



**GENDER DIFFERENCES IN SPORTS PERFORMANCE AND ITS RELATED
VARIABLES AMONG YOUNG ATHLETES**

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DECLARATION

I hereby affirm that my research work titled “Gender differences in sports performance and its related variables among young athletes” presented in this research is my own under the guidance of Dr. Rohini Thapar, Associate Professor of Department of Psychology, D.A.V. College, Sector 10, Chandigarh. It doesn’t include any work of degree/diploma that has been awarded by any other university. Also, I declare that I have acknowledged and credited everyone who helped me and referred to research workers wherever their work has been present in my research. I have adhered to all principles of academic honesty.

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ABSTRACT

The present study was done with an intent to study the gender differences in sports performance and its correlates among young adult athletes. The current study included a sample of 60 young adult athletes, with half being males and other half being females. They were from different areas in the India, training in Tau Devi Lal Stadium, Panchkula, Haryana. The sample was administered Sports Performance Perception Scale (Adam, Ferguson, Mosewich & Kowalski, 2023), Sports Motivation Scale-28 (Brière, Vallerand, Blais, & Pelletier, 1995), Athletic Self Efficacy Scale (Koçak, 2020), Sports Anxiety Scale (Smith, Smoll, Cumming and Grossbard, 2006) and Athletic Coping Skills Inventory-28 (Smith, Schutz, Smoll, & Ptacek, 1995). The results of the study revealed that Preparedness and Strategy came out to be an important variable defining sports performance in both genders. It was found that females depended more on intrinsic motivation as compared to males in determining sports performance. In females' intrinsic motivation increased with increasing anxiety and worrying about winning. Females reacted more positively towards increasing anxiety while males did not. Females were more focused and knew where to work on to improve their outcome while males on the other had a lot of ways by which they improved their performance and weren't restricting themselves to just a few methods.

The present study found that there was a significant difference between both genders in Self-Efficacy-Psychological Efficacy and Intrinsic Motivation to Know with females being higher on both. It was seen that Confidence and Achievement Motivation came out to be a major predictor for males in determining Sports performance. Self-efficacy and Intrinsic Motivation to Know came out to be significant predictors in females. These results were backed by Bandura's (1977, 1997) self-efficacy hypothesis. Lastly, both genders used all kinds of coping skills to improve performance. The study aimed to fill the gap in the research and can also be significant to athletes who want to improve their performance through therapeutic techniques.

CHAPTER - 1

INTRODUCTION

In today's psychology, the discipline of sports psychology is constantly expanding (Lavallee et al., 2004). A growing number of athletes are increasingly aware that improving performance may be achieved by much more than just eating well, working hard, and exercising frequently. Sportsmen and women increasingly place more emphasis on other elements that can support players in achieving their peak performance. Sport psychologists, seek to comprehend psychological theories and methods that optimize performance. Greek literature describes the value of sports psychology and its potential benefits as early as 1930 and 1978, respectively. Sports psychology has a long history dating back to those times (Gardiner, 1930; Sweet 1978).

Sport psychology is the scientific study of persons in sport and exercise. According to Danish (2001), there are two main aims of sport psychology: (a) learning how the psychological factors affect a person's sports performance, and (b) understanding how involvement in games affects people's psychological development, health, and wellbeing. Both goals are considered, even though the first goal has historically received more attention. This decision is justified by the fact that, out of the millions of people who play sports, particularly young people, only few will turn such activities straight into a career. For the rest, maturing entails honing their individuality even more, discovering new interests and abilities, and applying some of the lessons gained from participating in sports to their adult endeavors. Therefore, sport psychology encompasses the use of sport to enhance competence and advance human development throughout life, and individuals ought to be equally concerned with life development as they are with their athletic achievement.

Additionally, according to Danish (2001), as sport psychology grew in the twentieth century, two kinds of sport psychologists were seen blooming. Clinical sport psychologists are trained in applied fields of psychology such as abnormal, counselling, personality psychology, etc. and are usually licensed psychologists. Their training in sport sciences is generally lower. The other group consists of non-licensed educational sport psychologists. They have expertise and experience in kinesiology, physical education, workout, exercise and sport science, and the psychology of human movement, particularly in relation to the context of sport. They frequently possess further expertise in counselling techniques. They consider themselves to be "mental coaches" or researchers. These two groups were at odds over who was more qualified

to offer services that enhance athletic performance. The services are mostly intended for elite and professional athletes, many of whom find little use for them or occasionally turn to untrained parties for assistance. With the establishment of the Association for the Advancement of Applied Sport Psychology, which has about 1,000 members who are trained in both the sport sciences and traditional areas of psychology, there has been a recent thawing of tensions between them (Danish 2001).

