistent movement, and precise shooting skills are also required.

There is a considerable corpus of evidence indicating that for successes in any sports psychological factors playing very distinct role. Sports scientists and human biologists have paid much attention to the relationships between psychological characteristics and performance in sports. Not only the body structure is influencing factor for the development of performance but also some other factors like aggression,

anxiety, level of aspiration etc. also plays an important role for the development of performance in sports and games.

Stress may be stated as any physical, physiological or emotional factor that causes bodily or mental unrest and that may be a factor in disease causation. Physical and physiological factors that can cause stress include trauma, infections, toxins, illnesses and injuries of any sort. Emotional causes of stress and tension are several and varied. A mild degree of stress and strain can be beneficial sometimes. For example, feeling mildly stressed can make you to carrying out your project or assignment often compels you to do a good job, focus superior and work energetically. But if the players feel intense stress before and during competition, it has consequences for mental health and somatic symptoms, and may adversely affect players performance. Stress is something that causes high feeling of worry or anxiety. It is a normal part of players and it is not necessarily harmful until and unless, it takes over the player to feel overwhelmed and even isolated. In fact getting stressed a bit before competition means that players really worry about the competition. It will push them to work hard to perform better in competition. But when anxiety caused by competition stress reached clinical or sub-clinical levels, it interfered with the ability of the players to perform at their potential level. The inability to perform is turn led to a greater sense of distress. Stress and anxiety experienced before competition is often attributed to the fear of failure and can have lasting negative impacts on the self esteem of the players. The sign of stress before and during

competition are, having irregular attention, feeling of tiredness, isolated or sad, feeling ache all over, feeling of restlessness or leading to a condition where you are not able to recall the strategy. If an archer is in the condition of stress he may unable to focus his target. To perform better in archery, an archer must be stable by mentally and must controlled his emotions. Hence, researcher has taken the study "A Comparative study of Stress and Anxiety of different round of Archer".

Materials and Methods

Subject: For the study thirty (30) archer were selected, ten (10) from Compound round, ten (10) from Recurve round and ten (10) from Indian round. Archer was selected from Mahatma Jotiba Fule Archery Club, Ashti who regularly practice Archery. Subjects were selected by purposive and simple random sampling method. The age limit of the subjects was 20 to 25 Years.

Tool: To see the level of stress and anxiety, a self constructed questionnaire was used for data collection. The questionnaire consisted of total 120 items. Out of those 120 items 60 items were designed to elicit the information on competition stress and rest of the 60 items were related to anxiety level during competition.

Statistical Analysis

To compare the stress and anxiety level of different round of archer researcher applied One Way Analysis of Variance (ANOVA). The collected data were statistically analyzed with f-test. The level of significance was significant at 0.05 levels.

Analysis of Variance among Compound, Recurve and Indian Round Archer

Table

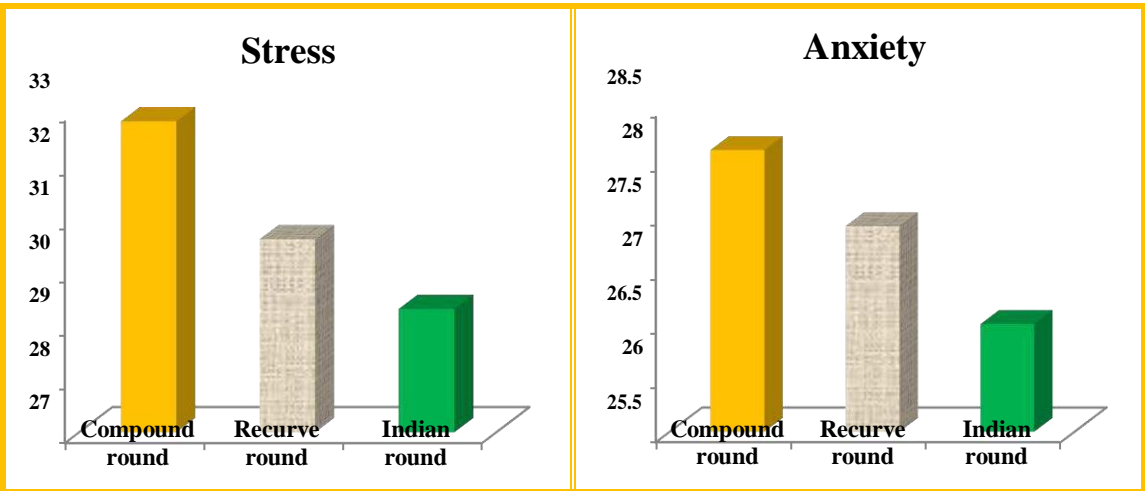
Variables	SV	SS	df	MS	F
Stress	between	62.6	2	31.3	8.11*
	error	104.1	27	3.85	
Anxiety	between	12.86	2	6.43	1.97
	error	87.8	27	3.25	

*Significant at .05 level.

$F_{0.05(2,27)} = 3.354$

Above table revealed that there was significant difference were found in Stress Level amongst Compound Round Archers, Recurve Round Archers, and Indian Round Archers as obtained F-ratio was 8.11 which was greater than that of required tabulated 'F' value of 3.354 at level of significance with (2,27) degree of freedom. Hence, Post Hoc test was applied to see the Mean Difference in Stress Level amongst Compound Round Archers, Recurve Round Archers, and Indian Round Archers. The significant difference were found among Compound Round Archers and Indian Round Archers **Graph**

because the mean difference (MD) 3.35 is greater than critical difference (CD) 2.94 as well as in Compound Round Archers and Recurve Round Archers, Recurve Round Archers and Indian Round Archers shows insignificant differences. Whereas, Anxiety Level of Compound Round Archers, Recurve Round Archers, and Indian Round Archers shows insignificant as obtained F-ratio was 1.97 which was lesser than that of required tabulated 'F' value of 3.354 at 0.05 level of significance with (2,27) degree of freedom. Hence, Post Hoc test was not applied.



Conclusion

Concluding the above study we revealed that there was significant difference were found in Stress Level amongst Compound Round Archers, Recurve Round Archers, and Indian Round Archers it may be attributed that all the archer of any round

were under stress before competition. But Anxiety Level of Compound Round Archers, Recurve Round Archers, and Indian Round Archers shows insignificant it means that as they were stress before competition compound round archer manage their anxiety level.

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**Critical Analysis of Yoga Asanas as Techniques of Controlling the Human Body, Soul
Mind and Traditional Exercise and Way of Modern Human Life**

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Abstract

Yoga plays a prominent part in the control of the body, soul and the mind of human beings in this mortal world. It relieves medical ailment due to its healing power by relieving both the mind and the body from stress. Yoga Asanas or Yogic exercises act as a catalyst to healing the psychological, spiritual and physical ailments. The improvements in the condition of patients' health, observed in their mindsets. Yogic exercises also intervene physical activities. The changes which occur due to Yoga in the mindsets of the people who perform Yogic exercises having mental and also physical ailments is conducive to bring about a sea change in their behavior, and the ultimate upshot is that their health having some problems is made whole. Therefore, the moderated role of mindset and the mental ability increase the elements, which are conducive to a healthy condition. Some Yogic exercises develop their spiritual power. Thus, Yoga develops the mental, the physical and spiritual power of the human beings. This paper the significance of substantiated and utilized Yoga Asanas in future directions. Furthermore, Yoga is' a meditative means of discovering dysfunctional Perception and cognition, as well as overcoming it for release from suffering and inner peace. It is a path to omniscience and enlightenment to consciousness enabling one to comprehend the impermanent (illusive and elusive) and permanent (true, transcendent) reality. This paper seeks to propound the notion of a systematic review and critical analysis of the evidence on the effectiveness of the Yogic Exercises as controlling factors which control the human body and mind and soul, and it shows how those elements act as behavioral therapies such as Yogic exercises and mindfulness for healing.

Yoga is part of the pre-Vedic heritage, Which also includes Jainism, Samkhya and Buddhism. Samuel argues that yoga derives from the Sramana tradition, Gavin Flood notes that such 'dichotomization is too simplistic. Pre-philosophical speculations of yoga begin to emerge in the texts of c. 500—200 BCE. Between 200 BCE—500 CE philosophical schools of Hinduism, Buddhism and Jainism were taking form and a coherent philosophical system of yoga began to emerge. Yoga is one of these traditions. Its origins are rooted in the soils of the Indus Valley, beneath the Himalayan Mountains, what is Northern India and Pakistan today. Its traditions so ancient, that it's claimed to have been practiced since the beginning of civilization. Yoga is art of living and yogasanas are the scientific procedure. This is the only exercise which affects in most parts of the body. The health of our body and mind depends on the soundness of the health of our internal organs the heart, lungs, digestive system, glands, nerves system, muscular system etc. Yoga exercises gently tone and shape the body, improve posture, flexibility and contribute to feeling of well-being promotion to positive health, to the professional in increasing their skills and improve the quality of life.

Key Words: Yoga, mind, body, human beings, power, healing, relieving, medical, ailments, healthy condition, behavior, mindset, soul, mindfulness, exercises

Introduction:

Yoga is a group of physical, mental, and spiritual practices or disciplines which originated in ancient India. There is a broad variety of Yoga schools, practices, and goals Hinduism, Buddhism, and Jainism. Among the most well-known types of yoga are Hatha yoga and Raja yoga.

The origins of yoga have been speculated to date back to pre-Vedic Indian traditions, it is mentioned in the Rigveda, but most likely developed around the sixth and fifth centuries BCE, in ancient India's ascetic and Sramana movements. The chronology of earliest texts describing yoga practices is unclear, varyingly credited to Hindu Upanishads. The Yoga Sutras of Patanjali date from the first half of the 1st millennium CE, but only gained prominence in the West in the 20th century. Hatha yoga texts emerged around the 11th century with origins in tantra.

In the present scenario, yoga plays a vital role in the management of the mental stress which is a significant element in the causation of cardiac diseases. The whole world witnesses several instances of the stress which take millions of lives daily. The mortal soul can get mental relief if he or she practices several yogic postures. Many studies have tried to determine the effectiveness of yoga as a complementary intervention for cancer, asthma, and heart disease. The results of these studies have been mixed and inconclusive, with cancer studies suggesting none to unclear effectiveness, and others suggesting yoga may reduce risk factors and aid in a patient's psychological healing process] On December 1, 2016, Yoga was listed as UNESCO's Intangible cultural heritage

Yogic exercises are one of the most important factors for optimum health, and there are myriad ways to get your exercise each day. Even if one struggles with conditions such as arthritis, osteoporosis, multiple sclerosis (MS), or chronic back pain that limits one's mobility, there are some Yogic exercises that can help a lot for healing these ailments. Yoga possesses the power which deals with a whole mind, body and soul therapy.

In cases where pain tends to constrain one's activity, it's significant to think of that idleness can cause one's muscles to become weaker, and can actually upsurge pain and stiffness. So, staying in motion is typically a better course of action.

Yogic postures do not only give you the physical benefits of exercise but may also help to alleviate pain or stiffness in such cases. Many yoga teachers offer routines specifically designed for certain conditions, such as arthritis or back pain, so you can look for a program that fits your specific needs.

Yoga is so much more than just Asanas. It is the path which leads one to the interior journey to meet the true self. There the tools and inspirations to bring about an intense spiritual development into the practice. In the Buddhist, Jaina and Hindu schools of the Yoga there has been some positions and postures and exercise which are helpful to create spiritual awareness and advance the spirituality. The Yoga of Mind Control reveals this wisdom of the ancient yogis and their powerful secrets to unlocking the unlimited potential within all of us ... That potential to have and to be all that we want! The ancient yogis understood well the relationship between thought and manifestation. They knew that

everything we have in life is a direct result of everything we think. They developed a clear and concise way for us to perceive and understand these deep, inner workings of our mind, and a whole system of yoga practices to help us to “break free” from our conditioning and destructive patterns.

But the benefits of yoga are by no means inadequate to those who may not be able to participate in more energetic or high-intensity types of activity. While it is believed that one needs to include anaerobic exercise (high intensity interval training) for optimal health, there is no doubt that yoga can be a vital part of an all-inclusive exercise program. Yogic Exercise is one of the most important factors for optimal health, and there are countless ways to get your exercise each day. Even if you struggle with conditions such as arthritis, osteoporosis, multiple sclerosis (MS), or chronic back pain that limits your mobility, there are exercises that can help a lot.

In cases where pain tends to inhibit your activity, it's important to remember that inactivity can cause your muscles to become weaker and can actually increase pain and stiffness. So staying in motion is typically a better course of action.

The origins of yoga are a matter of debate. According to Crangle, Indian researchers have generally favoured a linear theory, which attempts “to interpret the origin and early development of Indian contemplative practices as a sequential growth from an Aryan genesis”, just like traditional Hinduism regards the Vedas to be the source of all spiritual knowledge. Other scholars acknowledge the possibility of non-Aryan components. Some argue that yoga originates in the Indus Valley

Civilization. According to Zimmer, Yoga is part of the pre-Vedic heritage, which also includes Jainism, Samkhya and Buddhism. Samuel argues that yoga derives from the ramana tradition. Gavin Flood notes that such dichotomization is too simplistic”.

Pre-philosophical speculations of yoga begin to emerge in the texts of c. 500—200 BCE. Between 200 BCE-500 CE philosophical schools of Hinduism, Buddhism and Jainism were taking form and a coherent philosophical system of yoga began to emerge. The middle Ages saw the development of many satellite traditions of yoga. Yoga came to the attention of an educated western public in the mid 19th century along with other topics of Indian philosophy.

1. Integration of the Body, Mind, and Soul:

A human being is a three part being—Spirit, Soul, Body. Spirit is associated with the heart which is the pumping organ of the body figuratively denotes thoughts or feelings of human being. Mind denotes our thoughts, intellect, feelings and will. The soul includes every mental faculty one possesses including the mind, the will, and the emotions. The heart is comprised of both the spirit and the soul. We are transferred due to the renewal of the mind. Body, soul, and spirit, are interrelated.

The Yogic exercises in various postures can give one the physical benefits of exercise, as well as may also help to alleviate pain or stiffness in such cases. Many yoga teachers offer routines specifically designed for certain conditions, such as arthritis or back pain, so you can look for a program that fits your specific needs. Yoga is really a

comprehensive practice that integrates mental, physical, and spiritual elements. With regards to the latter, yoga can be viewed as a form of meditation that demands your full attention as one moves from one asana (yoga position) to another. As one learns new ways of moving and responding to your body and mind, other areas of one's life tend to shift and change as well.

Yoga Asanas not only give one physical flexibility but also mental one by changing mind approach to life. It gives an impetus to the implementation of the correct lifestyle. As reported by Fox News, 1 Huffington Post, 2 and Scientific American, several recent studies highlight a variety of health benefits from regular yoga practice. This includes but is not limited to: Improved immune function, Reduced risk for migraines, Improved sexual performance and satisfaction in both sexes, Better sleep, Reduced food cravings etc.

2. Brief Review of Advantages of Yoga Asanas for healing of the mind, soul, and body ailments:

There are some benefits of Yogic exercises regardless of your current state of health or fitness. Heart symptoms, blood pressure, heart rate, anxiety and depression levels, and general quality of life are assessed and tracked, while still tracking their symptoms. Yoga can improve insulin/leptin sensitivity to reduce obesity.

The study, published in the April 2016 in the issue of the Journal of Alternative and Complementary Medicine, investigated the effects of Hatha Yoga on blood pressure among seventh-graders, some of whom were pre-hypertensive (had clinical signs of early-stage high blood pressure). Half of

the kids took Hatha Yoga classes for three months, while the other half enrolled in either art or music classes. At the end of the three months, those who took yoga had lower resting blood pressure compared to those who participated in art or music. According to the authors: The practice of Hatha yoga demonstrates the potential to decrease resting BP, particularly among prehypertensive youth and reduces SNS drive may be an underlying neurohormonal pathway beneficially affecting the ailments. A large-scale efficacy/ effective. How Yoga Affects Fat Metabolism and Weight Loss Interestingly, research published in 2012 discovered that yoga has a beneficial impact on leptin, a hormone that plays a key role in regulating energy intake and energy expenditure. According to the authors, expert yoga practitioners had 36 percent higher leptin levels compared to novices, leading them to theorize that regular yoga practice may benefit your health by altering leptin and adiponectin production.

More recently, a study investigating the mysterious ability of Tibetan yogis to generate high amounts of body heat through the yogic practice of Tummo, found that these expert yogis were able to activate brown fat to keep them warm. This allows them to meditate near-naked in sub-zero temperatures without shivering or succumbing to hypothermia. Yoga has also been shown to help with a variety of common psychiatric disorders.

Some of the studies suggest yoga can have a similar effect to antidepressants and psychotherapy, by influencing neurotransmitters and boosting serotonin. More recent research has also found that yoga reduces anxiety and aggression among prison inmates. After doing yoga

once a week for 10 weeks, participants reported feeling less stressed, and also scored better on tests of executive control, indicating a higher degree of thoughtfulness and attention to their surroundings."Several studies have shown that yoga is conducive to improve symptoms of anxiety and depression in prisoners, and now a study at the University of Oxford has found that it also increases focus and, crucially, decreases impulsivity—a known factor in much prison violence.., 'Attention and impulsivity are very important for this population, which has problems dealing with aggressive impulses,' says Oxford psychologist Miguel Farias, one of the study's authors. With less anxiety and aggression, he notes, prisoners should be better able to reintegrate into society The Mind-Body Connection.

Naturopathists should not be amazed at the fact that health cannot be detached from the emotional well-being which reduces the risk of cardiac ailments.

Yogic exercise burns fat and it heals cancer.

Additionally, owing to some yoga Asanas, the gray matter decreased in the amygdala, the part of the brain associated with fear and stress. Besides,' Stroke causes devastating impairments and negative consequences for survivors. Moreover, it is the main cause of adult-onset disability among people. Medicare expenses are not affordable, and so yogaisan option for patients, Yoga and mindfulness can be viewed as the main form of alternative medicine therapy deriving the best from life. Yoga practices foster willpower, discipline, and self-control and force the mind and body to work in perfect energy.

Vipassana and other Zen traditions exercises may be used to treat the patients along with hatha yoga, for medical patients suffering from a wide range of chronic disorders and diseases. Dr. Hirst suggests that being mindful requires the person to attend, to be consciously aware of the emergent nature of phenomena in consciousness, and to recognize the nature of attachments made to these phenomena as they occur. On another hand, Professor Langer discusses the cognitive model of mindfulness without emphasis on the meditative part. She believes that mindfulness could be easier understood with the opposite concept.

Bhagavad Gita:

The Bhagavad-Gita ('Song of the Lord'), uses the term "yoga" extensively in a variety of ways. In addition to an entire chapter (ch. 6) dedicated to traditional yoga practice, including meditation, it introduces three prominent types of yoga.

Ancient Tradition of Yoga:

Yoga is one of these traditions. Its origins are rooted in the soils of the Indus Valley, beneath the Himalayan Mountains, what is Northern India and Pakistan today. Its traditions so ancient, that it's claimed to have been practiced since the beginning of civilization. Through internationalism, the seeds of yoga have scattered, blown in the wind and spread to those who seek light. Yoga now touches upon the lives of people all over the world,

Yet the traditions of yoga have altered significantly, in their travels from South Asia. In the West, people flock to 40.6 degree Celsius rooms, to sweat it out in a session of Bikram's hot yoga, or work their core in power Vinyasa yoga classes that focus on asanas, or physical postures

of yoga combined with fitness. The roots of yoga, the mantras, the Om, breathing techniques, pranayama, and the intentions of finding inner peace, and stilling the mind to single-pointed concentration in meditation are foregone in the mist of vanity to achieve one's ideal body type.

Himalayan Yoga Tradition:

The Himalayan Mountains have been the home of sages for millennia. These great sages have lived and passed on knowledge of the yogic teachings to disciples who then became masters passing on the teachings in an unbroken lineage since the Vedic period. Generations upon generation have followed this path and a huge reserve of knowledge has been built. The student can study the writings of the Tradition and read about the experiences of the great masters of the past for him or herself, The Himalayan.

Yoga and human life:

Yoga is art of living and the scientific procedure. This is the only exercise which affects in most parts of the body. The health of our body and mind depends on the soundness of the health of our internal organs the heart, lungs, digestive system, glands, nerves system, muscular system etc. Yoga exercises gently tone and shape the body, improve posture, flexibility and contribute to feeling of well-being promotion to positive health, to the professional in increasing their skills and improve the quality of life.

1. All-round fitness:

You are truly healthy when you are not just physically fit but also mentally and emotionally balanced. As Sri Ravi Shankar puts it, "Health is not a mere absence of disease. It is a dynamic expression of life

— in terms of how joyful, loving and enthusiastic you are." This is where Yoga helps: postures, pranayama (breathing techniques) and meditation is a holistic fitness package.

2. Weight loss:

What many want! Yoga benefits here too. Sun Salutations and KapalBhati pranayama are some ways to help lose weight with yoga. Moreover, with regular practice of yoga, we tend to become more sensitive to the kind of food our body for and when. This can also help keep a check on weight.

3. Stress relief :

A few minutes of yoga during the day can be a great way to get rid of stress that accumulates daily - in both the body and mind. Yoga postures, pranayama and meditation are effective techniques to release stress. You can also experience how yoga helps detox the body and de-stress the mind at the Sri Sri Yoga Level 2 Course.

4. Inner peace:

We all love to visit peaceful, serene spots, rich in natural beauty. Little do we realize that peace can be found right within us and we can take a mini-vacation to experience this any time of the day! Benefit from a small holiday every day with yoga and meditation.

5. Improved immunity:

Our system is a seamless blend of the body, mind and spirit. An irregularity in the body affects the mind and similarly unpleasantness or restlessness in the mind can manifest as an ailment in the body. Yoga poses massage organs and strengthens muscles; breathing techniques and meditation release stress and improves

immunity.

6. Better relationships:

Yoga and meditation work on keeping the mind happy and peaceful; benefit from the strengthened special bond you share with people close to you.

7. Increased energy:

A few minutes of yoga everyday provides the secret to feeling fresh and energetic even after a long day. A 10-minute online guided meditation benefits you immensely, leaving you refreshed and recharged in the middle of a hectic day.

8. Better flexibility & posture:

You only need to include yoga in your daily routine to benefit from a body that is strong, supple and flexible. Regular yoga practice stretches and tones the body muscles and also makes them strong. It also helps improve your body posture.

9. Better intuition:

Yoga and meditation have the power to improve your intuitive ability so that you effortlessly realize what needs to be done, when and how, to positive results. It works, You only need to experience it yourself.

Conclusion:

Yoga seems to deal with a relief from a long list of medical ailments in by alleviating both the mind and the body and the soul from stress. Yoga and meditative practices act on both the psychological and physical levels, and improvements have been noticed in patients mindsets Yoga and meditative practices act on both the psychological and physical and spiritual levels, and improvements have been noted in patients' mentalities. The Yoga of Mind Control is a profound exploration of the immense potential of the human mind.

It is concluded that yoga is a traditional Hinduism regards the Vedas to the source of all spiritual knowledge. Yoga came to the attention of an educated western public in the mid 19th century along with other topics of Indian philosophy. Yoga is art of living and the scientific procedure. This is the only exercise which affects in most parts of the body. The health of our body and mind depends on the soundness of the health of our internal organs lie heart, lungs, digestive system, glands, nerves system, muscular system and contribute to feeling of well-being promotion to positive health, to the professional in increasing their skills and improve the quality of life.

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Comparative Study of Motivation Level between Elite & Sub-Elite Volleyball Players of Nagpur University

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Abstract

The main purpose of this study is to present the visions on comparison of motivation between elite & sub-elite volleyball players of Nagpur University. This study explores motivation comparison of elite and sub-elite volleyball players. This research study is qualitative and execute by the technique of descriptive & inferential statistics. The self-administered questionnaire has been used for data collection which is based on five point Likert scale. From research it has been observed that there is no difference between motivation of elite & sub-elite volleyball players. This research study concludes that motivation of elite and sub-elite volleyball players is similar.

Key Words: Motivation, Volleyball, Elite, Sub-Elite

1. Introduction:

Every year around 700 female players played volleyball in intercollegiate tournament organised by RTM Nagpur University and approximately 18 players are selected in team of RTM Nagpur University. Every year this team represents RTM Nagpur University in West Zone competition and further All India Inter University Competition organised by Association of Indian Universities. In India Volleyball was introduced by Y.M.C.A, College of Physical Education, Madras (Chennai, Tamilnadu) during the year 1900 and taken initiative in popularizing the game in India. Therefore researcher identified a requisite to have a deep vision on variables related with volleyball players. Now a days in the field of sports; trainers, coaches, players not only emphasis on physical fitness and game skills but also on mental skills, because there is need of certain level of

mental skill to give better performance and enhance the performance. Motivation plays important role in the path of performance. It should be neither high nor low; it should be at optimum level for good performance. A short summary of related research studies carried out in different fields of sports are as follows.

Literature Review:

(Deci, 2016)Deci, Edward L. reported that when money was used as an external reward, intrinsic motivation tended to decrease; whereas when verbal reinforcement and positive feedback were used, intrinsic motivation tended to increase. Discrepant findings in the literature are reconciled using a new theoretical framework which employs a cognitive approach and concentrates on the nature of the external reward.

(Unierzyski, 2003) Piotr Unierzyski showed that junior players who eventually

reached international level in tennis, 8 to 10 years after the test questionnaire possessed significantly higher levels of achievement motivation compared with those who did not reach international level. The results provided evidence that high achievement motivation is an important factor influencing tennis performance. In the talent identification process it is important to measure achievement motivation at the early stages of a tennis career because it would strongly determine future performance.

(Manuel Gomez Lopez, 2014) The result of the study showed that high ego female players present a lower motivational climate for execution, and low ego ones an identified extrinsic motivation. On the other hand those with high task orientation show achievement as intrinsic motivation, stimulation as intrinsic motivation, identified extrinsic motivation, as well as a mastery-oriented motivational climate.

(Jeffrey J.Selfriz, 1992) Results indicated that the Perceived Motivational Climate in Sport Questionnaire was comprised of two valid and reliable subscales, the Mastery and Performance Climate scales. Perceptions of a mastery-oriented climate positively related to reported enjoyment and the belief that effort leads to achievement. Perceptions of a performance-oriented climate were associated with the view that superior ability causes success. In general, indices of intrinsic motivation and attribution beliefs were best predicted by dispositional goal orientation.

(Allen, 2003) Specifically, female adolescents' ($N = 100$) social motivational orientations, achievement goal orientations, perceived belonging,

perceived physical ability, and interest in sport were assessed. Results from multiple regression analyses indicated that social motivational constructs added to the explanation of adolescents' interest in sport.

Objectives of Study:

1. To examine motivation of elite volleyball players of Nagpur University.
2. To examine motivation of sub-elite volleyball players of Nagpur University.
3. To compare motivation of elite & sub-elite volleyball players of Nagpur University.

Hypothesis of Study:

There is no significant difference between motivation of elite & sub-elite volleyball players of Nagpur University.

Significance of Study:

1. The study will be helpful to understand the difference in motivation of elite and sub-elite volleyball players.
2. The study will be enlightened the importance of motivation for performance.
3. The finding may prove helpful to the physical educators, coaches, trainers and players to prepare their training schedule for better performance.

Delimitations:

1. The study was delimited to the female volleyball players of intercollegiate level and interuniversity level of Nagpur University.
2. The study was delimited in the age group of 18-28 years.
3. The study was delimited for the year 2015-2018.

4. The study was delimited to 54 female elite volleyball players.
5. The study was delimited to 340 female sub-elite volleyball players.
6. The study was delimited to motivation.

Limitations:

1. The daily routine life and voluntary participation in other physical activities by the subjects which was not under control of researcher.
2. There was no control over their habits, diet and motivation.
3. There was no control over environmental factors.

2. Research Method:

Descriptive & inferential research design has been used for this study. The research study based on qualitative research technique. Researcher adopted survey method for approaching target respondent.

Sample Design:

The target population for this study was all female volleyball players of Nagpur

Table 1: Mean of the Group

	SUB – ELITE GROUP	ELITE GROUP
Mean	30.99	31.48
Observations	340	54

University who have played during 2015-2017. The target population for elite group was approximately 54 and for sub-elite group were approximately 2280. The researcher had taken all elite players as sample for one group i.e. a sample of 54 elite volleyball players and sample of 340 sub-elite volleyball players. For sub-elite players cluster was formed on the basis of year of batches of players. Three clusters starting from 2015 to 2017 have been formed and samples were drawn from clusters proportionately.

Data Collection:

The researcher had used self-administered questionnaire to collect primary data. For data collection questionnaire has been designed.

Analysis of Data:

A bar graph has been prepared to check the motivation level of female elite & sub-elite volleyball players of Nagpur University.

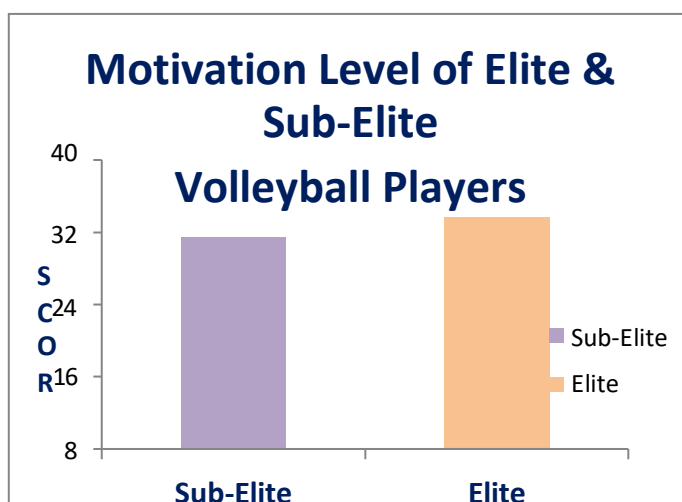


Fig. 1 Motivation Level of Elite & Sub-Elite Volleyball Players

As it is evident from bar graph there seems very small difference between motivation level of female elite & sub-elite volleyball players of Nagpur University.

Testing of Hypothesis:

Null Hypothesis: - There is no significant difference between motivation of elite & sub-elite volleyball players of Nagpur University.

$H_0: \mu = 0$

Alternate Hypothesis: - There is significant difference between motivation of elite & sub-elite volleyball players of Nagpur University.

$H_1: \mu \neq 0$

Table 2: Result of F Test

Computing F-Test		
	ELITE GROUP	SUB-ELITE GROUP
Mean	31.48148148	30.99705882
Variance	27.65059399	17.57226271
Observations	54	340
df	53	339
F	1.573536342	
P(F<=f) one-tail	0.009700117	
F Critical one-tail	1.378447155	

As p-value (0.009) < 0.05, Null hypothesis is rejected i.e. variance of both groups were different.

*Now check the difference between calculated mean of both groups is significant or not by t-Test: Two Sample Assuming Unequal Variances.

