

Burnout, Anxiety and Mindfulness in Athletes: A Gender Comparison

By

M. Sulfiya Banu,

(13PCP009)

A Thesis Submitted to the

Avinashilingam Institute for Home Science and

Higher Education for Women

Coimbatore – 641 043

In partial fulfilment of the requirement for the Degree of

Master of Science

In

Counselling Psychology

(2013-2015)

March 2015

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Certified as Bonafide Research Work

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ABSTRACT

Abstract

A study was conducted on, “Burnout, Anxiety and Mindfulness in Athletes: A Gender Comparison”. The purpose of the study was to find the gender differences in burnout, anxiety and mindfulness in athletes. One hundred and fifty athletes were selected by convenient sampling method from the Physical Education Departments of Avinashilingam Institute for Homescience and Higher Education for Women, Coimbatore, Bharathiar University, Coimbatore and Sri Ramakrishna Mission Vidhyalaya Maruthi College of Physical Education, Coimbatore. The sample consisted of 75 male and 75 female athletes. They were in the age group of 18 to 25 years. The consent from the athletes to participate in the research was obtained using Adult Consent Form. The entire sample was assessed using Case Study Schedule, Burnout Questionnaire, Manifest Anxiety Inventory and Mindfulness Attention Awareness Scale. The results revealed that there was no gender difference in burnout, anxiety and mindfulness in the selected athletes. It was also revealed that for male and female athletes, there was significant positive correlation between burnout and anxiety; negative correlation between burnout and mindfulness; and negative correlation between anxiety and mindfulness.

Key words: Burnout, anxiety, mindfulness, male and female athletes

INTRODUCTION

Introduction

Sports and Games

Sports can be defined as a “human activity capable of achieving a result requiring physical exertion and/or physical skill, which by its nature and organisation, is competitive and is generally accepted as being a sport” (Australian Sports Commission, 2009). Game can be defined as “an activity engaged in for diversion or amusement”. People often take game and sport as to be the same one. However sport and game are entirely different. A game involves more than one person and a sport pertains to only an individual’s skill and performance. A physical activity, sport is carried out under an agreed set of rules. Sport is related to recreational purpose, either for the self employment or competition or for both. A game is also for recreational activities and it involves one or more players. Played on the basis of the set of rules; game is defined as a goal that the player try to achieve. As like sport, game is also played for enjoyment. The person participating in sport is called as an athlete or a sports person. A person who participates in a game is called as player (Australian Sports Commission, 2009).

Athletics

Athletics is the sport of competing in tracks, field events, including running races and various competitions in jumping and throwing (George, 1979).

Gender Difference in Athletic Performance

Athletic differences in men and women have much to do with innate characteristics determined by genetics determined by genetics and hormones. These include height, weight, muscle mass, body fat and aerobic capacity. As a group, women do not run, jump or swim as fast as men. Women are also prone to certain types of athletic injuries than men (Lee, 2011).

Estrogen

Due to higher estrogen levels, women have more body fat than men. The leanest female athletes, such as top marathon runners, have body fat of approximately 8 percent, compared with 4 percent for their male counterparts. In addition, women's bodies are less muscular, but their joints are more flexible, which gives them greater range of motion-an advantage in sports such as gymnastics. The wider female pelvis also affects the ailment and movement of the extremities. Men have higher levels of testosterone, which gives them a performance advantage in other ways (Lee, 2011).

Testosterone

Testosterone enables men to develop larger hearts. Men also have a larger proportion of type 2 muscle fibers, which generate power, strength and speed. Testosterone also increases the production of red blood cells, which absorb oxygen, giving men an even greater aerobic advantage (Lee, 2011).

Injuries

Women are more prone to injuring joints such as the shoulders and knees. Weaker shoulder muscles and looser supporting tissues mean the joint is less stable than in men, and also, the injury rate to the anterior cruciate ligament, a major knee ligament than in male athletes. By proper training and strengthening of supporting muscles, women can prevent such injuries (Lee, 2011).

Sports Records

The gender gap in athletic performance, as shown in records from Olympics competitions, has remained stable since 1983. The mean difference has been about 10 percent between men and women for all events. The mean gap is 10.7 percent for running, 8.9 percent for swimming and 17.5 percent for jumping. When performances improve, the improvements are proportional for each gender. Still, in sports such as running, women who are fit and well-trained can outperform a man who is not in shooting and equestrian competition, where physical balance and mental concentration are essential; women can compete on a par with men (Lee, 2011).

The Female Athlete

The Training to Train stage is arguably the most important period regarding the development of power to weight efficiency in the female athletes. Adapting to effectively moving their bodyweight during this period will assist the female athlete in their power to weight ratio in later stages. Attempting to start this type of strength aspect after puberty will see the female athlete struggle to make inroads. This is mainly due to changes in body composition by the female during puberty where they experience greater fat gains than males. The prepubescent male and female typically have equal amounts of Lean Body Mass (LBM) giving them somewhat equal power to weight ratios. Throughout puberty males significantly increase their LBM allowing power to weight ratios to either remain the same or improve. The opposite can occur with the female where an increase in body fat can prevail, leading to decreases in power to weight effectiveness. The young female athlete involved in endurance based sports (swimming, rowing, triathlon, cross country etc.) can be very vulnerable to this shift in body fat composition. It takes little imagination to understand the large amount of energy required for both personal physical growth and the training demands of the preadolescent 'endurance' athlete (Lee, 2011).

It is not unusual for the young female athlete, under these growth and training conditions, to have a large appetite as they seek to assemble sufficient energy. Unfortunately when the peak growing period passes the athlete continues to take in large amounts of food at a time when energy requirements would have decreased. It only takes a short time for the body fat to climb to proportions that create both performance and emotional problems. Keeping a watchful eye on Peak Heavy Velocity (PHV) may allow the coach and athlete to stay out of this trap. Recognising biological age is somewhat difficult but it is suggested that parents, teachers and coaches use PHV as a measure. Peak Height Velocity is simply determined by keeping a watchful eye on the athletes growth function. The training principles of the fundamental stage should be broadly continued until one recognises, through measurement, when the athletes height is at peak acceleration (females 12.513years, males 12.515years) (Lee, 2011).

Factors Influencing Athletic Performance

An elite athlete is a rare combination of talent, hard work and the right psychological profile. In sports today, everyone knows the best training methods, has access to the best facilities and most nutritional foods. Often the difference between the good and the elite is the mental qualities of the athletes.

Personality

Despite popular opinion, no distinguishable “Athletic Personality” has been shown to exist. That is no consistent research findings show that athletes possess a general personality type distinct from the personality of non athletes. Also, no research has shown consistent personality differences between athletic subgroup. Research has identified several differences in personality characteristics between successful and unsuccessful athletes (Krane and Williams, 2010). These differences, however, are not based on innate, deeply ingrained personality traits but rather result from more effective thinking and responding in relation to sport challenges as well as higher levels of motivation (Hobson, 2009)

Confidence

Confidence is an emotion or state of mind commonly associated with athletic success. Confidence is usually a result of an athlete anticipating success in their upcoming event. An athlete’s anticipated outcome is the greatest indicator of confidence (Kauss1980). This expectation for success can be based on an athlete’s confidence in themselves, in teammates, emotional readiness, physical ability, knowledge of the opponent, goals, strategies, physical condition, or in the coach (Kauss 1980).Elite athletes are renowned for high confidence levels. It is believed that “confidence level mirrors skill level” (DeVenzio 1997). O’Connor (1970) suggests that an athlete can also build confidence just by acting confident. He says that an athlete should always act as if they are confident even if they are not. In doing so, the athlete does not let on any weaknesses to opponents and can even build up their own confidence. He believes that one cannot clearly define confidence as a cause or effect of being an athlete. It is obvious that to reach the very pinnacle of sport, an athlete must have a high confidence in his/her abilities; and getting to that elite level and all the preceding successes that it took to get to that level must surely build the confidence levels of an athlete(Hobson, 2009).

Ability to Cope with Anxiety

The link between anxiety and performance in sport has been known for a long time. Dealing with anxiety successfully is an important characteristic of the elite athlete (Hardy *et al.* 1996; Orlick and Partington, 1988). Clearly, anxiety levels can have a variety of effects on athletic performance. These effects vary based on sport and the individual. Anxiety can be reduced through mental imagery, relaxation, and cognitive intervention (Meyers *etal.*1982; Holm *et al.* 1996). These methods not only aim at reducing stress and anxiety levels but also aim to improve confidence levels. The higher an athlete's confidence, the less he or she will worry about the competition- they know they are prepared and ready. Likewise, if an athlete is over-anxious, it may be a sign of self doubt (Hobson, 2009).

Motivation

To achieve an elite level in sport, an athlete must have the motivation to train hard on a daily basis and to overcome any obstacles or setbacks that athlete might face in reaching or maintaining that level of performance. Overall, it would appear that the following traits would be common among elite athletes: extreme self-confidence, low performance anxiety, and high motivation. These three are very closely related and would seem to form a cyclic pattern. For example, the athlete who is highly motivated to succeed knows the importance of physical preparation and that motivation carries over to their training. As a result, the athlete is well conditioned and physically prepared to meet the demands of the competition. Because the athlete is physically prepared he or she gains confidence in knowing that he/she has done what they need to do, and that they are physically prepared. The high confidence level carries over and results in decreased anxiety because the athlete knows that they have put in the time, is prepared, and is confident in their chances for success. Now this athlete is primed to achieve the desired results. If the athlete meets or exceeds expectations and achieves a level of success, this fuels the athletes' motivation to train and return to or exceed that level again. Elite performers have shown a strong need to demonstrate their personal competence and self-determination. As a result, they commit themselves to difficult and demanding goals, when these goals are achieved, the athletes' feelings of self-competence are confirmed and their intrinsic motivation enhanced (Hobson, 2009).

Training for Athletes

“Simply repeating a skill will never develop the strength or flexibility to carry it out effectively over the long term” (Giles, 2001).

The Fundamental Stage

Research indicates that early participation in quality physical activity not only increases health and wellbeing in the short term, it increases the likelihood of children leading active lifestyles and reaching their sporting potential as they grow into adulthood. With much being said about the catastrophic effects of child obesity and general lack of fitness in the young, it is heartening to hear that the adults in our community are asking for a greater commitment to physical activity in the fundamental stage (6–10 years). It is during this stage that ‘general training’ forms the cornerstone of all plans and strategies conceived to assist the young person in moving towards a healthier lifestyle. As previously stated this is not a period for presenting competition specific exercises nor is it the time to look for ‘winners’. It is mandatory that the adult in charge see this time as the one and only opportunity to build a reservoir of movement competence and enthusiasm for involvement in regular and enjoyable physical activity. For the Primary School age child the word ‘training’ must be viewed in a completely different light to the training seen in the later stages. Although coaches and teachers have been brought up with this terminology it must not be used in the wrong context. Training at the Fundamental stage is categorised as an opportunity for activity. Although the overall coaching strategy at this age emphasises ‘fun’ and ‘play’ in an unregimented environment, it is still vitally important that the coach work from a program that achieves stated objectives. The child may experience a relaxed, ‘fun’ based activity schedule but the ‘coach’ must develop a plan of campaign and follow some form of structured syllabus (Giles, 2001).

Strength Training

The strength training is exercises that use resistance to strengthen and condition the musculoskeletal system, improving muscle tone and endurance (Giles, 2001).

An important result of strength training is increased physical performance. Muscles quietly literally utilize energy power house of the body. Strength training increases the improvements in the performances. It increases the power output which increases speed of movement, thereby heightened sport prowess. It reduces the incidence of injury. It increases the ability to balance and coordination with more power available to the athletes (Giles, 2001).