The late 19th century saw the beginning of sport psychology research, which was advanced by the contributions of notable academics and psychologists like Norman Triplett. In 1898, he discovered that because of the social and competitive nature of groups, cyclists who rode with others fared better (Backer & Joyce, 2008).

Before psychologist Coleman Griffith established the first American sport psychology laboratory at the University of Illinois in 1925, the field stumbled along. The lab was shut down in 1932 due to a lack of funding and lack of interest. Griffith continued to advise professional clubs like the Chicago Cubs even after that (Backer & Joyce, 2008).

Three people at Stanford University were doing their own psychological research in the meantime. College football coach Glenn "Pop" Warner, psychology graduate student B.C. Graves, and Professor Walter Miles, PhD collaborated on an experiment. Miles built his own testing apparatus, a robust chronoscope for timing football players' reactions (Backer & Joyce, 2008).

In hindsight, Miles and Graves were the leading lights of a movement that is currently pervasive in sports: utilizing scientific methods and psychological understanding to gain every advantage over rivals. Eighty years ago, Miles foresaw the significance of the illusive "competitive edge" when he observed, "Man has become more interested in isolating individual differences and in analyzing the various performances" (Backer & Joyce, 2008).

Sport psychology is now a significant applied field in both amateur and professional ranks; therefore, the search goes on. Psychologists of days frequently concentrate on the psychological elements of sports since, as baseball great Yogi Berra once observed, "Half of this game is 90 percent mental" (Backer & Joyce, 2008).

Definitions

Although numerous definitions of sport psychology had been proposed, no comprehensive definition that is widely accepted has been established. The European Federation of Sport Psychology (1995) defines sport psychology “as the study of the psychological underpinnings, mechanisms, and outcomes of the psychological control of one or more subjects engaging in sport-related activities”. According to the definition, sport psychology seeks to enhance athletes' performance by assisting them in improving their ability to focus, manage the pressure of competition, and train more successfully.

Sport psychology also attempts to know the impact of long-term sport participation on development of personal characteristics of athletes in the setting up of organized competitive sport. Physical activity is also used in other settings such as an organized physical education center, leisure, and rehabilitation (healing).

The dual character of sport psychology is another crucial aspect to consider. While it is a branch of psychology, the body of knowledge in sports psychology is rooted in the sport sciences and their emphasis on comprehending human behavior in this specific setting. As a result, in applications, these two knowledge sources aid in gaining a deeper understanding of the subject, the surroundings, and the essential elements of the sport (Hanin & Stambulova, 2004).

Athletes and theorists in human performance agree on the influence of psychological factors in the performance of motor skills, particularly at a high level of competition. As a result, an abundance of research has been dedicated to finding out not only how to prepare athletes mentally for high-pressure situations, but also what psychological factors are specifically determinants of performance. The connection between research and application is of importance because the great business of sports is at its peak and athletes from early childhood to advanced age are seeking ways to improve their game not only physically but mentally (Academy, 2013b).

Hence, the present research studies the complex links between self-efficacy, motivation, coping mechanisms, sports anxiety, and sports performance are examined in this

dissertation, with an emphasis on identifying any potential gender disparities in these relationships.

Investigating cognitive and affective components has become more popular as scientists try to understand the psychological foundations of athletic success. The concept of self-efficacy, which describes a person's confidence in their capacity to carry out a certain task successfully, has become essential to comprehending sports performance. Extra elements include motivation, coping mechanisms, and sports anxiety, each of which adds in a different way to the mental terrain of the athlete.

SPORTS PERFORMANCE

Sport participation is measured in terms of sport performance. It is a sophisticated fusion of training methods, psychological aspects, and biomechanical function. In the context of sports, performance is commonly understood to signify the pursuit of perfection, with athletes measuring their progress toward excellence in their results. Athletes interested in simple participation, for broader goals like fitness or weight control, are typically recreational athletes who avoid setting specific performance goals. It is widely understood in the sports world that people who are interested in performance tend to be elite or competitive athletes (World of Sports Science, 2024).