Table 3: Result of Hypothesis Testing

Hypothesis Testing		
Computing p-value		
	ELITE GROUP	SUB-ELITE
Mean	31.48148148	30.99705882
Variance	27.65059399	17.57226271
Observations	54	340
Hypothesized Mean Difference	0	

df	64	
t Stat	0.645191187	
P(T<=t) one-tail	0.2605548	
t Critical one-tail	1.669013025	
P(T<=t) two-tail	0.5211096	
t Critical two-tail	1.997729654	

Since t-critical two-tail (1.99) > T Statistics (0.65) & p-value (0.52) > $\alpha/2$ (0.025), therefore null hypothesis accepted.

1. Interpretation:

There is no significant difference between motivation of female elite & sub-elite volleyball players of Nagpur University at 0.05 significance level

It has been founded that there is no significant difference between motivation of female elite & sub-elite volleyball players of Nagpur University. It is concluded by this research study that motivation of female elite volleyball player is same as motivation of female sub-elite volleyball player.

2. Conclusion:

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A Comparative Study on Effect of Different Variation of Chakra Meditation on Brow Chakra of Athletes

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Abstract

Chakra verbally means “Wheels of light”. Our body has 7 major and many minor chakras. (Shiv Samhita, 2012) These 7 chakras are situated from base of spine to the top of head. These are psychic centre of the astral body governing a group of functions (The serpent power, 1919). To attain the purpose of the study, 45 students were selected as subjects from Lakshmibai National Institute of Physical Education, Gwalior, Madhya Pradesh. The age of the subjects ranged between 18 to 25 years. For administration feasibility three intact groups were formed, namely group 1, group 2 and group 3 with each group consisting of fifteen students. The treatment (chakra meditation with beej mantra chanting, chakra meditation with chakra colour, and control group) was randomly allotted among groups. The training duration was five days in a week for total eight weeks. The brow chakra was selected for the study. The criterion measure chosen for testing the chakras in this study was Auramed Biopulsar Reflexograph and the energy readings of root chakra was recorded in percentage before the training programme (pretest), after 4 and 8 weeks of training programme. To compare the effects of different chakra meditation training and training duration on selected chakra 3 (Training Durations) X 3 (Training Variations) between within factorial ANOVA was used as the statistical technique and the level of significance was set at 0.05. Partial Eta Square was also calculated to see the effect size of treatment. The SPSS-20 software was used for analysis. The findings indicated that there was a significant main effect of training durations, groups and interaction effect between training durations and groups on brow chakra.

Key Words: chakra meditation, Auramed Biopulsar Reflexograph, effect size, interaction effect

INTRODUCTION

Chakra verbally means “Wheels of light”. These *chakras* included the centre of electromagnetic energy that are located throughout the body, they provide a way for energy to enter and exit our body and

help to regulate all type of energy flow i.e. physical, mental, emotional and spiritual. Our body has 7 major and many minor *chakras*. (Shiv Samhita, 2012) These 7 *chakras* are situated from base of spine to the top of head. These are psychic centre

of the astral body governing a group of functions (The serpent power, 1919).

Consciousness is our awareness and environment. Consciousness has direct correlation with the energy levels of chakras. The measurements of the energy levels corresponding to the different focal points (chakras or centers) of the body, which is related with consciousness clearly showed that the energy level in terms of tissue conductance or current at constant voltage is highest at the eye centre and decreases at lower centre, which represents at the correlation between consciousness's which is highest at eye centre and lower at lower centres. According to David Pond the "Chakras" store and express the divine energy and any blocks and restrictions to the flow of energy create emotional and physical imbalances.

There is a positive impact of mediation on life and increase consciousness through chakra energy (Chaturvedi et.al.2015). Panday et al. (2011) conducted a study to check the effect of yoga sadhana and pranic healing on pranic energy level of female prisoners. and the study has revealed significant results. There are various mudras along with beej mantras of chakras, which are used for chakra meditation to enhance their energy levels (Dr. Indu Arora 2010).

Therefore, in this study we are measuring chakras energy level which also depicts the consciousness by giving two variations of chakra meditation i.e. beej mantra and chakra colour meditation.

MATERIALS AND METHODS

Subjects:

For the purpose of this study forty five (45) athletes from Lakshmbai National Institute of Physical Education, Gwalior (M.P), were considered as subjects. The age of the subjects ranged between 18 to 25 years.

Tools:

Auramed Biopulsar Reflexograph was used to take the energy readings of brow chakra and was recorded in percentage.

Procedure:

The data was collected from the three groups (two experimental and one controlled group) before the training of chakra meditation, after four weeks, and after the 8 weeks training of chakra meditation.

Administration of Training Programme

The details of the training programme are as follows:

- Total training program duration was of eight weeks.
- Five days a week training session.
- Training session was of 30-40 minutes/day.
- Beej mantra (Om) and chakra's colour (Violet) were used as chakra meditation technique.

Data Analysis:

In order to see "A Comparative Effect of Different Variations of Chakra Meditation on Brow Chakra of Athletes", 3X3 mixed (Between-Within) ANOVA was used as the statistical technique and level of significance was set at 0.05. The SPSS-20 software was used for analysis. The results have been depicted in the following table:

RESULTS AND DISCUSSION

Table 1
Descriptive Statistics of Brow Chakra of Different Groups and Training Durations of Chakra Meditation

Training Duration	Groups	Mean	Std. Deviation	N
Pre-test	Beej Mantra	62.47	2.17	15
	Colour Meditation	62.20	3.00	15
	Control Group	62.87	2.39	15
Four Weeks	Beej Mantra	65.33	2.61	15
	Colour Meditation	64.73	2.25	15
	Control Group	62.67	2.72	15
Eight Weeks	Beej Mantra	68.93	2.71	15
	Colour Meditation	68.47	2.56	15
	Control Group	63.47	2.75	15

Table 1 shows the scores of mean and S.D. of brow chakra of different groups and training durations of chakra meditation. The pre-test mean scores and S.D. of brow chakra for the beej mantra meditation group, chakra colour meditation group and control group were 62.47 ± 2.17 ; 62.20 ± 3.00 ; 62.87 ± 2.39 respectively.

After four weeks training duration, the mean scores and S.D. of brow chakra for

the beej mantra meditation group, chakra colour meditation group and control group were 65.33 ± 2.61 ; 64.73 ± 2.25 ; 62.67 ± 2.72 respectively.

The mean scores and S.D. of brow chakra after eight weeks of meditation training the beej mantra meditation group, chakra colour meditation group and control group were 68.93 ± 2.71 ; 68.47 ± 2.56 ; 63.47 ± 2.75 respectively.

Table 2

**F-Table for Training Durations (Within-Subject Effect)
 and Interaction Effect of Brow Chakra**

Source		Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Time	Sphericity Assumed	451.61	2.00	225.81	78.92	.00	.65
Time * Training_Variation	Sphericity Assumed	166.70	4.00	41.67	14.56	.00	.41
Error (Time)	Sphericity Assumed	240.36	84.00	2.86			

*p-value < 0.05 is significant.

Table 2 shows that there was a significant main effect of training durations on chakra meditation as the p-value was 0.00 which was less than 0.05. It also shows that there was a significant interaction effect between groups and training durations as the p-value was 0.00 which was less than 0.05.

In the mix design there are two independent factors, duration and groups, whose effects needs to be investigated. Here the duration is a within-subjects factor and training groups is a between-

Table 3

F- Table for Groups (Between-Subjects Effects) of Brow Chakra

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Training Variation (Groups)	170.90	2.00	85.45	5.97	.01	.22
Error	601.51	42.00	14.32			

*p-value < 0.05 is significant.

Table 3 shows that there was significant main effect of groups (beej mantra meditation, chakra colour meditation and control group) on brow chakra due to chakra meditation practice as the p-value was 0.01 which was less than 0.05. Partial eta squared in the above table explains 22% of variance of groups, which indicates moderate effect size.

Thus it can be concluded that there was a significant effect of training durations, interaction effect and groups on brow chakra.

Table of within subjects effects (Table 2) indicated that there was a significant effect of interaction between training durations and groups on brow chakra. To know in details about how brow chakra in each of the group through the practice of chakra meditation one way ANOVA with repeated measures was employed separately for each group. Further simple ANOVA's were computed separately for each data readings (pretest, after 4 and 8 weeks).

Table 4

F-Table for Training Durations (Within - Subjects) of Different Variations of Chakra Meditation

Source			Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Groups	Beej Mantra Group	Sphericity Assumed	314.98	2.00	157.49	71.48	.00	.84
	Colour Group	Sphericity Assumed	298.13	2.00	149.07	77.49	.00	.85
	Control Group	Huynh-Feldt	5.20	1.52	3.41	.58	.52	.04
Error	Beej mantra	Sphericity Assumed	61.69	28.00	2.20			
	Colour Group	Sphericity Assumed	53.87	28.00	1.92			
	Control Group	Huynh-Feldt	124.80	21.35	5.85			

*F0.05 > 3.34 (2, 28 df) is significant.

Table 4 evidences that there was a significant effect of training durations on

beej mantra and colour meditation groups as the calculated F-values were found to be

greater than tabulated f value ($F=3.34$) with df 2, 28 at 0.05 level of significance (p -values < 0.05). However no significant difference was found in control group as the calculated F-value (0.58) was less than tabulated f value (p -value > 0.05). This means training duration had a significant effect on two experimental groups except one.

To know exactly in which time period (pretest, after 4 weeks and after 8 weeks) of training duration brow chakra has improved significantly, pairwise comparison between data reading after Bonferroni correction for confidence interval were made. The results are shown in table below.

Table 5
Pairwise Comparison of Training Duration (Within-Group) of Groups

Groups	(I) time		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval for Difference	
						Lower Bound	Upper Bound
Beej Mantra Group	Pretest	4 weeks	-2.87*	.35	.00	-3.82	-1.92
		8 weeks	-6.47*	.61	.00	-8.12	-4.81
	4 weeks	Pretest	2.87*	.35	.00	1.92	3.82
		8 weeks	-3.60*	.62	.00	-5.29	-1.91
Colour Group	Pretest	4 weeks	-2.53*	.49	.00	-3.86	-1.21
		8 weeks	-6.27*	.63	.00	-7.97	-4.56
	4 weeks	Pretest	2.53*	.49	.00	1.21	3.86
		8 weeks	-3.73*	.37	.00	-4.74	-2.72
Control Group	Pretest	4 weeks	.20	.46	1.00	-1.05	1.45
		8 weeks	-.60	.89	1.00	-3.03	1.83
	4 weeks	Pretest	-.20	.46	1.00	-1.45	1.05
		8 weeks	-.80	.88	1.00	-3.19	1.59

*The mean difference is significant at the 0.05 level.

Table 5 shows that in beej mantra meditation group there was a significant difference found between pretest – after 4

weeks, pretest – after 8 weeks and 4 weeks – after 8 weeks as the p -values were less than 0.05. In colour meditation group there

was a significant difference found between pretest – after 4 weeks, pretest – after 8 weeks and 4 weeks – after 8 weeks as the p-values were less than 0.05. In control group there was no significant difference was found between pretest – after 4 weeks, pretest – after 8 weeks and 4 weeks – after 8 weeks as the p-values were more than 0.05.

From table 5 it was found that there was an interaction between training duration and groups. To know if there was a difference between training groups in each of the data reading, one way ANOVA was computed separately for all the data readings. The results are shown below:

Table 6
F-Table for Effect of Groups (Between Group) in Each Training Duration

Time		Sum of Squares	df	Mean Square	F	Sig.
Pre data	Between Groups	3.38	2.00	1.69	.26	.77
	Within Groups	271.87	42.00	6.47		
	Total	275.24	44.00			
4 weeks	Between Groups	58.71	2.00	29.36	4.57	.02
	Within Groups	269.60	42.00	6.42		
	Total	328.31	44.00			
8 weeks	Between Groups	275.51	2.00	137.76	19.26	.00
	Within Groups	300.40	42.00	7.15		
	Total	575.91	44.00			

*The mean difference is significant at the 0.05 level.

The results of One-Way ANOVA indicate that score of brow chakra was not different in pretest of data readings among three groups the p-value was greater than 0.05. There was a significant difference found among three groups after 4 weeks and 8 weeks because p-value was less than 0.05.

Since the One-Way ANOVA of brow chakra was found significant among groups at the end of 4 weeks and 8 weeks, Tukey post hoc test was applied to know exactly which group was better. The results are shown in the table below:

Table 7
Pairwise Comparisons of Between Groups (after 4 weeks and 8 weeks)

Dependent Variable	(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
						Lower Bound	Upper Bound	
Four Week	Beej Mantra	Colour Meditation	.60	.93	.79	-1.65	2.85	
		Control Group	2.67*	.93	.02	.42	4.91	
	Colour Meditation	Beej Mantra	-.60	.93	.79	-2.85	1.65	
		Control Group	2.07	.93	.08	-.18	4.31	
	Control Group	Beej Mantra	-2.67*	.93	.02	-4.91	-.42	
		Colour Meditation	-2.07	.93	.08	-4.31	.18	
	Eight Week	Beej Mantra	Colour Meditation	.47	.98	.88	-1.91	2.84
			Control Group	5.47*	.98	.00	3.09	7.84
Colour Meditation		Beej Mantra	-.47	.98	.88	-2.84	1.91	
		Control Group	5.00*	.98	.00	2.63	7.37	
Control Group		Beej Mantra	-5.47*	.98	.00	-7.84	-3.09	
		Colour Meditation	-5.00*	.98	.00	-7.37	-2.63	

*. The mean difference is significant at the 0.05 level.

Table 7 indicates that significant difference was found after 4 weeks and 8 weeks of chakra meditation training between control group – beej mantra group and control group- colour meditation

group as the p-values were less than 0.05 ($p < 0.017$). There was no significant difference found between beej mantra group and colour meditation group as the p-value was greater than 0.017 ($p > 0.017$).

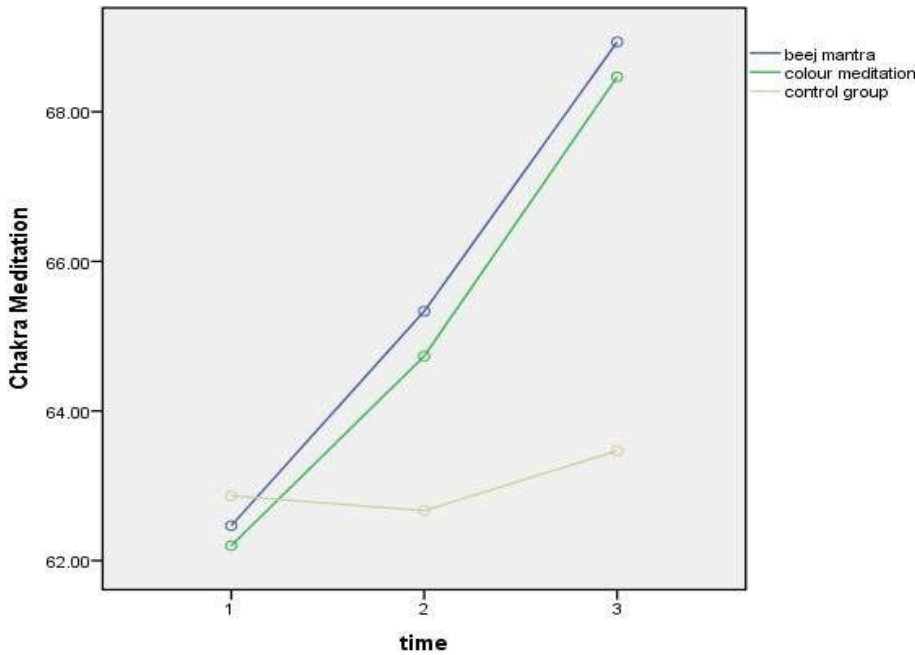


Figure: Graphical Representation of Different Groups with Training Duration of Brow Chakra

On the basis of the finding we conclude that practice of chakra meditation for 4 and 8 weeks is sufficient to bring out significant improvement in brow chakra (main effect of training duration).

In all the three groups the pattern of improvement in brow chakra is different according to the variation of chakra meditation they practice.

CONCLUSIONS

The findings revealed that there was a significant main effect of training durations, groups and interaction effect between training durations and groups on brow chakra. On the basis of the findings of interaction effect we conclude that

practice of chakra meditation for 4 and 8 weeks with beej mantra meditation and colour meditation is sufficient to bring out significant improvement in brow chakra. Group performing beej mantra meditation shows significant improvement in brow chakra after 4 weeks while the group performing colour meditation helped to improve brow chakra after 8 weeks as compared to control group which shows no significant improvement in brow chakra at any point of time. Descriptive table reveals that beej mantra meditation practice helps to improve maximum throat chakra as compared to colour meditation practice and control group (Magadhi, V. 2014).

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A Comparative Study of Positive Mental Health of School Teachers Belonging to Public and Private Sector of Uttar Pradesh

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Abstract

The aim of the present study was to compare positive mental health of school teachers belonging to public and private sector of Uttar Pradesh. For the purpose of the present study 200(Two Hundred) male school teachers of Uttar Pradesh (100 from public sector and 100 from private sector) were selected randomly as subject who falls between the age group of 30 to 45 years. Assessment of positive mental health by using Positive mental health assessment questionnaire development by Prof. C.D. Agashe was applied to collect the data. Independent samples t-test was applied to calculate the collected data at 0.05 level of Significance. The all statistical analyzed was carried out using MS Excel and SPSS 20.0 version. The result of the study indicates that there was no significant difference of positive mental health between public and private sector school male teachers of Uttar Pradesh.

Key Words: Mental Health, teachers, public and private sector

1. Introduction

An individual is only said healthy when he is physically fit, mentally sound, emotionally stable and socially outgoing. The total wellbeing of one's life depends upon his/ her mental psyche, up to a large extent. Mental health is more than the absence of a mental health condition or illness: it is a positive sense of well-being, or the capacity to enjoy life and deal with the challenges we face. Mental health impacts each and every one of us. We all have mental health, just as we all have physically healthy. People living with a mental health issue or condition can experience positive mental health, and an individual may experience poor mental health without a mental health condition. Mental health is not fixed. It is influenced by a range of factors, including our life experiences, workplace or other

environments, social and economic conditions that shape our lives. Mental and physical health is fundamentally needed. There are multiple associations between mental health and physical conditions that significantly impact people's quality of life. The World Health Organization (WHO) defines: health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The WHO states that "there is no health without mental health. Mental health is the "psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment". Mental health may include an individual's ability to enjoy life, and create a balance between life activities and efforts to achieve psychological resilience. WHO states that the mental well-being of an individual is encompassed in the realization of their

Abilities, coping with normal stresses of life, productive work and contribution to their community? A person struggling with his or her behavioral health may face stress, depression, anxiety, relationship problems, addiction, or learning disabilities, mood disorders, or other psychological concerns an age behavioral. Physical activity is good for our mental health. Experts believe that exercise releases chemicals in your brain that make you feel good. Regular exercise can also boost our self-esteem and help us in concentrating, sleep, and look and feel better. Leading an active life can help raise your self-worth and improve our confidence. It can help us feel valued – and value our self. Exercise and physical activity can provide something worthwhile in our life. Something that we really enjoy, that gives us a goal to aim for and a sense of purpose. (George, E. (2012),

The World Health Organization (WHO) defines mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.” Singh, O. (2016),

Singh, O., conducted a study on “physical activity/exercise in the prevention and management of mental health disorders among refugees and the internally displaced persons.” About 51.2 million people are displaced worldwide and 60% of this number can be found in just 5 countries namely, Syria, Iraq, Nigeria, Democratic Republic of Congo and Sudan. The figure is on the increase everyday with the conflicts and natural disasters across the globe. While some of these persons are displaced within their countries, others

have crossed international borders. Many of the displaced persons are subjected violence, harsh weather conditions, and sexual abuse, killings, kidnappings and loss of properties. These conditions predispose the displaced persons to risks of mental illness. Governments and Non-governmental organizations have been doing their best in the provision of the physical needs of displaced persons. One important need of the displaced persons that is most often neglected is that of mental health. The paper reviews nature of mental illness among the displaced persons and the impact of physical activity/exercise in its prevention and treatment. The paper recommends the inclusion of physical activity /exercise programmes in the displaced persons camps in order to forestall cases of mental illness that may break out among this category of the population. Singh, O. (2016),

Objective of the Study:

The purpose of the study was compared the positive mental health of teachers belonging to public and private sector.

2. Methodology:

Selection of Subjects:

200 (Two Hundred) male teachers of Uttar Pradesh (100 from public sector and 100 from private sector) were selected randomly as subject who falls between the age group of 30 to 45 years.

Selection of Variables:

After reviewing through all the scientific literature, journals, magazine and keeping feasibility criteria in mind contents related to positive mental health was selected for the purpose of the present study.

Criterion measures:

Assessment of positive mental health by using positive mental health questionnaire of Prof C.D Agashe.

Necessary instructions were passed on to the subjects before providing the questionnaire.

Administration of questionnaire & collection of data:

Public and private sector school male teacher was consulted personally and their co-operation was solicited. Respondents were given a questionnaire and measurement with necessary instructions.

Statistical analysis of data:

Percentage was used to compare positive mental health of school teachers belonging to public and private sector. Independent samples t-test was employed to compare the positive mental health of teachers belonging to public and private sector.

3. Result and Discussion of the Study:

TABLE: Mean and S.D. of positive mental health and Comparison of school teachers belonging to public and private sector of Uttar Pradesh.

Groups	N	Mean	S.D.	SED	T value
Public School	100	19.34	3.68	0.51	0.70
Private School	100	19.70	3.54		

Significant level at 0.05 level

Figure

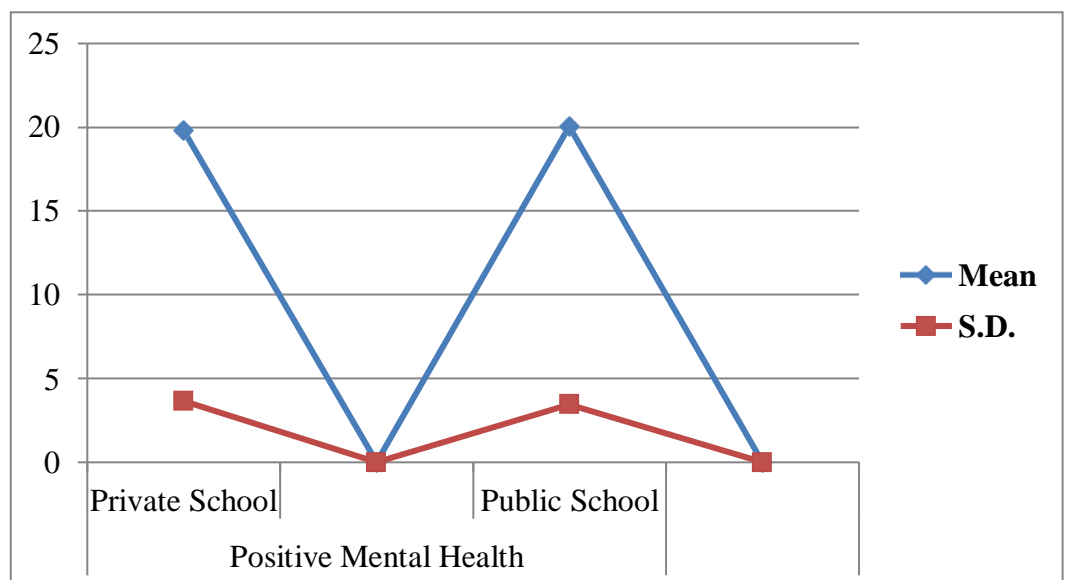


Table gives information regarding positive mental health of public and private sector School teachers table shows that there were no significant differences in positive mental health of public and private sector

School teachers. The Mean of positive mental health of public and private sector School teachers were 19.34 and 19.70 The S.D. of positive mental health of public and private sector School teachers were

3.68 and 3.54 respectively. 't' test was applied and t-value (0.70) appeared no significant. Graphical representation (Fig.) also indicates similar trend of this study.

tabulated 't' (1.98) which indicated that no significant difference between public and private sector School male teachers in relation to positive mental health at 0.05 level of significance.

4. Conclusion and Finding

It was documented from the table that calculated value 't'(0.70) was lower than

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Yogic Methods of Rehabilitation

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Introduction

Yoga is fundamentally different from conventional medicine in its approach to injury. Rather than attempt to isolate the cause of an injury to a single factor and to correct it using a specific cure, yoga aims to treat injury by working with the body's natural healing systems and improving health on all levels. Asanas or yoga movements relax and strengthen muscles and massage internal organs. Pranayama delivers oxygenated blood to injured areas, relaxation and meditation calm the mind and reduce pain in the form of tension. Yoga cannot be ignored at least in the present modern high-tech artificial world. Because of the inventions of the man made machines, the man himself has made his organs so weak. Man's survival has been in dangerous situation resulting in less life span and many serious life killing diseases. Which can be treated and rehabilitation by yoga and it has offered excellent results. The word yoga means union or identification and is derived from the same Indo-European root as the English verb to yoke. The union of the individual soul and the universal soul is a blissful and ineffable experience.

Yoga aims at helping its followers to discipline their emotions master their nervous tensions and complexes and to attain a sense of inner balance, harmony and relaxation. Yoga Therapy which is essence is the most powerful medicine in the world,

which can root out the diseases. We should practice yogic exercise for at least 20 min. a day, those who practices yogic exercise regularly' properly and consistently, then there is no need of Medical treatment.

What is rehabilitation?

Rehabilitation is a procedure which is designed specifically for recuperating a patient from a type of illness, malfunction of a body part, an accident or a physical damage there are different types of rehabilitation procedures available for variety of disorders.

Types of rehabilitation

Cardiac Rehabilitation, Stroke Rehabilitation, Mental Health Rehabilitation, Physical Rehabilitation, Kidney Rehabilitation, Tobacco Rehabilitation, Stress Rehabilitation, Alcohol Rehabilitation, Drug Rehabilitation, Spinal Cord Rehabilitation, Neurological Rehabilitation, Vocational Rehabilitation, Traumatic Brain Injury Rehabilitation, Cognitive Rehabilitation, Criminal Rehabilitation

Process of Rehabilitation

After suffering from an accident, attack or a malfunction, the patient is immediately hospitalized. The physicians take charge and start the medical process. Based on the various tests results, the physician decides whether or not to opt for an operation. If the operation is opted, a special surgeon is

called for the operation. After the operation, the patient is suggested some days of bed rest. Meanwhile, a physician keeps a close eye on the patient's body response to the medicines. He adjusts the medicine dosages accordingly. While the patient is taking bed rest, a social worker is appointed by the hospital authority. He helps to find a rehabilitation center for the patient. He also does the necessary paperwork for the admission of patient in the center. After the admission is confirmed, a rehab specialist, a psychologist and a rehab exercise expert approach the patient for his inpatient rehab treatment. In this phase of treatment, help of a hypnotist may be taken for the mental rehab patients. When the inpatient phase of the rehab is over, the patient is discharged from the hospital. After the discharge, a patient has to choose between outpatient rehab or residential rehab in order to continue his remaining rehab procedure. The social worker and the rehab experts help the patient to take this decision. The patient has to complete the Phase 2 and Phase 3 of his rehab by either of the above mentioned procedures. Many rehab experts help the patient in this course of time. The rehab experts which are associated with the procedure are; exercise rehab experts, dietician rehab experts, physicians, rehab nurses, helpers and social workers. By completing all the 3 phases of rehab the patient is sure to experience a positive change in his ability.

To enable yoga to impact the rehabilitation process, it is necessary to find a qualified instructor and make a commitment to a consistent yoga practice. A serious commitment to a daily practice of yoga is

necessary to enable the postures to impact the healing process. Some types of yoga, including Ashtanga and Bikram, promote a strict order and repetition of yoga classes. Repeating the same movements in the same order develops

Yoga's Role in Rehab

Rehabilitation is not just a special form of management by which the sick patients are restored to a healthy, useful life, but includes all measures which lead to speedy and complete recovery with professional instruction and a commitment to an ongoing practice, yoga has been shown to rehabilitate torn muscles, broken bones and a variety of other bodily injuries. But keep in mind that yoga can sometimes make injuries worse. Always talk to your doctor to be sure you understand the nature and extent of the damage and discuss rehabilitation methods and treatments, including how yoga can be applied in concert with other rehab approaches. Yoga should only be used only under the guidance of a yoga instructor trained specifically in the process of injury rehabilitation.

An Extension of Your Body's Natural Healing Process

Our body has intrinsic methods of healing itself after an injury. It rushes nurturing blood to injured areas, it produces antibodies to fight infection, and it produces pain-relieving endorphins, to name just a few. One important way yoga helps heal the body after injury is by supporting these natural defenses. The gentle movements of yoga encourage deeper breathing and boost circulation, helping the blood do its work

more effectively and increasing the amount of oxygen in the blood.

Yoga Rehabilitation in preventing and managing disease, yoga has several applications in rehabilitation (rehabilitate = to restore, in Latin). Rehabilitation is of different types such as (i) physical, (ii) psychological, and (iii) social

Yoga Rehabilitation in Physical Level

Yoga, as a way of life, has helped persons with physical disorders to return to health, an example being coronary artery disease. Other conditions which have benefitted from yoga practice include stroke after cerebral vascular accidents and patients with heart failure, in whom exercise capacity, oxygen saturation and parasympathetic activity were restored. Yoga breathing or pranayama was especially beneficial for COPD. Practicing yoga has also been used with good results in degenerative disorders such as idiopathic Parkinson's syndrome and muscular dystrophy

Yoga Rehabilitation in psychological Level

With regard to psychological rehabilitation, yoga practice has helped restore the psychological function and mental equilibrium in persons with posttraumatic stress disorder and even certain psychotic conditions

Yoga Rehabilitation in social Level

yoga practice can help people who are at a disadvantage because of their social circumstances. This includes persons in jail, those from the "inner city" children in remand homes and older people living in community centers. Social rehabilitation

includes dimensions of physical and psychological rehabilitation. Despite the research cited above, there is a continued need for research. The analyzed reviews suggested a number of areas where yoga may be beneficial, but more research is required for them to really establish such benefits. Nevertheless, some meta analyses indicated that there are several randomized clinical trials of relatively high quality indicating beneficial effects of yoga for pain-associated disability and mental health. Considering the large number of different yoga techniques and schools of yoga, it is also important for researchers to describe, in detail, the specific method used in a given study. Yoga is worth investigating as it is relatively cost-effective, its practices can be adapted for different groups of patients, and if well oriented, the risks of side effects are very low. We hope that this special issue will give new insights for the development of novel, well-designed studies in the field of yoga and rehabilitation. In yogic practices the basic concept is maintenance of the basal state. It, therefore, is difficult to explain the significant reduction in risk factors. Since the advent of the industrial era, stress has become very common. Every person in modern society has to undergo stress of various kinds, physical, social, economic, psychological, etc. It has been shown that stress is responsible for precipitation of hypertension, diabetes, and hypercholesterolemia

Conclusion

Yoga is the roots of the healing process. The asanas are capable of exercising every muscle, nerve and gland in the body as you stretch and move in repetitive full-body

motion. Yoga asanas strengthen muscles and help make bones healthier. They invigorate organs, helping keep the body free from disease by strengthening the immune system. In addition, the smooth, repetitive movements of yoga increase circulation and lung capacity drain the lymphatic system and stimulate glands. Specific asanas can be modified to treat a variety of injuries with the health affirming affects of gentle, repetitive motion. For many decades, inactivity was the solution for most injuries. Yoga rehabilitation exercises and concentration techniques also serve to reduce the pain and unremitting stress associated with chronic pain from some injuries. In fact, yoga is one way that the body's production of endorphins can be increased to help reduce pain naturally.