Impediments to Athletic Performance

Some of the roadblocks that make it more difficult or impossible to reach one's goal are:

- Fear of failing
- Fear of being humiliated
- Fear of competition
- Feelings of intimidation

In addition to the aforementioned obstacles, there are some attitudinal problems which can serve as impediments to athletic performance. The most common of these are:

- Inappropriate aggression
- Lack of confidence
- Lack of concentration
- Lack of assertiveness

Burnout and anxiety are some of the other impediments to athletic performance. Burnout and anxiety are being discussed in present research.

Burnout

Burnout is considered a response by an athlete to chronic stress in which he or she ceases to participate in a previously enjoyable activity, withdrawing from the sport because they perceive it is not possible to meet the physical and psychological demands

of the sport. Burnout is considered by experts to be part of a spectrum of conditions that includes over reaching and over training syndrome. Over reaching may either be functional or non functional:

- Functional over reaching is defined as intense training that leads to a period of decreased performance which results in full recovery after a rest period.
- Non-functional over reaching results in a longer period of decreased performance, and his further accompanied by increased psychological and/or neuro endocrinological symptoms, but, like functional overreaching, results in full recovery after a period of rest (Bozra, 2013).

Over Training Syndrome

Over training syndrome is a series of psychological and hormonal changes that result in decreased supports performance. It is characterised by:

- Extreme non-functional over reaching, with the longer period of decreased performance lasting 2 months or more
- More severe symptomatology
- Maladaptive psychology and
- An additional stressor not explained by other disease. Although it is difficult to determine the extent of over training/burnout in children and adolescents, due in part to the lack of standard terminology used in different studies, it is believed to occur in about 30% to 35% of adolescent athletes (Bozra, 2013).

Causes of Burnout

- The athlete is placed in a situation that involves varying demands
- The demands are viewed as excessive
- The young athlete experiences varying physiological responses

- Varying burnout consequences develop including
 - Low self-esteem
 - Low personal performance expectation
 - Worrying more about failure and adult expectations
 - Increased anxiety as a result of increased parental pressure to participate
 - Excessive athletic stress leading to a loss of sleep, physical injury, lower performance and
 - Ultimately withdrawal from sport (Demerouti et al., 2001)

Risk Factors for Athletes Developing Burnout

Environmental Factors

- Extremely high training volumes
- Extremely high time demands
- Demanding performance expectations
- Frequent intense competition
- Inconsistent coaching practices (Bozra, 2013)

Personal Characteristics

- Perfectionism
- Need to please others
- Non-assertive
- Uni-dimensional self-conceptualisation
- Low self-esteem
- High perception of stress (high anxiety) (Bozra, 2013)

Symptoms of Burnout

Athletes who experience burnout may go through a variety of psychological or hormonal changes including

- Decreased sport and/or school performance
- Chronic muscles or joint pain
- Personality or mood changes
- Elevated resting heart rate
- Fatigue
- Lack of enthusiasm or ambition
- Difficulty completing usual routines
- Sleep changes
- Decreased appetite and/or weight loss
- Increased injuries, illness or infections (Bozra, 2013).

Athletes who develop burnout typically share specific characteristics or experience these risk factors include:

- Early sports specialisation focusing on one sport from a young age
- Playing one sport, but competing on multiple teams during a session
- Overlapping seasons without intervals of rest
- Year-round participation without an off season
- “Type-A” personality including ambitiousness, determined, driven, intense
- Low self-esteem and high anxiety levels
- Parental or coaching pressure to train and compete at a higher level (Bozra, 2013).

Ways to Avoid Burnout in Athletes

Burnout is avoidable and treatable, reducing chance of burnout can start with the following strategies:

- Periodization is a process of varying with the training stimulus to promote long term fitness gains and avoid over training. The year as a whole is taken into consideration and divided upon into phases. In each phase, the workout emphasizes a specific type of training periodization can also be placed in the span of single week
- Cross training by varying workouts to focus on conditioning, weight lifting, stretch training, flexibility, or core strengthening
- Focus on proper sport technique
- Slow progression and avoid rapid increase in workload or intensity
- Proper injury treatment and rehabilitation, emphasis on sport as tools for fun, sportsmanship, fitness, skill acquisition, safety or education (Sport Medicine Team at Children's Hospital, Colorado, 2013).

Burnout could also be effectively dealt with mindfulness techniques. Mindfulness is a variable addressed in the present study.

Anxiety

Definition

Anxiety is an emotion characterised by feelings of tension, worried thoughts and physical changes like increased blood pressure (American Psychological Association, 2015). Anxiety is generally regarded as having a set of component parts that include cognitive functioning, physiological, emotional, and behavioural facets. One cognitive component is the expectation of uncertain danger, of course. Anxiety also uses up attention capacity. One consequence is that people with high test anxiety or high social anxiety become less efficient in their behaviour, once anxiety is aroused, and their attention is divided. The disruptive impact of anxiety on behaviour is illustrated by the large number of errors on performance related tasks. Anxiety is associated with increases in cardiac reactivity (e.g., heart rate and blood pressure) and with other physiological indices (e.g., blood flow to major muscle groups, sweating, trembling, etc.). Physiological arousal is characterized by heightened activation of the automatic nervous system and serves to energize behaviour (McCanny, 2011).

Causes of Anxiety

According to Kremer and Moran (2008) one reason why an individual tend to get uptight before competition could be related the pressure of being observed. Spectators of any sport are constantly evaluating the skills of the athletes they are watching and this can be extremely daunting to those who are not trained to deal effectively with this pressure. Not wanting to fail can heap more strain on a player when as they become more aware of being observed and so the stress continues to grow (McCanny, 2011).

Ways to Manage Anxiety in Athletes

To manage the negative impact of anxiety on performance, an athlete can learn to manage their personal anxiety levels. A range of psychological strategies available to athletes include concentration/attention skills, mental rehearsal/visualisation, relaxation and goal setting.

- **Concentration or Attention Skills**

Concentration or attention skills refer to the ability of the athletes to focus their thoughts and energy into the task at hand. It allows the athletes to focus on relevant cues and ignore distractions, for ex: crowd.

- **Mental Rehearsal or Visualisation or Imagery**

Mental rehearsal, visualisation and imagery refer to the performance or skill, or the environment in which it is performed in the athlete's mind. This allows athletes to develop a visual image of the performance in a non-threatening environment. This visual image can help the performer focus on the movements required to produce an optimal performance, increase concentration and confidence.

- **Relaxation**

Relaxation techniques are techniques that, with practice, reduce arousal levels and limit the impact of over arousal. Relaxation helps the athletes lower their stress levels and calm themselves before a performance. Techniques that can

be used to achieve this include progressive muscle relaxation, meditation, centered breathing and hypnosis.

- **Goal Setting**

Setting goals allows an athlete's progress to be planned and monitored over a period of time. Goal setting also increases motivation and commitment levels providing the athlete with the clear direction. Goals need to be realistic and achievable to be effective. Goals may relate to areas such as the overall performance specific skills involved fitness or behaviour (Gustafsson, 2007).

- **Mindfulness Training**

Techniques involving improvement of mindfulness have been found to be instrumental in reducing anxiety. Mindfulness is a variable studied in the present research.

Mindfulness

Mindfulness can be defined as, "paying attention in a particular way: on purpose, in the present moment, and non-judgemental" (Jon KabatZinn, 2008). These definitions include (a) an open and receptive attention to and awareness of what is occurring in the present moment; (b) an awareness that arises through intentionally attending in a nopen, accepting, and discerning way to whatever is arising in the present moment; (c) an attention that is receptive to the whole field of awareness and remains in an open state so that it can be directed to currently experienced sensations, thoughts, emotions, and Memories; and (d)waking up from a life lived on automatic pilot and based in habitual responding. A common theme shared among all these definitions is a general receptivity and full engagement with the present moment (Gill, 2013)

Benefits of Mindfulness

Although there are several disciplines and practices that can cultivate mindfulness (e.g., yoga, tai chi, qigong; (Siegel, 2007), the majority of theoretical writing and empirical research on the subject has focused on mindfulness developed by

mindfulness meditation. Meditation refers to: A family of self-regulation practices that focus on training attention and awareness in order to bring mental processes under greater voluntary control and thereby foster general mental well being and development and/or specific capacities such as calm, clarity and concentration (Fabrizio, 2008).

While a myriad of meditation practices including Tibetan and Zen Buddhist meditation styles also cultivate mindfulness, the term mindfulness meditation is typically used synonymously with Vipassana, a form of meditation that derives from Theravada Buddhism (Gunaratana, 2002; Young, 1997). Vipassana is a Pali word for insight or clear awareness and is a practice designed to gradually develop mindfulness or awareness (Gunaratana, 2002). Mindfulness is systematically cultivated in Vipassana practice by applying one's attention to one's bodily sensations, emotions, thoughts, and surrounding environment (Bodhi, 2000; Germer, 2005; Germer et al., 2005; Gunaratana, 2002; Wallace, 2001; Young, 1997). While it may be assumed that all meditation practices equally benefit the practitioner, research rather intriguingly suggests that different styles of meditation practice elicit different brain activity patterns (Cahn and Polich, 2006; Lutz, Dunne, and Davidson, 2007; Valentine and Sweet, 1999). With the advancement of neurological technology, mindfulness researchers are examining distinct components of mindfulness meditation such as focused attention, open monitoring (nonjudgmental moment-to-moment observation of one's experience), and loving-kindness compassion practice and their specific physiological outcomes (Fabrizio, 2008).

Ways to Improve Mindfulness

Jon Kabat-Zinn emphasizes that although mindfulness can be cultivated through formal meditation that is not the only way. It is about living one's life as if it really mattered, moment by moment by moment by moment. Some experts believe that

mindfulness works, in part, by helping people to accept their experiences including painful emotions rather than react to them with aversion and avoidance. It has become increasingly common for mindfulness meditation to be combined with psychotherapy, especially cognitive behavioral therapy. This development makes good sense, since both meditation and cognitive behavioral therapy share the common goal of helping people gain perspective on irrational, maladaptive, and self-defeating thoughts (Fabrizio, 2008).

There is more than one way to practice mindfulness, but the goal of any mindfulness technique is to achieve a state of alert, focused relaxation by deliberately paying attention to thoughts and sensations without judgment. This allows the mind to refocus on the present moment. All mindfulness techniques are a form of meditation (Jon Kabat-Zinn 2008).

Basic Mindfulness Meditation

Sit quietly and focus on your natural breathing or on a word or mantra that you repeat silently. Allow thoughts to come and go without judgment and return to your focus on breath or mantra.

- **Body Sensations**

Notice subtle body sensations such as an itch or tingling without judgment and let them pass. Notice each part of your body in succession from head to toe.

- **Sensory**

Notice sights, sounds, smells, tastes, and touches. Name them sight, sound, smell, taste, or touch without judgment and let them go.

- **Emotions**

Allow emotions to be present without judgment. Practice a steady and relaxed naming of emotions: joy, anger, frustration. Accept the presence of the emotions without judgment and let them go.

- **Urge Surfing**

Cope with cravings (for addictive substances or behaviours) and allow them to pass. Notice how the body feels as the craving enters. Replace the wish for the craving to go away with the certain knowledge that it will subside. Meditation and other practices that foster mindfulness can be cultivated through mindfulness meditation, a systematic method of focusing attention. One can learn to meditate on oneself, following instructions in books or on tape. However, individuals may benefit from the support of an instructor or group to answer questions and help you stay motivated. Individual could look out for someone using meditation in a way compatible with one's beliefs and goals. If an individual has a medical condition, one may prefer a medically oriented program that incorporates meditation (Gill, 2013).

Sports Psychology

Today, a sport psychologist's role is more accepted as a part of the regular coaching staff for teams and for teams and for the individual athletes. The roles of sports psychologists are numerous, but they primarily teach athletes mental game skills to improve their performance and learning.