In practically all sports, it is easy to determine one's level of performance. The outcome of an activity is quantifiable if it can be measured and precisely specified, like in a race, jump, or throwing an object. The pursuit of performance enhancement in these sports is what motivates the examination of each performance component separately. When a coach and athlete can identify specific areas to work on throughout training, the product is probably going to be better (World of Sports Science, 2024).

According to World of Sports Science (2024), sport performance has four different aspects, each of which has several sub-divisions, some of which are rooted in physical certainty, others of which tend to be highly variable. The four areas include neuromuscular factors, the relationship between the nervous system and its dimensions and the musculoskeletal system; mental control and psychological factors; environmental conditions; and coaching and external support for the athlete.

Beyond just physical ability, a variety of psychological aspects also play a role in this complex arena. It becomes essential to comprehend how psychological factors interact when athletes work to reach their full potential.

SPORTS MOTIVATION

One could characterize motivation as a force or urge that enables someone to stick with an activity until the desired outcome is reached. It is crucial to the field of sports psychology. Many settings, including workplaces, gyms, playing fields, sports arenas, and classrooms, overuse the phrase "motivation" (Ford, 1992; Roberts, 2012; Roberts, Treasure & Conroy, 2007). Stars, politicians, and businesspeople who deliver "Motivational Talks" utilize a rather ambiguous word, although their interpretations vary. Motivation is defined variously, even among scholars.

In contemporary research the solution found was to discard the term and use other terms like self-concept, self-regulation which affect motivational processes (Roberts, Nerstad & Lemyre, 2018). All the theorists agreed that its not an entity but a process (Maehr, & Brskamp, 1986).

According to Maehr and Zusho (2009), motivation is the process that influences the initiation, direction, magnitude, perseverance, continuation, and quality of goal- directed behaviour.

On the other hand, for a more extensive treatment, Ford (1992), proposed that motivation theories can be arranged on a continuum ranging from deterministic to mechanistic to organismic to cognitive ones.

Weiner (1972) signaled the beginning of the cognitive revolution. He said that individuals who were high or low in motivation were likely to think differently about why success and failure occur. Harwood, Spray, and Keegan (2008) continued to state that achievement goal theory, in particular, has "triggered a penetrating wave of research into the interpersonal and environmental influences on athlete behaviour in achievement settings" (p. 158). The most popular contemporary theories have the base of organismic (Self-Determination theory, Deci & Ryan, 1985; Hierarchical goal model, Elliot, 1999) or social cognitive criteria (Achievement Goal Theory, Nicholls, 1989).

The most commonly brought up theories are Achievement Goal Theory (Dweck, 2006; Nicholls, 1989) and Self-Determination Theory (Deci & Ryan, 1985). These are the most used theories in the sport and performance arena.

According to the social cognitive theory known as achievement goals theory (AGT), an individual is an active, rational, goal-directed organism, and as such, achievement goals influence achievement beliefs, decision-making, and behaviour in situations related to achievement. These objectives are what these strive for achievement is all about. According to Roberts, Nerstad, and Lemyre (2018), the integrated pattern of beliefs that drives approach and avoidance methods, the varying degrees of involvement, and the varying reactions to accomplishment outcomes are all determined by the achievement goal. An activity's purpose or meaning is determined by its goals (Kaplan & Maehr, 2007; Maehr & Nicholls, 1980).

On the other hand, according to the Self-Determination Theory (Deci and Ryan, 1985), the central element are the psychological needs. Basic Psychological Needs Theory (BPNT; Deci & Ryan, 2000) is one of five mini-theories that constitute the meta-theory of Self-Determination Theory. Within BPNT, it was proposed that individuals have innate and fundamental psychological needs that they want to satisfy in order to get psychological adjustment, internalization, well-being, and personal growth. However, a dialectic occurs between the active organism and the social-contextual conditions that constitute the basis for the theory's predictions about behaviour, experience, and development processes (Deci and Ryan, 2000).

Three basic psychological needs have been identified, namely, the need for autonomy, the need for competence, and the need for relatedness. (Roberts et al., 2018).

Two primary categories of motivation are Intrinsic and Extrinsic motivation. Intrinsic motivation involves internal like deriving enjoyment from the activity itself. For eg- personal satisfaction. While on the other hand extrinsic motivation depends on some external rewards which can be tangible (money) or non- tangible (praise).