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Exercise, breathing, relaxation and meditation stimulate the body to produce endorphins, distract the mind from pain and reduce tension in muscles formed in reaction to pain. With yoga, sufferers of chronic pain find they can "move through" the pain instead of resisting it.

Yoga aims at helping its followers to discipline their emotions master their nervous tensions and complexes and to attain a sense of inner balance, harmony and relaxation. Yoga Therapy which is essence is the most powerful medicine in the world, which can root out the diseases. We should practice yogic exercise for at least 20 min. a day, those who practices yogic exercise regularly' properly and consistently, then there is no need of Medical treatment.

A Study of Factors Influencing Attitude and Motivation of Physical Education Teachers

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Abstract

The role of physical education as well as the educators is very well known. The physical education teacher has numerous responsibilities in the schools and college's physical activity program that decide the fate of players of that institution. Hence, their attitude and motivation towards their respective jobs is very critical. In the backdrop of the above information this study has been carried out to know the influence of different factors in their attitude and motivation. In the present study, physical education teachers working in the colleges affiliated to Rashtrasant Tukadoji Maharaj Nagpur University Nagpur were selected. All the data generation has been carried out using standard methods. In view of the study results it is concluded that the factors like appreciation, institution's top management's role and physical infrastructure are highly important for motivation of physical education professionals.

Key Words: *Physical education teacher, attitude, motivation, appreciation, physical infrastructure*

1.0 Introduction

It is very well known that a physical educator is to provide maximum physical activity time within the class period, teach skills and activities that transfer into physical activity outside of physical education class, motivate children to be physically active. This is important because, if students are to receive the amount of physical activity they need each day, other opportunities to be physically active within the school day must be provided. The physical education teacher has unique responsibilities in the schools and college's physical activity program to ensure that students are physically active within the physical education class. The physical education teacher also has the responsibility to help direct and guide opportunities for physical activity within the school outside the physical education class.

In today's competitive world, teamwork has received a lot of focus. Moreover, organizations believe that tasks will be accomplished more quickly and efficiently with more than one person working on a problem. An ability to work in a team setting will show that physical educator are willing to compromise their own individual ideas in support of a greater organizational goal. Although teamwork is encouraged, every team still needs a leader. Showing confidence in them and stepping up to the challenge of leading a team is admired. Here self-motivation is essential if they plan on going anywhere in the future within the sports field may it be coaching assignment or sports management related work. Hence, physical education teacher's ability to stay motivated through tough times and difficult jobs will ensure their sustainable progress in whichever organization they work. In the backdrop of above

information this study has been carried out to know the nature of factors that influence attitude and motivation of physical education teachers towards their professional development.

Research Methodology

Study Area and Research Design In the present study, physical education teachers working in the colleges affiliated to Rashtrasant Tukadoji Maharaj Nagpur University Nagpur were considered. In this study "Descriptive (Cross Sectional)" research design was used by the researcher. Moreover, 200 physical education teachers were randomly selected from Nagpur division.

Universe and population of the Study

All the colleges affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur were considered as a universe of study. However, all the physical education lecturers working in these colleges comprised the population of this study.

Sampling method and Sample Size

The sampling was done by following random sampling method. In all the data was collected from 200 physical education teachers working in the colleges affiliated Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

Data Collection

For the purpose of data collection, survey methodology was used in the present

study. Survey method was used as it is an efficient method, in that many variables can be measured without substantially increasing the time or cost. The data was collected by using a standardized questionnaire, which was prepared by keeping the objectives of the study in mind. In the present study, Fixed Response (Qualitative) Rating scale was used.

Pilot Study

A pilot study was conducted to estimate the reliability and validity of the research instrument. This exercise was carried out to validate and improve the research instrument in terms of its format and layout, the wording of statements and also the overall content of items. The validity of a measure refers to the extent to which it measures what it intends to measure. Three different types of validity were considered namely, content validity, criterion related validity and construct validity.

Statistical Analysis of Data and Significance Level

Analysis of data was done with the help of SPSS 18.0 Software and by using suitable statistical tests. The descriptive statistics, such as frequency, mode, percentage, etc. were determined from the collected data. The significance level was chosen as 0.05 (or equivalently, 5%).

Results and Discussion

Appreciation -Motivation of the Physical education professionals

Table No. 1: Role of appreciation in high motivation of physical education teachers

Response	No. of PE Teachers	Percent
Highly important	154	77.0
Moderately important	32	16.0
Less important	14	7.0
Total	200	100.0

Above Table 1 presents information pertaining to the role of appreciation in high motivation of physical education teachers. The result shows that according to 77.0% Physical education teacher's appreciation is highly important for motivation. In addition to it according to

16.0% physical education teachers appreciation moderately influences motivation level whereas according to 7.0% physical education teachers appreciation influences motivation at very less extent.

Educational Institute's Top Management - Motivation of the Physical education professionals

Table No. 2: Role of educational institute's top management in motivation of physical education teachers

Response	No. of PE Teachers	Percent
Highly important	92	46.0
Moderately important	62	31.0
Less important	46	23.0
Total	200	100.0

Above Table 2 presents information pertaining to the role of educational institute's top management in motivation of physical education teachers. The result shows that according to 46.0% Physical education teacher's attitude of the top management of the educational institute serves highly important for motivation. In

addition to it according to 31.0% physical education teachers attitude of the top management of the educational institute moderately influences motivation level whereas according to 23.0% physical education teachers attitude of the top management of the educational institute influences motivation at very less extent.

Sports related Physical Infrastructure - Motivation of the Physical education professionals

Table No. 3: Role of sports related physical infrastructure in motivation of physical education teachers

Response	No. of PE Teachers	Percent
Highly important	174	87.0
Moderately important	26	13.0
Less important	–	–
Total	200	100.0

Above Table 3 presents information pertaining to the role of sports related physical infrastructure in motivation of physical education teachers. The result shows that according to 87.0% Physical education teacher's sports related physical

infrastructure serves highly important for motivation. In addition to it according to 13.0% physical education teacher's sports related physical infrastructure moderately influences motivation level.

Student's Parents - Motivation of the Physical education professionals

Table No. 4: Role of student's parents in motivation of physical education teachers

Response	No. of PE Teachers	Percent
Highly important	42	21.0
Moderately important	120	60.0
Less important	38	19.0
Total	200	100.0

Above Table 4 presents information pertaining to the role of student's parents in motivation of physical education teachers. The result shows that according to 21.0% Physical education teachers student's parents serve highly important for motivation. In addition to it according to 60.0% physical education teacher's student's parents moderately influences motivation level whereas according to 19.0% physical education teacher's

Educational Institute's Top Management - Motivation of the Physical education professionals

- From the study results it is evident that attitude of the top management of the educational institute is highly important for motivation of physical education professionals.

Sports related Physical Infrastructure - Motivation of the Physical education professionals

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student's parents influences motivation at very less extent.

Conclusions

Appreciation -Motivation of the Physical education professionals

- In view of the study results it is evident that appreciation is highly important for motivation of physical education professionals.
- From the study results it is evident that sports related physical infrastructure is highly important for motivation of physical education professionals.

4.4 Student's Parents - Motivation of the Physical education professionals

- From the study results it is evident that parents of the students are moderately important for motivation of physical education professionals.

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Effect of Yogic Practices on Stress Reduction

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Abstract

Stress is the body's physical and mental response to stressors or Any interference that disturbs a person's healthy mental and physical well beings. Ruth isn't explained that stress might be good or painful. Good stress is the pressure or emotional condition that inspires one, motivates one to be active to maintain a positive attitude to work hard and to benefit from happy relationships and successes. Painful stress is the emotional condition that one feels when it is necessary to cope with unsettling, frustrating or harmful situation. It is a disturbing sense of helplessness perhaps futility that one feels when there are a number of problems to solve. It is uncomfortable. Yoga helps us to develop our different potentials, to discover and to strengthen our internal forces, to reach the self consciousness and a happy spirit and to extend our life. Yoga an everlasting science of preparing a man with strength, vitality, happiness and utilize him in making the society strong and peaceful.

Key Word : Stress, meditation, pranayama, Yogic practice, Yoga, Yogic exercise, Inspiration, Concentration

Introduction: Various environmental factors such as age, sex, marital status, family circumstances, childhood experiences, dietetic factors nature and amount of daily work load play important role in the causation of stress lead to a series of changes in the body so as to make the person adapt himself efficiently to the changed environment. If proper adaptation leading to full recovery does not take place, then he starts getting the manifestations of psychosomatic changes one by one. At first he will experience psychic changes such as irritability, nervousness, sleeplessness etc. If the process is not recognized and checked in time he experiences some additional manifestations palpitation, increased pulse

rate, rise of blood pressure etc. As these changes continue he ultimately becomes a victim of one of the psychosomatic stress disorders, hypertension, and ischemic heart disease, peptic ulcer, diabetic mellitus, ulcerative colitis, bronchial asthma, thyrotoxicosis, migraine, rheumatoid arthritis etc. Stress effects emotions and people indulge in destructive behavior mood swings, erratic behavior, isolate colleagues/friends and family.

Definitions of Yoga: Hindu discipline aimed at training the consciousness for a state of perfect spiritual insight and tranquility that is achieved through the three paths of actions and knowledge and devotion. A system of exercises practiced as part of the Hindu discipline to promote

control of the body and mind. At the physical level we need to harmonize the functions of different organs, muscles and nerves so that they do not hamper or oppose each other. Disharmony in various body parts and systems brings about inefficiency and lethargy or clumsiness. Moreover it manifests in diseases in the body.

Stress: Stress is produced by an interaction between a person and the environment which is perceived to be so trying or burdensome that it exceeds one's coping resources. Stress, therefore, is unwanted pressure and is manifest when we feel that a situation is out of our control or when we feel unable to cope. It is a subjective experience. "In the eye of the beholder", and this explains why in a given situation one person might be highly distressed, yet another seems to prosper and thrive.

Causes of Stress:

- 1) Going too fast
- 2) Trying to control everything
- 3) Poor physical health habits
- 4) Harboring chronic pessimism
- 5) Holding on to the past
- 6) Believing in conflicting values

Effects Yoga on Stress: Hypertension: Yoga provides peace and tranquility of mind. Asanas, Pranayam, Concentration and Meditation if practiced according to established methods endow perfect health: physical, mental, moral and spiritual. Harmonious development of body mind and psychic potencies. Yoga has therapeutic value on digestive system, circulatory system, nervous system, metabolism and process of autoimmunization. Certain asanas suits

balancing of metabolic activity of the body and secretions of the endocrine glands.

Effect of different yogic practices:

Mudra: These are static psycho-physiological neuro muscular control practices. It directly affects the working of certain changes in the endocrinal balance and thus the state of mind.

Pranayam: Its effect is four fold on the practitioner.

Expiration: It is very useful for weak stomach and sluggish colon. It corrects inflated lungs. It is suggested that serious heart patients and pregnant women should avoid this method.

Inspiration: It is helpful to those whose lung capacity or heart action is poor. It stimulates the sluggish ones to healthy action. Thinking power increases as stress and anxiety decreases.

Concentration: It helps individual to increase his concentration. What others can do in six hours can be done by one who has concentration within half an hour. It purifies and calms the surging emotions, strengthens current of thoughts and clarifies ideas.

Meditation: It kills all pains, suffering, fever, kleshas or sorrows. It controls mind and indriyas. It helps one enjoy the wave of bliss and peace.

Techniques of Mind Happiness:

Individual comes across contrasting situations in life. Numbers of people are able to enjoy several pleasures in life while great number of people led a sorrowful life. Patanjali. Muni advises to offer the hand of friendship to those who are enjoying pleasures in life rather than being jealous of them. He advised to have sympathy towards those who are living

sorrowful life and try to reduce their miseries by offering help in cash and kind. Another contrasting situation one comes across in life is that number of people is doing good service to other members of society while some get pleasure in adding miseries to others lives. Patanjali advises to express happiness by seeing good service to other people while discouraging the bad acts of those who are adding miseries to others lives and not to give importance to their activities.

Techniques of stress reduction:

Yoga: Yoga is truly a science of human personality. It has a very efficient system of postural and breathing exercises. These techniques have great preventive, curative, restorative and relaxative value. Yoga has long been known to be a great antidote to stress. Yoga combines many popular stress reducing techniques, including exercise and learning to control the breath clear the mind and relax the body. As yoga becomes increasingly popular more and more people are discovering its benefits.

Exercise: Hatha yoga is the physical practice of yoga postures. Any exercise will help relieve stress by keeping the body healthy and releasing endorphins, natural hormones that make us feel better. Yoga also relieves stress through stretching. When we are stressed tension is stored in the body making us feel tight and often causing pain. The intense stretching of yoga releases tension from problem areas including the hips and shoulders.

Breath control: Pranayama or breath work is an important part of any yoga practice and one that translates well to life off the mat. At the very least yoga increases our awareness of the breath as a tool for relaxing the body. Although

breathing is an involuntary act we have to keep doing it to stay alive we can choose to regulate the breath. Just learning to take deep breaths and realizing that this can be a quick way to combat stressful situations is amazingly effective.

Silencing the mind: Mind control for stress management is simply sending positive impulses or thoughts to our brain, informing it that there is no stress or the act to stop worry. Mind control can also work using helpful distractions. This means that whenever we feel stressed we can escape the negativity by thinking about something interesting we can do like baking a cake. Engaging in a sport like football or running will also provide us with a diversion. The general rule is to avoid too much analysis of a problem and we should know that if there is nothing we can do about a certain problem it is better left at that.

Relaxation: Each Yoga sessions ends with five to ten minutes spent relaxing in corpse pose shavasana. While this enforced relaxation can be difficult at first, eventually it serves the purpose of a total release for both body and mind. Shavasana transitions us back into the world feeling refreshed and equipped with the tools to combat stress in our daily life.

Conclusion: It is gratifying to note that scientists and scientifically minded people are now taking greater interest in exploring the truth of yoga not only its impact on stress but its influence on the humanity as a whole. Various studies conducted give sufficient proof in favour of the statement that the use of yoga has a health promotive, preventive and curative effect. Therefore let us pool all our resources to spread the message of yoga for promoting universal health and happiness.

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Psychological Preparation in Sports

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Abstract

Various people view personality from different angles and this is the main reason that why no static conception of personality has been fixed till now. Concept of personality keeps on evolving from time to time. Majority of the people consider personality of a human being only outward appearance. Some of the view that the pattern of behaviour performed by a human being in certain way is termed as personality. On the basis of various perspective. It can be said that whole bio-psychological structure of a human being is included in his or her personality. It implies that personality not only mean what a person looks like but also include the way in which he thinks or behaves with other persons. Personality of a human being keeps on changing from time to time. Basically, there viewpoints have been suggested with which personality of a human being is viewed, which are: what actually he is, what other considers him to be and what he considers of himself. All the actions, reactions and behaviours are important aspects of his mind in general and mind in particular. It is entirely wrong to estimate the personality of an individual on basis of his or her single trait. While assessing the personality of a person, attention should be provided to various kinds of factors, which can be dynamic and static in nature.

Key Words: Psychology, sports, practice

Concept

The concept of personality is so broad that it is difficult to define precisely. Regardless of what definition is put forth, there will be those who argue that it is either too broad or too narrow. One definition that has stood the test of time was proposed by Allport, who said personality "is the dynamic organization within her individual of those psychophysical systems that determine his unique adjustments to his environment". Hollander gave a similar yet simpler total of an individual's characteristics which make him unique". No matter what definition is selected, both Allport and Hollander agree that the personality of each individual is unique. Perhaps the best way to

understand personality is to look at its structure. Such a structure has been outlined by Hollander and adapted to sport psychology of Martens. A schematic view of personality structure. While the basic concept for the structure of personality of Hollander, the unique manner of presenting these concepts should be attributed to Martens.

A personality can be divided into three separate but related levels. These are (i) typical responses, (ii) the psychological core, (iii) role-related behaviours. The psychological core is further represented as being internal and consistent in nature, while typical responses and role-related

behaviours are considered external and dynamic.

Role-related behaviour represents the most superficial aspect of our personalities. We engage in role-related behaviour to fit our perception of our environment. Consequently, as the environment or our perception of our environment. Consequently, as the environment of our perception of it changes our behaviour changes. These are not typical responses, and are certainly not valid indicators of the psychological core. In measuring an athlete's personality, we want to get to the real person, or in Hollander's terms, the psychological core. That this can best be done at the level of typical responses. Psychologists have long attempted to measure tests, however, projective tests may suffer from low reliability and validity. Consequently, the most common and objective manner of measuring personality is on the level of typical responses using some type of questionnaire.

As known that human beings are social animals and they cannot live happily without help of other people. Because of this reason it is said that to develop one's personality is a social necessity and personality exists only within the boundaries of society. Standards to measure and compare personality are provided by society as without these concept of personality will not arise. Other persons exist to acknowledge personality of human beings, this is the main reason personality. An important task of teachers and coaches is to improve or develop the personality of learners or players. Personalities of a person do not remain same but it keeps on changing from time to time. Various environmental

factors affect personality of human beings. The situation in which a person live keep on changing, because of which personality of person also gets changed. If any person becomes physically, mentally or emotionally imbalanced, then he will have to face a lot of problems. An important feature of beings has to make adjustments, which is a biological and psychological necessity.

Personality of all the human beings consists of some specific dimensions, some of which are visible while some of them are hidden. All the dimensions have specific purposes. It is not possible to disintegrate one's personality. Various dimensions of the personality are related to each other and it is not possible to understand any of them without studying the other. Various experts have enumerated certain important dimensions of personality, some of which are as follows

a Physical Structure :- All the human beings are differently structured physically and their physique determines their personality to a lot of extent. Only that person can have a good personality, who is physically fit and attractive. A layman will consider only that person's personality attractive who have a disease-less body. Thus, one's personality is defined by majority of persons by his outside looks.

b Mental Health :- Only physical fitness is not sufficient for a person to have a pleasant personality, but it is also very necessary to have mental health. Only a mentally sound person can possess a developed and pleasant personality. Those persons who cannot adjust themselves according to changed environment cannot

help others in any way, as they will demand care and sympathy of others.

Physical and mental health is supplementary to each other and they cannot be substituted in any way. Human beings are considered superior to other creatures because they have a mind by which they can think over various facts and understand complex situations. A person who does not possess mental health will not be able to think properly and cannot take the proper decision. Such kind of person will not be better than animal in anyway and animals do not have any concern with concept of personality. For this reasons, another important dimension of personality is mental soundness of person.

c Socialization :- No human being can live a self-dependent life and it is the main reason that they are considered as social animals. All the human beings should have the ability to live in co-operation with other persons living in the society. If nature creates a man, then function of humanizing him his performed by society. No human being can live within personal domains, but it is very necessary for him to make relationship with other peoples. This is the main reason that people makes friends and various kinds of relationship. Such kinds of relations provide them a sense of belonging and sense of security.

d Emotional Stability :- Personality of only that person can be considered properly developed who possess other than above mentioned attributes, the quality of emotional stability. A person who reacts, the acts under the sway of emotions cannot possess a developed personality. One must

have control over his emotions as strong emotional reactions generally leads to destruction of social relationships. Such kind of emotional stability is very necessary for players as sometimes they have to face defeat while sometimes victory. Neither or victory, not on defeat, they should lose their control from emotions and behave entirely in accordance with their emotions.

A person who does not have control over his emotions will take faculty incorrect decisions, which can ruin his career or can harm him in other ways. It is very necessary for everyone to have control over emotions, otherwise person cannot get a stabilize personality, which can destruct his life a flooded river destructs the life of people.

Personality of Players

The study of personality is one of the most intriguing and exciting areas of sport psychology. Based on the great interest in personality research, one might incorrectly conclude that the relationship between personality and athletic performance would by now be crystal clear. Unfortunately, this is not the case.

Since a long time, various attempts have been made to classify human beings on the basis of their individual characteristics. Although these attempts cannot be said totally failure, but success achieved by them is not satisfactory. Various acute differences are found in personalities of human beings that task of classifying the individuals on basis of their personality has become very difficult.

According to an expert, it is possible to classify all the human beings on basis of their personality in four categories, namely,

pyknic, Asthenic, Athletic, and Dysplastic. Persons with pyknic personality are shortly built and they like to make and maintain good social relationship. Persons with Asthenic personality are shy and thinly structured. They do not speak too much and likes to remain quiet. Persons with pyknic personality are shortly built and they like to make and maintain good social relationships. Persons with Asthenic personality are shy and thinly structured. They do not speak too much and likes to remain quiet. Persons with Athletic personality have muscular and proportionate body structure. Persons who do not fall in these categories rests in the fourth one, namely Dysplastic. However, these categorizations do not prove very effective for a long period of time when other investigations took place.

An important study was done by Spranger, who divided human beings on basis of their personality into six categories, namely, Cognitive, Aesthetic, Economic, Political, Religious and Social. In this hierarchy, no special category was provided to sportspersons. With development of researches were made in which personality of sportsmen were studied separately. It was determined by some studies that kind and length of social intercourse and social relationship determine the degree of manipulation of a particular trait in a player. A player will behave in the ma I various traits will combine in his body.

Developmental Effects of Athletic Participation Upon personality

It has been found that athletes and non-athletes differ on the personality dimensions of extroversion and stability, and it is due to

the athletic experience, or to a natural selection process in which individuals possessing certain personality traits gravitate toward athletes? Perhaps the final answer to this question will never be known; however, the evidence typically supports the genetic. Individuals who possess stable, extroverted personalities tend to gravitate toward the athletic experience.

As the competitive process weeds out all but the keenest of competitors, those who remain are those having the greatest levels of extroversion and stability. This could be described as sort of an athletic Darwinism. Some of the studies that support the gravitation as model are those by Yanada and Hiratta, Kane, and Rushall.

The viability of the gravitational model, however, does not preclude the possibility that sport participation can enhance personality development. In this respect, Tatters field has provided longitudinal evidence that athletic participation before maturity has a developmental effect upon personality specifically; Tatters field monitored the personality profiles of boy's participation in an age-group swimming program across a five-year training period. Significant changes toward greater extroversion, stability, and dependence were observed in boys during this period. From an educational perspective, all but the factor of dependence would be considered positive in nature.

Personality Profiles of Athletes Differing in Skill Level

Sufficient evidence exists to suggest that elite, high-levels, performers can be distinguished from lower-level performers

when psychological state and trait profiles of the athletes are considered. This point has been well documented by Morgan and his associates, using elite distance runners, wrestlers, and oarsmen. Nevertheless, the ability to distinguish between successful and unsuccessful athletes in any particular sport using personality traits only has never been particularly successful. For example Kroll, using collegiate wrestlers, could not successfully distinguish between the successful and unsuccessful performers. Rushall, using football players, and Singer, using tennis and baseball players, likewise could not distinguish between the successful and unsuccessful players.

The Female Athlete

On basis of various studies, it can be said that "normative" female differs in personality profile from the successful female athlete, specifically; the female athlete is found to exhibit personality traits much like those of both the normative male and the male athlete. The female athlete differs from the non-athlete in terms of personality. As with male athletes, female athletes from on sport are likely to differ to some degree from female athletes in another sport in terms of their personality profiles. Differentiation between athletes of varying skill levels on the basis of personality factors is feasible only at the level of the elite performer.

Sports and Social Psychology

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Abstract

Sports and social psychology is inter co-related factor. A good socialization can be created with the help of sports. Psychology is the mediator between social and sports. Sports can be change individual and social. Social psychology plays a great role to modify the social factors.

Key Words: Sports, Social Psychology, Socialization

Introduction:

The process of learning to live and understand a culture by utilizing its values and norms through the social psychology. Sports socialization occurs through contact with socializing mediators. Parents can be important socializing representatives. Socialization is a process of learning the ways of one's society and becoming a functioning member of it along with exhibiting standards of behaviour in accordance with its rules, laws and customs, which have been formed due to our interaction in the society. Social Psychology is an area of sociology that focuses on sports as a social phenomenon. All social and cultural structures, patterns and organizations are actively engaged in games and sports festivals. Man is a social animal and is distinctive from other animals due to his ability to learn.

Factors of Social Psychology:

1. Social behavior of individuals, groups, organizations, societies, institutions and communities
2. Sociology focuses on the links between different aspects of society, e.g.

family and the economy, religion and politics, medicine and law, etc.

3. Sociology also considers social inequality, social mobility, and social justice

Factors of Social Psychology in Sports -

Status:

This is an important element in the socialization process because it is associated with self-image. One positive factor of sports in the socialization process is in the era of social status. Today our society is sports oriented not only for youth but for adults as well. Status is related to participation in sports and status is gained through sports competitions. Status becomes a dynamic factor in personality development.

Self- image:

Body-image is a vital socialization concept as well as psychological one. The attitude and appreciation one has towards one's own body affect behaviour and ultimately the personality. This body – image complex is particularly important during adolescence for both boys and girls. The image one has of one's own body will be reflected in behaviour. And will himself

adopt games and sports in which one elects to participate.

Co-operation and competition:

Co-operation and competition are social processes that are highly related to the area of games and sports. In fact they have become powerful forces in the socialization process, as well as motivate the learners in both intellectual and motor performance.

Sports personality:

Games have a close relationship to personality. Personality is influenced by the activity that a person chooses to participate. Socialization process through games and sports are the best ways of helping the child to identify his self-image and formulate his ideal self.

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Conclusion:

The physical educator recognizes the essence of sports in this quest of humaneness, and he accepts the current barriers that now block his envisioned ideal about sports as a challenge. His thrust at the cutting edge of this frontier does not leave him uniquely alone in his quest and do not isolated him from other disciplines. There must be integration and a synthesis of many approaches to socialization through sports, but while other disciplines may well contribute to the evolution of the sports ideal, the application of this process will ultimately be left to the educator and the physical educator who organizes, administers, and teaches the sports curriculum, should design his activities accordingly.

A Study of Digital Finger Ratio with Personality of Team, Individual and Combat Game Players

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Abstract

This paper represents A Study of Digital Finger Ratio with Psychological Variable (Personality) Team, Individual and Combat Game Players of S.G.B.A.U. Amravati. Those sports persons were selected for the study which represented at least one inter university. Total one hundred and fifty Subjects (150) i.e 50 Team Game Players, 50 Individual Game Players and 50 Combat Game Players were selected for the present study. The data pertaining to the study was collected through Standard Questionnaire of Personality by Dr. Tom Buchanan's. The age groups were ranged from 18 to 30 years. The subjects were selected by using available sampling method. In this study data were analyzed and interpreted with the help of statistical Product Moment Correlation' and 'F' test for testing of hypothesis. The findings of the study have been discussed extensively in the light of available research studies and the set objectives of the study.

Key Words: - Digital Finger Ratio, Personality, Team, Individual and Combat Game Players.

Introduction:

The digit finger ratio is the ratio of the lengths of different digits or fingers typically measured from the midpoint of bottom crease where the finger joins the hand to the tip of the finger. It has been suggested by some scientists that the ratio of two digits in particular, the 2nd (index finger) and 4th (ring finger), is affected by exposure to androgens e.g. testosterone while in the uterus and that this 2D:4D ratio can be considered a crude measure for prenatal androgen exposure, with lower 2D:4D ratios pointing to higher androgen exposure. Writing in the Proceedings of the National Academy of Sciences, developmental biologists Martin Cohn, Ph.D., and Zhengui

Zheng, Ph.D., of the Howard Hughes Medical Institute and the department of molecular genetics and microbiology at the UF College of Medicine, show that male and female digit proportions are determined by the balance of sex hormones during early embryonic development. The 2D:4D ratio is calculated by dividing the length of the index finger of the right hand by the length of the ring finger. A longer index finger will result in a ratio higher than 1, while a longer ring finger will result in a ratio of less than 1. The 2D:4D digit ratio is sexually dimorphic: while the second digit is typically shorter in both females and males, the difference between the lengths of the two digits is greater in males than in

females. A number of studies have shown a correlation between the 2D:4D digit ratio and various physical and behavioral traits.

Personality is a set of traits that define the way a person's behavior is perceived. It represents a combination of emotional, attitudinal, and behavioral response patterns of an individual. Different personality theorists present their own definitions of the word based on their theoretical positions and philosophical affiliation.

Psychologically speaking personality is all that a person is. It is the totality of one's behavior towards oneself and others as well. It includes everything about the person, his physical, emotional, social, mental and spiritual make-up. It is all that a person has about him. Personality is covered with the 'social stimulus value' of the individual behavior, attributes and qualities or with conceptions of one's self which differentiate one human being from other personalities the entire organization of the individual at each stage of his life. Traits like imagination, ambition or perseverance may be found in many people but it is in relation to other abilities and environment opportunities that they develop and influence life and behavior. Personality is the way be affected others. Personality is distinctive or unique. It is continually changing and growing people may acquires and develop in the course of his life and experience. Growth takes place by reorganization and integration of new experience and behavior in the total system. Disposition refers to habitual tendencies inherited or previous experience and term character is inter changeably with

personality. Moral and ethical term involving judgments of good and bad.

Methodology:

In the present study the main purposes of the study was to find out the Digital Finger Ratio of Team, Individual and Combat Game Players. For this purpose researcher had selected subjects from S.G.B.A.U. Amravati. Those sports persons were selected for the study which represented at least one inter university. Total one hundred and fifty Subjects (150) i.e 50 Team Game Players, 50 Individual Game Players and 50 Combat Game Players were selected for the present study. The data pertaining to the study were collected through standard Questionnaire of Personality by Dr. Tom Buchanan's. The age groups were ranged from 18 to 30 years. The players were selected by using available sampling method. In this study data were analyzed and interpreted with the help of statistical Product Moment Correlation' and 'F' test for testing of hypothesis.

Statistical Analysis and Interpretation of Data

In this study data were analysed and interpreted with the help of statistical term 'Product Moment Correlation' and 'F' test.

Level Of Significance:

To test the hypothesis, the level of significant was set at 0.05 level of confidence which was considered adequate and reliable for the purpose of this study.

Finding:

The data collected on 150 subjects (50 Team, 50 Individual and 50 Combat Game

Players) was Analyzed by Product Moment Correlation' in the Inter-Correlation Matrix

were applied and 'F' test for testing of hypothesis.

Table No.1

Relationship of Digital Finger Ratio with Personality of Team, Combat and Individual Game Players

Sr. No	Variables	Calculated r			Tabulated r
		Team Game Players	Combat Game Players	Individual Game Players	
1	Total Personality	0.506*	0.048	0.158	.231
I.	Openness	0.396*	0.396*	0.625*	
II.	Conscientiousness	-0.019	-0.019	-0.094	
III.	Extraversion	-0.023	-0.023	0.127	
IV.	Agreeableness	0.186	0.186	0.133	
V.	Neuroticism	0.163	0.163	-0.002	

N=150

*Significant at 0.05 level

An analysis as shown in table indicated that relationship of digital finger ratio with psychological variables of team, combat and individual game players were not statistically significant in more variables. Only in few variables i.e total personality of team game players (0.506), openness of team game players (0.396) and openness of individual game players (0.625) were significant as the value obtained is higher than the tabulated (r = .231) at 0.05 level with 49 degree of freedom. And there is also

negative correlation of digital finger ratio with psychological variables i.e conscientiousness of team, conscientiousness of individual, conscientiousness of combat, conscientiousness of team, extraversion of team, extraversion of combat and neuroticism of individual game payers. Remaining other psychology variables shows positive relationship of digital finger ratio with psychological variables of team, combat and individual game players.