- **Help Athletes Cope with Performance Fears**

Sports psychologist can help athletes overcome fears, such as fear of failure, fear of embarrassment, and general performance anxiety. This is common among athletes who are perfectionists or highly dedicated athletes that worry too much about what other people think about their performance.

- **Help Athletes Mentally Prepare for Competition**

The most common role of a sports psychologist is to help athletes mentally prepare for competition and practice, this includes many of the mental skills mentioned above, but applied to specific situations on the athletic fields.

- **Help Athletes Improve Mental Skills for Performance**

The most common role for a sport psychologist is to teach mental skills for enhanced performance. A mental game expert can help you improve confidence, focus, composure, intensity, and trust in athletic performance. These mental skills help athletes improve performance and can help in other areas of an athlete's life.

- **Help Athletes Return After Injury**

Returning to play after an injury can sometimes be difficult for many athletes depending on the nature of the injury. Athletes are often left with the "mental scars" long after an injury is physically healed. A sports psychologist can help injured athletes cope better with the pressures associated with returning to a prior level of performance pre-injury.

- **Help Athletes Develop Pregame Routines**

As part of mental preparation, the role of the psychologist includes helping athletes develop mental skills used during pregame or on race routines. Athletes learn how to focus on the process instead of results and be more proactive with their confidence prior to competition.

- **Help Athletes Develop Pre-Shot Routines**

Pre-shot routines are another common role of a sport psychologist, here athletes learn how to use mental skills to prepare for a specific motor skills, such as golf shot, free throw, or fields goal kick.

- **Help Athletes Improve Practice Efficiency**

Another common role of a sport psychologist is to help athletes improve the quality of efficiency of their practice. Many athletes, such as collegiate athletes, have limited practice time. Coaches want to help these athletes get most of their practice time by understanding principles of motor learning and performances (Giles, 2005)

Need for the Study

There are 29 states and five union territories in India, with a total population of one billion. Our country representing in the international events is less when compared to the other countries which has the low level of population. The main reason behind this is the means, facilities, aids and infrastructure available to the potential athletes is low and the money allocated by the state and central government is not reaching the potential athletes. The number of athletes who participated in the London Olympics is only 81 from the total population. The athletics in our country is male dominating and only 4 women athletes have participated in this event. State wise discrimination is also found at a higher rate. States not represented by athletes at London Olympics are Arunachal Pradesh, Bihar, Chhattisgarh, Goa, Gujarat, Jammu and Kashmir, Madhya Pradesh, Meghalaya, Mizoram, Sikkim, Tamil Nadu and Tripura and Union Territories (Salt, 2012).

The present study attempts to understand the differences in burnout, anxiety and mindfulness in the selected male and female athletes. Women athletes are thought to be more prone to burnout and anxiety because women athletes are in need to compete with the male dominating society and they are given less opportunities to participate in the events and represent the college, state and country, even if they have high level of talent. The issues in their personal life would also have greater influence to their burnout and anxiety. These variables have great impact on the performance of the athletes. Burnout and anxiety can negatively influence their performance and being mindful can help them overcome the barriers which might affect the performance of the athletes. Gender wise influence of these variables is also addressed in the present study.

The present study is intended throw light on the level of burnout, anxiety and mindfulness in male and female athletes. This study is also intended to pave way for more such studies that can help this particular population. The Principal Researcher of the present study considers this as a pilot venture for her future research in evolving an interventional package for athletes.

REVIEW OF LITERATURE

Review of literature

The research related to the study on, “Burnout, Anxiety and Mindfulness in Athletes: A Gender Comparison” was reviewed and are presented under the following headings:

- Studies on Athletes
- Studies on Male and Female Athletes
- Studies on Burnout
- Studies on Anxiety
- Studies on Mindfulness

Studies on Athletes

A study was conducted by Karve (2010) to assess the differences in the types of stress that athletes and non-athletes experience. The number of participants was 178, female (56) and male (122), freshman students from different private college of Gulbarga university. The participants ranged in age from 17 to 34 years. Participants were grouped as athletes (n=52) and non athletes (n=126). Questions were adopted from the Survey of Recent Life Experiences developed by Kohn, Lafreniere, and Gurevich (1990). It is found that athletes differed in a variety of ways from their non-athlete counterparts and student athletes reported more stress than did non athletes in a variety of variables.

A study was conducted by Singh, Bharadwaj and Bharadwaj (2012) on, “Effect of Self-Efficacy on the Performance of Athletes”. The sample was between 13 to 19 years from the schools of Punjab and Chandigarh. The sample comprised of 200 athletes from the disciplines of Cricket, Kho-Kho, Volleyball, Softball and Athletics. The data was collected using Self-efficacy Questionnaire developed by Bandura (1977).The results showed that School National Level athletes were significantly better on perceived physical ability and self-efficacy than the School District Level athletes.

A study was conducted by Martinent and Ferrand (2014) on, “A Field Study of Discrete Emotions: Athletes' Cognitive Appraisals during Competition”. Thirty self-confrontation interviews were conducted with 11 national table-tennis players. Content analyses suggested that primary and secondary appraisal components (goal relevance,

goal congruence, ego involvement, blame or credit, coping potential, and future expectations) were associated with a range of positive and negative discrete emotions: self-, other-, and environmental-oriented anger, anxiety, discouragement, disappointment, disgust, joy, serenity, relief, hope, and pride.

A study was conducted by Malinauskas, Dumciene, Mamkus and Venckunas (2014) on, “Personality Traits and Exercise Capacity in Male Athletes and non-Athletes”. The study compared the sample of 376 young adult men (169 athletes, 207 non-athletes). 26 lab-based exercise capacity parameters were measured, as well as the Big Five Major Personality Traits using the NEO Five-Factor Inventory. The results indicated that athletes scored higher than non-athletes for Conscientiousness but scores were not statistically different between groups for other personality traits. Team sport athletes scored higher on Extraversion than endurance athletes. All the personality traits were associated with some of the exercise capacity indices.

Studies on Male and Female Athletes

A study was examined on, “Women outperform men in ultra distance swimming: the Manhattan Island Marathon Swim from 1983 to 2013” by Knechtle, Rosemann, Lepers and Rust (2014). Gender difference in 551 male and 237 female was analysed. The top 19 race times ever were significantly lower for women than for men. Race times of the annual 3 fastest women and men did not differ between genders and remained stable across years.

A study was conducted by Cheuvron, Carter, Deruisseau and Moffatt (2005) on, “Running Performance Differences between Men and Women: An Update. Sex differences at distances from 100 to 10 000 m show similar trends. The remaining sex gaps in performance appear biological in origin. Success in distance running and sprinting is determined largely by aerobic capacity and muscular strength, respectively. Because men possess a larger aerobic capacity and greater muscular strength, the gap in running performances between men and women is unlikely to narrow naturally.

Studies on Burnout

A study was conducted by Younas and Sitwat (2011) on “The Relationship of Occupational Stress and Burnout among Practicing Psychologists of Lahore”. Sample of 48 psychologists was gathered. Occupational Stress Scale (Mubashir, 2005) and Copenhagen Burnout Inventory (Kristensen, Borritz, Villadsen, & Christensen, 2005) were used. Results showed that there was a significant positive relationship between occupational stress and personal, work and client burnout. Demographic correlates showed that participants facing client burnout were mostly dealing with psychotic clients and majority of the burned out participants had thoughts about leaving the job.

A study was conducted by Lonsdale, Hodge and Rose (2009) using “Self-Determination Theory” (Deci& Ryan, 1985) as the theoretical framework. They examined, “Potential Antecedents of Athlete Burnout in 201 elite Canadian athletes” (121 females, 80 males). Analyses showed indirect relationships between these two needs and devaluation, through their associations with self-determined motivation. Motivation partially mediated the needs-reduced sense of accomplishment relationships, but the direct effects were more prominent than the indirect effects.

A study was conducted by Fergusson and Stern (2014) on, “A Case of Early Sports Specialization in an Adolescent Athlete”. Early Sport Specialization (ESS) refers to intense year round training in a specific sport with the exclusion of other sports at a young age. The case described a 16 years elite level baseball pitches who engage in high volume, intense training at a young age which leads to several significant throwing related injuries. The case highlights the historical context of ESS, the potential risk benefits as well as the evidence for its effectiveness.

A study was conducted by Curran, Appleto, Hill and Hall (2012) on, “The Mediating Role of Psychological Need Satisfaction in Relationships between Types of Passion for Sport and Athletes”. 173 academy soccer players completed Self Report Measures of Passion for Sport Psychological Need Satisfaction, and Athlete Burnout. The results indicated that psychological need satisfaction mediated the relationship between harmonious passion and athlete burnout.

A study was conducted by FrodeMeon (2006) on, "Burnout among Junior Athletes". The Athlete Burnout Questionnaire (ABQ) measures three dimensions of Athlete Burnout, Accomplishments, Exhaustion and Devaluation. The hypothesis was partly confirmed as the results revealed that lower levels of perceived satisfaction with progress academically in school were associated with higher Athlete Burnout. This result applies for the dimensions Exhaustion and Devaluation as well as the sum of Athlete Burnout.

A study was conducted by Grylls and Spittle (2008) on, "Injury and Burnout in Australian Athletes". The sample of 264 local to international Australian athletes (124 men and 140 women) was studied. Participants completed a Demographic Questionnaire and A Modified Version of the Maslach Burnout Inventory. Results indicated that currently injured athletes (150) had significantly lower mean burnout scores than currently uninjured athletes (113). Small, but statistically significant, positive correlations were found between number of injuries and burnout scores.

A study was conducted by Gustafsson and Skoog (2012) on, "The Meditational Role of Perceived Stress in the Relation between Optimism and Burnout in Competitive Athletes". Two hundred and seventeen athletes (139 males and 78 females, aged 16 to 19 years). The results showed that optimism had a significant negative relationship with both stress and burnout mediation analysis indicated that links between optimism and symptoms of burnout, emotional/physical exhaustion and sport devaluation, and partly mediated the link between optimism and a third symptom, reduced sense of accomplishment.

A study was conducted by Gustafsson, Hassmen and Podlog (2010) on, "Exploring the Relationship between Hope and Burnout in Competitive Sport". One hundred and seventy eight competitive athletes (63 females and 115 males) aged 15-20 years was the sample. Results revealed that agency thinking was a significant predictor of all burnout dimensions. Frustrations over unmet goals and a perceived lack of agency, a characteristic of low hope athletes, might pose a risk factor in athlete burnout, whereas being able to maintain hope appears to be associated with health and well-being.

A study was conducted by Abbasabadi, Goudarzi and Farahani (2013) to compare, “The Rate of Job Burnout among Athletic and Nonathletic Employees of Government offices in Damavand”. In this study, measuring instrument was the Maslach & Jackson’s Job Burnout Questionnaire, containing 22 questions and 6 propositions. Hypothesis test results showed that job burnout in athletes is less than the non-athletes in reduced personal achievement and emotional exhaustion dimensions.

A study was conducted by Chen, Kee and Tsai (2008) on, “Relation of Dispositional Optimism with Burnout among Athletes”. This study recruited 139 young volley ball players to examine this relation. Athletes completed the Chinese version of the Life Orientation Test and Chinese version of the Athlete Burnout Questionnaire was also administered. Analysis showed scores on optimism were negatively related to athletes’ burnout scores.

A study was conducted by Brandon and Harris (2005) on, “Coach and Athlete Burnout: The Role of Coaches’ Decision-Making Style”. Collegiate swimmers and coaches completed questionnaires assessing burnout and decision-making behaviours. Results revealed a significant relationship between athlete burnout and autocratic coaching behaviours. A significant inverse relationship emerged between athlete burnout and democratic behaviours. No significant interactions between gender and decision making on burnout scores. Significant main effects were found for democratic behaviours on exhaustion and depersonalization subscales; swimmers classified as perceiving fewer democratic behaviours scored higher on these subscales. No significant relationships or gender differences were found within the coaches.