Motivation needs to be managed and channeled in the right direction to elicit the best performance outcomes. "Motivating training environments get the most out of their athletes, maximize professionalism and long-term athlete growth, channel a team and/or individual's

motivations towards a common goal (unity), and maximize organizational connection,” outlined Banfield, Head of Performance and Medical at Sydney Kings Basketball (Ambler, 2024).

Langan, Blake, and Lonsdale (2013) did meta- analysis and presented a systematic review of the effectiveness of interpersonal coaching in sport. This meta-analysis examined the impact of interpersonal coaching on sports performance. The study provided insights into how the coach-athlete relationship, including motivation strategies, influenced performance outcomes. The results showed that all these variables were related to each other and affect performance in one way or the other.

There are some key factors that one needs to keep in mind while looking at athletic motivation,

As Ambler (2024), proposed, they can be goal setting, player education, expectation and values, leadership, legacy, fun, physical environment, player selection, investment and coaching strategies. All these factors affect an athlete’s motivation strongly which further affects performance. Hence motivation plays a key role in determining performance of athletes.

SELF-EFFICACY

Perceptions of personal agency's mediating influence on behavior is the main focus of self-efficacy theory, according to Katula (1996). It is described as a person's level of conviction that they can carry out a specific behavior and get the desired result. The belief in one's capacity to carry out certain actions in order to accomplish a specific goal is known as self-efficacy. But self-efficacy is not the only factor that influences behavior. According to Bandura (1986) for self-efficacy to have an impact on performance, one must also have the necessary abilities and motivations to complete a task.

Coaches can assist athletes in realizing their maximum athletic potential if they can develop their sense of self-efficacy. Therefore, the need is to understand how can one create practice programs and instruct in ways that increase athletes’ sense of self efficacy. Fortunately, self-efficacy can be found in a variety of places, and the examples below show how to apply them to various contexts.

Bandura's idea of self-efficacy is one hypothesis that has drawn a lot of attention in the literature on sports psychology (Bandura, 1977, 1986). The main focus of self-efficacy theory is on how beliefs about one's own agency influence behavior through mediation. Self-efficacy is the degree to which a person believes that they can carry out a particular behavior and get the desired result (Katula, 1996). Four types of information are used to build perceptions of self-efficacy: verbal persuasion, physiological conditions, vicarious experience, and performance accomplishments (Bandura, 1977).

- ***Performance Accomplishments***: Creating a sense of mastery in athletes to affect how they view their own skills. For example, practising mechanics by repeatedly hitting the ball off the tee creates a sensation of expertise (Head, 2019).
- ***Vicarious Experience***, or modelling, which involves demonstrating to an athlete how to complete a task precisely as you want it done. When someone sees someone else with a similar skill level complete a task, it gives them confidence that they can too do it. For example: When shooting a basketball, one may demonstrate to the players the proper grip, where to place one's elbow and eyes after the shot, and how to follow through with one's hand (Head, 2019).
- ***Verbal Persuasion***: providing motivation and encouraging speech that is upbeat. For example, while athletes are working on a task, watch out that those who aren't involved right now are supporting, motivating, and hyping each other up (Head, 2019).
- ***Emotional Arousal***: Using encouraging words and genuine concern to alter a player's emotional state. For example, making a joke or playing a little practical joke on an athlete while they're upset or depressed might drastically alter their mood (Head, 2019).
- ***Physiological State***: managing athletes' stress and anxiety levels to improve performance. Using breathing exercises can help with anxiety. It has been demonstrated that box breathing affects anxiety and lowers stress. For instance, for four counts, the athlete breathes in, holds for four counts, exhales for four counts, and holds for four counts. Moreover, positive self-talk helps with physiological regulation. The physiological condition is also made more relaxed by tensing and relaxing muscles (Head, 2019).

- *Imaginal experiences*, such as visualizing oneself performing well. To develop the conviction that they can and will get a hit, a baseball player can, for example, picture themselves getting a hit off an opposing pitcher before to an at-bat (Head, 2019).

According to Bandura (1977, 1986), one should assess the degree, strength, and generalizability of one's own beliefs to measure self-efficacy microanalytically. The number of tasks that a person can accomplish, or the predicted performance attainment are indicators of their level of self-efficacy. For example, a gymnast's floor routine requires the performer to learn multiple sub-skills. These subskills serve as a measure of self-efficacy. One's strength of self-efficacy is the degree to which they believe they can perform at different levels. Generality is the number of functional domains in which people see their own efficacy.