Graph -1
Analysis of Variances in Personality among Team, Combat and Individual Game Players

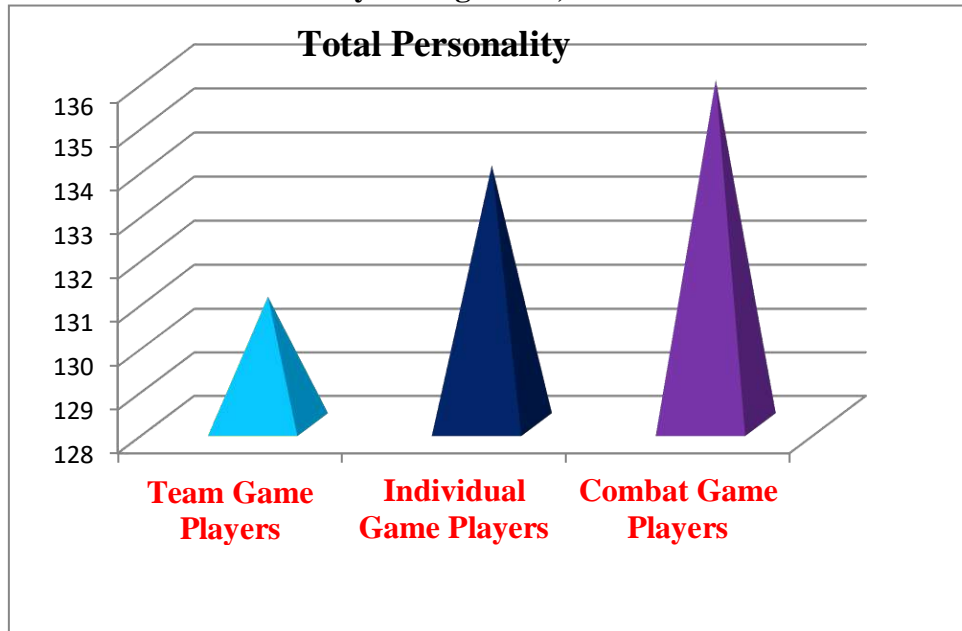


Table -2
Analysis of Variances in Total Personality among Team, Combat and Individual Game Players

Source of Variation	df	Sum of Squares	Mean Sum of Squares	F- Ratio
Between Groups	2	614.18	307.09	7.69*
Within Groups	147	5866.52	39.90	

*Significant at 0.05 level.

$F_{0.05}(2,147) = 3.06$

Mean of total personality of team game players = 130.94, combat game players = 135.86, and individual game players = 133.92. It shows there is a difference in total personality among team, combat and individual game players. To find out this difference is significant or not researcher calculated 'F Ratio'. Above table revealed that there is significant difference in psychological variable of total personality as

obtained F ratio is 7.69 which is higher than that of required tabulated F value of 3.06 at 0.05 level of significance (2,147) degree of freedom.

Since the one way analysis of variance were found to be significant in related to total personality, the least significant difference (L.S.D) were applied to assess the paired mean difference among team, combat and individual game players.

Table No- 3

Post-Hoc Test for the Means of Total Personality of Team,
Combat and Individual Game Players

Combat Game Players	Individual Game Players	Team Game Players	M.D	C.D
135.86	133.92		1.94	2.49
135.86		130.94	4.92*	2.49
	133.92	130.94	2.98*	2.49

*Significant at 0.05 level

Table clearly revealed that significant differences were found between the mean of total personality of combat and team game players, and individual game players and team game players as the above two mean were greater than the Critical difference at level. But there is no significant difference between combat and individual game players because it critical difference (C.D) is greater than Mean difference (M.D). Table shows combat game players having more good personality traits than **References:**

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individual and team game players (combat > individual > team game players).

Conclusion: With the limitations of the study and from the statistical analysis of the collected data it is concluded that there is a significant relation were found between Digital Finger Ratio with personality of total personality of team game players and openness of team, combat and individual game players and remaining others variables difference is not significant.

Importance of Yoga in Daily Life

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Abstract

Yoga is a traditional method of meditation developed by the saints of ancient India. They practiced yoga as an effective method of controlling their mind and bodily activities. Yoga in Daily Life is a system of practice consisting of eight levels of development in the areas of physical, mental, social and spiritual health. When the body is physically healthy, the mind is clear, focused and stress is under control. This gives the space to connect with loved ones and maintain socially healthy relationships. When you are healthy you are in touch with your inner Self, with others and your surroundings on a much deeper level, which adds to your spiritual health. Yoga increases the flexibility of the spine, improves body's physical condition and heightened awareness to the importance of relaxation. Yoga has been used to help heal victims of torture or other trauma. Because yoga is a form of meditation, it results in a sense of inner peace and purpose, which has far-reaching health benefits. As we start practicing simple asanas we will immediately find out what needs attention the most while giving it the attention it calls for. The effects are immediate and the results keep becoming more apparent. The longer and more often we engage in the pure self-indulgent healing art of yoga. The more it will have a healing effect on us. Yoga is no less magical than the power of life itself. It unlocks life's wonder and unleashes hidden energies. Through this art everyone can experience the Divine and enjoy the ecstasy of freedom from pain and ignorance apart from other gracious rewards like longevity and happiness. It has taken time for us to wind ourselves up in a knot. Naturally it takes time to unravel. If we are still breathing, it is never too soon or late to start yoga.

Keys Words: Yoga, Importance, Benefits

Introduction

The word "Yoga" came from the Sanskrit word "yuj" which means "to unite or integrate." Yoga then is about the union of a person's own consciousness and the universal consciousness. Yoga is a traditional method of meditation developed by the saints of ancient India. They practiced yoga as an effective method of controlling their mind and bodily activities. Yoga in Daily Life is a system of practice consisting of eight levels of development in the areas of physical, mental, social and spiritual

health. When the body is physically healthy, the mind is clear, focused and stress is under control. This gives the space to connect with loved ones and maintain socially healthy relationships. When you are healthy you are in touch with your inner Self, with others and your surroundings on a much deeper level, which adds to your spiritual health.

Yoga increases the flexibility of the spine, improves body's physical condition and heightened awareness to the importance of relaxation. It has been emphasized that each exercise be practiced slowly,

coordinating movement with the breath, pausing motionless in each position and always with full concentration. Yoga teaches you to focus on breathing while you hold the poses. This attention to breath is calming it dissolves stress and anxiety. Yoga can help cure insomnia, as regular yoga practice leads to better and deeper sleep. Yoga can help fight fatigue and maintain your energy throughout the day. Yoga is an effective treatment for a variety of autoimmune diseases because it can reduce the symptoms these diseases often cause, such as stiffness, malaise, fatigue, and weakness. Even children can benefit from yoga. Those with attention deficit disorder and hyperactivity can learn to relax and get control by using yoga breathing and yoga asanas. Yoga has been used to help heal victims of torture or other trauma. Because yoga is a form of meditation, it results in a sense of inner peace and purpose, which has far-reaching health benefits.

Value of Yoga in Our Life

Human beings are made up of three components—body, mind and soul corresponding these there are three needs—health, knowledge and inner peace. Health is physical need, knowledge is our psychological needs and inner peace is spiritual need when all three are present then there is harmony. Yoga gives us relief from countless ailments at the physical level. The practice of the postures (asanas) strengthens the body and creates a feeling of well being. From the psychological view point, yoga sharpens the intellect and aid in concentration; it steadies the emotions and encourages a caring for others. The practice of breathing techniques (pranayama) calms the mind. In the realm of the spiritual yoga brings

awareness and the ability to be still. Through meditation inner peace is experienced. Thus, yoga is a practical philosophy involving every aspect of a person's being. It teaches the evolution of the individual by the development of self-discipline and self awareness. Anyone irrespective of age, health circumstances of life and religion can practice yoga. Yoga helps to discipline our sense of power with the power of our own. If we peep into the benefits of yoga, they are numerous. It improves physical fitness, stress, controls general well being, mental clarity and greater self-understanding. People of all ages can do yoga and it can also be adapted for people with disabilities or special needs. The asanas enhance muscle strength, coordination, flexibility and can help to keep our body fit control cholesterol level, reduces weight, normalizes blood pressure and improves cardiovascular performance. Apart from these when people actively seek to reduce the stress in their lives by consoling the mind. The body often works to heal itself. In this sense yoga can be seen not only as a way to get into shape on several levels, but also as a tool for self-healing.

In today's world of information and inter planetary voyages most of the people find it difficult to devote time towards their health and fitness. This has led to drastic increase in health problems and health's related stress—the number one killer in modern days. Unlike the early part of the century when infectious diseases were the leading killers, today's health problems are mostly related to life style. Cardiovascular, heart disease, stroke, and arteriosclerosis, chronic lung disease, diabetes, cirrhosis of liver, suicide and several forms of cancer are all related to

unhealthy lifestyle and behaviour. At one point of time or the other, a doctor comes into the scene in every individual's life. Yoga is also self-diagnosis, healing prevention and maintenance. Although it is not replacement of one's doctor, yet it has been practised safely and successfully by millions of people who never had doctors, for thousands of years. With the help of yoga the doctor and the individual can both monitor the progress and the doctor will definitely learn from individual how beneficial yoga really is. In the context of self-diagnosis yoga postures and exercises can be easily done and that too with minimal possible effort. The magic of yoga is that as we begin the basic stretches we can immediately discover where our deficiencies are. If we are really up to, then we should not be discouraged by this. We can do yoga, as perfectly as possible with a modest amount of care and patience, yoga triggers our body's natural adaptive and rejuvenating powers. Unless we use it we will lose it and if we start using it again we can get most of it back. Some people even claim that yoga gave them more vitality than they ever had in their lives. Even those who began later in life also benefited from its practice. As for athletes or sports persons, yoga can be a powerful enhancement in regular training exercises. Adding yoga in a routine training programme helps develop strength, flexibility, range of motion, concentration, and cardiovascular health and reduces stress, tension and tightness. The most significant benefit of adding yoga to a training programme is its effect on performance. It allows an athlete to train harder and a higher level because of motion is greater and the fear of injury lessens.

Some people think it is divine others find it positively addictive and a powerfully effective substitute for negative habits. Whether borne of inspiration or by trial and error, yoga techniques substitute for the kinds of activities our early human ancestors must have done in the course of just living out in their arboreal lives. It is pretty to say that if we still hung around trees all our lives like other primates, then 70% to 90% of us would not end up suffering from chronic back, neck and head pain. Obviously it takes time for our body to tuck itself in here and fill out there. Tissues have to grow. Others need to shrink. This is why it is important to drink lots of water and eats amount of wholesome food along with regular moderate exercise. In challenging those muscles to remodel themselves, we are literally clearing out lots of junks from our tissues. The essence of yoga is to make the process of life as efficient and enjoyable as possible. In the beginning it is essential that we learn not only what the stretches are, but how to stretch, how to relax and how to breathe etc. Then we will be ready to work out safely, yoga does not bring away the qualities of genuinity, wholesomeness, compassion, but rather instills them within us. It teaches us that love heals the giver at least as much as it does the recipient. In addition therein dwells the sacred power of community, union, harmony, yoga and free and fair civilisation. It is our birth right to have access to this information. It is a sign of our wisdom if we use it, our enlightenment if we share it.

Conclusion

Yoga has been used to help heal victims of torture or other trauma. Because yoga is a form of meditation, it results in a sense of

inner peace and purpose, which has far-reaching health benefits. As we start practicing simple asanas we will immediately find out what needs attention the most while giving it the attention it calls for. The effects are immediate and the results keep becoming more apparent. The longer and more often we engage in the pure self-indulgent healing art of yoga. The more it will have a healing effect on us. Yoga is no less magical than the power

of life itself. It unlocks life's wonder and unleashes hidden energies. Through this art everyone can experience the Divine and enjoy the ecstasy of freedom from pain and ignorance apart from other gracious rewards like longevity and happiness. It has taken time for us to wind ourselves up in a knot. Naturally it takes time to unravel. If we are still breathing, it is never too soon or late to start yoga.

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A Study on Sports Emotion and Achievement Motivation among the Indian and Srilankan Athletes

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Abstract

The purpose of the study was to find out the relationship between Sports Emotion and Achievement Motivation and also to ascertain the difference between Indian and Srilankan athletes on Sports Emotion and Sports Achievement Motivation. A sample of 100 male athletes was selected representing the game of Football, Hockey and Handball. Out of 100 male athletes, 50 were Indians and the other 50 were from Srilanka. All the athletes had represented University and were in the third year of their college. Sports Emotion Questionnaire and Sports Achievement Motivation Scale were used to assess sports emotion and sports achievement motivation. The statistical employed to find out the relationship and differences were Mann Whitney U test, as the Asymp. Sig. (2-tailed) value (p-value). Results indicated that there was significant relationship and differences among Indian and Srilankan male athletes on sports emotions and sports achievement motivation.

Key Words: Sports Emotion, Motivation, Sports Achievement Motivation

INTRODUCTION

Psychology is the scientific study of the mind and behavior. It is a multifaceted discipline and includes many sub-fields of study specifically sports and psychology. According to APA (2010). Applied in sport psychology consists of instructing athletes, coaches, teams, exercisers, parents, fitness professionals, groups, and other performers on the psychological aspects of their sport or activity. The goal of applied practice is to optimize performance and enjoyment through the use of psychological skills and

the use of psychometrics and psychological assessment.

Athletes they may grow from different environmental conditions and physical aspects. Throw that their performance and psychological variables very from each one. Based on that India and Srilanka have been maintain the various relationship in the south Asian region.it is has been traditionally consist similar cultural bondage, environmental condition and political influence, those are impact both countries sports participation and performance. Achievement motivation is based on reaching success and achieving all

of our aspirations in life. Achievement goals can affect the way a person performs a task and represent a desire to show competence (Harackiewicz, et al., 1997).

Emotions are complex, this is variously associated with thoughts, feelings, behavioral responses, and a degree of pleasure or displeasure also emotions are implement to the physical education field that is show as sports emotions come from past experiences in similar athletic situations in the form of beliefs and attitudes shows about performing and competing. The emotions associated with these beliefs and attitudes are commonly known as the "baggage" you carry from your past. Athlete's perceptions from the past impact and present even though the emotions may not be appropriate or useful in the present situation. (Daniel L, 2011).

METHODOLOGY

RESULTS AND DISCUSSION

Determining the level of Sports Emotion

Table 1: Level of Sports emotion in athletes

Level of Sports emotion	Sri Lankan Athletes	Indian Athletes
High	11	17
Average	39	33
Low	0	0

According to the table 1, number of Indian athletes having high level of sports emotion was more than Sri Lankan athletes. But it was vice versa in the number of athletes

A sample of hundred male athletes (N=100) were selected representing the game of Football, Hockey and Handball. Out of hundred male athletes (N=100), they were randomly selected from two countries. Fifty male (N=50) were Indians and the other fifty male (N=50) were from Srilanka. All the athletes had represented University and were in the third year of their college. Sports Emotion Questionnaire and Sports Achievement Motivation Scale were used to assess sports emotion and sports achievement motivation. The statistical employed to find out the relationship and differences were Mann Whitney U test, as the Asymp. Sig. (2-tailed) value (p-value). Results indicated that there was significant relationship and differences among Indian and Srilankan male athletes on sports emotions and sports achievement motivation.

having average level of sports emotion. In both group of athletes, most of the athletes had average level of sports emotion and none of the athletes had low level of sports emotion.

Comparison of Sri Lankan Athletes and Indian Athletes in sports emotion

Ranks

	Group	N	Mean Rank	Sum of Ranks
Score	1	50	46.66	2333.00
	2	50	54.34	2717.00
Total		100		

Test Statistics^a

	Score
Mann-Whitney U	1058.000
Wilcoxon W	2333.000
Z	-1.325
Asymp. Sig. (2-tailed)	.185

a. Grouping Variable: Group

According to the results of Mann Whitney U test, as the Asymp. Sig. (2-tailed) value (p-value) is 0.185 which is greater than 0.05 at 95% confidence level, there was no significant difference in sports emotion among the Sri Lankan athletes and Indian

athletes. Here the mean ranks for both groups are different, which indicate that Indian athletes have high level of sports emotion, but that difference was not significant.

Determining the level of Sports achievement motivation

Table 2: Level of athletic Sports achievement motivation

Level of athletic coping skills	Sri Lankan Athletes	Indian Athletes
High	8	21
Average	42	29
Low	0	0

According to the table 2, similar to that in sports emotion, the number of Indian athletes having high level of Sports achievement motivation was more than Sri Lankan athletes. But it was vice versa in the number of athletes having average level of

Sports achievement motivation. In both group of athletes, most of the athletes had average level of Sports achievement motivation and none of the athletes had low level of Sports achievement motivation.

Comparison of Sri Lankan Athletes and Indian Athletes in Sports achievement motivation.

Ranks

	Group	N	Mean Rank	Sum of Ranks
Score	1	50	42.11	2105.50
	2	50	58.89	2944.50
Total		100		

Test Statistics

	Score
Mann-Whitney U	830.500
Wilcoxon W	2105.500
Z	-2.895
Asymp. Sig. (2-tailed)	.004

a. Grouping Variable: Group

According to the Mann Whitney U test, as the Asymp. Sig. (2-tailed) value (p-value) is which is less than 0.05 at 95% confidence level; there was a significant difference in level of Sports achievement motivation among the Sri Lankan athletes and Indian athletes. Here the mean ranks for both groups not the same, which indicate that the level of Sports achievement motivation was higher in Indian athletes than the Sri Lankan athletes and this difference was significant.

CONCLUSION

1. There was a significant difference between Sri Lankan athletes and Indian athletes in the level of Sports achievement motivation.
2. There was no significant difference between Sri Lankan athletes and Indian athletes in the level of sports emotion.
3. The Indian athletes were better in sports emotion and Sports achievement motivation when compared to Sri Lankan athletes.

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Science of Meditation

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Abstract

Meditation has its roots in cultural, spiritual, and religious settings. It is an ancient practice that has been practiced by individuals throughout the world. Meditation involves used to train your thoughts to stay in the present moment, because in the present states there is true peace. Thoughts of the future that is (what/will happens, leading to fear or anxiety) or of the past (might have happened, leading to sadness, depression, anger, or jealousy) prevent us from feeling the inner peace that is in the present moment. Meditation originally was meant to help deepen focus on the sacred and mystical forces of life. Meditation impacts health such as, relaxation, systematic desensitization, release of repressed memories, un-stressing and so on.

Key Word: Meditation, Anapan Sati, Meditation techniques

Introduction:

Meditation is one powerful way to the exercise of mind to keep it healthy & free of perversions. In the depth of Meditation, one experiences a dialogue with one's own self/soul. Miseries as human being are primarily due to our thoughts, emotions, desires-aspiration, ego, perceptions, liking-disliking (raga-dweshha), attitude etc. our constant shifts between past & present tense. If we carefully analyse, these are all the functions of our mind. If we learn to improve on these, our miseries would be gone. Meditation teaches us to improve on all these aspects. Peace of mind & happiness are sought for by each and every person. But our search for them is in outside world. At some stage, we realize that peace of mind & happiness actually resides in our own selves. The day we begin internal journey, we start getting peace of mind & happiness. This internal journey is gifted and guaranteed by meditation. All great prophets, religious path makers & saints have done meditation

in some or other form to achieve the greatness and enlightenment. From oriental and western spiritual texts, it is clear that Lords like Shiva, Mahavir, Buddha to Rama, Krishna, Patanjali and from Christ to Prophet Mohammed to Asho Jarthusutra to recent most saints all have meditated for a long time during their self-realization enlightenment process so, if we really want peace of mind & happiness and eliminate our miseries or if we want to experience god like we must meditate regularly.

Benefits of meditation:

There are so many advantages of meditation. Meditation can restore physical, mental & emotional health. It can be useful in controlling several lifestyle disorders, psychosomatic disorders including high BP, coronary artery disease, diabetes, asthma, rheumatism etc. In this modern stressful life, it's a powerful weapon or antidote to acute as well as chronic stress also it improves concentration and sharpness. It decreases

reactivity to a situation or a person, so one remains serene.

Person who does meditation has a totally different attitude towards everything in life. Thus meditation helps to improve interpersonal relationship, job performance; cultivate positive emotions and removes negativity of person. It also helps in controlling anger and conquering fear. In all, it brings inner peace, patience & happiness and thus changes quality of life for better. Higher level of meditation brings intuitive knowledge, healing power, magnetic personality and occult powers.

The neurochemistry of meditation is entirely the reverse of stress. Meditation up regulates parasympathetic system, while stress regulates sympathetic system responsible for increase in heart rate, respiration, blood pressure etc. According to our oriental spiritual texts and our spiritual masters, we should meditate for much higher gain than above mentioned physical & mental benefits. The real purpose of meditation is conquering the mind, elimination of ego and then elimination of mind itself, thus attaining Samadhi-total bliss. Here soul remains uninhibited, manifesting its complete knowledge, complete revelations etc. We can understand the state of self realization, God realization comes here which is a part of Enlightenment & Liberation as per our masters & texts. Meditation is not a pushbutton system. We need to have patience courage, hard work and perseverance. A person has right guide, right technique, right understanding and real belief and dedication can bring success. There is a high failure rate amongst mediators due to non fulfilling of above criteria. It is said, that meditation has become a business of billions and

many opportunists have misused and abused this sacred spiritual science.

Two major styles of meditation:

- **Focused-attention meditation:** Concentrates on a single object, thought, sound or visualization. It emphasizes ridding your mind of attention and distraction. Meditation may focus on breathing, a mantra or a calming sound.
- **Open-monitoring meditation:** Encourages awareness of all aspects of your environment, train of thought and sense of self. It may include aware of thoughts, feelings or impulses that you might normally try to suppress.

Anapan Sati:

This technique is about moment to moment awareness of our own breathing. The technique concentration or focus on breathing, but not a pranayama which is controlling breathing, but here one has to see and know every natural breath that goes in and comes out, Just no other thoughts, no other objects. Be aware of your own natural breathing, moment to moment in an effortless, choice less way. Please do not lose a single breath. When the mind gets distressed, as it commonly happens with every beginner, one has to bring it back to breathing very quietly, without criticising or cursing the mind. With months, years of practice, one learns to be with every breath for several minutes to hour. This facilitates the awakening process or enlightenment.

In this technique there is no deity, no sect, and no religion; hence it's perfectly a secular technique. Also breathing is a vital process, without it nobody can survive;

therefore it's a vital technique. Breathing is always with you wherever you are and whenever you go hence this is a hassle free, easy and handy technique. You are alive, because you are breathing. This is a truth. One can't deny this eternal truth about existence. So when one concentrates on breathing, in a way one is perusing the truth. By perusing this truth, one is supposed to be near the ultimate truth. The enlightenment, as revealed by experienced sages. Breathing is the carrier of our emotions. Breathing changes with different emotions and perversions. With anger, hatred the breathing becomes fast. With love towards living beings it becomes slow with compassion it becomes slower and even effective.

For a regular practitioner of breathing meditation, it becomes a feedback of one's own emotions and perversions. It's an auto check mechanism and whenever there is a negative emotion one becomes alert, as one's own breathing tells look here, something is wrong, control it. This is a wonderful reason, why breath practitioner becomes quiet, calm and compassionate and is always full of positive emotions/energy.

Finally, breathing is our own present tense, present moment. When we stay on breath, we actually remain in present moment. Our mind always fluctuates, between past and future that is one of the major tragedies and root of our miseries. This meditation technique is a straight training of remaining in present tense. It is not easy to dwell on breathing, without losing a single breath with hard work, dedication and commitment to achieve.

Similarly, with all other techniques there is some science and some logic in each one

of them. In meditation over thought, one has to either pursue one and unified thought process e.g. a good or noble thought, or just simply watch the stream of thoughts, as they come one after the other, and the next. For sound meditation, one can chant a mantra several times (loudly or internally without vocalizing) or listen calmly in a quiet place at night or in a jungle the subtle sound that enters the ears and concentrate on that. In object based meditation, one stare at the object continuously even without blinking eyes.

Based on the techniques, several masters have designed different methods. Patanjali Rajyoga, Anapan Sati, Smriti Upasthan, Vipashyana, Prekshadhyan, Jaindhyan, Transcendental meditation to name few important methods. Amongst others are Mantra dhyan, Zen meditation, Yoganindra, Nays, Dynamic (HooDhyan) meditation, Sahajdhyan, Tratak, Kayotsarga, Atitdhyan, Bhavidhyana, Swapnadhyan, Tahata, Spanddhyan, etc.

All our mistakes or bad karma happen during our unaware state. In Jain technical language it is called pramad. If one is aware moment to moment, one will be very cautious. Hence mistake or pramad (unawareness) does not occur. So Karmic Dosh of thoughts, speech or deed is minimized. Lord Mahavir used to frequently say to his chief disciple Gautam Always be aware and watch your thoughts, words and actions so closely that nothing goes wrong anywhere.

If one understands the basics of meditation, one can really design one's own tailor made system, suitable to one. Initially one should learn one standard method, follow it for few years, then after

mastering it, at some stage one can modify.

Most of these oriental techniques have come from teachings of Lord Shiva, Patanjali, Buddha, Adinath, Mahavir, amongst several others.

No one method is better than others really. All methods are great & equally beneficial. Comparison is dangerous & has no meaning. One has to choose the method that suits to one. One should remember that all methods teach to remain in present tense, this particular moment. Choice less, effortless, non judgmental awareness brings happiness & joy. As nicely described in Vipashyana Method, actually speaking, meditation is an operation of mind, by the mind. The tools of mind are calm and quiet mind, Awake & attentive mind, an equanimous mind. When this state is practiced several times over weeks & months & years, one achieves what is called mindfulness practice. Here mediator remains in a state of constant awareness in whatever he/she does. Eating meditation, sitting meditation, working meditation, walking meditation. To achieve this, 3 rules are mostly famous.

1. Whenever the body is, mind should also be there without any exception. All activities of body are with full mind at every moment.

2. To Develop wakeful plain observorship: Non judgmental. Thus, one learns to detach body from mind.

3. Ultimately to know the soul with our own soul.

Conclusion:

Meditation act to changes the body and mind together and research on the impact of diverse kinds of meditation is the most favoured trend among the present day. Working together with Mediators, researchers help to understanding the concept of meditation and its impact on the physiological and psychological wellbeing of the human community. When meditation acts as a constant repetitive stimulus, certain qualitative and quantitative variations occur permanently. As we see effects of meditation on metabolism, we realize there are decreased heart rate, decreased breathing and decreased B P. Researcher studies shown that the blood flow to liver and kidneys is reduced with increase in cardiac output. The oxygen utilization level is decreased in muscles. The root cause of our problems/miseries is our own mind. The thoughts, desires, emotions, ego, perceptions, attitude etc. causes the problems. If we take our mind, the miseries will be gone. To tackle our mind is meditation is important in our everyday life.

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Transcendental Meditation

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Abstract

Transcendental Meditation brought to light by his Holiness Maharishi Mahesh yogi; Transcendental Meditation uses the natural tendency of the mind to progress and 'go beyond', all limitations and gain un-bounded awareness. Is there simplest and the most effective technique for gaining deep relaxation inner happiness and fulfillment. Transcendental Meditation is practiced for 15 to 20 minutes in the morning and evening while sitting comfortably with the eyes closed. It can be easily learned by any one. People of all lands of intelligence, belonging to all ages above 14 years, belonging to all cultures, religions and educational backgrounds in countries throughout the world practice the technique.

Key Words: Transcendental Meditation and Benefits

Introduction

There are 112 meditation methods, the simplest is Vipassana" in general, there are two types of meditation. Passive meditation is the aim of sitting in one pose and performing a meditational practice. Its aim is to still ever restless and wandering mind and make it one-pointed so that meditational experience will automatically follow. Active meditation is that which occur when one performs one's daily duties when one walks, talks, eats and so on. This in fact is the aim of yoga, to allow one to meditate while being involved in worldly activities. Active meditation can be developed by performing the passive meditational practices. In Saguna meditation one tries to focus on a concrete object on which the mind can easily well-on an image or visual symbol perhaps or a mantra which bring him to unity, (with seed). It can also be called as concrete meditation. Ningana Meditation is without any distinguished feature or attributes. It is called as absolute or abstract meditation (without seed). Transcendental Meditation

is not a set of beliefs, a philosophy, a life style or a religion. It is an experience", it is a mental technique; it is practiced twice everyday for fifteen to twenty minutes; it means go beyond". It is the science of creative intelligence. It emphasizes restful alertness. If we do in the morning, we get energy and if we do in the evening we get calmness.

Objective of the Study:

To study the transcendental meditation and their benefits

Hypothesis of the Study:

There exist various types of meditation and each meditation differs from one another in terms of methodology and benefits.

Review of Literature:

Bhatt (2007) observed that More than 60 scientific studies from 20 Universities of the country have confirmed profound benefits for mind, body behavior and environment. **Taimini (2008)** after scientific investigation has found that,

during the period of Transcendental Meditation, oxygen consumption, carbon dioxide production, cardiac output, heart rate respiratory rate significantly decreases.

Methodology:

1. Sit in a comfortable positional: Eyes closed;
2. Do Sukha Pranayama for 3 to 5 minutes with Surya Mudra;
3. After Sukha Pranayama first concentrate on breathing for 30 seconds without opening eyes;
4. After 30 seconds. Spell out mantra mentally while exhaling, be slow.
5. At one stage Mantra disappears thought appears;
6. Then, thought disappear and mantra appears;
7. At one stage, there won't be any remembrance of Mantra or thought;
8. You are unaware of body, mantra and thought; that is the spiritual experience.
9. After 13 or 18 minutes, without reciting mantra, do meditation for two minutes.
10. Then slowly, open your eyes; see the floor first;
11. Rub the palms and place it on eyes; relax.
12. In doing Transcendental Meditation, be an observer; be an experience ; Don't restrict thoughts; don't be strict to

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mantra; Don't concentrate on mantra or thought; allow its own course, Don't resist sleep; Mantra is a vehicle only;

13. It can be done at any place even while travelling; women can do even during pregnancy and menstrual periods. It can be done after doing Asanas and Pranayamas.

Results:

Transcendental Meditation highlights the importance of the settled state, one that is neither in the active state of brain awake, nor in one of the two states of sleep that comprise dreaming and forgetfulness. Once the fourth state of consciousness is accessed, the mind is at its most alert, most creative and most precise. The combination of the deep relaxation that transcendental meditation brings and this clarity of mind, allow for better physical and mental performance and improved health.

Conclusion:

The metabolic rate is reduced by an average of 20% accumulating tension and fatigue which hinder efficient functioning of the nervous system at dissolved in natural way, the Transcendental Meditation is the one systematically word with senses, body, breath, the various levels of mind, and then goes beyond, the center of consciousness.