A study was conducted by Vilaradaga et al. (2013) on, “Burnout among the Addiction Counselling Workforce: The Differential Roles of Mindfulness and Values-based Processes and Work-site Factors”. They conducted a cross-sectional survey among 699 addiction counsellors working for urban substance abuse treatment providers in six states of the United States. Results corroborated the importance of work-site factors for burnout reduction in this specific population, but were found that mindfulness and values-based processes had a stronger and more consistent relationship with burnout as compared with work-site factors.

A study was conducted by Bhatia and Kumar (2005) on, “Occupational Stress and Burnout in Industrial Employees”. Hundred employees were selected from textile industries, Bhiwani. Their chronological age ranged from 22 to 32 years and 33 to 42 years and their experience/length of service varied from 2 to 6 years and 7 to 12 years. Occupational Stress Index and Maslach Burnout Inventory were administered. The results indicated that the industrial employees at supervisor rank and below supervisor rank, belonging to higher age group and with more emotional exhaustion and more feeling of depersonalization. The reduced feelings of personal accomplishment was found only in the case of supervisor staff, the below supervisor rank staff did not seem to have feelings of reduced personal accomplishment.

A study was conducted by Haque and Khan (2001) on, “Burnout and Organisational Sources of Social Support in Human Service Professions: A Comparison of Women Doctors and Nurses”. The role of organisational sources of social support in reducing the home-work stress, burnout as well as buffering the impact of home work stress on burnout was explored. Data were collected from 143 women (69 doctors and 74 nurses) working in public hospitals of Lahore. Results indicated that nurses were significantly different from the women doctors in the levels of depersonalisation of others and reduced personal accomplishment dimensions of burnout. Results also suggested that the relationship between home-work stress and burnout was moderated by organisational sources of support predominantly in nurses.

A study was conducted by Pandey and Tripathi (2001) on, “Occupational Stress and Burnout in Engineering College Teachers”. The research examined the level of perceived occupational stress and burnout in engineering college male teachers (56) as well as the relative importance of various job stressors in predicting burnout. Analysis of the data revealed a moderate level of occupational stress in the sample. Various job stressors correlated positively with emotional exhaustion and depersonalisation component of burnout negatively with personal accomplishment component.

Studies on Anxiety

A study was conducted by Elliott, Polman, Taylor (2014) on, “The Effects of Relaxing Music for Anxiety Control on Competitive Sport Anxiety”. Seventy-two

undergraduate students volunteered to participate in the study. Participants were randomly allocated to one of three intervention conditions, listening to relaxing music for anxiety control, listening to non-relaxing music or a no music control. Results showed that all three interventions provoked significant reductions in competitive state anxiety. These results suggest that listening to relaxing music for anxiety control was no more effective at reducing competitive state anxiety than non-relaxing music or a period of silence. There were no between-condition differences in motor task performance.

A study was conducted by Bridges and Knight (2005) on, “The Role of Cognitive and Somatic Anxiety in Athletic Performance”. 23 starting collegiate athletes from Division III football, women’s basketball and men’s basketball teams were tested for somatic anxiety (measured blood pressure and heart rates) and Cognitive Anxiety (Self Report Questionnaire) during leisure time and 10 to 45 minutes prior to a collegiate competition. Athletic performance was assessed by the appropriate coaching staff. The result shown significant positive linear relationship between cognitive anxiety and performance for basketball players, while no other significant findings were determined across sport or type of anxiety.

A study was conducted by Besharat and Pourbohloul (2011) on, “Moderating Effects of Self-Confidence and Sport Self-Efficacy on the Relationship between Competitive Anxiety and Sport Performance”. A total of 246 volunteer athletes (149 males, 97 females) were included in this study. All participants were asked to complete Multidimensional Competitive Anxiety Questionnaire and Sport Self-Efficacy Scale. To measure the athletes’ sport performance, their coaches were asked to complete the Sport Achievement Scale. The results revealed that self-confidence and sport self-efficacy moderated the relationship between competitive anxiety and sport performance.

A study was conducted by Sukumar and Balakrishnan (2003) on, “Competitive Anxiety in Relation to Sex and Age Difference of Basket Ball Players. 100 subjects were chosen for the study from schools and college basketball players in both sexes. 25 players each were selected from the college men, college women, school girls and boys. The subject’s age of all the four groups in the sample ranged from 15 to 20 years. Sports Competitive Anxiety Test (SCAT) was administered individually. The result revealed that, 1) There is no sex difference in competitive anxiety-trait among the school

basketball players. 2) There is a significant sex difference in competitive anxiety-trait among the college basketball players. 3) When school and college basketball players were compared on the competitive anxiety trait, no age difference was noted either among female or males.

A study was conducted by Deshmukh (2004) on, “Comparative Study of the Self-Concept and Anxiety of the Athletes and Non-athletes”. Eighty students were taken as the sample. Self-Concept Inventory developed by Jogawar and Sinha’s Anxiety Scale was used. The results indicate that athletes are higher on self concept than non-athletes. Athletes feel themselves confident enough to face problems of life. The athletes and non athletes had no significant difference on anxiety.

A study was conducted by Sharma and Sharma (2004) on, “Psychoticism and Death Anxiety in Female Athletes and Non Athletes”. Sample comprised of 50 athletes and 50 non athletes under graduate females of Varanasi district in India. These groups were matched on the variables of age (ranged from 17 to 26 years) and socio economic status. Hindi adaptation of Eyesenk Personality Questionnaire and Thakur Death Anxiety Scale was administered to them individually. It was found that female athletes were low on psychoticism and death anxiety than the non athletes.

Studies on Mindfulness

A study was conducted by Pineu, Glass and Kaufman (2006) on, “Mindfulness in Sport Performance, the research examined the associations between mindfulness and important sport performance-related topics is presented, including flow, attention, affect, and physiological factors. Although most existing research has utilized the Eastern perspective, a particular focus is given to the empirical and theoretical connections between sport performance and Langer’s conceptualization of mindfulness. These two ideas of mindfulness may complement each other.

A study was conducted by Fortney et al. (2012) on, “Abbreviated Mindfulness Intervention for Job Satisfaction, Quality of Life, and Compassion in Primary Care Clinicians: A Pilot Study”. A total of 30 primary care clinicians participated in an abbreviated mindfulness course. They used a single-sample, pre-post design. At 4 points in time (baseline, and 1 day, 8 weeks, and 9 months post intervention), participants

completed a set of online measures assessing burnout, anxiety, stress, resilience, and compassion. Participants had improvements compared with baseline at all 3 follow-up time points.

The above stated are a few studies on variables such as anxiety, burnout and mindfulness in athletes which were addressed in the present study. The review of literature shows that burnout and anxiety can compromise performance and attempts to enhance mindfulness can prove beneficial to athletes. Review of literature does not confirm gender differences in athletic performance.

METHOD

Method

The method of the study on, “Burnout, Anxiety and Mindfulness in Athletes: A Gender Comparison” involved following steps:

- Objectives
- Research Questions
- Null Hypotheses
- Area
- Sample
- Tools
- Procedure

Objectives

- To assess the levels of burnout, anxiety and mindfulness of the sample, who are the selected male and female athletes
- To compare the levels of burnout, anxiety and mindfulness in male and female athletes
- To find out the relationship between burnout, anxiety and mindfulness in male and female athletes

Research Questions

- What are the levels of burnout, anxiety and mindfulness of the selected athletes?
- How are the level of burnout, anxiety and mindfulness in male athletes when compared to that of female athletes?
- Is there any relationship between burnout, anxiety and mindfulness in male and female athletes?
- Is there any relationship between burnout, anxiety and mindfulness and demographic factors in male and female athletes?

Null Hypotheses

- There is no gender difference in the level of burnout of the sample
- There is no gender difference in the level of anxiety of the sample

- There is no gender difference in the level of mindfulness of the sample
- There is no relationship between burnout, anxiety and mindfulness in the male athletes
- There is no relationship between burnout, anxiety and mindfulness in the female athletes
- There is no relationship between demographic factors and burnout, anxiety and mindfulness of male athletes
- There is no relationship between demographic factors and burnout, anxiety and mindfulness of female athletes

Area

Sri Ramakrishna Mission Vidhyalaya Maruthi College of Physical Education, Periyarayakkanpalayam, Coimbatore, Bharathiar University, Coimbatore and Avinashilingam Institute for Homescience and Higher Education for Women, Coimbatore were selected for the study.

Sample

From Sri Ramakrishna Mission Vidhyalaya Maruthi College of Physical Education, Periyarayakkanpalayam, Coimbatore, Bharathiar University, Maruthamalai Road, Coimbatore and Avinashilingam Institute for Homescience and Higher Education for Women, T.V.S, Coimbatore, 150 athletes (75 male and 75 female) were selected as the sample of the study. They were in the age range of 18 to 25 years. The study employed convenient sampling technique.

Tools

- Adult Consent Form (Annexure 1) was used to obtain consent from the athletes to participate in the study.
- Case Study Schedule (Annexure 2) was used to collect the demographic data of the sample.
- Burnout Questionnaire (Annexure 3) (Post, 1981). It consisted of 28 items with 6 point rating scale.

- Manifest Anxiety Inventory (Annexure 4) (Hemalatha Natesan and Nandini Menon, 2001). This inventory consisted of 40 statements with "Yes" or "No" options. The reliability and validity values are .89 and .93 respectively.
- The Mindfulness Attention Awareness Scale (Annexure 5) (Brown and Ryan, 2003). This scale consisted of 15 items with 6 point rating scale. The reliability and validity values are .89 and .93 respectively.

Procedure

The Research Proposal submitted by the researcher was subjected to perusal by the Institutional Ethical Committee and approval was granted (Approval No. AUW/IHEC-14-15/XMT-73) to conduct the study. From Sri Ramakrishna Mission Vidhyalaya Maruthi College of Physical Education, Periyayakkanpalayam Coimbatore, Bharathiar University, Maruthamali Road, Coimbatore and Avinashilingam Institute for Home Science and Higher Education for Women, T.V.S, Coimbatore, 150 athletes were selected as the sample of the study. Among them 75 were male athletes and 75 were female athletes. The study employed convenient sampling technique. A good rapport was built with the athletes and instructions were given regarding the questionnaires. The athletes expressed their consent to participate in the study by signing in the Adult Consent Form. Following that they completed the Burnout Questionnaire, Manifest Anxiety Inventory and Mindfulness Attention Awareness Scale.

Analysis of Data

The data were analyzed by standard statistical tools such as Mean, Standard Deviation, Karl Pearson Coefficient of Correlation and ANOVA using SPSS+PC package on the basis of the following:

- Demographic Data
- Burnout
- Anxiety
- Mindfulness

RESULTS AND DISCUSSION

Results and Discussion

The study on, “Burnout, Anxiety and Mindfulness in Athletes: A Gender Comparison” was conducted in the Physical Education Departments of Avinashilingam Institute for Homescience and Higher Education for Women, T.V.S, Coimbatore. Bharathiar University, Marudhamalai Road, Coimbatore and Sri Ramakrishna Mission Vidhyalaya Maruthi College of Physical Education, Periyanaayakkanpalayam, Coimbatore. One hundred and fifty athletes were selected by convenient sampling method. The entire sample was assessed using Case Study Schedule, Burnout Questionnaire, Manifest Anxiety Inventory and Mindfulness Attention Awareness Scale.