Further, numerous studies have looked into the connection between performance and self-efficacy. Weinberg, Gould, and Jackson (1979), conducted a study to examine the impact of having participants observe a confederate, do a muscular leg endurance activity before they were scheduled to participate in the task themselves. The participants were informed that their objective was to complete the assignment for a longer amount of time in order to outperform the confederate. Their "competitor" was described as a varsity track athlete who either did well on the task and claimed to have a leg injury or did poorly and claimed to have a leg ailment. Participants' self-efficacy was induced in two ways: first, by the "competitor's" injury, they felt more confident that they could outperform the confederate; second, by the "competitor's" admission that they were varsity track athletes, they felt less confident that they could compete in this scenario. Prior to performance, participants who faced off against the injured confederate had higher levels of self-efficacy, and they also completed the task for a longer period of time.

Moreover, Bandura (1977), also predicted that in the face of failure, an aversive condition, high-efficacy respondents showed greater perseverance while low-efficacy subjects showed less persistence. By modifying the aforementioned experiment, Weinberg, Yukelson, and Jackson (1980) attempted to further quantify the effect of private and public efficacy expectations on competitive performance. To alter the individuals' feeling of self-efficacy, they were given false feedback and made to perform an isokinetic machine task against a confederate who was either on the track team or had strained knee ligaments. Because of this,

a person with weak ligaments and a knee injury faced competition from the other participants in the condition with high manipulated self-efficacy. This subject also demonstrated inferior objective performance on an injury-related activity. In a related leg-strength test, the high school athlete outperformed the participants with poor self-efficacy. Furthermore, participants were assigned to either a private or public setting. In response, the subjects were invited to provide their thoughts and tactics regarding the task and competition. While participants in the public condition were required to give their replies aloud, those in the private condition were only required to write their answers on a questionnaire. Furthermore, subjects competed against each other back-to-back. The findings confirmed self-efficacy predictions and extended the findings of Weinberg et al. (1979), to a back-to-back scenario. High-efficacy respondents extended their legs substantially longer than low-efficacy subjects. Additionally, the researchers discovered that in both high- and low-efficacy scenarios, face-to-face competition yielded noticeably higher performance than back-to-back competition.

The aforementioned techniques were combined by Weinberg, Gould, Yukelson, and Jackson (1981) to investigate the impact of pre-existing and altered self-efficacy on a competitive muscular endurance challenge. The findings showed that performance changed in response to changes in efficacy expectations, with participants in the high pre-existing and manipulated self-efficacy groups extending their legs noticeably longer than those in the low pre-existing and manipulated self-efficacy groups. Sex differences were found in all 3 studies (Weinberg et al. 1979, 1980, 1981).

Thus, we may say that self-efficacy is the belief in one's ability to complete a task and that it affects the selection of activities, endeavor, tenacity, and success. Individuals bring different amounts of self-efficacy to an activity, depending on their personal traits, social support, and past experiences. They get knowledge about their performance as they complete assignments. Their self-efficacy for ongoing learning and performance is influenced by this information. A study conducted by Schunk (1995), is discussed, wherein self-efficacy was impacted by goal setting, modelling, and feedback. Findings indicate that self-efficacy has a significant role in predicting motivation and performance, and research examining causal models supports this finding.

On the other hand, Katula (2019) proposed that future research is still needed to determine the influence of such factors as the subjects' experience with the performance task, the type of task involved, and the temporal spacing of performance trials.

SPORTS ANXIETY

Anxiety, a common emotional state experienced by athletes at all performance levels, is defined as an unpleasant psychological condition that is induced by perceived stress connected to task performance under pressure (Cheng, Hardy & Markland, 2009). Anxiety typically consists of somatic elements like the degree of physical activation as well as cognitive elements like troubling thoughts and fears. Anxiety can manifest as a persistent personality characteristic called trait anxiety or as a fleeting, situation specific, and adaptive emotion called state anxiety (Weinberg & Gould, 2015). In the context of sports, anxiety is commonly perceived as a typical response to circumstances in which an athlete's skills are evaluated (Smith & Smoll, 1990).