A Study of Sports Competition Anxiety among Players of Different Games

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Abstract

The objective of this investigate was to camper the sports competition anxiety among players of different games. The aim of this investigation was to sports competition anxiety of male players who participated in different games. 40 male players were selected related to the sports anxiety during competition. The chosen players were from Amravati district who participated in inter-college level tournaments in various games. For the present study researcher had collected data from 40 male players with the help of purposive sampling method, 10 Volleyball, 10 Basketball, 10 Handball and 10 Softball players. The age of the subject was ranged from 18 to 22 years. Data was collected through standardized questionnaire Sports Competition Anxiety Test (SCAT) developed by Rainer Marten's (1990). The data thus collected were put to statistical treatment computing One Way ANOVA to find out the differences and Percentage. Further the level of significance was set at 0.05. The findings revealed that there was statistically no significant difference found. In regard to sports competition anxiety there is a significant difference between the means of volleyball, basketball, handball and softball players.

Key Words: Sports Competition Anxiety, Games

Introduction:

These days sports competitions are very tough. Players are using best techniques and best training methods for better results during competitions. Even then they are not satisfied by their results. Thus the importance of psychology was realized in physical education to give best possible results of players. Sports psychology is the branch of psychology which deals with positive behaviour of sports person during training and competition period to increase performance. It guides coaches and players to give individual attention regarding

various methods and various motivational techniques. It gives knowledge regarding adolescence problems, changes during adolescence, managing adolescence problems. It guides sports ethics and sportsmanship to develop sports attitude. The knowledge of sports psychology helps coaches and players to develop and control anxiety level. It also helps to tackle various stresses of life. [1]

During playing situations, the sportsmen are by and large fearful to some degree which eventually affects their performance. This is a natural phenomenon. No human being is

free from fear and anxiety. In the stressful setting provided by competitive sports, it is usual to observe a player who either is unable to act because of fear of whose fears at least interfere with his effective performance. The word 'fear' here refers to a rational appraisal of a real threatening situation and the term anxiety denotes an abnormal apprehension of such a situation. Anxiety is a complex emotional state characterized by a general fear of foreboding usually accompanied by tension. It is related to apprehension and fear and is frequently associated with failure, either real or anticipated. It often has to do with inter-personal relation and a part of anxiety. According to Frost (1971). Anxiety is an uneasiness and feeling of foreboding often found when a person is about to embark on a hazardous venture; it is often accompanied by a strong desire to excel. "Hence anxiety state arises from faulty adaptations to the stresses and strains of life and is caused by over-actions in an attempt to meet these difficulties. [2]

Methodology:

The aim of this investigation was to sports competition anxiety of male players who participated in different games. 40 male players were selected related to the sports anxiety during competition. The chosen players were from Amravati district who participated in inter-college level tournaments in various games. For the present study researcher had collected data from 40 male players with the help of purposive sampling method, 10 Volleyball, 10 Basketball, 10 Handball and 10 Softball players. The age of the subject was ranged from 18 to 22 years. Data was collected through standardized questionnaire Sports Competition Anxiety Test (SCAT) developed by Rainer Marten's (1990).

Statistical Analysis:

The data thus collected were put to statistical treatment computing One Way ANOVA to find out the differences and Percentage. Further the level of significance was set at 0.05. The data collected by above mentioned tool was analyzed and the results were interpreted as under:

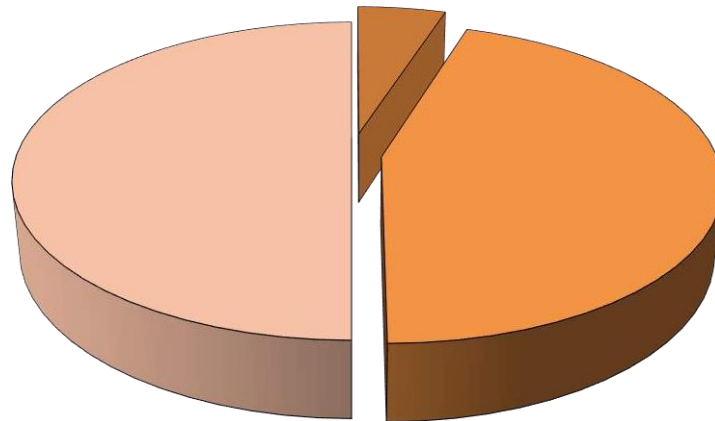
Table No. 1: Percentage for Anxiety Level among Players

<i>Anxiety Level</i>	<i>Frequency</i>	<i>Percentage</i>
Low Level of Anxiety	2	5.00
Average Level of Anxiety	18	45.00
High Level of Anxiety	20	50.00
Total	40	100

Table No-1 reveals that percentage of various categories of anxiety level in male players. It shows that percentage of low anxiety level is (2) 5%, average anxiety

level is (18) 45.00% and high anxiety level is (20) 50.00% respectively. In view of the study results, it is observed that majority 50.00% high anxiety level in among players.

Low Level of Anxiety Average Level of Anxiety High Level of Anxiety



Graph.1: Comparison of percentage of anxiety level among players

Table No. 2: Mean and SD for anxiety among players

<i>Groups</i>	<i>Mean</i>	<i>SD</i>
Volleyball	24.50	2.64
Basketball	22.90	1.66
Handball	24.20	2.70
Softball	24.00	2.87

From Table-2 it is clear that in volleyball player the mean \pm standard deviation of anxiety level is 24.50 ± 2.64 . Basketball player the mean \pm standard deviation of anxiety level is 22.90 ± 1.66 . Handball player the mean \pm standard deviation of anxiety level is 24.20 ± 2.70 . Softball player the mean \pm standard deviation of anxiety level is 24.00 ± 2.87 respectively.

Volleyball Basketball Handball Softball

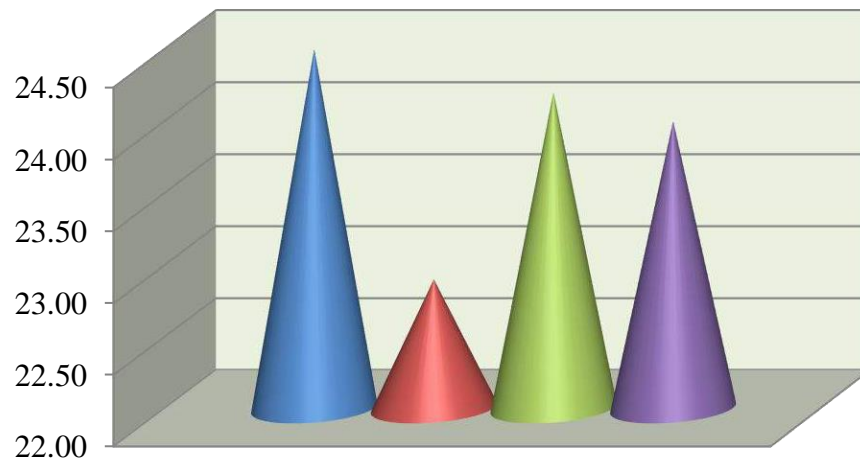


Table.3: Analysis of variance in anxiety among volleyball, basketball, handball and softball players

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>
Between Groups	14.60	3	4.87	0.772
Within Groups	227.00	36	6.31	

Above table-3 revealed that there was no significant difference in volleyball, basketball, handball and softball players component anxiety level as obtained F-ratio was 0.772 which was less than that of required tabulated 'F' value of 2.87 at .05 level of significance with (3,36) degree of freedom.

Conclusion:

The findings revealed that there was statistically no significant difference found.

In regard to sports competition anxiety there is a significant difference between the means of volleyball, basketball, handball and softball players. Research can help physical education teachers and coaches to understand the importance of anxiety level in sports. Conditions that create anxiety should be determined and psychological exercises should be done to overcome these problems.

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Effect of Selected Asanas on Minimum Muscular Strength

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Introduction

Today yoga is the most popular in the world, because in the field of physical education it is called as the mother of all activities. The subject 'yoga' is recognised as one of the most important heritage of India. Today yoga therapy has got high status in our life because neither it has side effect nor costly. Yoga can cure diseases. This I cannot say with any conviction, but there is no denying the fact that yoga can definitely help to keep the body free of diseases and allow it to remain healthy and active. It also helps us to keep us cheerful and happy.

Total fitness has many components. In a factor analysis study C.H. Mcloy isolated 36 different factors involved in motor performance. Among these were muscular strength, speed and muscular contractor cardio respiratory endurance, flexibility and agility.

Yoga assists all your muscles and bones and organs to operate at top masculine or female vigor. Yoga stimulates into peak performance the latent abilities of your body to throw off the attacks of diseases, the psychosomatic "nervous illness".

Thus we can say that the relationship between yoga and fitness is very vast. Because it is only the yoga which helps the human being in every walk of life. Yoga not only develops the flexibility but it develops all components of physical fitness these components are__strength, muscular, strength flexibility.

Strength is the ability to overcome resistance or to act against resistance. Strength should not be considered a product of only muscular contractions. It is, in fact, a product of voluntary muscle contractions caused by the neuro-muscular system.

Origin of Research Problem:

Maintenance of health related physical fitness is the need of the day in human society. Recent reviews reported that Indian School children especially from economically Backward Class have a low level of minimum muscular strength which is required for normal living. Hence the researcher likes to find out the solution which is easily accessible in the Indian context.

International Status:

Today yoga is gaining recognition in the field of medical science as a meditative therapy, particularly in Western and European Countries and it has got high status in the life of western peoples much scientific study is under progress at their level.

In U.S.A. the minimum Muscular strength test has been made compulsory for all school going children to check the minimum level of muscular strength.

Significance of the Study:

In India very few scientific studies has been found and much scientific study is required in this area. Because today's Medical Science recognizes the

importance of yogic exercise to maintain good health and fitness. Various reports also revealed that certain factors at physical fitness like flexibility lung capacity, endurance, neuromuscular coordination etc. can be maintained by regular practice of yoga.

Objectives

- a. Objective of the study is to find out the effect of asanas on strength development.
- b. To find out non-conventional method of strength building.

Selection of Subjects

The subjects were selected on the basis of result of minimum muscular test. The Krausweber test was conducted on 50 boys. Among them 30 boys failed in the test and were selected as the subject of the study. All these students are from Nav Pratibha High School, Nagpur.

Criterion Measures

Criterion measures of selecting Krausweber test in this study are as below:

1. Abdominal plus A +
2. Abdominal minus A-
3. Psoas P
4. Upper Back UB
5. Lower Back LB
6. Length of Back and Hamstring Muscle BH

Administration of Test

The students who failed in the test will be selected for the study and will be given SIX months selected yogic exercises 1 to 14 that is Tarasan , Matsyasan, Sarvangasan, Vipareetkarni, Halasan, Ushtrasan, Suptavajrasan, Vajrasan, Chakrasan, Gomukhasan, Dhanurasan, Bhujangasan, Naukasan, Shavasana thrice

in a week (Monday, Wednesday & Friday) and the students will be asked to perform these exercises at home for remaining three days, as per the practice and Sunday will be observed as a rest day. Post test will be employed after the completion of experimental period. These test items are as under.

Test No.1 Abdominal Plus

Strength of the abdominal plus psoas muscle. Subject in supine lying position hands behind neck, examiner holds feet down pass performance one sit-up.

Test No.2 Abdominal Minus

Strength of the abdominal psoas muscle subject in same position as test 1 except knee bent score one sit-up.

Test No.3 Psoas And Lower Abdomen.

Strength of psoas and lower abdominal muscle subject in supine lying position hands behind neck raise feet 10 inch with knee straight while examiner counts to 10.

Pass: Position held for 10 seconds.

Test 4 Upper Back:

Strength of upper back muscles subject in prone lying position with pillow under hips and lower abdomen hands behind neck examiner holds feet down raise chest head and shoulder, while examiner counts to 10. Pass: Position held for 10 seconds.

Test 5 Lower Back:

Strength of lower back muscle subject in same position as in test No.4 except feet are raised with knee straight.

Pass: Position held for 10 seconds.

Test 6 Length Of Back And HAM String Muscles:

Trunk flexibility or floor touch test subject

stands except in stocking or bare feet hands.

Collection of Data

Data collection was obtained from the failures of Krausweber test from Nav Pratibha High School, Nagpur. All postures were practiced regularly among the failure students in the test and were

Findings

The score of each selected test item are present in the following tables.

given for SIX months.

Analysis of the Data and Result of the Study

The analysis of the date collected on the selected Krausweber test components namely abdominal plus, abdominal minus, psoas, lower back, upper back and back and ham string.

Table – 1
Comparison of Kraus Weber test item I (Boys)

Item 1 st	Abdominal Plus A+ Pass percentage
Pre Test	70%
Post Test	86.67 %

As per the table No. 1 pass percentage of pre test is 70% and post test percentage is 86.67%. It was seen that after six month yoga exercise results are found increased.

Table – 2
Comparison of Kraus Weber test item 2 (Boys)

Item 2 nd	Abdominal minus A- Pass percentage
Pre Test	33.33 %
Post Test	76.67 %

As per the table No. 2 pass percentage of pre test is 33.33 % and post test percentage is 76.67 %. It was seen that after six month yoga exercise results are found increased.

Table – 3
Comparison of Kraus Weber test item 3 (Boys)

Item 3 rd	Psoas and lower abdomen Pass percentage
Pre Test	86.67 %
Post Test	96.67 %

As per the table No. 3 pass percentage of pre test is 86.67 % and post test percentage is 96.67 %. It was seen that after six month yoga exercise results are found increased.

Table – 4
Comparison of Kraus Weber test item 4 (Boys)

Item 4 th	Upper Back Pass percentage
Pre Test	86.67 %
Post Test	96.67 %

As per the table No. 4 pass percentage of pre test is 86.67 % and post test percentage is 96.67 % . It was seen that after six month yoga exercise results are found increased.

TABLE – 5
Comparison of Kraus Weber test item 5 (Boys)

Item 5 th	Lower Back Pass percentage
Pre Test	70 %
Post Test	90 %

As per the table No5 pass percentage of pre test is 70 % and post test percentage is 90 % . It was seen that after six month yoga exercise results are found increased.

Table – 6
Comparison of Kraus Weber test item 6 (Boys)

Item 6 th	length of Back and Hamstring muscle Pass percentage
Pre Test	63.33 %
Post Test	90 %

As per the table No. 6 pass percentage of pre test is 63.33 % and post test percentage is 90 % . It was seen that after six month yoga exercise results are found increased.

Table – 7
Comparison of Kraus Weber test items (Boys)

	Pass Percentage of total test items
Pre Test	68.33 %
Post Test	89.45 %

As per the table No. 7 pass percentage of pre test is 68.33 % and post test percentage is 89.45 % . It was seen that after six month yoga exercise results are found increased.

Conclusion

1. It was seen that most of the Boys are found weak in lower Back as compared with other test items.

2. In boys section most of the boys are found weak in abdominal minus. These findings are to the fact that yoga exercise affects the motor fitness of the school going student's age group 9-14
3. It was seen that age affects the performance.

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Impact of Psychological Factor on Sports Performance

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Psychological factor influencing sport performances have long been recognized (Crespo, 2002) Psychological issue with respect to a variety of sports have also been addressed in a large number of scientific studies which have examined many of the mental characteristics during competition. Motivation also attracted the attention of researchers. Taylor (1994) treated motivation as the base of a pyramid towards success in sports. Other important factors in this area include goal orientation goal setting motivational climate (van Aken, 1994 Boyee et al 2001) and burnout (Gould et al., 1996, 1996, 1997).

Sports provide a unique opportunity to explore how emotions operate in people. However, the prevailing sport consumer behavior research has focused on emotion as an outcome variable and little research has examined the motivational function of such transitory emotional status on subsequent behavior and cognitive processing. The purpose of this research is to investigate the approach / avoidance characteristics of emotion in a spectacular sport setting. We manipulated participants' emotional state by using a fictitious publicity about their favorite team and examined its effect on behavioral and cognitive responses to marketing stimuli. Study 1 examined the effect of message-induced emotion on participants' acceptance of a promotional item. In an effort to identify the underlying mechanism of the stimulus-behavior link,

Study 2 investigated whether such message-induced emotions influenced brand-related product evaluation. Findings suggest that emotions elicited from a single exposure to a written communication acted as a crucial motivator of information processing and behavior (Kwak, Kim & Hirt, 2011).

MOTIVATION:

Self-knowledge is the key aspect of the philosophy of trainer. The fact that the trainer is expected to set an example, especially in his work with younger trainees, goes hand in hand with a great responsibility. Every trainer's personality and his ability to cooperate with other people are crucial aspects of his profession. Other important aspects are the trainer's personality traits, for example his ability to control and regulate his emotions and behavior, and his professional motivation. The main motive may be the desire to help others, to influence and raise other people in a positive way, to help them become successful and to take pleasure from doing a good job and attaining respectable results. At times, there may as well be other reasons, such as desire for money, fame or power, which may represent a risk factor in this kind of profession. Personality traits are a result of interaction of innate dispositions and social interaction and development. The degree of awareness of one's strength and weaknesses is quite individual. However, we should not only respect but also be as much

as possible aware of our ways of functioning, since our behavior is largely reflected in our interpersonal contexts.

Several studies have analyzed the importance of psychological variables in sports performance, and flow state is the one that has aroused the most interest. It is known as the optimum psychological state for attaining a better sports performance [1, 2]. defined it as being made up of nine dimensions; challenge-skill balance, action awareness merging, clear goals, unambiguous feedback, concentration on task at hand, sense of control, loss of self-consciousness, and transformation of time and auto telic experience. (Carlos et al. 2014).

Motivation is an internal energy force that determines all aspects of our behavior, it also impacts on how we think, feel and interact with others. In sport, high motivation is widely accepted as an essential prerequisite in getting athletes to fulfill their potential. However given its inherently abstract nature, it is a force that is often difficult to exploit fully. Some coaches, like Portugal manager Luiz Felipe 'Big Phil' Scolari, appear to have a 'magic touch', being able to get a great deal more out of a team than the sum of its individual parts; others find motivation to be an elusive concept they are forever struggling to master. Elite athletes set personal goals that were based on both self-determined and extrinsic motives. They had a high self-belief in their ability to succeed; Track and field was central to their lives – everything rotated around their involvement in the sport. Positive self-talk is a technique that can be used to enhance motivation across a

wide range of achievement domains. It makes use of an athlete's powerful inner voice to reinforce their self-esteem or important aspects of their performance. With appropriate repetition, self-talk can positively alter an athlete's belief system.

SOCIAL SUPPORT:

A social support network is made up of your friends, family significant others, coaches, therapists and other people you interact with on a regular basis. These individuals can be invaluable during the rehabilitation process by providing; A connection to your team during rehabilitation, Comfort during the hard work of returning to play, an understanding of the injury and what to expect from the rehabilitation process support for completing day to day tasks that become difficult when injured.

Evidence is growing that perceived social support, more often than actually received support, is an important contributor to health and personal adjustment. Perceived support may also play a role in performance. People high in social support report experiencing less cognitive interference than do those with lower levels of perceived support and that relate to skill development and performances: (1) the sense of support and (2) the sense of acceptance. A description of the ways in which these concepts influence exploratory behavior, reasonable risk-taking, the sense of personal control and performance level is provided. Examples of applications of this analysis to sports are given and the need for research on the supportive aspects of coaches' behavior and team cohesion is identified. (G. Irvin, 2008).

Competition in elite combat sports such as boxing, fencing, judo, taekwondo, and wrestling requires task-specific psychological readiness that will enable the performer to act in combat situations that may often change within extremely short periods of time (e.g., 100 to 200 msec) (Pedro and Durbin, 2001). Emotional and mental states are subject to extreme fluctuations during combat matches. It is a challenge for the competing combat athlete to simultaneously attack and defend while concealing his or her intentions from the opponent and while in an state of extreme tension. It is difficult to make decisions under time pressure while facing aggressive opponents and to decide on alternative tactical movements (e.g., attentional flexibility), all while striving to achieve the designated goals.

In order for competitive combat athletes to meet the above-mentioned specific combat requirements, they should be involved in sport-specific training programs. A training program for competitive athletes is typically comprised of physical, technical, tactical and psychological preparation (see Bompa, 1999, Zatsiorsky, 1995), which are uniquely linked with one another. The interaction between these preparations defines the quality of the practice and its contribution to athletic goal attainment (Blumenstein et al., 2005).

In this article we focus on one type of preparation – the psychological preparation. Those professionals who regularly work with competitive combat athletes should obtain relevant information on psychological intervention that are evidence-based, in order to plan task-enhancement sport

psychology programs aimed at preparing these athletes for practice sessions and combats. This evidence-based information can help the professionals who work with competitive judokas to effectively plan training programs that match the specific needs of the individual judoka. Among these professionals are sport psychology consultants (SPCs), coaches, and strength and conditioning coaches.

Social support and negative social interactions have implications for athlete psychological health, with potential to influence the links of stress-related experiences with burnout and well-being over time. Using a longitudinal design, perceived social support and negative social interactions were examined as potential moderators of the temporal stress-burnout and burnout-well-being relationships. American collegiate athletes (N = 465) completed reliable and valid online assessments of study variables at four times points during the competitive season. After controlling for dispositional and conceptually important variables, social support and negative social interactions did not moderate the stress-burnout or burnout-well-being relationships respectively, but did simultaneously contribute to burnout and well-being across the competitive season. The results showcase the importance of sport-related social perceptions to athlete psychological outcomes over time and inform development of socially driven interventions to improve the psychological health of competitive athletes (JD De Freese 2014).

EMOTIONAL REGULATION:

Emotions experienced before and during sports competition influence performance (Hanin, 2010). Appropriate emotional responses might be beneficial to an athlete by, for example, improving the economy of movement, improving the quality of interaction with teammates, reducing the risk of disciplinary action, and reducing the risk of injury. Emotion regulation is therefore regarded by sport psychologists as an important psychological skill. In the following expert statement, research findings from sport and relevant areas of psychology are reviewed prior to a discussion of the implications for athletes and practitioners. Emotion regulation is the automatic or deliberate use of strategies to initiate, maintain, modify or display emotions (Gross & Thompson, 2007). Emotions are subjective feelings experienced in response to events either in the athlete's environment, for example walking onto the field of play, or in the athlete's mind, for example anticipation of an upcoming event (Lazarus, 2000). Emotions usually encompass three types of response; physiological such as increased respiration and heart rates; cognitive such as the changes in attention, perception and information processing priorities; and behavioral such as aggression towards an opponent or displaying disgust at an official's decision. (Andy Lane et al., 2011).

Research suggests that emotional states are predicative of sports performance (Beedie et al., 2000; Hanin, 2010), and that athletes regulate emotions accordingly (Totterdell & Leach, 2001; Hanin, 2003 2010, Jones, 2003; Robazza et al., 2006; Rujiz & Hanin,

2011). Emotion regulation is the automatic or deliberate use of strategies to initiate, maintain, modify or display emotions in a given situation (Gross & Thompson, 2007) – for example the subjective experience (feelings), cognitive responses (thoughts), emotion-related physiological responses (for example heart rate or hormonal activity), and emotional-related behavior (bodily actions or expressions).

Positive emotions could facilitate long-term positive adaptational outcomes in sport thought a 'broaden and build' process that increases personal resources, leading to emotional and physical well-being, which over time could energize optimal functioning (Fredrickson, 2001, 2004)). Unlike negative emotions that cause athletes to narrow their thought and action options, positive emotions are thought to facilitate a variety of behaviors that build resources through a broadening of thought-action repertoires (Fredrickson, 1998). Action tendencies or 'urges' are identified by Fredrickson (2004) for specific positive emotions that have important implications for sport. Joy creates the urge to play, push the limits and be creative. Interest produces an urge to explore and take in new information and experiences. Contentment generates any urge to savor and produce new insights about oneself in relation to the world. Many sport psychology studies have identified the importance of play, exploration and interest in facilitating intrinsic motivation and the building of physical skills and social attachments (see Cote, Baker, & Abernethy, 2007; Vallerand, 2004). Engaging in these broadening thought-action repertoires should allow

athletes to build their physical, social, and psychological resources. These resources should therefore produce durable changes and enhance the attainment of performance goals, as well as social goals. Fredrickson (2004) suggest that by broadening one's minded and building resources, people should be able to develop better psychological resiliency to cope with adversity. All these changes should to enhance long-term adaptation to the constantly changing challenges of sport (Tammlinen et al., 2014)

At the top of the Prime Sport Pyramid sits emotions. It's closest to the top of the pyramid (above motivation, confidence, intensity, and focus) because emotions will ultimately dictate how you perform throughout a competition. Emotions during a competition can cover the spectrum from excitement and elation to frustration, anger, and disappointment. Emotions are often strong and, most troublesome; they can linger and hurt your performances long after you first experience them.

Negative emotions can hurt performance both physically and mentally. They first case you to lose your prime intensity. With frustration and anger, your intensity goes up and leads to muscle tension, breathing difficulties, and a loss of coordination. It also saps your energy and causes you to tire quickly. When you experience despair and helplessness, your intensity drops sharply and you no longer have the physical capabilities to perform well.

Negative emotions can also hurt you mentally. Your emotions are telling you that, deep down, you're not confident in

your ability to perform well and achieve your competitive goals. Your confidence will decline and you will have negative thoughts to go along with your negative. Also, since your negative emotions are so strong, you will likely have difficulty focusing on what will help you to perform well; the negative emotions draw your attention onto all of the negative aspects of your performance. Finally, negative emotions can hurt your motivation to perform because you just don't feel good and it's no long fun.

Emotion comes from past experiences in similar athletic situations in the form of beliefs and attitudes you hold about performing and competing. The emotions associated with these beliefs and attitudes are commonly known as the "baggage" you carry from your past. Your perceptions from the past impact your present even though the emotions may not be appropriate or useful in the present situation. One of the most difficult aspects of emotions is that they become habits that can cause you to automatically respond with a certain emotional reaction to a particular circumstance even when that emotional response does more harm than good. When you see professional athletes on TV, for example, totally "lose it" and get ejected from a game, you are likely seeing emotions that are self-destructive to both the athlete and their team.

Negative emotions can be provoked by many occurrences during a competition including bad calls, senseless mistakes, making an error at a crucial point in the competition, and just performing poorly. All of these events share two common

elements that lay at the heart of what causes the negative emotions; You feel that the path to a goal is being blocked and you don't seem to have control over removing the obstacle. For example, a tennis player is losing to an opponent that he believes he should beat and, no matter what he tries, he can't seem to turn the match around. The tennis player is likely to experience

frustration and anger initially. These emotions can be helpful at first because they motivate him to fight to clear the path to his goal and regain control of the match. But if he's unable to change the course of the match, then he may experience despair and helplessness, in which he accepts that he cannot win, so he just gives up. (Taylor, 2010)

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Social Psychology of Sports

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Abstract

In this present paper we are highlighting Social Psychology in Sports with the various aspects of individual and team games. Social life is governed by interaction of self with others. In today's context social psychology is very much important for developing sports persons' behaviour, attitude, body language and his relationship with the society. In every society, socialization process is very important. There are two types of social processes. In this paper, we are highlighting the current scenario of social psychology of sports. As everyone knows, today sports person need to socialize a lot in order to ensure their survival and progress. The simple meaning of **social psychology** is the scientific study of the process through which people's thoughts, feelings and behaviours **are** influenced by the actual, imaginary or implicit presence of others. In this **definition**, scientific refers to the empirical investigation using the scientific method. The present paper is based on **psychological** knowledge and skills necessary for addressing optimal performance and well-being of athletes, developmental and **social** aspects of sports participation and systemic issues associated with sports settings and organizations.

Key words: Social Sports, Social Psychology, Skills, Optimal Performance, Well-being, People thoughts, Scientific study, Sports person, Socialize

Introduction:

The present paper focuses on social psychology and sports discipline. In today's context, psychology is deeply concerned with physical education and sports.

Psychology subject is related to all other subject because psychology helps in teaching- learning process. If you want to improve your teaching methodology, you need to understand the psychology of particular content. Social psychology in sport is essential since it offers readers a global viewpoint, an extensive foundation of knowledge and the latest thinking on

topics such as social relationships, communication, coach leadership, team cohesion, motivation and motivational environment, audience effects and morality.

Social psychology is essential in the field of sports on the following dimensions:

- **Social relationships** –Humans are social entities since without social life we cannot survive. Forming social relationships is our basic need. To fulfill this need, we seek relationships at home, in the neighbourhood, at work place, at educational institutions, in communities and religious organizations, in sports

teams, in online communities, and in other social contexts as well as media.

Baumeister suggests *“these relationships help us feel we are not alone, because we belong to a social community. Depriving people of social relationships can be physically and psychologically devastating. However, interacting with people merely on the surface level isn't enough. They don't fulfill our need to belong, because they are not emotionally close. But many of our social relationships do, in fact, fulfill our need for social interaction and emotional belonging. Consider for example your longtime friends. Research even suggests that online relationships can be just as emotionally close and fulfilling as face-to-face relationships. When we have social relationships, we feel connected to others in ways that we can't experience when we are alone, or when we have only superficial relationships”*.

In fact, social relationships provide us several rewards in terms of improvement in emotional, material and physical health. In terms of **emotional rewards**, social relationships offer us emotional backing and reassurance in tough times apart from providing happiness through interactions with friends bringing about fun, relaxation and joy. Social relationships also bring **material rewards** in that people close to us often fulfill our material needs for money, food, shelter, and transportation through sharing. Moreover, our social relationships bring **health rewards**. They actually help us stay healthy by alleviating stress through the happiness and relaxation found in close friendships. Our friends tend to advise us to avoid, or eliminate, harmful practices and situations thereby bringing us health rewards.

Communication –Social communication is a relatively new term that has emerged in the recent past. It is in fact regrouping and recategorizing the previously known concepts of social interchange, social interaction, social skills, communication skills and language skills. Social Interchange is social interaction and is displayed through the use of joint attention to share experiences and emotions with another person for a variety of events and in a variety of contexts. The social partner expects the other person to be responsive to social partner's interests and needs, not just to their own interests or personal needs. Communication involves three key areas including speech, language and pragmatic language. Speech is the expressive production of sounds to produce words and phrases. Language is the understanding and use of words, phrases and grammatical structures to effectively understand and convey messages for a variety of interactions within a variety of contexts and with a variety of people. Pragmatic language is the use of non-verbal and verbal behaviours of speech and language combined to express and respond to functions such as request for basic needs, request for assistance, protest, and persuade. Non-verbal behaviours include facial expressions, gestures and body proximity. Verbal behaviours include voice prosody, voice stress, and voice intonation. Communication behaviours are required to engage effectively in joint attention and sharing of emotions and experiences with others in a social interaction. In addition, symbolic language in the form of words, phrases, sentences and abstract language such as idiomatic expressions, figurative language and sarcasm are included in the verbal and

non-verbal behaviours exhibited to participate in an effective social interaction.