The results of the study are analysed, tabulated and discussed below:

Table 1: Showing the Demographic Profile of Athletes

N=150

Age	Male		Female	
	n	Percentage (%)	n	Percentage (%)
18-21	12	16	62	83
22-24	54	72	12	16
25-27	9	12	1	1
Location	n	Percentage (%)	n	Percentage (%)

Urban	20	27	55	74
Rural	55	74	20	27
Qualification	n	Percentage (%)	n	Percentage (%)
B.P.Ed.	50	67	73	97
M.P.Ed.	7	9	2	3
B.Sc.	6	8	0	0
M.Com.	1	1	0	0
B.A.	4	5	0	0
B.Com.	1	1	0	0
B.B.M.	6	8	6	0
Marital Status	n	Percentage (%)	n	Percentage (%)
Single	74	98	72	96
Married	1	1	3	4
Family Type	n	Percentage (%)	n	Percentage (%)
Joint	42	56	56	34
Nuclear	33	44	22	65
Participation Level	n	Percentage (%)	n	Percentage (%)
International	0	0	1	1
National	7	5	4	5

State	31	41	35	46
District	28	37	34	45
College level	9	12	1	1

Scholarship	n	Percentage (%)	n	Percentage (%)
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Non scholarship	65	52	43.3	69
Government scholarship	10	23	7	31

Number of Tournaments Attended	n	Percentage (%)	n	Percentage (%)
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0-19	35	47	62	83
20-39	22	29	10	13
40-59	8	11	1	1
60-79	1	1	2	3
80-99	1	0	0	0
100-119	5	7	0	0
120-139	0	0	0	0
140-159	0	0	0	0
160-179	0	0	0	0
180-199	1	1	0	0

200-219	1	1	0	0
220-239	0	0	0	0
240-259	0	0	0	0
260-279	0	0	0	0
280-289	1	1	0	0

Percentage are rounded off

Table 1 shows the Demographic Profile of the sample. The sample consisted of equal number of male and female athletes. The equal numbers of the sample portrays that, the male domination in the sports field is getting lowered in the recent years. It can be seen that maximum number (72%) of male athletes are from the age group of 22 to 24 years and the maximum number (83%) of female athletes are from the age group of 18 to 21. More than half (55%) of male athletes is from the rural areas and more than half (55%) of the female athletes are from the urban locations. More than half (67%) of the male athletes and a large majority (97%) of female athletes had the educational qualification of B.P.Ed. A large majority (98%) of male and a large majority (96%) of female athletes are single. More than half (56%) of the male athletes are from the joint family and more than half (65%) of the female athletes are from nuclear family. More than half (52%) of male and more than half (69%) of female athletes receive no scholarships. Nearly half (41%) of male athletes and nearly half (46%) of the female athletes have attended the tournaments representing their state. More than half (47%) of the male athletes and majority (83%) of the female athletes attended up to 19 tournaments.

Figure 1: Age of Male Athletes

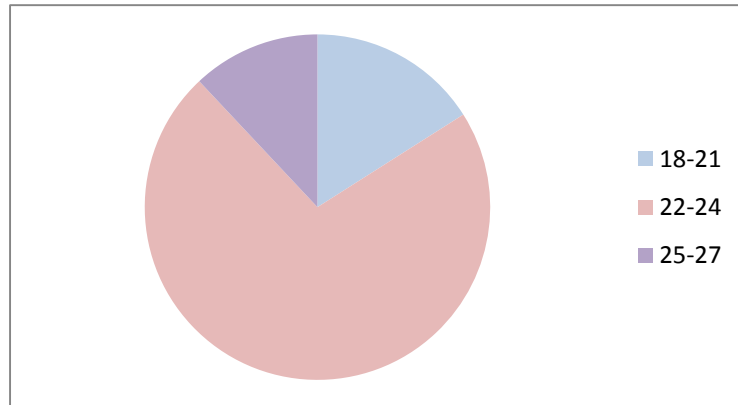


Figure 2: Age of Female Athletes

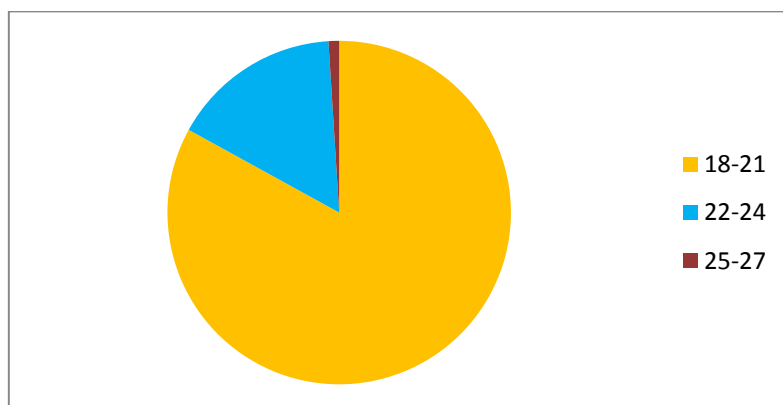


Figure 3: Location of Male Athletes

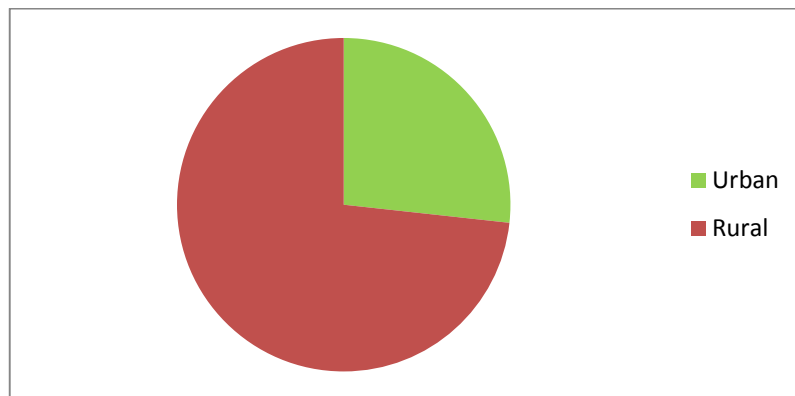


Figure 4: Location of Female Athletes

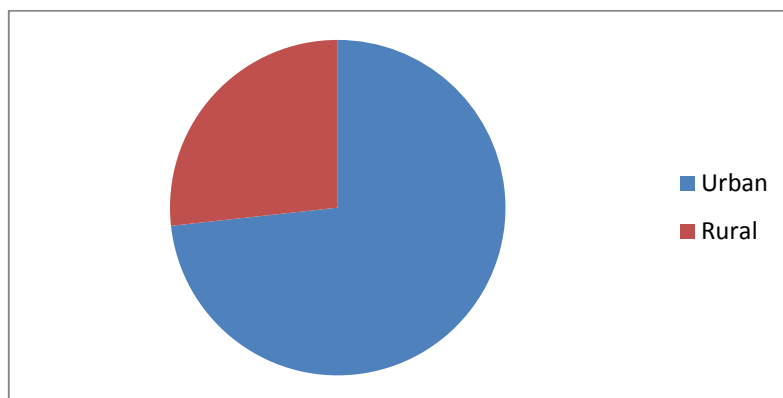


Figure 5: Qualification of Male Athletes

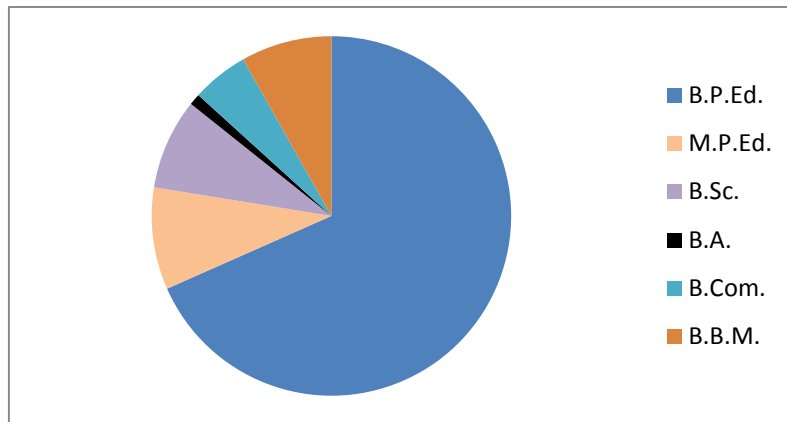


Figure 6: Qualification of Female Athletes

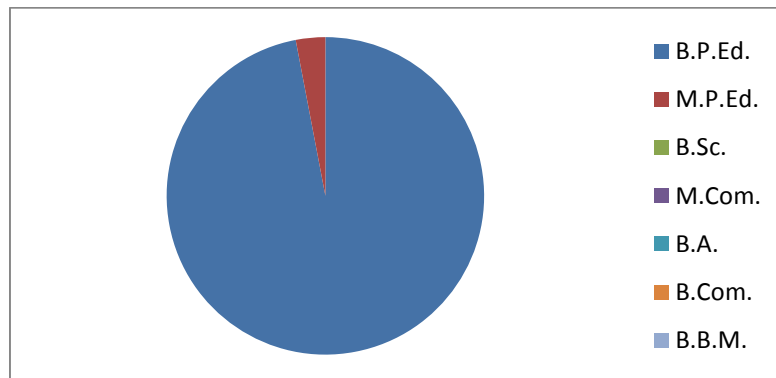


Figure 7: Marital Status of Male Athletes

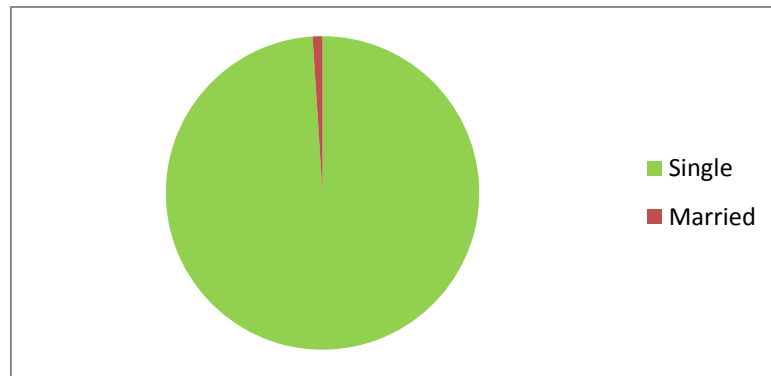


Figure 8: Marital Status of Female Athletes

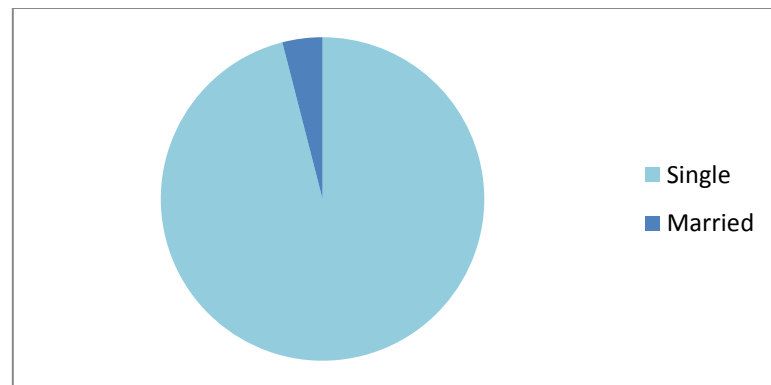


Figure 9: Scholarships of Athletes.