Weinberg and Gould (2015) state that a variety of physiological (such as perspiration, elevated heart rate), behavioral (such as biting fingernails, fidgeting), and/or cognitive (such as negative thoughts, inattention) signs and symptoms are typically associated with anxiety. Patel and Omar (2010) conducted a review that found that various terms have been used to describe anxiety related to sports, including competitive state anxiety, competitive trait anxiety, somatic anxiety, cognitive anxiety, behavioral anxiety, performance anxiety, facilitative anxiety, debilitating anxiety, competition anxiety, and pre- and post-competition anxiety.

Many theories attempted to explain sports anxiety and how it impacts players' performance. According to Yerkes and Dodson's (1908), inverted U theory, low arousal or anxiety results in poor performance, whereas higher arousal or anxiety can help performance up to an optimal level; beyond this, however, more arousal or anxiety causes performance to drop.

In Reversal Theory by Apter (1982), it says that the ways in which arousal/anxiety affects performance, depends on the individual's own interpretation of their arousal/anxiety levels. Another theory called Drive Reduction Theory by Hull (1943), tries to explain sports related anxiety. This view holds that relationship between situation specific state anxiety and

performance is linear; higher anxiety leads to improved performance. According to Smith & Smoll (1990), the Conceptual Framework for Sports Performance According to anxiety, arousal and anxiety can impact a person's stress response during a competition, which can then have an impact on performance through a variety of behavioural, physiological, and/or cognitive reactions. According to the multi-dimensional anxiety theory, somatic state anxiety has an inverted U-shaped relationship with performance, while cognitive state anxiety has a negative relationship with it (Marten, Vealey & Burton, 1990). Catastrophe Theory says that somatic anxiety is related to performance in an inverted-U fashion, but it is only valid when the individual has low cognitive state anxiety (Hardy & Parfitt 1991). Moreover, the Individual Zones of Optimal Functioning Theory maintains that high achieving athletes have an ideal range of arousal/anxiety in which they may operate at their best. Their performance will suffer if their level of anxiety or arousal is out of range—too high or too low (Hanin, 1997).

These theoretical relationships associated with sport-related performance anxiety although have been among the most talked about areas within sport psychology (Woodman, 2001) but empirical results appear to not relate with each other or agree with each other. (Cheng, Hardy & Markland, 2009) However, when examining the theoretical concepts and empirical evidence (Craft, Magyar, Becker, & Feltz, 2003; Jokela & Hanin, 1999; Patel et al., 2010) as a collective whole, few key tenets remain constant and are generally agreed upon: 1) sport-related anxiety has an effect on performance; 2) depending on the individual and the situation, performance can either improve or decline; 3) performance is typically a result of individual's cognitive, behavioral, and physiological responses to the potentially stressing sporting situation.

In the realm of sports, athletes and their coaches believe that one of the most significant elements affecting their players' success is their competitive feelings, and performance anxiety. These feelings continue to be a subject of discussion since they still provide many unanswered questions. While it is widely accepted that pleasant emotions have a favorable impact on achievement, there is less agreement regarding the relationship between negative emotions, specifically, competitive anxiety and performance. Some people believe that worry lowers an athlete's performance, they see a nervous athlete as weak or vulnerable. Some see worry as a motivator and cite athletes who excel only when faced with competition pressure and the

resulting anxiousness as examples. According to Palazzolo (2020) there is currently no single model for the relationship between anxiety (or emotions) and performance on which everybody agrees, in spite of the fact that the scientific community has been striving for some time to better understand the links between them.

Studies attempting to confirm these connections have yielded contradictory findings that are extremely challenging to interpret because the variables being measured, performance, anxiety, and emotional states, and the study design, participant characteristics and the significance of the sporting event, are frequently at odds.

COPING SKILLS

Athletes from all levels and sports frequently have to deal with psychological strain and negative feelings in addition to physical exhaustion during competitions (Theodosiou, Mavvidis & Tsigilis, 2018). The ability of athletes to cope is a crucial factor in determining their performance; as such, athletes' personal and professional life can be directly impacted by the development, teaching, and training of these coping abilities. Performing athletes may experience mental health issues that are tied to their individual skills and performance but also intersect with issues in daily life (Cosma, Nanu, Chiracu, Stepan, Cosma & Paunescu, 2020).