Coach Leadership - The study of leadership has a long history in mainstream psychology, spanning social psychology, industrial-organizational psychology and military psychology (Van Vactor, 2013). Drawing upon the many theories of leadership, Chelladurai (1993, 2012) advanced a multidimensional model of leadership that includes situational characteristics, leader characteristics, and member characteristics. To measure leader characteristics, Chelladurai focused on five dimensions of coaching behaviour: (a) training and instruction; (b) democratic behaviour (allowing athletes a voice in team decisions); (c) autocratic behaviours (decisions restricted to the coach); (d) social support (expressing personal concern for individual athletes); and (e) positive feedback for good performance. These dimensions are measured by a 40-item leadership scale for sports (LSS), which assesses athletes' preferences for specific behaviours, their perceptions of their coach's behaviours, and coaches' perceptions of their own behaviour. The scale has acceptable psychometric properties and has been used in many studies of coaches.

The multidimensional model predicts that athlete performance and satisfaction will be greatest when required (situationally elicited) behaviours, preferred leader behaviours, and actual leader behaviours match. Although support has been found for this hypothesis (Chelladurai, 1984, 2012), results have been inconsistent, with congruent findings for some subscales and not for others, and

with inconsistent patterns across studies. In general, however, low discrepancies between training and instruction, social support, and positive feedback tend to be more often related to satisfaction, while autocratic behaviours that exceed preferences are aversive and related to dissatisfaction.

Clearly, other variables interact with the congruence measure in ways as yet undetermined. Of particular interest in this regard is the fact that preferred leader behaviours can vary among athletes. For example, athletes with high anxiety prefer more social support and positive feedback behaviours as compared to athletes with low anxiety; and athletes with low levels of motivation prefer autocratic behaviours that apparently substitute for internal motivation (Horn, Bloom, Berglund, & Packard, 2011). Older and more accomplished athletes prefer coaches who are both autocratic and socially supportive. Males prefer training and instructional and an autocratic styles more than women do, whereas women tend to prefer a more democratic style. Studies have also shown marked differences across different nations and cultures (Chelladurai & Reimer, 1998). Thus, within this model, there is no "one size fits all" preferred coaching pattern. Rather, coaches who are flexible and can adapt their coaching behaviours to the situation and to the preferences of individual athletes are likely to be most successful.

Given the substantial amount of research involving the LSS, it is puzzling that although many positive findings have occurred in terms of differences between groups of athletes and support has been found for the importance of alignment between preferred and actual coach

behaviours, relations between hypotheses derived from the multidimensional model and objective measures of performance have proven to be weaker than expected, and at times inconsistent with expectations (Chelladurai & Reimer, 2012). Objective performance is an understandably challenging target variable, as it is affected by many factors beyond leadership style, including athletic talent, unforeseen injuries, strength of opponents, and an array of psychological factors that are largely beyond the coach's influence. Also, quantitative measures of broad classes of behaviour, whether coded with the CBAS or reported, do not necessarily reflect important qualities of the behaviour (e.g., instructional adequacy or encouragement delivered in a sarcastic fashion), a fact that can reduce relations to performance. Moreover, there is evidence that coaches are perceived as responding differentially to more and less successful athletes. In a study of collegiate football players, for example, higher-performing athletes (starters) rated their coaches as engaging in significantly higher levels of training and instruction, as having a more democratic and a less autocratic decision-making style, as being more socially supportive, and as offering more positive feedback than did lower-status athletes labeled "survivors" by their coaches. The latter perceived their coaches as more autocratic and as low on the other four behavioural dimensions. Additionally, longitudinal evidence exists that LSS behaviours are not stable over the course of a season, with instructional, democratic, and positive feedback showing the largest changes (Fletcher & Roberts, 2013). Temporal invariance could therefore affect perceived behaviour scores on the LSS and

cloud relationships of the LSS with other variables across studies.

Finally, the multidimensional model is complex, with many "moving parts." It is possible that complex and as yet undiscovered interactions among mediating factors remain hidden, as in the mediation model, where nonsignificant overall relations between CBAS observed behaviours and attitudes toward the coach when behaviours were aggregated across game situations suddenly became highly significant when the game situation variable was taken into account.

Team Cohesion—At the outset, it is important to discuss the meaning of a **sports team**. *Team can be defined as a kind of organization.* According to the public awareness, *the notion of team means either football or handball teams. But professionals often list here, for example, rowing, tennis doubles or gymnastics team championships. The other question is what the main differences among these factors are. Professionals define each sports and its section a team if athletes contest with minimum another of his/her team mate. Studies within this area of sports analyse these sports from different angles. In the followings a few points of view are highlighted.*

Team cohesion can be interactive, depending on how much effort the team members invest into their work (hand-basket- volley- basket- football etc). In such sports, results primarily depend on the quality of interaction, interplay and the competences of co-operation. Now it can be understood that because of interactions, a given structure will develop within which each of the participant must find his/her place, even in the "changing

rooms". *There are sports where the results are added up within teams and this is called additive or summative team types (kayak-canoe, tennis doubles and gymnastics team championships etc.).*(Baumann, 2006).

In other theorists' opinions, there are interactive and coactive (there is no or little interaction within a team) types of sports. The features of *interactive* sports are that the individual activities are in harmony with the other team members. Athletes can be high achievers if both the attacks and defence are adjusted to the motions of the other members. In this case the proverb saying "one swallow does not make summer" is true. Thus, relatively weaker teams can achieve success if the team members can cooperate (Baumann, 2006).

Cratty examining the relationship between cohesion and team-performance divided team sports into three groups (cited in Nagykáldi, 1998. p 97) while he analyzed the degree of cohesion generated by the tasks. He propounded the following:

- *Few interactions among teams and low co-ordination among their members (e.g.: archery, bowling, shooting, wrestling);*
- *High numbers of interactions and effective co-operation among players (hand-foot-valley-ball);*
- *Teams within both elements are present (jumping, rowing, exchange swimming).*

The presence of cohesion supports athletes to harmonize their work. There are two things when cohesion works, that is, objectives to be achieved together and performance. These two factors are known as *cohesive force*. Cohesion comes up when team members enjoy being together.

To become high achievers, both of these elements are needed as in case of problems there is no co-operation which would help athletes swing over hardships. When only team cohesion is present then after some time teams can forget about their tasks and goals.

The two basic components of cohesion appear differently in the preceding cases. The power of cohesive force of the task is higher within teams where the members can co-operate whereas the social cohesive force is lower. The teams being equipped with the abilities of co-operation the level of task and social cohesive force are almost the same.

Motivation and Motivational Climate -

Psychological research has demonstrated that different learning environments can influence the success rates of instructive impact (Ntoumanis & Biddle, 1999, p. 645). These research results are coupled with the fact that *society tends to rely on the leaders of groups to produce success in their followers (such as firing sports coaches or company executives when their team isn't performing sufficiently; not winning games, not making enough profits, etc.)* (p. 643). *The psychological research and societal perception demonstrate that psychology efforts should be focused on determining methods that improve leaders' effectiveness.*

Mastery-motivational climate is the product of such efforts (Schneider, Gruman, & Coutts, 2005, p. 123). Although research has identified two climate types, mastery-motivational (effort/improvement/team work; such as focusing on enhancing self-skills and collaborating with others; cooperative atmosphere) and performance

(performance/ability based; such as employees comparing their own work to those around them, competitive atmosphere), the former has proven most effective (Ntoumanis & Biddle, 1999, p. 644).

Psychologists have empirically demonstrated, in multiple studies [such as Ames, 1984; Dweck and Leggett, 1988; Nicholls, 1989 (Ntoumanis & Biddle, 1999, p. 643); Magyar, Feltz, and Simpson, 2004 (Schneider, Gruman, & Coutts, 2005, p. 123)], *that leaders who promote an atmosphere of learning, improvement, and working with others, produce a superiorly increased rate of motivational adaptation (use pattern of positive outlook, effective learning tactics, greater effort)* (Ntoumanis & Biddle, 1999, p. 643-644) *and collective efficacy (everyone on the team believing in the success of the team)* (Schneider, Gruman, & Coutts, 2005, p. 122). *Research regarding mastery-motivational climate also speaks to the significance of the utilization of team members collaborating on decisions, where success is defined and determined, not by specific ability, but based on each team member's effort and improvement rates* (Ntoumanis & Biddle, 1999, p. 644).

Programmes that include mastery-motivation climate are particularly well used in the athletics, school and business systems, as interested parties seek to improve the quality of behavioural production (such as, improving athletic motivation in an effort to improve performance (Strawbridge. & Marshall, 1999, p. 1), *improving the quality of physical education programs within school systems to promote increased rates of physical activity* (Bowler, 2009, p. 2),

inspiring business associates to work together to more cooperatively solves financial analyses and workups (L'Atelier, 2012, p. 1), etc.). The effectiveness and efficacy of the mastery-motivation model is extensively acknowledged and established. There are several programmes that utilize the many benefits of the mastery-motivation method, but in the interest of brevity, this blog will only cover one area.

In the interest of promoting contentment, successfulness and efficiency in the work place, Christina Nerstad has developed a six principle system which personifies the mastery-motivation climate. *First, the business leadership must provide assignments which are both meaningful and varied. Second, the business leadership must promote creative challenges and chances for employees to contribute to decisions being made. Third, the business leadership must encourage self-motivation, learning skill sets, dedication, and acceptance. Fourth, business leadership must avoid playing favorites between the employees, singling people out for talent or lack thereof can cause the other teammates to lose self-esteem and self-worth. Fifth, Nerstad promoted that business leadership should promote an atmosphere of self-development and commitment. Then sixth, it is important to hone individual's specific talents as well.* (L'Atelier, 2012, p. 1)

Audience Effects - Audience effects are any changes in behaviour attributable to someone else watching. An audience effect arises when a participant's behaviour changes because they believe another person is watching them. One example of an audience effect is where an individual's performance (in sports, for

example) can be influenced either positively or negatively due to an audience being present. This effect is one of the oldest studied in psychology (Triplet 1898) and was the subject of intensive study in the 60 and 70's, with less interest since. Taking into account a modern understanding of social cognition across a wide range of populations, it is suggested that one needs to look again at

the audience effect, in that it is essential to consider whether audience effects can help us understand social cognition in diverse populations, including people with autism, people with social anxiety, people of different ages and people from different cultures. We also need to explore and study different possible cognitive mechanisms underlying the audience effect.

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Effect of Yogic Practices on Physical Education and Sports: An Overview

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Abstract

Regular practice of yoga helps in cultivating a strict discipline in food habits, cleanliness, sex and character, thus enabling one to become a better person. The therapeutic use of yoga is widely known. In fact, today, yoga is considered a global phenomenon and an essential part of modern civilization. However, yoga, when practiced in the wrong manner, and without professional guidance, can do more harm than good.

Key Words : Yogic Practices , Physical Education , Sports , Health and Well Being

INTRODUCTION:

The Five Principles of Yogic Practices

The Five Principles of Yoga are the basis of attaining healthy body and mind through the Practice of Yoga.

Principle 1: Proper Relaxation

By releasing the tension in the muscles and putting the whole body at rest, revitalize nervous System and achieve inner peace, making you feel relaxed and refreshed.

Principle 2: Proper Exercise

This principle revolves around the idea that our physical body is meant to move and exercise. Proper exercise is achieved through the Yoga Postures or Asana which systematically works on all parts of the body- stretches and tones the muscles and Ligaments, enhances the flexibility of the spine and the joints, and improves Blood Circulation.

Principle 3: Proper Breathing

This means breathing fully and rhythmically, making use of all the parts of Lungs to increase oxygen intake. Proper Breathing should be deep, slow and rhythmical. To achieve this, need to be

able to regulate the length and duration of inhalation, exhalation, and the retention of air in lungs or the pauses between breaths. Yoga Breathing Exercise of Pranayama teaches how you can recharge your body and control your mental state by regulating the flow of prana- the life force. This helps you achieve a calmer and more focused mind, and increases your energy level.

Principle 4: Proper Diet

Proper Diet is one that nourishes both mind and body. It should be well balanced and based on natural foods. Proper Diet in Yoga also means eating in moderation and eating only when you are hungry.

Principle 5: Positive Thanking and Meditation

Practice keeping a positive outlook in life, will facilitate in having a peaceful mind. Positive thinking and Meditation helps you remove negative thoughts and put your mind under perfect control.

REVIEW OF LITERATURE:

The various past research studies carried out by a different investigators i.e. Devanand (1983) studied the emerging

effect of the Yogic practices or asanas , Douglas (1987) determine the effect of the Yogic practices on lean body-weight, Gangoli and Gharote (1989) studied the effect of Yogic training on endurance and flexibility level , Joshi (1990) worked out the effect of certain selected Yogic asanas on the flexibility of school going girls , Sharma`s (2004) effect of specific Yogic & practices on selected physiological and psychological parameters of secondary school boys, Deepla (2009) studied Yoga and its cleansing practices have been reviewed to know the effect of Yogic practices, Diwanj et al (2009) impact of regular Yoga training, Pangarkar et al (2009) on importance of physical education and Yoga in daily human life, Jadhav (2012) examined effect of Yoga exercises on the nervous system Sarpate (2012) studies on Hatha Yoga ,on different parameters of physical education , sports and health and well being.

RESEARCH METHADODOLOGY:

The research methodology followed by the above research investigators includes. Yoga training for at least two weeks & selection on physical and psychological parameters were cardiovascular endurance, vital capacity , body composition and psychological parameters were aggression , attitude and memory , twelve weeks treatment programme endurance , flexibility, concentration memory and lean body weight.

RESULTS:

1. Yoga benefits mankind physically, mentally and psychologically. Asthma, self awareness, mental performance, mood change, spiritually respiration problems, high blood pressure pain

management i.e. back pain, arthritis weight reduction.

2. Improve concentration emotional fitness physical fitness and also students can develop the ability to cope up with mental stress. If Yoga can be practiced regularly for 25 minutes as the regular routine it can overcome many more problems of students.
3. Hatha Yoga exercises have resulted in several bodily dysfunction or injury
4. There were significant changes in all the parameters of the study.

There was no significant difference in pulse rate in combined group when compared with the physical exercise group.

5. The physiological parameters endurance and flexibility increases significantly. The psychological parameters memory and concentration also increased significantly.
6. The experimental group performing yogasana improved significantly their flexibility performance than that of the control group.
7. More importantly, Yoga is extremely effective for increasing flexibility, increasing lubrication of the joints, ligaments and tendons, complete detoxification and excellent toning of the muscles.

CONCLUSIONS:

Yoga is a way of life. It must be practiced regularly and conscientiously, with thorough preparation, bearing all precautions in mind for true mental and physical relaxation. One has to also keep in mind that any result depends purely upon the individual, the nature of ailments and the regularity of yogic practice

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Personality Profile of Players, Playing Indoors and Outdoors Games

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Abstract

The present study has been conducted to find the personality profile of players playing indoor and outdoor games. 100 women players who represented RTM Nagpur University in Inter University Tournaments were selected for this study. Their age ranged between 18-25 yrs. Cattel's 16 PF personality test was used. By using 'Z test if proportion' Z value was calculated. The study concluded that the players playing Indoor games were of good nature, warm hearted, clever, humble natured & balanced whereas the players playing outdoor games were emotionally more stable, more assertive, independent & aggressive.

Key Words: Personality, Personality Traits

INTRODUCTION

The concept of personality type refers to the psychological classification of different types of individuals. Personality types can be distinguished from personality traits, which come in different levels or degrees types which involve qualitative differences between people, where as traits involve quantitative differences. According to type theories, for ex-Introverts and Extroverts are the two fundamentally different categories of people. According to trait theories Introversion and extroversion are the parts of continuous dimension, with many people in the middle.

In view of the underlined importance of personality in human life, especially in sportsman's life, a systematic study was carried out to determine the personality profile of Nagpur University women Athletes.

Purpose of the study

1. To study the personality of women athletes and impact of participation in sports on personality of women athletes
2. To study the personality traits of the players who play Indoor and Outdoor games.

Delimitations

The study was delimited to the following six factors:-

- 1) Reserved vs Outgoing
- 2) Less intelligent vs More intelligent
- 3) Affected by the feelings vs Emotionally stable
- 4) Humble vs Assertive
- 5) Sober vs Happy go lucky
- 6) Expedient vs conscientious

Methodology

100 women players of RTM Nagpur University who represented University in interuniversity tournaments

were selected for the study as a sample. The age of selected players ranged between 18 to 25 years. The women players were from different the same socio-economic status.

Cattle's 16 PF personality test was used for this research work.

Statistical analysis

"Z test of proportion" was used for statistical analysis. "Z value" was calculated by using the Z test.

Findings of the study

The result of the study are presented in following section

Factor A (Reserved vs Outgoing)

- High percentage of women athletes playing indoor games were stiff, skeptical and aloof natured than that observed for players playing outdoor games.
- More women athletes playing indoor games were found to be warmhearted, easy going and participating than the women athletes of outdoor games.

Factor B (Less intelligent vs More intelligent)

- Relatively high percentage of women athletes playing Indoor Games were found to be less intelligent than that observed for women athletes of outdoor games.
- More women athletes playing indoor games were found to be claver and balanced than women athletes of outdoor games.

Factor C (Affected by the feelings vs Emotionally stable)

- Women athletes of outdoor games were found to be emotionally less

stable than that observed in women athletes playing indoor Games.

- More women athletes playing outdoor games were found to be emotionally more stable than Women athletes of the indoor games.

Factor E (Humble vs Assertive)

- High number of women athletes of outdoor games was observed with mild accommodating and humble nature than that observed in women athletes playing indoor games.
- Women athletes playing indoor games were found to be more assertive, independent and aggressive than the women athletes playing outdoor games.

Factor F (Sober vs Happy go lucky)

- The women athletes playing indoor games were found to be more serious natured than the women athletes playing outdoor games.
- The women athletes playing outdoor games were found to be more Happy go Lucky and Impulsively, Lively personalities than the women athletes playing indoor games.

Factor G (Expedient vs Conscientious)

- More number of women athletes playing outdoor Games was found to have the Rule Breaking Behavior than the women athletes playing indoor games.
- Higher percentage of women athletes playing indoor games was found to be rule bound individuals than the women athletes playing outdoor games.

Conclusions

The personality types, traits are vital to understand & more so in the field in the

Physical Education as the field itself is very competitive and demanding. The knowledge of the various personality types will help to improve the performance of the players. In the present study, the Personality Profile of Players, Playing indoor and outdoor games was determined. The comparative study showed that there exists a significant difference in the personality traits of women player's indoor and outdoor games. Since different game require different types of personalities to ensure the excellence. The conclusions

clearly highlight the potential for marked increase in the performance of the players. In the study, the personality traits of the women players playing indoor and outdoor games belonging to Nagpur University were successfully determined by using the 16 PF personality test. The result of the present study provides a sound platform for designing novel performance management as well as improvement strategies.

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Yoga Therapy and Physiological Benefits

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Abstract

Yoga is the activity that increases your flexibility, strengthens your muscles, centers your thoughts, and relaxed and calms you. Yoga is an ancient physical and spiritual discipline and branch of philosophy that originated in India reportedly more than 5,000 years ago.

PHYSIOLOGICAL BENEFITS :

Participating in the Yoga Club benefits in Increases Breath holding time, Normalizes Gastrointestinal function, increases, joint range of motion, increases strength Join range of motion, Increases Strength & resiliency, increases Musculoskeletal flexibility, improved posture, increases Energy level, increases Grip strength, imporvoved Dexterity skills, Increases Muscular Endurance. Imporved Steadiness, increases Respiratory efficiency, Improved sleep, Improved Balance, Improved Eye-hand coordination, Improved Balance, Improved Eye –hand coordination, Improved integrated functioning of body, improved Reaction time, stable Autonomic, nervous system equilibrium increases immunity, increases cardiovascular efficiency, Normalized Weight, Relived Pan Relived Bronchitis & Asthma, Improved Depth Perception (2nd & 3rd dimension), control Blood sugar levels, Decreased Respiratory rate, Balanced Blood pressure, Decreased Pulse rate.

Key Words : Yoga, Spirtual, Pranayama

Introduction

Yoga is the activity that increases your flexibility strengthens your muscles, centers your thoughts, and relaxes and calms you. Yoga is an ancient physical and spiritual discipline and branch of philosophy that originated in India reportedly more then 5,000 years ago. The word yoga comes from the Sanskrit word *yuj*. Which means to yoke, join, or unite. The Iyengar School of yoga defines *yug* as the “Joining or integrating of all aspects of the individual – body with min and mind with sout-to achieve a happy, balance and useful life.” The ultimate aim of yoga, they claim, is to

reach kavivalya (emancipation or ultimate freedom) (Raub, 2000). There is no written record of who invented yoga because it was practiced by yogis (yoga practitioners) long before humans knew how to write. Yogis over the millennia passed down the discipline to their students, and many different schools of yoga developed as it spread.

The result is to drift into a peaceful, calm, and relaxing state. Savasana is generally the final pose of a yoga session before final chanting and / or breathing exercises. Yoga uses controlled breathing as a way to merge the mind, body and spirit. The breathing

techniques are called pranayamas; prana means energy or life force, and yama means social ethics, it is believed that the controlled breathing of pranayamas will control the energy flow in your body. It is my experience that controlled breathing helps me focus on muscles that are working and during savasana, it slows down my heart rate, calms my mind and leads to a deep, inner claim and sense of relaxation.

Working of Yoga Class :

A typical yoga class lasts 75 minutes. There is a 15-20 minute period of breathing, chanting and warming up (it varies by type of yoga and instructor), followed by the asanas and then 15-20 minutes of relaxation (savasanan) at the end.

Research Method

Survey was conducted with the help of the questionnaire prepared by the researcher. Five Yoga Clubs out of fifteen, from western area of Pune city were selected randomly. There were 975 registered members out of which 100 were selected randomly from the randomly 81 members answered fully questionnaire were consider

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for data analysis. Data collection was done after they finished their daily routine of the club. One hour daily routine of the clubs was as follows.

CONCLUSION –

Physiological Benefits : Participating in the Yoga Club benefits in Increases Breath holding time, Normalized, Gastrointestinal function, increases Joint range of motion, increases Strength & resiliency, increases musculoskeletal flexibility, Improved Posture, Increases Energy level, increases Grip strength, Improved Dexterity skills, Increases Muscular Endurance improved Steadiness, Increases Respiratory efficiency, Improved sleep. Improved Balance, improved Eye-hand coordination, Improved integrated functioning of body, improved reaction time, stable autonomic nervous system equilibrium, increases Immunity, increases cardiovascular efficiency, Normalized Weight, Relived Pain, Relived Bronchitis & Asthma, Improved Depth perception (2nd & 3rd dimension), Control Blood sugar levels, Decreased Respiratory rate, Balanced Blood pressure, Decreased pulse rate.

Comparison of Anxiety and Aggression among Winner Kabaddi Team and Other Teams of All-India Interuniversity Kabaddi Competition

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Abstract

The purpose of this study was to gauge and compare the anxiety and aggression level of Kabaddi players belonging to best four teams of Indian universities of all-India inter-university Kabaddi tournament. The sample for the study consisted of 48 male Kabaddi players belonging to the best four team of all India inter-university Kabaddi tournaments held at CCS University, Meerut during 24-28 February 2015. To test the anxiety level of Kabaddi players Sports Competition Anxiety Test - SCAT (Marten et al., 1990) was used. Whereas, to test the aggression level, Buss and Perry scale of aggression (Buss and Perry, 1992) was used. The collected data was statistically analyzed and mean, SD, and t-Test: Two-Sample Assuming Equal Variances were calculated to find out the significance difference between the anxiety and aggression level of winner and other Kabaddi teams of all India inter-university Kabaddi tournament, 2015. The significance level was determined as $p < 0.05$. The result show the significant difference in anxiety between the winners of the tournament compare to other three semifinalist teams of the tournament. Where as in aggression there were no significant difference between the winner of the tournament and the three other semifinalist teams expected in-between the winner and the third team. Winner team has the low level of anxiety and moderate level of aggression compare to other three semifinalist Kabaddi teams.

Key Words: stress, arousal, anxiety, aggression, Kabaddi

INTRODUCTION

It is a well-known fact that in order to perform any motor action efficiently in any sport at national and international level, a player must possess a mixture of all necessary qualities in a ratio best suited to the particular sport event. These qualities are inter-alia, body-built, physical fitness, physiological capacities, technical efficiency, psychological make-up and rigorously and scientifically trained. Competition is increasing day by day; to win at international level, or even at national level, players have to be fit in all

respects. At the time when competition is tough, every player, even if he is perfectly fit, well prepared, and trained, he feels stress. This is true for every level of game, whether district level or Olympic level. As we move upward in the level of competitions, the difference between the capacities of the players of different teams decreases. For example, in the Olympic game, which is the most prestigious sports event, all the players in a given game are of almost equal competence and the difference between winners and loser are very small. This very small difference in

the competence automatically increases the level of stress among the participants. In such a fiercely competitive scenario, the psychological make-up and toughness of a player gives him edge over his other competitors. That is why it has become a standard norm to include a psychological trainer with the team.

Stress is a state that results from the demands that are placed on the individual which require that person to engage in some coping behavior (Jones, 1990 as cited in Cox, 2002). Competitive sport can make even the world's most successful athlete feel nervous. Many factors such as expectations, perfectionism, fear of failure, lack of confidence, induce feelings of anxiety in athletes (Moran, 2004 as cited in Cox, 2002).

To overcome challenges in during a tough competition, one has to control his emotion and concentrate on target. Lazarus (2000a) defines an emotion "an organized psycho-physiological reaction to ongoing relationships with the environment, most often but not always, interpersonal or social". Lazarus indentifies fifteen different emotion and core themes associated with each emotion. One of these emotions is anxiety, which he defines as "facing uncertain, existential threat".

Lazarus identifies anxiety as one of the emotions that may have substantial impact upon how an athlete performs. Other emotions, such as anger, guilt and shame, relief, happiness, and pride, may also have a powerful influence upon performance (Cox, 2002). Jones, (2003) opines that sport is an emotional experience for many athletes. An important victory can result in happiness and joy; and a crushing defeat may result in despair and disappointment.

It is general observation in sports field that sometime a strong and well versed team also loses his game against an equal or weak team due to aggression or anxiety. This means that in order to have a winning edge in sports, in addition to physical fitness and physiological capacities, the team must be trained psychologically to contain aggression and maintain the optimum level of anxiety.

A famous incident of world cup football 2006 final match in between Italy and France is a very striking example of losing control over aggression and losing game. In this Zindane zidane was shown red card because he had lost his control and head butted Marco Materazzi.

Anxiety

Worchel and Goethals (1989) define anxiety as the uncertainty in how to cope with stress, i.e., when one feels that she or he does not have the capacity to deal with stress or that the stress is overwhelming. Components of anxiety include fear, anger, increased heart and respiration rate, trembling, and being mentally off balance, each of which is directly involved with the autonomic nervous system creating arousal.

Anxiety means feeling of extreme worry or fear of which persists even after the event has ceased to exist or which has not happened or there is no obvious reason. No external causes for fear exist. Anxiety normally causes tension, fatigue and sweating. When anxiety dominates, the entire personality disrupts normal behavior. (Sharma, 1997).

Anxiety has two components that is trait and state component. The trait component is like a personality disposition; whereas

the state component is a situation specific response. (Anshel, 2003, Jarvis, 2002)

State anxiety is an immediate emotional state that is characterized by apprehension, fear, tension, and an increase in physiological arousal. Conversely, trait anxiety is a predisposition to perceive certain environmental situations as threatening and to respond to these situations with increased state anxiety (Spielberger, 1971).

Martens (1990) stated in his multidimensional anxiety theory that there are both cognitive and somatic components to anxiety. Cognitive anxiety is the mental component of anxiety caused by such things as fear of negative social evaluation, fear of failure, and loss of self-esteem. Somatic anxiety is the physical component of anxiety and reflects the perception of such physiological responses as increased heart rate, respiration, and muscular tension.

According to Cox (2002), if an athlete has a high level of competitive trait anxiety, she is likely to respond to an actual competitive situation with a high level of competitive state anxiety.

Precompetitive cognitive state anxiety starts relatively high and remains high and stable as the time –to-event approaches. Conversely, somatic anxiety remains relatively low until approximately twenty-four hours before the event and then increase rapidly as the event approaches. Once performance begins, somatic anxiety fluctuates throughout the contest as the probability of success/ failure changes. (Fenz, 1975; Hardy and Parfitt, 1991; Jones, Swain and Cale, 1991; Martens et.al., 1990; Wiggins, 1998).

Arousal and anxiety

It is to be mentioned that in literature there are two similar psychological traits, namely, arousal and anxiety which are used to discuss sports psychology. Arousal is a state in which you feel excited or very alert, whereas Anxiety is a feeling of nervousness or worry. Most of the studies support that for the top performance in sport one must has to arouse up to optimum level but when the level of arousal increase too much then it become negative for the performance. Arousal can be considered to be a signal to the individual that he or she has entered a stressful state and is characterized by physiological signs. Anxiety results when the individual doubts his or her ability to cope with the situation that causes him or her stress (Hardy et al., 1996).

A high level of arousal is necessary for the best performance in gross motor activities such as weight lifting. Conversely, a lower level of arousal is best for a fine motor task such as putting in golf. Each sports skill has its theoretical optimal level of arousal for best performance. Regardless of which type of skill is being performed, they all conform to the inverted- U principle. Specifically, performance is lowest when arousal is very high or very low and highest when arousal is moderate, or optimum. (Cox, 2002)

Anxiety and sports performance

Previous research outside of sport and exercise psychology has indicated that individuals with high trait anxiety who are state anxious attend to threat related information, while individuals with low trait anxiety who are state anxious will attend away from threat related information (MacLeod, 1990).

A great deal of research has been devoted to the effect of anxiety on sports performance. Researchers have found that competitive state anxiety is higher for amateur athletes in individual sports compared with athletes in team sports (Simon & Martens, 1977).

According to Endler (1978), Fear of performance failure, particularly by a weaker or permanent opponent, fear of negative social evaluation (spectators pressure), fear of physical harm, situation ambiguity (unclear or confusing), disruption of well-learned routine are five specific antecedents, or factors lead to an increase in anxiety in anticipation of an achievement situation

Research has identified fear of failure and fear of negative social evaluation as the most likely causes of state anxiety in ice hockey athletes (Dunn, 1999). Another cause of state anxiety is the perceived importance of a competition (Marchant, Morris and Anderson, 1998).

Anxiety is a negative emotional state. It is a feeling of dread and apprehension about the future without specific cause. In sports, we can say that it is always an anticipating danger to loss the match or poor performance. Some time it may be very personal in which a sports men can feels a threat about his selection, performance during match, due to accidental injury, tension with teammate but he can not specify its source.

Anxiety and anger are such emotion which persistent. Their effect continues for a longer time even after they have subsided. An anxious or angry player will remain anxious or angry even match or competition is over. Whether he or his

team loses due to him, he naturally refuses to cool down.

Aggression

Aggression is a form of over behavior intended to harm a living person either physically or psychologically. It includes physical attacks and verbal abuse. The aggression may be against another person. It does not include unintentionally harming another person, or doing destructive violence to inanimate object. (Sharma, 1997)

Aggression is defined as “any form of behavior directed toward the goal of harming or injuring another lived being who is motivated to avoid such treatment” (Baron & Richardson, 1994)

Aggression has also been defined as ‘an overt verbal or physical act that can psychologically or physically injure another person or oneself.