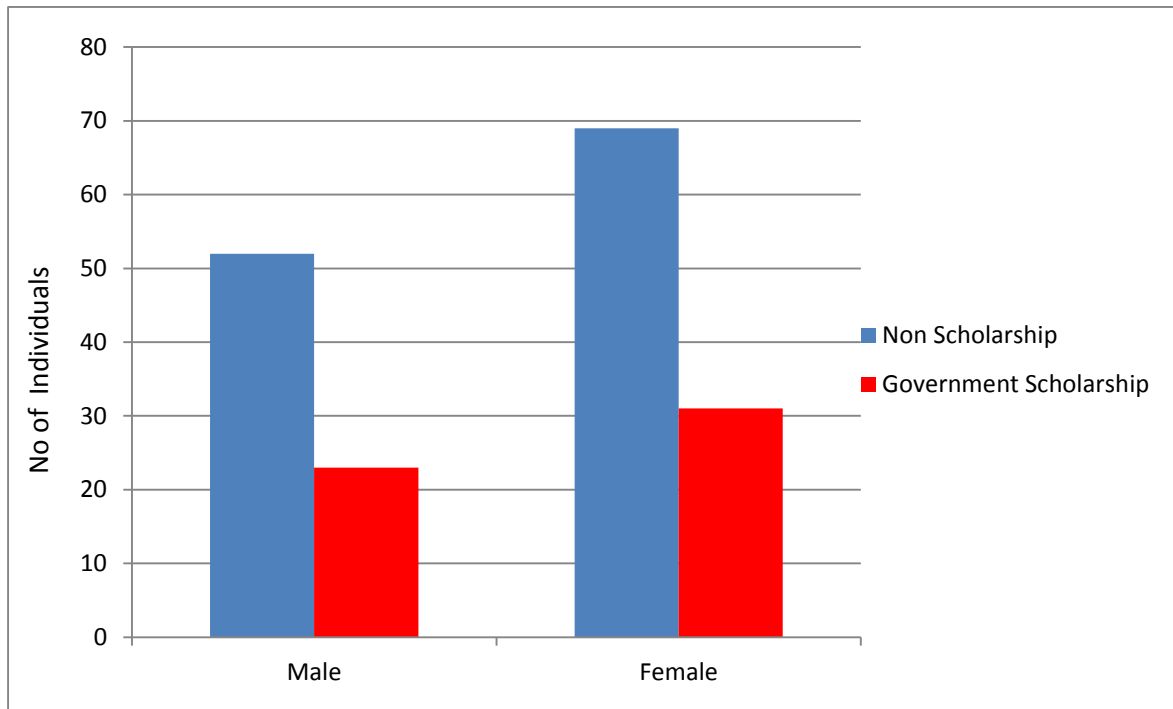


Figure 10: Level of Participation of Athletes

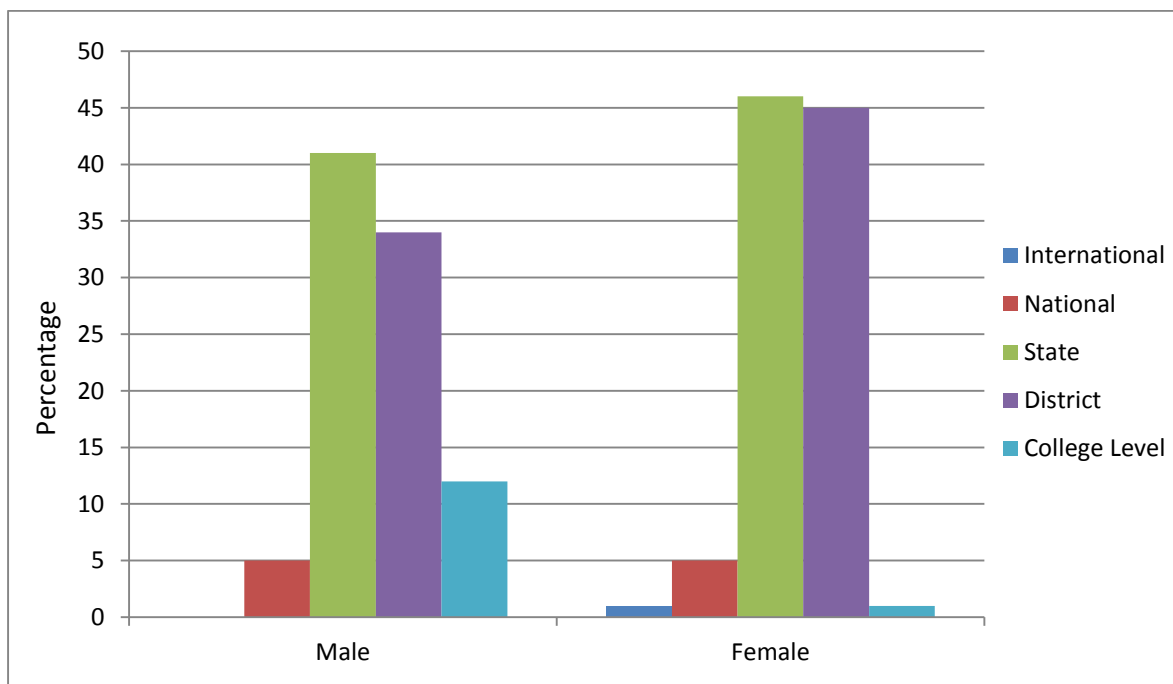


Table 2: Showing the Level of Burnout of Athletes**N=150**

Burnout	Male		Female	
	n	Percentage (%)	N	Percentage (%)
(Very low)	1	1	1	1
28-37				
(Low)	7	9	6	8
38-50				
(Moderate)	40	53	44	59
51-70				
(High)	25	33	22	29
71-90				
(Very high)	2	3	2	3
90-140				

Percentage are rounded off

Table 2 shows the level of burnout of the sample. Burnout is considered a response by an athlete to chronic stress in which he or she ceases to participate in a previously enjoyable activity, withdrawing from the sport because they perceive it is not possible to meet the physical and psychological demands of the sport (Stratus, 2014). Majority (89% of male and 71%) of the participants had moderate to high level of burnout. The following study that reviewed 58 scientific publications confirm the presence of burnout in athletes.

A review of 58 published scientific studies on burnout in sports was done by Goodger, Gorely, Lavallee and Harwood (2007). Findings comprised 3 sections: sample characteristics, correlates, and research designs and data collection. A total of 58 published studies were assessed, most of which focused on athletes ($n = 27$) and coaches ($n = 23$). Correlates were grouped into psychological, demographic, and situational factors and were summarized as positively, negatively, indeterminate, and not associated with burnout.

Table 3: Showing the Level of Anxiety of Athletes

N=150

Anxiety	Male		Female	
	n	Percentage (%)	N	Percentage (%)
(Very low)	4	5	13	17
0				
(Low)	32	43	23	31
1-8				
(Moderate)	28	37	30	40
9-16				
(High)	10	13	7	9
17-24				

(Very high)

1

1

2

3

25-40

Percentage are rounded off

Table 3 shows the level of anxiety of the sample. Anxiety is an emotion characterised by feelings of tension, worried thoughts and physical changes like increased blood pressure (American Psychological Association, 2015). Majority (86%) of male athletes have low to moderate level of burnout. Majority (88%) of female athletes have very low to moderate level of anxiety. The athletes reported that they experienced increased anxiety before attending the matches and tournaments which can be referred as a performance anxiety, which is more or less like a test anxiety. They also reported that when they practiced less, before any tournament, they experienced high level of anxiety. The study stated below shows the impact of anxiety on athletes.

A study examined on, “Impact of Identity on Anxiety in Athletes”, by Masten, Faganel and Tusak (2006) involved 410 athletes (67.4% male and 30% female). The Athletic Identity Measurement Scale (AIMS) (Brewer, Van Raalte and Linder, 1993) and STAI-X1 and STAI-X2 (Spielberger, Gorsuch, and Lushene, 1970) were applied. It was found that there was a similar interconnection between athletic identity and both types of anxiety. Those athletes with a higher negative affectivity and world-class athletes have a higher level of both trait and state anxiety than the other categories of athletes. Male athletes had a lower state and trait anxiety. An increase of self-identity decreased the level of trait anxiety.

Table 4: Showing the Level of Mindfulness of Athletes

N=150

Mindfulness	Male		Female	
	n	Percentage (%)	n	Percentage (%)
(Very low)	0	0	0	0
1-18				
(Low)	3	4	3	4
19-36				
(Moderate)	25	33	16	21
37-54				
(High)	33	44	44	59
55-72				
(Very high)	14	19	12	16
73-90				

Percentage are rounded off

Kaufman, Glass, and Arnkoff (2009) examined, “The Evaluation of Mindful Sport Performance Enhancement (MSPE): A New Approach to Promote Flow in Athletes”. The construct of mindfulness appears to be compatible with theories of flow and peak performance in sport. The study assessed how Mindful Sport Performance Enhancement (MSPE), a new 4-week program, affected flow states, performance, and psychological characteristics of 11 archers and 21 golfers from the community.

Participants completed trait measures of anxiety, perfectionism, thought disruption, confidence, mindfulness, and flow. They additionally provided data on their performances and state levels of mindfulness and flow. Analyses revealed that some significant changes in dimensions of the trait variables occurred during the training. Levels of state flow attained by the athletes also increased between the first and final sessions. The findings suggested that MSPE is a promising intervention to enhance flow, mindfulness, and aspects of sport confidence.

Mindfulness is paying attention in a particular way: on purpose, in the present moment, non-judgmental (Jon KabatZinn, 2008). It is interesting to see that most of (96%) the athletes have moderate to high level of mindfulness. High level of mindfulness can help the athletes to perform more efficiently in the tracks and fields. Mindfulness meditation is one of the most popular techniques which is been widely used to help the athletes to reduce their stress levels and to improve their concentration levels. Athletes can try to maintain their mindfulness by practising mindfulness meditation.

The above stated study confirms the presence of mindfulness or flow state and it is also proved that mindfulness could be attained through training.

Table 5: Showing Mean Burnout and Standard Deviation in Male and Female Athletes

N=150

Group	n	Mean	Standard Deviation
Male	75	65.78	12.35
Female	75	66.21	12.78

Table 5 shows the mean burnout and standard deviation in male and female athletes as 65.78 and 12.35 and 66.21 and 12.78 respectively. The means indicate that both the male and female athletes were moderate on burnout. Their burnout could be attributed to their high expectations regarding sports achievement and the stresses and strains of achieving them.

Table 6: Showing the Significant Difference in Burnout between Male and Female Athletes

Burnout	Sum of squares	DF	Mean squares	F	P
Between	6.934	1	6.934	0.044	0.834

Within	23,372.967	148	157.925
Total	23,375.900	149	

Table 6 shows the gender comparison in burnout in athletes, obtained using the ANOVA. The P value of 0.834 indicates that there is no statistically significant difference in male and female burnout of the present study. Hence, the null hypothesis, “There is no gender difference in the level of burnout of the sample” is accepted.

This could be due to the fact that both men and women receive same level of opportunities and importance in sports in the recent years and the ability to withstand the problems that occurs in the tracks and fields are more or less same in both male and female athletes. Burnout is a state of emotional exhaustion of an individual, which is more psychological in nature. Though men are considered to be physically stronger than women, it may not guarantee a condition where men experience burnout and women do not experience burnout. Several other reasons like family back ground, the way they are brought up by their parents and other environmental factors can also contribute for the similarities in the level of burnout in athletes.

Table 7: Showing Mean Anxiety and Standard Deviation in Male and Female Athletes

N=150

Group	n	Mean	Standard Deviation
Male	75	15.57	6.52
Female	75	16.46	7.37

Table 7 shows the mean and standard deviation values of anxiety in athletes. The mean value of male and female is 15.57 and 16.46 respectively. The standard deviation values are 6.52 and 7.37 respectively. The means indicate that the male athletes has low to high level of anxiety .

Table 8: Showing Significant Difference in Anxiety between Male and Female Athletes

Anxiety	Sum of Squares	Df	Mean Squares	F	P
Between	29.704	1	29.704	0.614	0.435
Within	7,165.220	148	48.414		
Total	7,194.924	149			

Table 8 shows the gender comparison of anxiety in athletes, obtained using the ANOVA. The P value of 0.435 indicates that there is no statistically significant difference in male and female anxiety in the present study. Hence, the null hypothesis, “There is no gender difference in the level of anxiety of the sample” is accepted.