Athletes may evaluate a wide range of potential stressors when they compete in sports, such as discomfort, anxiety, low self-esteem, psychological demands, stress from coaches, and the demands of participating in sports (Dale, 2000; Gould, Eklund, & Jackson, 1993; Holt & Hogg, 2002; Nicholls, Holt, & Polman, 2005). Numerous studies have examined performance athletes' coping mechanisms. Therefore, it has been noted that coping mechanisms are linked to a variety of mental factors, including performance (Mahoney, 1989) and accident susceptibility (Hanson, McCullagh, & Tonymon, 1992). Coping skills are also crucial when designing athlete-specific personal development programs that attempt to improve athletes' motivation, engagement, resilience to setbacks, and, indirectly, their ability to perform well in sports and maintain a healthy balance between their personal and professional life. Because of the nature of their work, athletes deal with a lot of difficult situations. They may experience pain, fear, insecurity, fear of failing, and fear of the coach during competitions. They may feel excruciating pain, tiredness, or uncertainty while they are training. One major element

contributing to failure and declining performance is their incapacity to manage these pressures (Lazarus, 2000). Thus, it is well accepted in the literature on sports psychology that in order for athletes to manage the challenges they encounter, they need to acquire and employ adaptive coping mechanisms. Lazarus (2000), defined coping as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (p.141). Athletes have a wide range of coping mechanisms for handling difficult circumstances.

According to Crocker, Kowalski, and Graham (1998), problem- or emotion-focused methods are the most often employed ones. While emotion-focused coping techniques target the situation's emotional suffering, problem-focused coping techniques try to change the stressful circumstances (Lazarus & Folkman, 1984).

According to Krohne (1993), athletes most commonly employ avoidance and confrontation as methods. There are two types of avoidance strategies: psychological avoidance (cognitive problem solving) and behavioral avoidance (removal from the circumstance).

According to Roth and Cohen (1986), confronting techniques involve going straight after the source of stress and making an effort to eliminate or minimize it by actions, increased effort, or preparation. Reevaluating the circumstance in order to downplay its significance or severity is known as appraisal-focused coping (Cox & Ferguson, 1991).

Problem-focused coping strategies in turn are linked to a task-orientation, while emotion-focused coping strategies are reflective of a person-orientation (Parker and Endler, 1992). According to them "person-orientation refers to strategies that may include emotional responses, self-preoccupation, and fantasizing reactions", while "task-orientation refers to strategies used to solve a problem, reconceptualize it (cognitively), or minimize its effects" (p. 325). Parker and Endler (1992) also reported that numerous coping models identified avoidance-oriented coping as a third fundamental feature. This type of coping involves both task-oriented and person-oriented methods. Person-oriented avoidance manifests as social diversion, whereas task-oriented avoidance is understood as distraction. By engaging in alternative activities (distraction, such as watching TV) or making social diversionary

efforts, one can avoid a stressful circumstance. Task-oriented coping involves the individual taking on the difficult task head-on. When someone engages in distraction coping, they are replacing their current activity with one of their choosing (Parker and Endler, 1992).

Conversely, social diversion is characterized as being “person-oriented” as the person attempts to “lose himself or herself” by interacting with other people instead of taking on the demanding situational task.

There are different tools that have been used to measure coping skills in athletes. Professional baseball players are an elite athlete population, and Smith and Christensen (1995) investigated the use of the Athletic Coping Skills Inventory, as a performance prediction tool in this community. The Houston Astros organization's 104 minor league baseball players—47 pitchers and 57 position players—participated in the study. During spring training, participants completed the ACSI; position players' batting averages (BA) and pitchers' earned run averages (ERA) served as performance metrics. While ERA for pitchers associated significantly with both Peaking Under pressure and Confidence and Achievement Motivation ratings, only Confidence and Achievement Motivation was a significant predictor of BA for position players. Reduced ERAs were associated with higher Confidence and Achievement Motivation and Peaking Under Pressure ratings.

The most strongly represented coping strategies in a study that sought to determine the relationships between athletes' coping mechanisms and their sports performance were Freedom from Worry and Coachability, while peaking under pressure and overcoming adversity were the least frequently used coping mechanisms. In a study authored by Cosma et al. (2020), men were found to be better than women in setting objectives, coming up with creative solutions to complete tasks, and being psychologically ready for any eventuality that might arise. Men were reportedly more driven to handle stressful situations and have greater self-confidence in their talents than women did. There were notable variations between the sexes in terms of goal setting, mental preparation, confidence, and determination to achieve.