During emotional excitement, the voluntary movements of the body are virtually paralyzed. Under the sway of intense fear, anger or laughter, the voluntary movements become involuntary even if we may consciously try to control them. In anger, clenching of fists, dilation of eyes etc are automatic and voluntary, (Kamlesh, 1988).

Aggression is the delivery of an aversive stimulus from one person to another, with intent to harm and with an expectation of causing such harm, when the other person is motivated to escape or avoid the stimulus. (Green, 2001)

Aggression and sports performance

In sport, aggression is a characteristic that can have many negative as well as positive effects on performance. Anger and tension, in the absence of depression, can actually

facilitate performance up to a point, but when they get too high will cause a decrement in performance. (Cox 2002)

It has been found (Coulomb and Pfister, 1998) that experienced athletes used more instrumental aggression in which they used to their advantage and that hostile aggression was less frequently used. Experienced athletes used self-control to help them with their aggression.

Kabaddi

Kabaddi is a sport, which originated in India. It is one of the most popular sports in India played mainly among people in villages. Indian Team proved their worth by winning seven consecutive gold medals in the year 1990, 1994, 1998, 2002, 2006, 2010 and 2014 in Asian Games. Women Kabaddi also has its inclusion for the first time in the year 2010 at Guangzhou Asian Games and there Indian woman Kabaddi team won the Gold Medal.

Kabaddi is a combative team game, played with absolutely no equipment, in a rectangular court, with seven players on the ground each side. Each side takes alternate chances at offence and defence. The basic idea of the game is to score points by raiding into the opponent's court and touching as many defence players as possible without getting caught on a single breath (Rao, 2002).

Kabaddi being a body contact game players perform push, fall, hit by leg or hand, fall together on raider in order to stop him to go back in his court, shoulder hit etc. . In Kabaddi, generally, we recognize direct and indirect aggression, as well as verbal and physical aggression. These types of aggression are mingled. Direct aggression can be physical (assault, kick, and slap) or verbal (raised voice,

abuses, curses, and insults). Indirect aggression can be physical (the aggressor feels that the situation would hurt him alone, so he transfers the aggression to objects, which are somehow connected with the victim, such as property) or verbal (slander and inappropriate jokes).

Individual differences in competitive anxiety and aggression are obvious. While some individuals including highly skilled athlete become physically ill, worrying about an upcoming contest, some remain calm and cool throughout the game irrespective of whether they are leading or lacking behind. Thus, this becomes extremely important to study the anxiety and aggression level of Kabaddi players at university level. It is to be mentioned that some of these players from university teams also go at the national level.

OBJECTIVES

The purposes of the study are as follow:

1. To gauge the anxiety and aggression level of Kabaddi players belonging to best four teams of Indian universities.
2. To compare the level of anxiety of players of winner team with players of other three semi-finalist teams of the tournament of all-India inter-university Kabaddi tournament.
3. To compare the level of aggression of players of winner team with players of other three semi-finalist teams of the tournament of all-India inter-university Kabaddi tournament.
4. To find out the relationship between performance and anxiety in the game of Kabaddi.
5. To find out the relationship between performance and aggression in the game of Kabaddi.

METHODOLOGY

Sample

The sample for the study consisted of 48 male Kabaddi players (12 from each team) belonging to the best four team of all India inter-university Kabaddi tournaments held at CCS University, Meerut during 24-28 February, 2015. Kurukshetra University, Kurukshetra was the winner of the tournament where as CCS University, Meerut, P.U. Chandigarh, and Punjabi University, Patiala was the second, third and fourth respectively. It is to be mentioned that some of these players from university teams also go at the national level.

Test used

To test the anxiety level of Kabaddi players Sports Competition Anxiety Test - SCAT (Marten et al., 1990) was used. The test consists of fifteen questions and in responding to the anxiety scale, subjects were instructed to indicate how they generally feel by rating the frequency of their feeling of anxiety on the three point scale- rarely, sometimes and often. The lowest possible score on this test is 10 and the highest possible score is 30. Those who scored less than 17 points were considered as low level of anxiety, and those who score in between 17 – 24 having average level of anxiety where as those who score more than 24 have high level of anxiety. To collect the information regarding aggression level of Kabaddi player Aggression Questionnaire by Buss and Perry (Buss and Perry, 1992) were used. The aggression scale consists of four factors, Physical Aggression, verbal aggression, anger and hostility. The total score for aggression is the sum of the factor scores. It consisted of 29 questions

(PA – 9 Questions, VA – 5 Questions, AN – 7 Questions and Ho – 8 Questions) subject had to give his response in the form of rating on the scale of 1 to 5. Here, the score of 1 stands for “extremely uncharacteristic of me” and the score of 5 stands for “extremely characteristic of me”.

Investigation was done after the completion of league matches and top four teams were decided for semi-finals. Due consent of the coaches of various team was properly taken. Two questionnaires, one of Buss-Perry test and the other of SCAT were simultaneously given to all the players of one given team. Before completion of the questionnaire, all the players were demonstrated how to answer the questions and meaning of the question was also explained. The questionnaires were prepared both in Hindi and in English. Performance was obtained from official meet results.

Reliability

To established internal consistency reliability of the test Cronbach alpha was calculated. The Cronbach alpha value were as fallow – Buss-Perry AQ 29 items PA – 0.76, VA - .74, AN – 0.80 and HO – 0.70, whereas SCAT AQ 12 items is – 0.75. All the values ensure good reliability of the tests.

Statistical design

The collected data was statistically analyzed and mean, SD, and t-Test: Two-Sample Assuming Equal Variances were calculated to find out the significance difference between the anxiety and aggression level of winner and other Kabaddi teams of all India inter-university Kabaddi tournament, 2015. The

significance level was determined as $p < 0.05$.

RESULTS AND DISCUSSION

Results of statistical analysis are given in the tables 1 and 2. Figure 1 shows the bar

diagram of anxiety level of the four teams studied here. Figure 2 shows the bar diagram for the aggression level of the same four teams.

Table 1: Comparison of anxiety level of three semi-finalist teams with the winner team of Kurukshetra University, Kurukshetra in all India inter-university Kabaddi tournament, 2015.

Team	N	Mean	SD	't' value#
Kurukshetra university, Kurukshetra(Winner) anxiety	12	14.17	2.16	
CCS University, Meerut (second) anxiety	12	19.83	3.58	4.68*
Panjab University, Chandigarh (third) anxiety	12	18.66	3.57	3.72*
Punjabi University, Patiala (forth) anxiety	12	17.41	1.78	4.01*

t-values given here are the result of t-test done between Kurukshetra University, Kurukshetra and the respective team. $t\text{-critical} = 2.073$ ($P < 0.05$).

Result presented in Table 1 shows that the mean value of anxiety level of winner team of Kurukshetra University, Kurukshetra and other three semi-finalist teams (namely, CCS University, Meerut, Panjab University, Chandigarh and Punjabi University, Patiala) of all-India inter-university Kabaddi tournament, 2015. The mean value of anxiety level of winner team of Kurukshetra University, Kurukshetra is $14.17 (\pm 2.16 \text{ SD})$ which lies in the low level of anxiety as defined above. In comparison to this, the mean value of anxiety of team of CCS University, Meerut is $19.83 (\pm 3.58 \text{ SD})$ which is a moderately high value. The calculated t-value 4.68 is higher than the value of t-critical (2.073), which shows that the difference between the anxiety level of Kurukshetra University, Kurukshetra, which emerged as winner,

and that of CCS University, Meerut is significant ($P < 0.05$). In comparison to the mean value of anxiety level of winner team of Kurukshetra University, Kurukshetra, i.e. $14.17 (\pm 2.16 \text{ SD})$, the mean value of anxiety of team of Punjab university, Chandigarh is $18.66 (\pm 3.57 \text{ SD})$ which is also a moderately high value. The calculated t-value 3.72 is higher than the value of t-critical=2.073, which shows that the difference between the anxiety level of Kurukshetra University, Kurukshetra and that of Punjab university, Chandigarh is also significant ($P < 0.05$). Result presented in Table 1 shows that the mean value of anxiety of team of Punjabi university, Patiala is $17.41 (\pm 1.78 \text{ SD})$ which is though higher than that for Kurukshetra university, Kurukshetra but is smaller than other two teams. The calculated t-value of 4.01 is higher than the value of t-

critical=2.073, which shows that the difference between the anxiety level of Kurukshetra University, Kurukshetra and

that of Punjabi university, Patiala is significant ($P < 0.05$).

Table 2: Comparison of aggression level of three semi-finalist teams with the winner team of Kurukshetra University, Kurukshetra in all India inter-university Kabaddi tournament, 2015.

Team	N	Mean	SD	't' value##
Kurukshetra university, Kurukshetra (Winner) aggression	12	104	15.93	
CCS University, Meerut (second) aggression	12	110.58	17.65	0.95
Panjab University, Chandigarh (third) aggression	12	121.5	18.45	2.48*
Punjabi University, Patiala (forth) aggression	12	98.33	24.5	0.67

t-values given here are the result of t-test done between Kurukshetra university, Kurukshetra and the respective team. t-critical=2.073 ($P < 0.05$).

Table 2 shows that the mean value of aggression level of winner team of Kurukshetra University, Kurukshetra is 104 (± 15.93 SD) whereas the aggression level of the team of CCS University, Meerut is 110.58 (± 17.65 SD). The calculated t-value is 0.95 which is less than the value of t-critical ($t = 2.073$). This is indicative of insignificant difference in the aggression level of these two teams. Even then the mean value of aggression level of the team of Kurukshetra University, Kurukshetra is slightly less than that for the team of CCS University, Meerut. Table 2 gives that the aggression level of the team of Panjab University, Chandigarh is 121.5 (± 18.45 SD). The calculated t-value is 2.48. This large t-value indicates significant difference in the aggression level of the teams of Panjab University, Chandigarh and Kurukshetra

University, Kurukshetra. This is noteworthy that although winner team of Kurukshetra University, Kurukshetra has significantly less aggression with respect to the that for the team coming at the third position but it has similar aggression level as compared to runner team of CCS University, Meerut as given in table 2. Table 2 also shows that the mean value of aggression level of the team of Punjabi University, Patiala, which came at the forth position, is 98.33 (± 24.5 SD). The calculated t-value is 0.67. This is indicative of insignificant difference in the aggression level of the team of Kurukshetra University, Kurukshetra and that of the team of Punjabi University, Patiala.

These values of anxiety and aggression are plotted in figure 1 and 2 for easy comparison of all the teams.

Figure 2: bar diagram showing the level of anxiety of the four teams studied here

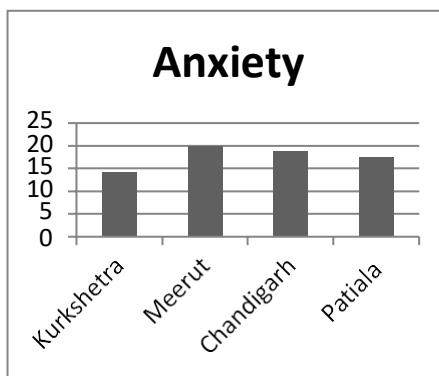
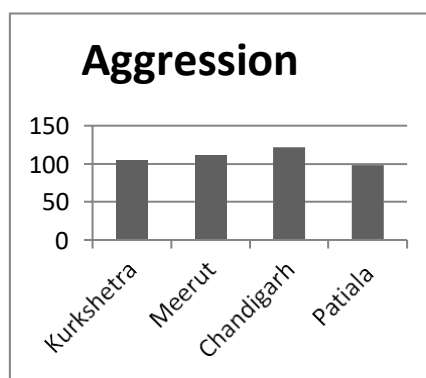


Figure 1: bar diagram showing the level of aggression of the four teams studied here



CONCLUSION

This study was conducted on all India inter-university Kabaddi players belonging to top four teams. Subjective analysis of the teams showed that all the four teams were technically and physically sound equally. Only the level of anxiety and aggression played a determining role in their performance in the field. It was found that the anxiety level of the winner team of Kurukshetra University, Kurukshetra was lowest among the four semi-finalist teams. This gives a sound correlation between anxiety and the performance in Kabaddi. It was also noticed that the aggression level of the team of Kurukshetra University, Kurukshetra is moderate among all the

four semi-finalist teams. Panjab University, Chandigarh has the highest aggression level and it secured the third position whereas the Punjabi University, Patiala has the lowest aggression level among the teams studied here but it secured the fourth position. It can be inferred that a moderate value of aggression helped Kurukshetra University, Kurukshetra and CCS University, Meerut to secure top positions whereas extremely high or low values of aggression undermined the performance of other two semi-finalist teams.

SUGGESTIONS

On the basis of the study of anxiety and aggression presented here, It can be suggested that there should be

psychological training for the team or players along with physical and technical training. If an athlete is over anxious relaxation response, meditation, autogenic training, self-talk, progressive relaxation, berating control, bio-feedback may be employed for treating it. Zinsser et. al. (2001) suggested that it is very important that the athlete approach every sports situation with a positive attitude and belief that she/he will succeed. A mnemonic device called PRESSURE, as suggested by Butler (1996) (as cited in Miguel Humara, 1999) can be employed to psychologically arouse the player to the optimum level of anxiety and aggression.

It has been noticed that all the semi-finalist teams of this tournament belonged to a specific region of India. Few players of

these teams have already participated in pro-Kabaddi Indian League. This may indicate that these teams and their players were having the required optimum level of anxiety and aggression for the game of Kabaddi that can be further verified by comparing the anxiety and aggression level of these teams with all other teams participating in the tournament. Author is presently involved in undertaking this comparative study at present.

Acknowledgments

I would like to express my hearties thanks to Dr. Isht Vibhu for his invaluable help throughout this study. I also express my appreciation to Dr. Y. S. Tomer, Dr. G. S. Ruhail and Dr. Virendra Dager for their assistance in data collection during the competition.

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Situational Factors Related to Anxiety and Mood

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Abstract

This paper examines the relationship between anxiety and performance from a cognitive-behavioral perspective. Athletes have to cope adequately with the consequences of their injury in order to return into sports as soon as possible. Besides the physical characteristics of the injury, illness perceptions and emotional responses impact the behavioural responses to the injury. Previous research in the field has suggested that the majority of consultations conducted by sport psychologists are related to anxiety. Included is a discussion on the theoretical underpinnings of anxiety and how it relates to performance. Research conducted on the relationship between anxiety and performance is also discussed. A review of the cognitive-behavioral treatments that have been used for anxiety reduction and performance enhancement within the field of athletics is included. To apply Leventhal's Common Sense Model as a theoretical framework in the field of sports medicine, pertaining to injured athletes. Suggestions for future research and practical considerations are listed in the conclusion. Injured athletes' most experienced symptoms were pain (82%) and loss of strength (50%), associated with a high controllability; they see their injury as not chronic, with minor consequences for daily life and minor emotional consequences. Athletes with an injury of longer duration have minor psychological attributions, 28% suffer from fatigue, which is strongly related to a negative mood state. Illness perceptions and mood states are related to injury characteristics. Clinicians ought to incorporate patients' views about their injuries into their treatment in order to increase the concordance between patient's and clinician's perceptions, thereby increasing chances of a quick and uneventful recovery.

Key Words: Athletes, mood, illness perception



Introduction

The ability to cope with pressure and anxiety is an integral part of sports, particularly among elite athletes. Researchers have reported that over 50 of consultations among athletes at an Olympic festival were related to stress or anxiety related problems (Murphy,

1988). A great deal of research has been conducted examining the relationship between anxiety and performance within the field of athletics. This paper will review the relevant research from a cognitive-behavioral perspective. Included is a discussion of the research findings of the relationship between the two

constructs. In addition, the research that has examined the efficacy of cognitive-behavioral treatments is also discussed. Although a great deal of information has been generated, the results are limited due problems in the terminology used by researchers. Therefore, it is important to first examine the conceptualization of anxiety.

METHOD: Theoretical Constructs of Anxiety

Previous research conducted relating to anxiety and performance in athletics has been difficult to synthesize for a variety of reasons including methodological flaws such as a lack of clear operational definitions and a clear theoretical construct. This section will establish operational definitions for the terms that will be used throughout the rest of this paper. In addition, it will provide an overview of the theories that have been used by researchers who have attempted to clarify the relationship between anxiety and performance in athletics.

The main problem that research on the relationship between anxiety and performance has encountered is that researchers have not adequately operationally defined the construct of anxiety. Instead, terms such as **stress**, **anxiety**, **arousal** and **activation** have been used interchangeably. For the purposes of this paper the following operational definitions will be used for the terms anxiety and stress. Stress is a state that results from the demands that are placed on the individual which require that person to engage in some coping behavior (Jones, 1990). Arousal can be considered to be a signal to the individual that he or she has

entered a stressful state and is characterized by physiological signs (Hardy et al., 1996). Anxiety results when the individual doubts his or her ability to cope with the situation that causes him or her stress (Hardy et al., 1996). Another important point that needs to be clarified is the difference between state and trait anxiety (Spielberger, 1966). While state anxiety can be considered to be more situational in nature and is often associated with arousal of the autonomic nervous system, trait anxiety can be thought of as a world view that an individual uses when coping with situations in his or her environment (Spielberger, 1966). Trait anxiety influences performances in that individuals with high trait anxiety will attend more to information related to state anxiety (Hardy et al., 1996). Previous research outside of sport and exercise psychology has indicated that individuals with high trait anxiety who are state anxious attend to threat related information, while individuals with low trait anxiety who are state anxious will attend away from threat related information (MacLeod, 1990). Within the context of sports, those individuals who are low trait anxious and experience high state anxiety would find it facilitative to a peak performance; but, those individuals with who are high trait anxious and experience state anxiety will find it debilitating to athletic performance (Hardy et al., 1996).

The differences observed between successful and unsuccessful athletes may be the result of their cognitive interpretation of their anxiety states. According to reversal theory (Apter, 1982) arousal is interpreted differently depending on their present

state. In telic states athletes are focused on a goal and thus interpret their arousal as anxiety. However, in paratelic states performers are focused on their behavior and therefore interpret their arousal as excitement. Individuals can flip from one state to another quickly and therefore change their interpretation of the arousal that they experience which in turn affects their performance (Hardy et al., 1996). This theory attempts to incorporate both physiological and cognitive factors in its explanation of the relationship between performance and anxiety but fails to explain their relationship with performance adequately. Multidimensional anxiety theory expanded on reversal theory's inclusion of cognitive and physiological factors (Burton, 1988). In this model, cognitive anxiety (the central tenet of which is concerned with the consequences of failure) has been found to have a negative linear relationship with performance (Burton, 1988). Self-confidence (a separate cognitive component) has been found to have a positive linear relationship with performance (Burton, 1988). Finally, somatic anxiety (physiological symptoms) has been found to have an inverted-U shaped relationship with performance (Burton, 1988). Although this model incorporates many elements of anxiety, it still treats them as separate entities. The next model that arose looked at the interaction between two of these three factors.

DISCUSSION: Effects of Anxiety in Athletics

A great deal of research has been devoted to the effect of anxiety on sports performance. Researchers have found that competitive state anxiety is higher for

amateur athletes in individual sports compared with athletes in team sports (Simon & Martens, 1977). In addition, participants in individual non-contact sports have been found to report lower levels of state anxiety than participants in individual contact sports (Lowe & McGrath, 1971). This section will review this research from the perspective of the theoretical models discussed above. Cognitive anxiety has been found to exert a powerful influence on performance. This statement holds true regardless of the individual's skill level. Participants in a collegiate softball tournament were put into one of two conditions: high situation criticality or low. While somatic anxiety did not differ in the two situations, those athletes in the high criticality condition had significantly higher levels of cognitive-anxiety (Krane, Joyce & Rafeld, 1994).

Although the research conducted focusing on cognitive anxiety and self-confidence provides some insight into their effect on athletic performance, the interaction of these variables in conjunction with somatic anxiety provides a better understanding of the true effects. Among a group of 91 athletes ranging in age from 14 - 36 years old who participated in soccer, swimming, and track and field, those individuals with higher scores on self-confidence and lower scores on cognitive anxiety and somatic anxiety perceived their overall anxiety levels as more facilitative of athletic performance (Wiggins & Brustad, 1996). Research conducted comparing athletes competing in team sports (basketball) with those competing in individual sports (track and field) has found that subjects competing in individual sports report significantly lower

self-confidence and higher somatic anxiety than team sport athletes (Kirby & Liu, 1999).

Cognitive-Behavioral Treatments in Athletics

The research cited so far in this paper clearly indicates that it is important for athletes to be able to control their anxiety if they are to produce peak performances at important times. A large discrepancy between performance in practice and in competition is indicative that the athlete is having a hard time achieving an appropriate level of arousal or may over aroused (Butler, 1996). Relaxation is one method that has been discussed in the literature for reducing both cognitive and somatic anxiety. It is important since it can reduce the individual; Hardy, Jones, & Gould, 1996). These two strategies have been used successfully in the treatment of clinical populations. While a discussion of the procedures used in these two treatments is beyond the scope of this paper, they are still an important component of any anxiety reduction intervention for the purposes of performance enhancement.

Imagery and mental rehearsal of tasks is also beneficial for the individual seeking to improve athletic performance. It provides familiarity with the task at hand and also provides positive feedback of their imagined performance (Hardy et al., 1996). This intervention has been proven to be effective with collegiate athletes in all sports. Results of research indicate that individuals who were in the imagery intervention had significantly greater increases in sport performance and sport competition anxiety than did the delayed-training control group (Lohr & Scogin,

1998). The technique to be imagined should be brought into focus. An internal perspective (as if they are viewing it through their eyes not the eyes of a camera on them performing the skill) is necessary. In addition, an attempt to feel the movement is effective in enhancing the imagery exercise. Practice the skill in "real time," there is no need to speed up or slow the skill down. Inclusion of coaches in the development of an imagery routine is important since it incorporates their technical skill and helps to minimize the perception of psychologists as a threat by coaches.

Although relaxation, imagery, and cognitive interventions are each beneficial for the purposes of anxiety reduction in athletics, they are far more powerful when used in conjunction with one another. Butler (1996) suggests a mnemonic device called PRESSURE who has a hard time coping in competitions that incorporates all three phases of intervention. The word can be broken down as follows:

- **Prepare** - Athletes must psychologically prepare for what they will face during the competition.
- **Relax** - Diaphragmatic breathing exercises may be necessary prior to competition in order to prevent over arousal which would result in a deterioration in performance.
- **Externalize** - This involves the belief that problems are not within you. This can be of assistance when athletes feel that there are too many demands that are being put upon them.
- **Stay Positive** - Acknowledgement of the importance that individuals should have confidence in their abilities.

- **Single Minded** - Stay focused on the task at hand. This can be used both in training and competition.
- **Unite** - Particularly useful within the framework of teams sports, this component encourages athletes to consider what roles others will fulfill and the importance of working together as a team throughout the competition.
- **Re-evaluate** - How important is this event in the real world?
- **Extend yourself** - Give your best performance every time no matter how important, or unimportant, the competition is.

Use of this mnemonic device is warranted with individuals that have problems with the three components of athletic anxiety: cognitive, somatic, and self-confidence. Even the amount of cognitive effort that is used by an individual to use these strategies as an effect on performance. Gould et al., (1993) reported that the differences between medal winners and non-medal winners at an Olympic wrestling competition was the degree to which the individuals used these interventions automatically such that winners were more likely to use the interventions automatically. Most elite level performers have already found ways of achieving the activation state that is necessary for the sport. One of the things that makes athletics so fascinating is the number of different demands that are placed on an individual throughout a competition. It is therefore unlikely that any one intervention will ever be able to be of benefit for everyone. Thorough assessment of the athlete's needs is therefore recommended.

Conclusion

The above research indicates that anxiety has a considerable impact on performance. Early research was limited due to a lack of clear operational definitions for the construct of anxiety. The development of the catastrophe model provides future researchers with a theoretical framework for better understanding the relationship between cognitive anxiety and somatic anxiety and their effect on performance. Furthermore, we now have the tools for better understanding the components of anxiety in the athletic context. The development of the CSAI-2 and the SAS allows researchers to reliably measure the following constructs: cognitive anxiety, somatic anxiety, self-confidence, and concentration disruption. Furthermore, the development and increased popularity of multiple baseline research designs provide a method for examining anxiety reduction interventions through cognitive-behavioral interventions with small sample sizes. Today's managed care environment has led to the development of manualized treatments for many anxiety disorders in clinical populations. Future researchers should focus on the development of manualized treatments within the athletic environment. However, this should be done with a consideration for the athlete's needs if our interventions as sport psychologists are to have their maximum impact.

According to the model, peak performances are achieved by individuals who poses psychological states with high levels of vigour and low levels of tension, depression, anger, fatigue, and confusion. This is typically called the

iceberg profile and is one method for differentiating between successful and unsuccessful performers. Although some research has indicated that this profile cannot be used to differentiate between successful and non-successful athletes, evidence from Terry's meta analysis (1995) indicates that there is some validity

to this profile if the sample is homogenous in ability and the sport they participate in. It is therefore necessary to consider all aspects of an individual's psychological functioning if sport psychology interventions are to have a maximum impact.

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lk"u 5 & Fdku "kkfjjhd rFkk ekufld] nk idkj dh gkrh g] bl ckr dh tkudkj f"K{kdk e de ek=k e ik; h x; h g A

lk"u 6 & f[kykMh [ky if"kk.k tc yrk g] ml oDr ml dk doy fl [kuk gh lk;klr ugh gkrk g] ijr ml drh e mrkjuk vko"; d g] ;g f"kk{k d tkur: g A fl [kudh fØ; k ij ijhlj %okrkoy.k% dk iHko iMrk g] ;g tkur: g, Hkh ml n'Vhl: drh djue f"kk{k d vleFk fn[kkbi fn;: A

lk"u 7 & iBkj voLFkk tc dh ,d LokHkkfod flFkrh g] ;g voLFkk vf/kd le; jgu l: f[kykMhij ifrdy vlj iMrk g rFkk bld fuokj.k gr fo"kk i;kl t:jh g] bl ckr l: f"kk{k d vufHkK fn[kA

lk"u 8 & ^ekufld Hkkj {kerk* bl ldyiukl: f"kk{k d vijfpr fn[k A eukoKkfud mik;kl: ekufld Hkkj {k erk fodflr gkrh g] bldk Hkh mlUg irk ugh gA

lk"u 9 & f[kykMh dk 0; ogkj ifjoruf"ky gkrk g] ;g rF; l Hkh f"kk{k d u flodkj fd;k A ijr 0; ogkj ifjoru dk vk/kkj eukoKkfud gkrk g ;g le> mue ugh ik;h x;h A

lk"u 10 & ^0; DrhRo fHkUurk * dk fl/nkr fØMk f"kk{k d le>r: g A ijr fHkUu 0; DrhRo /kkj.k dju oky: gj f[kykMh dk fHkUu fHkUu mipkj nu e og mnkflu gh fn[k A

lk"u 11 & :ph d vHkko e tk folkFkhi fØMk {k= l: fcydy Hkh ugh tMr: g] mlUg vkdf"kr dju gr dkb i;kl ugh fd, tkr: g] A

5% fu'd'k &

1% iLrr "kk/k fuc/kd: fu'd'k doy fnxl rgfly vrxr LFkxfir gkbLdy rd gh flfer gA mudk ifj.kke lkoHkkfed ugh ekuk tk l drk A

2% fnxl tli xkeh.k {k= e: %d ox: uxjij"kn {k=% gkbLdy e iof"kr dy folkFkhi l[:k dh ryuk e cgr de folkFkhi fujrj :lk l: [kyk dh rkfy e fglk yr: g A mudk ifr"kr c<ku gr i;kl dju dh t:jr g] A eukoKkfud mipkj }kjk ;g lEHko gk l drk g] A

8% l nHkx Fk l ph &

1% %Sports Psychology% Mk-l jfo vEcV] i dk"kd & [ky l kfgR; dUn] ubi fnYyh & i dk'ku o"2012. ISBN 978-81-7524-252-3

3% [kyk e yMdk dh ryuk e: yMdh; k dh fglInkjh de ik;h x;h A vr% yMdh; k dk vuikr c<ku gr fo"kk i;kl dh vko"; drk gA

4% ,d vPNh ckr ;g fudydj vk;h g] dh fujrj [kyk dh rkye iku oky: folkFkhi; k e yMfd; k dh l[:k de gkr: g, Hkh fofHkUUK Lrj ij gku okyh ifr; kfxrvke e mudh fglInkjh yMdk dh ryuk e vPNh ik;h x;h g] A fQj Hkh yMfd; k dk ifr"kr vkj c< bld fy, lein"ku fd t:jr g] A

5% xkeh.k {k=e: if"kkfkr %VUM% vkj LFk; h %ijeuv% fØMk f"kk{k d dh deh ik;h tkrh gA iLrr "kk/k fuc/k e Hkh ;g rF; mtixj gvk gA 23 e: l: 12 f"kk{k d vuVUM rFkk 8 f"kk{k d vLFk; h %in [kkyh gkudh otgl: blUpt% Lo: l ik; x; g] A ,l f"kk{k d viu f[kykMh folkFkhi; k dk U; k; ugh n: ikr: gA vr% f"kk{k d dh fu; Drh rFk Vfuxdh rjQ fo"kk /; ku nudh vko"; drk g A

6% xkeh.k Lrj ij fØMk f"kk{k d e fØMk eukfoKku d lex Kku dk vHko fn[krk g] A vr% ,l f"kk{k d d fy, gj 5 lky lk"pkr ,d l lrgdk ,d vkfj, %V"ku@fjY"kj dkl: vk; kfr dj ml e fØMk eukfoKku dk v/; ki u fd; k tk;: A

7% [kyh ifr; kfxrvke f[kykMh; kd l ghHkxhkrkd vuikr c<ku gr vf/kd i;kl dju dh vko"; drk g A

8% fu'd'k dk vH; kl djr: oDr dN flekvkdk /; ku e j[kuk gkxkA tli dh Ldy e fu; Dr fØMk f"kk{k d ,d "kkfjhd f"kk{k d %Qhft dy ,T; d"ku fVpj% gkrk g] u dh fdlh fo"kk [ky dk dkp gkrk gA ml v/; ki u ,oe vU; dr0; k dk Hkh fuogu djuk gkrk gA vr% mle fØMk fo"kk; d l Hkh x.kk: dk ik; k tkuk doy vlHko g] A

- 2½ “kfkdkd vkj ØhMk eukfoKku % Educational And Sports Psychology% y-Mk-vfer vt iu c/n] Mki -dfork vxoky] LikVI iCyhd”ku ubi fnYyh & iFkelLdj.k & 2013 . ISBN 978-81-7879-796-0
- 3½ “kkfjjhd f”k{k.k e: “kk/k rFkk l kf[;dh & Mki -gkf”k;kj flg] Mk-vk-ih-rutk [ky l kfgR; dñ: ubi fnYyh & o”k 2013. ISBN 978-81-7524-710-9
- 4½ [kydn e: vf/kf”k{k k rFkk fu.k;u % Officiating and Coaching in Sports% ik-l uhy prñh [ky l kfgR; dñ: ubi fnYyh o”k 2013 . ISBN 978-81-7524-726-0