Anxiety is common in both male and female athletes. One of the common reason for being anxious and not performing well in a sport and being excited and performing well in front of an audience explain the social facilitation theory. When athletes are well practised, the presence of the audience improves performance; when athletes are not confident and lack practice, the presence of audience makes them anxious resulting in poor performance Social facilitation can be defined as an improvement in performance produced by the mere presence of others. It seems that, the extent of social facilitation or inhibition depends upon the nature of the interaction between the task and the performer. In some cases the presence of co-actors/audience improved the quality of performance but in others it is impaired the quality (Dashiell, 1935). The table reveals that there is no gender difference in experiencing anxiety.

Table 9: Showing Mean Mindfulness and Standard Deviation in Male and Female Athletes

N=150

Group	n	Mean	Standard Deviation
Male	75	59.28	12.27
Female	75	61.90	11.84

Table 9 shows the mean mindfulness and standard deviation of male and female athletes. The mean and standard deviation of mindfulness in male athletes is 59.28 and 12.37 respectively and for the female athletes 61.90 and 11.84 respectively. This indicates that overall, male athletes were high on mindfulness and female athletes too were high on mindfulness. The selected athletes of the present study might be focused and determined which could attribute to their mindfulness.

Table 10: Showing Significant Difference in Mindfulness between Male and Female Athletes

Mindfulness	Sum of squares	Df	Mean squares	F	P
Between	257.415	1	257.415	1.771	0.185
Within	21,514.649	148	145.369		
Total	21,772.064	149			

Table 10 shows the gender comparison in mindfulness in athletes, obtained using the ANOVA. The P value of 0.185 indicates that there is no statistically significant difference in male and female mindfulness of the present study. Hence, the null hypothesis, “There is no gender difference in the level of mindfulness of the sample” is accepted.

The reasons for most of the athletes being mindful could be due to fact that they are more focused towards their work and they are attending state level, national level and international level of tournaments. This brings them more attention and dedication towards their works.

Figure 11: Mean Burnout, Anxiety and Mindfulness of Male and Female

Athletes

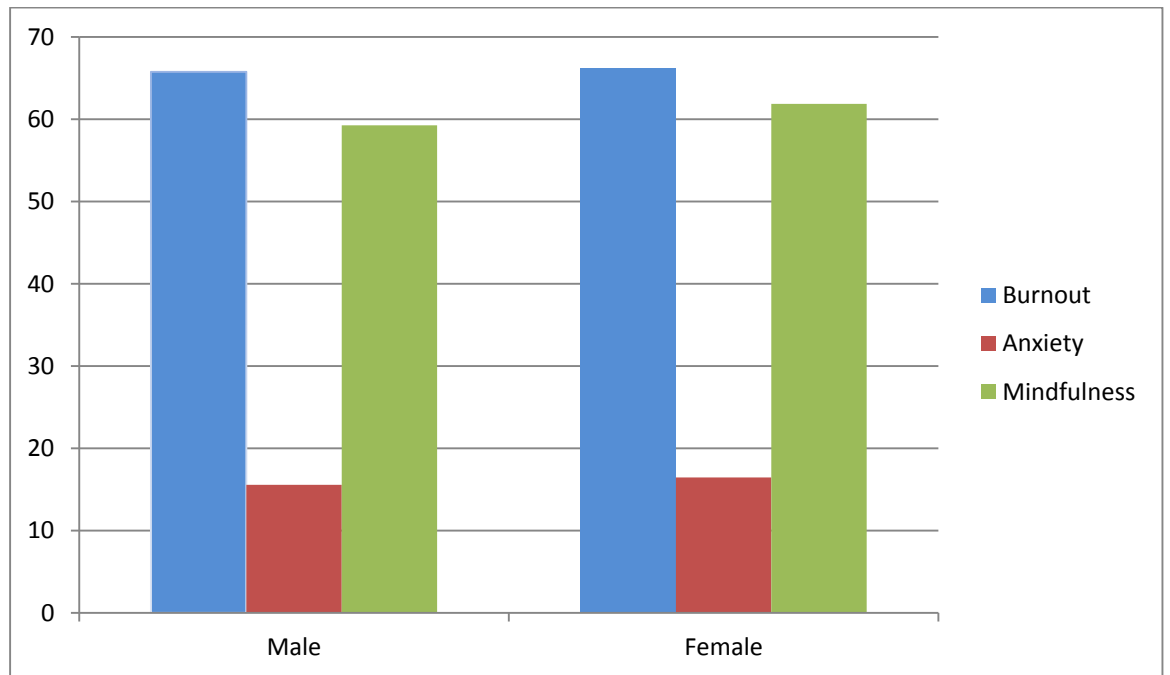


Table 11: Showing the Correlation between Burnout, Anxiety and Mindfulness in Male Athletes

		Burnout	Anxiety	Mindfulness
Burnout	Pearson Correlation	1	.472(**)	-.532(**)
	Sig. (2-tailed)	.	.000	.000
	N	75	75	75
Anxiety	Pearson Correlation	.472(**)	1	-.518(**)
	Sig. (2-tailed)	.000	.	.000
	N	75	75	75
Mindfulness	Pearson Correlation	-.532(**)	-.518(**)	1
	Sig. (2-tailed)	.000	.000	.
	N	75	75	75

** Correlation is significant at the 0.01 level (2-tailed).

Table 11 indicates that there is a negative correlation between mindfulness and burnout; negative correlation between anxiety and mindfulness; positive correlation between burnout and anxiety in male athletes. Hence, “There is no relationship between burnout, anxiety and mindfulness in the male athletes is rejected”.

Table 12: Showing the Correlation between Demographic Factors and Burnout, Anxiety and Mindfulness in Male Athletes

		Family					Mindfuln
		Type	Scholarship	Location	Burnout	Anxiety	ess
Family Type	Pearson correlation	1	.126	.012	-.142	-.215	.268(*)
	sig. (2-tailed)	.	.280	.918	.224	.064	.020
	N	75	75	75	75	75	75
Scholarship	Pearson correlation	.126	1	.207	-.294(*)	-.295(*)	.174
	sig. (2-tailed)	.280	.	.075	.011	.010	.134
	N	75	75	75	75	75	75
Location	Pearson correlation	.012	.207	1	-.169	-.118	.298(**)
	sig. (2-tailed)	.918	.075	.	.148	.312	.009
	N	75	75	75	75	75	75
Burnout	Pearson correlation	-.142	-.294(*)	-.169	1	.472(**)	-.532(**)
	sig. (2-tailed)	.224	.011	.148	.	.000	.000
	N	75	75	75	75	75	75
Anxiety	Pearson correlation	-.215	-.295(*)	-.118	.472(**)	1	-.518(**)
	sig. (2-tailed)	.064	.010	.312	.000	.	.000
	N	75	75	75	75	75	75
Mindfulness	Pearson correlation	.268(*)	.174	.298(**)	-.532(**)	-.518(**)	1

sig. (2-tailed)	.020	.134	.009	.000	.000	.
N	75	75	75	75	75	75

* correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

It is interesting to note that the family type is positively correlated with the mindfulness; scholarship is negatively correlated with the burnout and anxiety; location is negatively correlated with mindfulness. Hence, the Null Hypothesis, “There is no relationship between demographic factors and burnout, anxiety and mindfulness of male athletes” is rejected.

In Indian culture, family is considered to be the greatest asset. Mindfulness, a positive aspect has a relationship with the family type. This shows the importance of the family systems which is being followed in India for several years. This can be because, the athletes when they receive some kind of scholarships from the government, they can support themselves and financial burden can be reduced when they are depended to their parents. The place from where the athletes come also play an important role in being mindful and attentive. The factor location is correlated with the variable mindfulness.

Thorn and Amorose, (2000) examined the relationship among athletes’ intrinsic motivation, gender, scholarships, and perceptions of the number of their teammates receiving scholarships, and perceptions of their coaches’ behaviour. Male and female college athletes (386) from variety of division I of sports completed the tests. Results revealed that scholarship athletes reported higher levels of intrinsic motivation than did the nonscholarship athletes, male athletes reported higher levels of intrinsic motivation and perceived coaching behaviour were related to athletes’ intrinsic motivation.

Table 13: Showing the Correlation between Burnout, Anxiety and Mindfulness in Female Athletes

		Burnout	Anxiety	mindfulness
Burnout	Pearson correlation	1	.451(**)	-.275(*)
	sig. (2-tailed)	.	.000	.017
	N	75	75	75
Anxiety	Pearson correlation	.451(**)	1	-.261(*)
	sig. (2-tailed)	.000	.	.024
	N	75	75	75
Mindfulness	Pearson correlation	-.275(*)	-.261(*)	1
	sig. (2-tailed)	.017	.024	.
	N	75	75	75

** correlation is significant at the 0.01 level (2-tailed).

* correlation is significant at the 0.05 level (2-tailed).

Table 13 indicates that there is a negative correlation between mindfulness and burnout; negative correlation between anxiety and mindfulness; positive correlation between burnout and anxiety in female athletes. Hence, “There is no relationship between burnout, anxiety and mindfulness in the female athletes is rejected”.

Table 14: Showing the Correlation of Demographic Factors with Burnout, Anxiety and Mindfulness in Female Athletes

		Tournaments					
		s participated	Marital Status	Scholarship	Burnout	Anxiety	Mindfulness
Tournaments Participated	Pearson correlation	1	-.099	.064	-.070	-.302(**)	.239(*)
	sig. (2-tailed)	.	.400	.585	.553	.008	.039
	N	75	75	75	75	75	75
Marital Status	Pearson correlation	-.099	1	-.136	-.009	-.097	-.230(*)
	sig. (2-tailed)	.400	.	.246	.940	.410	.047
	N	75	75	75	75	75	75
Scholarship	Pearson correlation	.064	-.136	1	.087	-.003	-.039
	sig. (2-tailed)	.585	.246	.	.459	.980	.740
	N	75	75	75	75	75	75
Burnout	Pearson correlation	-.070	-.009	.087	1	.451(**)	-.275(*)
	sig. (2-tailed)	.553	.940	.459	.	.000	.017
	N	75	75	75	75	75	75
Anxiety	Pearson correlation	-.302(**)	-.097	-.003	.451(**)	1	-.261(*)
	sig. (2-tailed)	.008	.410	.980	.000	.	.024
	N	75	75	75	75	75	75
Mindfulness	Pearson correlation	.239(*)	-.230(*)	-.039	-.275(*)	-.261(*)	1

correlation

sig. (2-tailed)

.039 .047 .740 .017 .024

N

75 75 75 75 75

75

** correlation is significant at the 0.01 level (2-tailed).

* correlation is significant at the 0.05 level (2-tailed).

It can be noted that in female athletes, number of tournaments attended and mindfulness are positively correlated; marital status and mindfulness are negatively correlated. Hence the Null Hypothesis, “There is no relationship between demographic factors and burnout, anxiety and mindfulness of female athletes” is rejected.

Experience in sports can be achieved only when the person attends more number of tournaments and not from the number years as other professions. The athletes get more confidence when they participate in more contests. It can be understood from the table that, anxiety is negatively correlated with the number of tournaments attended by the athletes. Tournaments participated is also correlated the mindfulness. Mindfulness is directly influenced by the marital status of the athletes. It is interesting to see that the female athletes have the negative correlation with the mindfulness and majority of the athletes are single. This shows that being single brings in some problems in the female athletes. Female athletes might be worried about acquiring masculine looks due to their athletic activities.