LokLF; l eL; k; vkj ;kx dk ;kxnu

lk-Mk-[k"ky iMjx ok?keij

"kkjhjfd f" k{k.k foHkkxiefk mToy xkeh.k egkfo/ky;] ?kk.k/h rk-tGdkV ft -ykrj

ifjp; %Introduction%

LokLF; eu'; dk lcl cMk [ktkuk dgk tkrk gA LokLFk b"oj vkj ek&cki l feyh veY; nu gA ftldk LokLF; vPNk g] mll ;g mEehn dh tkrh g dh og bldk ijk [;ky j[k rkfd ;g [ktkuk mld gkFkk l fudy u tk;A bl ml" dh ifri di fy, bl bl ckr dh tkudkjh gkuh pfg, fd LokLF; di fy, dli ft;k tkrk gA

EkU'; u lHkh {k=k e vHkriod mlUfr dh gA vk/kfud oKkfud rFkk "kk/kdrkivk u gekjh thou "kyh dk i.krk cny fn;k gA ok;] ikuh] "kjh rFkk eu dk in'k.k Hkh foKku dh nu gA /ku&lEiRr dh c<rh yylk u eu'; k u gn;k dk dBkj cuk fn;k gA ekuo&eY;k dk iru gvk gA "kkjhjfd o eukoKkfud 0;kf/k;k dk dkj.k ruko rFkk nco g] bu lHkh ciekfj;k dk iDdk bykt ;kx }kjk gh gk ldrk gA ;kx "kjh di fgLi dh dk;{k erk c<krk g rFkk ekuo "kjh di vkrjfd dk;dyiki ij vPNk iHkko Mkyrk gA

;kx /ke gh ugh gA ;g og lk/ku g ftli ge viuh xir "kDr;k ij fu;=.k dj ikr gA ;g Lo; dk ijh rjg tkuu dk ,d lk/ku gA ckjgh nfu;k l nj djr; g, viu fopkjk dh vr;k=k }kjk ;kx ;g lk/ku djrk gA ;kx thou dk bruk fu;f=r rFkk lUr'V cuk nrk g fd viu vUr bPNk e eu'; dk dki vQlkl ugh gkrk rFkk og ;g ugh lkrk g fd og bruk dN vi.k NKM dj tk jgk gA ;kx "kjh di lkFk&lkFk ekufld dk;dyiki d h iuf"kkk gA

;kx dk vFK % Meaning of Yoga%

;kx "kOn lL -fr dh /kkr ^;t * l fy;k x;k gA ftldk vFK g tkMuk] xBcl/ku djuk] ck/kuk rFkk viuk /;ku dfnr djuk ;g vFK g&tMuk ;kx gekjh bPNk vkj b"oj dh bPNk dh bPNk dk lPpk xBcl/ku gA

;kx dk vFK g vkrjfd vlRro di lkFk ,d gkuk ;k mldk vuHko djuk ;g ,dkRerk rc vkrh g tc ml lokpp lRrk e viu "kjh vkj eu di ngjiu dk feyu dj nr; gA ;kx og foKku g ftldk }kjk 0;fDr lPpk dh rjQ c<rk gA

;kx dk "kffond vFK g ;kd lc yk di du/kk ij j[ku oky/k%A bldk vFK g cEgk.M dh "kDr b"oj di lkFk 0;fDr vkrk dk xBcl/kuA

;kx di idkj % Type of Yoga%

fuEu di idkj fuEufyf[kr g&

1% de ;kx %

de dju dk ;kx gA de ;kx iFk ;kx g rFk ;kx e nfk gku dh fLFkr tkuu di fy, vko";d gA de&;kx ;kx dk ,d iFk gA de dk vFK g dk;l tk gj 0;fDr tkudj ;k vutku e djrk gA tc ge de ;kx dk ftd djr; g rk gekjk rRi;l g ,lk de tk /;kue;h tkx#drk e fd;k tk,A mRiRr di gjd igy dk de dk fl)kr gh pyk;eku djrk gA Kku gh g tk 0;fDr vuHko djrk gA

2% Kku ;kx

/;ku dh fLFkr ikr dju dk lk/ku g Kku ;kxA Kku dk vFK g le> vkj food vr; ;g le> vkj food dk ;kx gA ;g /;ku dh tkx#drk dh ifd;k g rFk ge viu Hkhrjh i -fr di fudV ykrh gA ;g ckf)d "kDr;k dk tkxu dk lk/ku gA

3% gB ;kx

Hkfrd ;k ekufld ifo=rk o lryu ikr dju di fy, gB ;kx ,d lk/ku gA ;g cgr lk/kk.k ;kx gA [kkuiku dh vkrk di dkj.k "kjh e ,d= g, vkrd>u fudy tkr g rk "kjh ifo=rk dh fLFkr e igp tkrk g ftli vkrjfd fgLi dh dk;{kerk e lryu vk tkrk gA

4% jkt ;kx

jkt;kx dk vlx nk xik e ckVx x;k gA igy xi dk uke ckG ;k ckgjx ;kx gA ble ;e] fu;e] vklv vkj ik.kk;ke "kfeY gA mlG; ckG ;kx blfy, dgr; g D;kfd o 0;fDrRo di ckG #i] crko vkj dk;dyiki e ifjori ykr; g tk nfu;k di 0;ogkj l lEcfU/kr gA

5% e= ;kx o ti ;kx %

Ek= ;kx og "kDr g tk eu di dl/kuk l LorU= djrh gA eu o ekufld iofuk di nk ,l x.k g tk

bl dU/kuk e Mkyr: gA igyk g ey ftldk vFk g
vifo=rk, rFkk nlj: g fo{ki ftldk vFk g
vKkurkA vifo=rk, gekji thou dh jktlh x.kk d i
fr vkd'k.k gl tk eu dh "kfDr; k dk lhfer dj
nrh g] bl de dju dk ifjr djrh g rFkk fo"kk
rjhd: l vuHko vkj 0;ogkj dju d fy, ck/;
djr gA

6% y; ;kx %

;g fd;k vkj dMfyuh ;kx l feyrk gA bldh
fof/k; k T; knrj /; ku idfr ij vk/kkfjr gA bldk
mnn"; "kfDr dn vkj ukfM; k dk tkxr djuk g
rFkk ;g eukoKkfud "kjhd di vuHko l lEcfU/kr g
rFkk bld l kFk gk" d fofHkUu igyv k dk feykuk
vkj bu vuHko d l kFk Atk d #ik dk l elo;
foBkrk gA y; dk vFk foy; gkuk % ?kyuk% Atk
foy; ugh gkrh] ;g tkxr gkrh gA Atk d 5%
tkxj.k ij gk" dh nfu; k e ifjoru vkr g tk
cnyh gb ekufld ifd; k] ij[ku dh cnyh gb 6%
ifd; k] cnyh gb tkxfr o vU; ifjoru ykr: g

7% HkfDr ;kx %

vkLFkk ij tkj nr: g, xgu J)k d r= dk H kfDr
;kx dgr: gA HkfDr dk l Ppk vu; k; h ogh g tk
vijj/k vkj vgdkj l eDr gA og fouhr gkrk g]
nl[k vkj l[k l viHkkfor gkrk g] mldk dkb
n"eu ugh gkrkA ykHk] vU; k; ; tYnct h] nlj: ij
edne pykuk] tyu] pkjh] dV opu vkj fun; rk
tl "kCn mld fy, vijjpr gA mldk fny l Ppk
gkrk gA mle J)k] Hkkykiu] lknxh o lEi.k
l Ppkiu gkrk gA ml l r ekuk tkrk gA

;kxkH; kl di fy, vkO"; d rRo

;kxkH; kl dh ifd; k e l k/kd d "kjhd dk LoLFk
jguk vko"; d gA ;g LoLFk "kjhd di vni&cgj
nkuk e gkuh pkfg, bld fy, x# l cl igy
l k/kd&l k/kd vkv: dk "kjhd di fofHkUu vxk dh
l Qkb, o mld 0; k; ke dh ifd; k cukrk gA

;kx di mnn" % Aim of Yoga %

;kx dk e[; mnn"; eu ij fu; =.k ikuk gA eu
bfUn;] fopkj vkj "kkl d gkrk gA ftlu viuk eu]
bfUn;] fopkj vkj l"; t hr fy, gk] og eu"; k e
jkt k gkrk gA ftlu viuk eu dk thr fy; k ml
Lo; ij i.k fu; =.k gk tk, xkA doy ;kx gh eu

InHk

- 1% "kkjhjd f"kk v/; kid ijh{kk euvy &Mk f-foukn dek] "kek] 0; kl no "kek
- 2% "kkjhjd f"kk rFkk vkyfEid vfHk; ku & Mkl -vtej flx] Mk -txnh"kl cl
- 3% vkj kX; f"kk{k.k ;kx o iFkekpkj & ik -d-, u- xnx] ik-ekLrG
- 4% ;kx l k/kuk o ;kx fpdfRI k jgL; & Lokeh jkeno
- 5% ;kxkl uk l k/kuk & Mk-lR; iky] Mk -fl Ugh
- 6% ;kxkH; kl l [kh thou&Jhikn tni

dk thru d rjhd crkrk gA ;kx ,d >ju d
leku gA ;g "kkfr vkj uhjork yrk g rFkk b"oj
d lEe[k lEi.k lEi.k d fy, eu dk r; k] djrk
gA

;kx dk egUo % Importance of Yoga %

1% ;kxk dju l 0; fDr dk vPNh lgr vkj fn?kk; ;
feyrh gA

2% ;kxk dju l eu dk "kkir rFkk bfUn; k dk dko
dju e enr gkrh gA

3% ;kxk dju l "kkjhjd vkj ekufld "kfDr; k dk
fodkl gkrk gA

4% ;kxkl uk l "kjhd dh ifrj/kd "kfDr c<rh g
rFkk fcekfj; k nj jgrh gA

;kxk l "kjhd yfpyk curk gA

;kxk l "kkjhjd ,o ekufld fodkl d l kFk&l kFk
ckf) d rFkk v/; kfred fodkl gkrk gA

7% ;kxk l "kjhd e lryu fodkl gkrk gA

8% ;kxkl u d }kjk jDrnk] e/keg] xl] flj nn]
dej nni Bhd gkrk gA

Lkkj"kk

vk/fud ;x e yxHkHkx l kjh fof/k; k ,o i) fr; k
; k rk fcekfj; k di mipkj di fy, [kkt h xbi g ; k
fcekfj; k dk nku ,o fu; =.k dju di fy, A ijr
;kxkl uk }kjk ge jkx&ifrj/kh "kfDr; k d
l kFk&l kFk fcekfj; k dk l jy mik; ,o mipkj Hk
djr gA vxt h dh ,d ifl) dgkor g&
'Prevention is better than cure.' vFkkir-
mipkj l cpko vPNk gA dN Hk gk tk,] ge ft ruh
pkg "kfDr o/kd vk'kf/k; k dk mi; kx D; k u dj
y] gekj jkx pkg tM lekr D; k u gk tk, ijr og
"kfDr] LQfr, o LokLF; iklr ugh gk l drk tk
chekjh gku l igy FkkA vr ge pkfg, fd ge dkb
jkx gh uk gA bld fy, ;kxkl u vko"; d gh ugh
cfYd vfuo; l Hk gA ;kx ,d lokrre ,o loJ'B
0; k; ke g ftldk dkb edkcyk ugh gA

[ky eukfoKku l ,d ifjp;

Jh i"ijkt flg

ØhMk vf/kdjh] 'kkldh; egfo|ky; i|Vu| tcyij e;/in'k
'kk/kkFkh] Jh txnh'kiln >cjey fVcjokyk fo'ofok|ky;] >u>qu| jktLFkku

Lkkjk'k

[ky ekuothou di fodkl dk vk/kkj ,o cky thou dk ie[k rRo vkj ey vf/kdkj gA [ky ekuothou dh ,d fØ;k ,o jpuKRed iofUk g] tk LokHkkfodrj Lor=rk ,o vkun di y{k.kk di }kjk vuHko dh tkrh gA [kyk dh iklfxdrk dkQh 0;kid Lo#i k ei gA lek t ei [kyk dk Lo#i L=h o i#" k vFkkir fyx vk/kkfjr nf" Vdk.k I Hkh ipfyr gA vudkud lekt k ei L=h; kfpr [kyk dk vk;kt u o ipyu Hkh gA ogh nljh vkj j i#"kkfpr [ky 0;kid ieku ij eukjtu dk l|ku jg gA 'kkjhfd f' k{kk o [ky gekj lek t dk iR;{k #i I iHkkfor djr gA ,o ,d LoLFk IH;rk ,o lLdfr d fuek.kk ei l gk;d gkr gA [kytxr ei bekunkjh] ufrdrk] l gdkj vkj lgvfl rRo di l= [ky dh lQyrk di ey e= gkr gA

dit h & [ky f' k{kk} [kyeukfoKku] 'kkjhfd f'k{kk} urRo 0;ogkj] ekufl d dk' kyA

iLrkouk

[ky ,d 'kkjhfd fØ;k g ftld [kyu d rjhdk di vulkj vyx&vyx uke gkr gA [ky dk iR;d idkj 'kkjhfd] ekufl d] eukoKkfud vkj ckf}d LokLF; di l kFk xgjkbl I tMk gvk gA ;g 0;fDr di 'kkjhfd vkj ekufl d LokLF; dk cuk, j[ku ei enn djrk gA ;g ,d 0;fDr d eukoKkfud dk'ky ei Hkh l/kkj djrk gA ;g ij.kk] lgl] vu' kkl u vkj ,dkxrk dk ykrk gA

[ky LokLF; vkj rn#Lrh dk l/kk ju vkj cuk, j[ku] ekufl d dk' ky vkj ,dkxrk Lrj di l kFk gh lke kftd vkj okrkyki ;k lokn dk'ky dk l/kkju ei egRoi.k Hkfedk fuHkkri gA ,d cgrj Hkfo"; dk fuek.kk dju di fy, [ky cgr gh iHkkoh rjhdk g D;kfd ;g l Hkh di fy, leku vkj vPNh ukdjh di voljk dk inku djrk gA

[ky cgr rjhdk I gekj thou dk ikf"kr djr g; ge vu' kkl u vkj viu y{; dk iklr dju di fy, fujrj dk; vkj vH;kl

djuk fl[kkr: gA ;g gei 'kkjhfd vkj ekufl d nkuk rjhdk I LoLFk j[kr: g vkj bl idkj lekftd HkkoukRed ekufl d vkj ckf}d #i I j[kr: g; ;g ,dkxrk Lrj vkj Lej.k 'kDr dk c<krk gi vkj eflr" d dk l dkjRed fopjk ei Hkrk gA

'kk/k di ml';

iLrr v/;u ei ml' ;k dk fu/kkj.k 'kk/k ei [ky dk e[; pj ekur g,] urRo 0;ogkj] ufrd eY; ,o [ky Hkkouk dh fuHkrk fo] kfFk;k dh [ky {kerk ij fdl idkj fuHkj djrh gi ml di vulkj gh ml' ;k dk fu/kkj.k fd;k x;k gi &

1-[ky Li/kk di ek;/e I fo] kfFk;k di 0;fDrRo fodkl ei ufrd eY;k dk v/;u djukA

2-Lekftd [ky Hkkouk dk v/;u djukA

3-fo] kfFk;k ei urRo 0;ogkj dk v/;u djukA

4- fo|kfFk;k d ufrd fu.k; fodkl e mudh
lkekftd cf}} lkekftd vkfFkd fLFkfr dk
v/;;u djukA

lkfgR; lch{k

flg %2006% u fo|kfFk;k dh 'kf{k d miyfC/k
,o ufrd eY;k dk v/;;u 'kh"kd 'kk/k e
i;k;k fd ufrd eY;k d fodkl e 'kf{k d
miyfC/k dk iHkkou ugh iMrk gA bli Li" V
g fd eY;k d fodkl d fy, mUkjnk;h
vud dj.k g tk lex #i l iHkkou Mkyr
gA

'kek %2010% d v/;;u d vulkj ljdkj dh
ubi [ky uhfr ml vfre f[kykMh d fy,
ykhkdj fl) gkrh g pkj og f[kykMh i#" k
gk ;k L=h gk nkuk e bli [ky Hk kouk dk

1- urRo fodkl e of} & fo|kfFk;k l urRo fodkl d lc/k e i' u iNs x, g o mul iklr
mUkjnk dk rkfydk 1 e n'kk;k x;k g &

fodkl gk l dxk vkj n' k dk vPNs f[kykMh
iklr gk l dxA

'kDyk %2011% ^ek/;fed fo|ky;k d [ky e
Hkkx yu oky fo|kfFk;k d 0;fDrRo ,o [ky
Hkkouk dk ryukRed v/;;u fo" k; ij
'kk?kdk; fd;kA blgku vi u 'kk/k d fu" d"
e i;k;k fd [kyk e Hkkx yu oky vkj u Hkkx
yu oky d 0;fDrRo x.kk e vrj gkrk g
[ky e Hkkx yu oky lek;kt u'khy]
lkekftd #i l J" B gkr g fo|kfFk;k e
[kyHkkouk vf/kd ikb xbl gA

fuopu

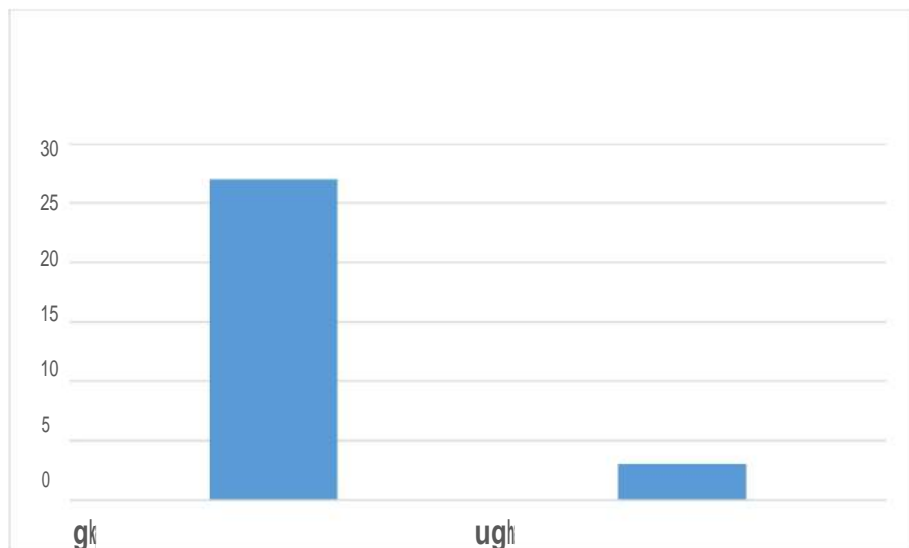
ilrr v/;;u e 30 fo|kfFk;k l i fofHkUu
idkj d i' u fd, x, rFkk mul iklr mUkjnk
dk rkfydk e n'kk;k x;k g&

urRo e fodkl of}

fooj.k	l[;k	ifr'lr
gk	27	90-0
ugh	03	10-0
dy	30	100

L=lr & lo{k.k d v/kj ij

urRo e fodkl of}



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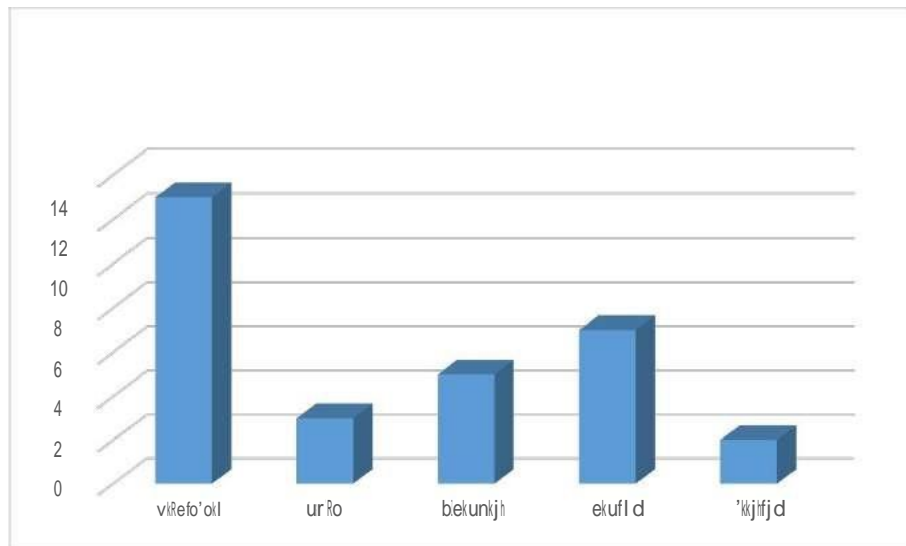
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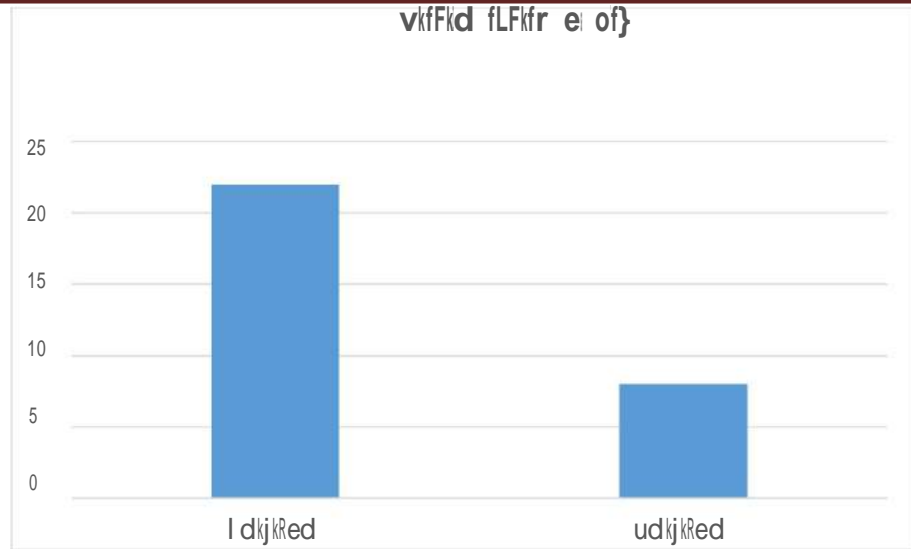
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YOGA AND ITS EFFECTS ON STRESS, ANXIETY AND DEPRESSION

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“Yogic life style alone would endow us with equanimity amidst all types of dissonance in our life and would make all our endeavors creative and skilful”, as per Bhagwat Gita (II: 48, 50)

“Not just mind and body, yoga is good for economy too”, an article by Upasna Jain mentions that Yoga articles and sports items purchases are going up since the start of International Yoga day. Estimated value of yoga industry globally is at around \$80 Billion and the most surprising is US had 37 million people practicing yoga in 2015 and it is rapidly growing. The graphical representation is a proof that Yoga is practiced worldwide with a higher level of popularity.



Derived from the Sanskrit word ‘yuji’, meaning yoke or union, yoga is an ancient practice that brings together mind and body both. Yoga may be in its original meaning and sense unity of mind and body, which has been used in Eastern societies since 5000 years ago and has recently received much attention from Western countries too. Today we see that the western societies are giving perhaps equal or more attention and significance in their life regarding fitness of physical and mental health and Yoga has been a perfect tool to achieve this.

In recent decades, several medical and scientific studies have proved that Yoga has been

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very useful for the treatment of some diseases. Practicing yoga is claimed to return with many benefits for both mental and physical health. Yoga has an efficient role in reducing stress, anxiety,

and depression. There are some misconceptions on yoga that it delivers only physical fitness or it should be practiced by elderly only, etc. but that is not true. Yoga benefits all and in all ages and delivers returns on not only physical but mental health also. It is also believed and mostly proved that some chronic diseases also have been cured by a regular and prolonged practice of yoga, though under a proper environment and instructions. Thus, it can be used as complementary medicine. Studies have demonstrated effect of yoga for several conditions, including asthma, irritable bowel syndrome, lymphoma, hypertension, white plague, osteoarthritis and psychological state issues. Increased stress, depression and anxiety are the features of modern lifestyle. Due to the adverse effects of drugs in the treatment of anxiety and depression and in some cases their lack of effectiveness, people turn to yoga as an alternate therapy to overcome the debilitating effects of these disorders. Researchers suggest that yoga as an intellectual and mental exercise, improves better health feeling and also creates a positive outlook towards human life and situations. Furthermore, yoga can improve the psychological conditions for monitoring and managing stress and negative emotions, increase positive emotions and help mental balance. Yoga has an efficient role in reducing stress, anxiety and depression which will be considered as medicine and reduces the medical cost per treatment by reducing the utilization of medicine.

Lets take a look at how the US has placed Yoga in their lifestyle: Key Findings and Statistics about Yoga has revealed that 36 million Americans practice yoga. There are thought to be 300 million yoga practitioners worldwide; Between 2012 and 2016 the number of Americans doing yoga grew by 50%; The number of over 50s practicing yoga has tripled over the last four years; Americans spend \$16 billion on yoga classes, clothing, equipment, and accessories each year; and there are currently 6,000 yoga studios in the US. This statistics speaks the popularity of the ancient treasure of India in foreign countries. Continuing this, we can always have a truthful basis to discuss the significance of yoga in our life.

Following are some of the evidence-based benefits of yoga:

1. **Reducing Stress:** Yoga is known for its ability to ease stress and promote relaxation. In fact, multiple studies have shown that it can decrease the secretion of cortisol, the first stress hormone. A particular study demonstrated the powerful effect of yoga on stress by following 24 women who perceived themselves as emotionally distressed. After a three-month yoga program, the females had significantly lower levels of cortisol. They also had lower levels of stress, anxiety,

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fatigue and depression. Another study of 131 people had similar results, showing that 10 weeks of yoga helped reduce stress and anxiety. It also helped improve quality of life and psychological

state. When used alone or along-side other methods of alleviating stress, like meditation, yoga are often a strong way to keep stress in check.

2. **Relieving Anxiety:** There is quite a bit of research and proof showing that yoga can help reduce anxiety. Researchers have supported with prominent evidences that 34 women diagnosed with a mental disorder participated in yoga classes twice in a week for 2 months. At the top of the study, those that practiced yoga had significantly lower levels of hysteria than the control group. Another study followed 64 women with post-traumatic stress disorder (PTSD) which is characterized by severe anxiety and fear following exposure to a traumatic event. After 10 weeks, the females who practiced yoga once weekly had fewer symptoms of PTSD. In fact, 52% of participants did not meet the standards for PTSD in the least.

3. **Yoga for Heart Health:** One of the most vital organs in all living beings, from pumping blood throughout the body to supplying tissues with important nutrients, heart is an important component of overall health. Studies show that yoga may help improve health of heart and reduce several risk factors that may often be a cause of worry. There have been enough researching and evidences that participants over 40 years who practiced yoga for five years had a lower risk indicators and a better balanced pulse than those that didn't. Higher vital sign is one among the main causes of heart problems, like heart attacks and strokes. It is also suggested that incorporating yoga into a healthy lifestyle could help slow the progression of heart condition. A group study followed 113 patients with heart condition, watching the consequences of a life-style change that included one year of yoga training combined with dietary modifications and stress management. Following the results, participants saw a 23% decrease in total cholesterol and a 26% reduction in 'bad' LDL cholesterol . Additionally, the progression of heart condition stopped in 47% of patients.

4.**Improving Quality of Life:** Yoga is becoming increasingly common as an adjunct therapy to enhance quality of life for several individuals. There is an objective data of a study where 135 older people were assigned to six months of yoga and walking. Practicing yoga significantly improved their quality of life also mood and fatigue, compared to the opposite groups. Other studies have checked out how yoga can improve quality of life and reduce symptoms in patients

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with cancer. In some of the Yoga Centres which have a continuous monitoring system over practitioner women with carcinoma undergoing chemotherapy, it was observed that yoga

decreased symptoms of chemotherapy, like nausea and vomiting, while also improving overall quality of life. An identical study checked out how eight weeks of yoga affected women with carcinoma. The participating females had less pain and fatigue with improvements in levels of invigoration, acceptance and relaxation. In many of similar cases, it is observed that yoga has improved sleep quality, enhanced spiritual well-being, improved relationships and reduced symptoms of hysteria and depression in patients with cancer.

5. Treating Depression: An overall impression of the practice of yoga suggests that under regular conditions, it clearly has an anti-depressant effect and does help decrease the symptoms of depression. This might be because yoga is an arrangement to decreased levels of cortisol, a stress hormone that influences levels of serotonin, the neurotransmitter often related to depression. Participants in an alcohol dependence program practiced Sudarshan Kriya, a selected sort of yoga promulgated by Sri Sri Ravishankar that focuses on rhythmic breathing. After a fortnight, participants had fewer symptoms of depression and lower levels of cortisol. They also had lower levels of ACTH, a hormone liable for stimulating the discharge of cortisol. Other studies have had similar results, showing an association between practicing yoga and decreased symptoms of depression. Supported these results, it's going to be concluded that yoga does help fight depression, alone or together with meditation techniques.

6. Yoga for Chronic Pain : Chronic pain may be a persistent problem that affects many people and features a range of possible causes, from injuries to arthritis. There is a growing amount of research demonstrating that practicing yoga could help reduce many sorts of chronic pain. In one study, 42 individuals with carpal tunnel syndrome either received a wrist splint or did yoga for eight weeks. At the end of the study, yoga was found to be simpler in reducing pain and improving grip strength than wrist splinting. A special study in 2005 showed that yoga could help decrease pain and improve physical function in participants with osteoarthritis of the knees.

7. Yoga for Sleep Quality: In the most competitive world today where individuals have not only compromised with the deteriorating health but quality of sleep, yoga has been a boon to all. The rat race for meeting the physical gains, there is a complete loss of longevity of life and very little concern is shown for one's health. Nobody believes that there exists quality parameters for sleep.

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For many it is a natural occurrence and for equal or more people it is an induced affair where sleeping pills come at support. The induced sleep actually harms individual health and leads to

slow decline of vital organs in the body. Poor sleep quality has been related to obesity, higher vital sign and depression among other disorders. It has been accepted that incorporating yoga into your routine helps promote better sleep. During a 2005 study, 69 elderly patients were assigned to either practice yoga, take an herbal preparation or be a part of the control group. The yoga group fell asleep faster, slept longer and felt more well-rested within the morning than the other groups. Consequences of yoga on sleep in patients with lymphoma have given wonderful results. They found that it decreased sleep disturbances, improved sleep quality and duration and reduced the necessity for sleep medications. Though the way it works isn't clear, yoga has been shown to extend the secretion of melatonin, a hormone that regulates sleep and wakefulness.

Conclusion: There could be innumerable evidences that provide a clear indication that yoga features a significant effect on anxiety, depression, chronic pain and stress—all common contributors to sleep problems. Yoga is now considered as a replacement sort of medicine that integrates a person's physical, mental and spiritual components to enhance health during a stress-related illness. There's sufficient evidence which shows that stress causes negative emotional states in private which might contribute to the etiology of varied chronic diseases. In recent years, many people everywhere on the planet are practicing yoga to beat stress in lifestyle and now it's considered an accepted alternate sort of therapy in treating stress-related anxiety and depression.

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