SUMMARY AND CONCLUSION

Summary and Conclusion

The study on, Burnout, Anxiety and Mindfulness in Athletes: A Gender Comparison was carried out with the following objectives:

- To assess the level of burnout of the sample, who are the selected athletes
- To assess the level of anxiety of the sample
- To assess the level of mindfulness of the sample
- To compare the level of burnout in male and female athletes
- To compare the level of anxiety in male and female athletes
- To compare the level of mindfulness in male and female athletes

The Research Proposal submitted by the researcher was subjected to perusal by the Institutional Ethical Committee and approval was granted (Approval No. AUW/IHEC-14-15/XMT-73) to conduct the study. From Sri Ramakrishna Mission Vidyalaya Maruthi College of Physical Education, Periyayakkannpalayam Coimbatore, Bharathiar University, Marudhamalai Road, Coimbatore and Avinashilingam Institute for Home Science and Higher Education for Women, T.V.S, Coimbatore, 150 athletes were selected as the sample of the study. Among them 75 were male athletes and 75 were female athletes. The study employed convenient sampling technique. A good rapport was built with the athletes and instructions were given regarding the questionnaires. The athletes expressed their consent to participate in the study by signing in the Adult Consent Form. Following that they completed the Burnout Questionnaire, Manifest Anxiety Inventory and Mindfulness Attention Awareness Scale.

Conclusion

- The sample consists of equal number (75%) of male and female athletes.
- Majority (72%) of male athletes is from the age group of 22 to 24 years and the majority (83%) of female athletes is from the age group of 18 to 21.
- More than half (55%) of male athletes are from the rural areas and more than half (55%) of the female athletes are from the urban locations.
- More than half (67%) of the male athletes and more than majority (97%) of female athletes had the educational qualification of B.P.Ed. and 98% of male and 96% of female athletes were single.
- More than half (56%) of the male athletes are from the joint families and more than half (65%) of the female athletes are from nuclear families.
- Half (52%) of male and more than half (69%) of female athletes received no scholarships.
- Nearly half (41%) of male and female (46%) athletes had attended tournaments representing their state.
- Forty seven percent of male athletes had attended up to 19 tournaments.
- Majority (83%) of the female athletes have attended up to 19 tournaments.
- Burnout, anxiety and mindfulness are correlated with each other in male athletes. Hence, the null hypothesis, “There is no relationship between burnout, anxiety and mindfulness in the male athletes” is rejected.
- Burnout, anxiety and mindfulness are correlated with each other in female athletes. Hence, the null hypothesis, “There is no relationship between burnout, anxiety and mindfulness in the female athletes” is rejected.
- There is no statistically significant difference in male and female burnout of the present study. Hence, the null hypothesis, “There is no gender difference in the level of burnout of the sample” is accepted.
- There is no statistically significant difference in male and female anxiety in the present study. Hence, the null hypothesis, “There is no gender difference in the level of anxiety of the sample” is accepted.

- There is no statistically significant difference in male and female mindfulness of the present study. Hence, the null hypothesis, “There is no gender difference in the level of mindfulness of the sample” is accepted.
- In male athletes, family type is positively correlated with the mindfulness; scholarship is negatively correlated with the burnout and anxiety; location is negatively correlated with mindfulness. Hence, the Null Hypothesis, “There is no relationship between demographic factors and burnout, anxiety and mindfulness of male athletes” is rejected.
- In female athletes, tournaments attended and mindfulness are positively correlated; marital status and mindfulness are negatively correlated. Hence the Null Hypothesis, “There is no relationship between demographic factors and burnout, anxiety and mindfulness of female athletes” is rejected.

Limitations

- A larger sample could not be taken for the study as it was difficult to obtain permission from the authorities of the institutions.
- The time available to do the Project was limited.
- Intervention was not given to the athletes to reduce their burnout and anxiety.
- Techniques to improve the mindfulness in athletes were not provided.

Recommendations

- Sports psychologist can be appointed in every Physical Education Departments.
- Athletes could be given awareness about burnout, anxiety and mindfulness.
- Stress Management and Mindfulness meditation Programmes could be conducted for the athletes.
- The present study can be carried out with intervention programs in future.

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ANNEXURES

Annexure 1

Adult Consent Form

Title of project: “Burnout, Anxiety and Mindfulness in Athletes: A gender comparison”.

Researchers: Ms.M.Sulfiya Banu, II M.Sc. Counselling Psychology student, Avinashilingam University for Women, Coimbatore.

Research Guide: Dr. Preetha Menon, Assistant Professor, Dept. of Psychology, Avinashilingam University for Women, Coimbatore. I have been asked to participate in a research study conducted by Ms.M.Sulfiya Banu (8098743121) and Dr. Preetha Menon (ph. 9894896882).

Introduction

In this consent form, I will learn about the proposed research and my rights, if I agree to participate in it. I will read this form carefully and, if I agree to be interviewed, I will sign this form.

Purpose

I understand that Ms.M.Sulfiya Banu, and Dr. Preetha Menon propose to study the “Burnout, Anxiety and Mindfulness in Athletes: A gender comparison”.

Duration and location of study

If I agree to undergo the interview, it will take place at my own college, along with other athletes and will take about 20 minutes.

Procedure

If I agree to be interviewed, it will be along with other athletes, by answering three questionnaires. I understand that my name will not be disclosed in any of the report written about this research.

Right to refuse and to withdraw

I understand that participation in this research is voluntary. I may agree for an interview or I may decline an interview. If I disagree for an interview, I may refuse to answer any question and I may end the interview at any time.

Offer to answer any question

If I have any questions about the study, I may call any of the listed researchers: Ms.M.Sulfiya Banu (8098743121). If I have any question about my rights as a participant, I may call the research guide Dr. Preetha Menon (Phone Number- 9894896882).

I agree to participate in this research.

Name_____ Date_____

Researcher's statement: I have explained the nature and purpose of this research. I agree to answer any question regarding the rights of the participant.

Name_____ Date _____

Annexure 2
Case Study Schedule

Name:

Age:

Gender: F/M

Qualification:

Marital status:

Location: Urban/Rural

Family: Joint/Nuclear

Number of Tournaments attended:

Level of participation: District/State/National/International player

Scholarship (mention if any):

Annexure 3

Burnout Questionnaire

Do you:

- ___ 1. Worry at night, have trouble falling asleep or staying asleep?
- ___ 2. Feel less competent/effective than before or work harder yet accomplish less?
- ___ 3. Consider yourself unappreciated or “used” on the job?
- ___ 4. Feel tired/fatigued rather than energetic even when you get enough sleep?
- ___ 5. Dread going to work or feel trapped in your job situation?
- ___ 6. Feel angry, irritated, annoyed, or disappointed in people around you?
- ___ 7. Suffer from physical complaints or frequent illness (headaches, stomach/back/neck aches, colds)?
- ___ 8. Feel overwhelmed?
- ___ 9. Think that sex seems like more trouble than it’s worth?
- ___ 10. See close friends and family less often?

Are you:

- ___ 11. More forgetful (about appointments, deadlines, personal possessions) or disassociated than usual?
- ___ 12. Always watching the clock?
- ___ 13. Avoiding conversation with co-workers or isolating from people in general?
- ___ 14. Rigidly applying rules without considering more creative solutions?
- ___ 15. Increasing your use of alcohol or drugs?
- ___ 16. Easily or automatically expressing negative attitudes especially to changes?
- ___ 17. Absent, out sick more often, or while at work?
- ___ 18. Unable to laugh at a joke about yourself or have difficulty finding joy?
- ___ 19. Experiencing interpersonal conflict with co-workers/family?
- ___ 20. Too busy to do ordinary things (making phone calls, reading, calling/contacting family or friends)?

Does your job:

- ___ 21. Seem meaningless or filled with too many repetitive situations?
- ___ 22. Pay too little?

- ___ 23. Lack access to a social-professional support group?
- ___ 24. Depend on capricious funding sources or not have enough funds to accomplish agency goals?
- ___ 25. Lack clear guidelines or require you to deal with rapid program changes?
- ___ 26. Entail so many different tasks that you feel fragmented?
- ___ 27. Demand coping with an angry public?
- ___ 28. Overload you with work, demand long shifts and frequent overtime or deny you breaks/self-monitored time-outs, lunch time, sick leave, or vacation?

Annexure 4

Manifest Anxiety Inventory

PART-I	YES	NO
<ol style="list-style-type: none"> 1. My muscles are tensed 2. I am short breath 3. My hands tremble 4. I feel tired 5. My mouth becomes dry 6. My hands go chill 7. I have poor appetite 8. I have digestive problems 9. My palms sweat 10. I have disturbed sleep 11. I get unpleasant sensations in my stomach 12. I get recurring dreams which trouble me 13. I have an urge to urinate frequently 		
PART-II		
<ol style="list-style-type: none"> 1. I worry a lot over small matters 2. I am scared without any reasons 3. I am not satisfied with myself 4. I am tensed 5. I have no interest in things which i used to like 6. I get butterflies in my stomach 7. I worry about my future 		
PART-III		
<ol style="list-style-type: none"> 1. I have difficulty in concentrating 2. I cannot take decisions 3. I feel I an going to fall ill 4. I am unable to relax 5. I feel confused 6. I forget things easily 7. I am unable to think clearly 		

8. I have distracted easily 9. I don't know how to react in certain situations 10. I am unable to finish things in time 11. I get unwanted repetitive thoughts		
PART-IV		
1. My speech is blocked 2. I act without thinking 3. I mess up whatever I do 4. I am unable to have complete rest 5. I can't sit in a place for more than 5 minutes 6. I am unable to do anything perfectly 7. I am very careless 8. I have a strained posture 9. I exhibit unwanted mannerisms (e.g. adjusting dress, shaking legs, biting nails etc.)		

Annexure 5

Mindfulness Attention Awareness Scale

I could be experiencing some emotion and not be conscious of it until some time later.	1	2	3	4	5	6
I break or spill things because of carelessness, not paying attention, or thinking of something else.	1	2	3	4	5	6
I find it difficult to stay focused on what's happening in the present.	1	2	3	4	5	6
I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.	1	2	3	4	5	6
I tend not to notice feelings of physical tension or discomfort until they really grab my attention.	1	2	3	4	5	6
I forget a person's name almost as soon as I've been told it for the first time.	1	2	3	4	5	6
It seems I am "running on automatic," without much awareness of what I'm doing.	1	2	3	4	5	6
I rush through activities without being really attentive to them.	1	2	3	4	5	6
I get so focused on the goal I want to achieve that I lose touch with what I'm doing right now to get there.	1	2	3	4	5	6
I do jobs or tasks automatically, without being aware of what I'm doing.	1	2	3	4	5	6
I find myself listening to someone with one ear, doing	1	2	3	4	5	6

something else at the same time.						
I drive places on 'automatic pilot' and then wonder why I went there.	1	2	3	4	5	6
I find myself preoccupied with the future or the past.	1	2	3	4	5	6
I find myself doing things without paying attention.	1	2	3	4	5	6
I snack without being aware that I'm eating.	1	2	3	4	5	6

Annexure 6

INSTITUTIONAL HUMAN ETHICS COMMITTEE



Avinashilingam

Institute for Home Science and Higher Education for Women

University

(Estd. u/s 3 of UGC Act 1956)

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Mrs. S. Radha Devi
Mrs. Judith Justin

9th March 2015

To
Ms. Sulfiya Banu, M.
Department of Psychology
Avinashilingam Institute for Home Science and
Higher Education for Women
Coimbatore – 641 043

Dear Madam,

Ref : Your proposal No. IHEC/14-15/PSY/04 entitled "Burnout, anxiety and mindfulness in athletes: A gender comparison" submitted for approval of the IHEC on 3rd January 2015.

The Institutional Human Ethics Committee of our University hereby grants approval to your research proposal No. IHEC/14-15/PSY/04 entitled "Burnout, anxiety and mindfulness in athletes: A gender comparison" submitted by you. The Approval number for the same is AUW/IHEC-14-15/XMT-73.

We wish you all the best in your research endeavours.

Regards,

Dr.P.R.Padma
Member Secretary