NEED OF THE STUDY

The main goal of this study will be to find out how much motivation, self-efficacy, coping mechanisms and sports anxiety all worked together to influence sports performance and whether gender played a relevant role in these interactions. Acknowledging potential gender-specific concerns, this study aims to maximize mental readiness, resilience, and motivation for athletes by recognizing the complex dynamics at play and developing targeted therapies accordingly.

By combining and analyzing the effects of motivation, self-efficacy, coping mechanisms and sports anxiety on the overall performance of Indian athletes in sports, this dissertation will fill a significant vacuum in the body of literature. Moreover, the study intends to reveal subtle variations in how these psychological elements materialize and impact performance among male and female athletes by integrating a gender-specific lens. Enhancing the effectiveness of performance enhancement programs, these insights will have practical consequences for coaches, sports psychologists, and athletes themselves, in addition to their academic value.

Including sports performance, motivation, self-efficacy, coping skills and anxiety as variables in the present research offers a comprehensive understanding of the factors that contribute to athletic success and well-being. Here's the rationale for each:

- Sports performance is the primary outcome variable in many studies related to athletics. It serves as a measurable indicator of an athlete's skill level, competence, and effectiveness in their chosen sport. By examining sports performance, researchers will assess the impact of various factors on an athlete's ability to achieve desired outcomes, such as winning competitions, improving personal records, or enhancing team dynamics.
- Anxiety is a common psychological phenomenon experienced by athletes before, during, and after competitions. It can manifest as pre-game jitters, performance anxiety, or fear of failure. Investigating anxiety levels in athletes can provide insights into how psychological factors influence athletic performance. High levels of anxiety may impair performance by disrupting concentration, increasing muscle tension, and

reducing confidence. Conversely, effective coping strategies for managing anxiety can enhance performance and overall well-being.

- Coping skills refer to the cognitive and behavioural strategies individuals use to manage stressors and adapt to challenging situations. In the context of athletics, athletes encounter various stressors, such as competition pressure, injuries, and performance setbacks. Effective coping skills enable athletes to navigate these challenges effectively, maintain focus, and perform at their best. Understanding the types of coping skills athletes employ and their effectiveness can inform interventions aimed at enhancing resilience and performance optimization.
- Self-efficacy refers to an individual's belief in their ability to successfully perform specific tasks and attain desired outcomes. In sports psychology, self-efficacy plays a crucial role in shaping athletes' motivation, effort, and persistence. Athletes with high levels of self-efficacy are more likely to set challenging goals, exert greater effort, and persevere in the face of obstacles. Research on self-efficacy in sports will elucidate how athletes' beliefs about their capabilities influence their performance, resilience, and overall psychological well-being.

By examining the interplay between sports performance, motivation, self-efficacy, coping skills and anxiety, this research will contribute valuable insights to the fields of sports psychology and athletic performance enhancement. Additionally, findings from the present study may inform the development of interventions and training programs designed to optimize athletes' psychological functioning and performance outcomes.

Moreover, the aim of the study is to examine the gender differences in sports performance and its correlates among young adult athletes. Including 60 athletes, from which 30 are male and 30 females, makes the objectives easier to study. All the athletes represent different areas in India but training in Tau Devi Lal stadium, Panchkula, Haryana. Factors such as effect size, anticipated attrition rates, and available resources help in determining the sample size of 60 athletes.

The present study includes both genders equally, all the athletes are from individual sports and have at-least 1 year of experience in training and competition, playing sprint, race walking,

athletics, hurdles, track and field. They meet the necessary qualifications and characteristics relevant for the present research.

Only those athletes who are willing to participate in the study were selected, to protect their rights and well-being. The sample is selected to promote diversity, equity, and inclusion within the sample to minimize biases and enhance the validity of the findings.

CHAPTER – 2

REVIEW OF LITERATURE

In the realm of sports psychology, understanding the intricate dynamics between psychological factors and athletic performance has garnered significant attention. This comprehensive literature review explores the effects of motivation, self-efficacy, coping skills and sports anxiety, on sports performance. By synthesizing existing research, this review aims to elucidate the individual and collective influences of these psychological constructs, providing valuable insights for athletes, coaches, and practitioners in optimizing performance outcome

SPORTS PERFORMANCE AND MOTIVATION

Motivation serves as a driving force behind athletes' engagement, persistence, and goal-directed behaviour in sports contexts. Here are some studies done to better explain the concept.

Pedersen (2002) conducted a study with 83 students—36 males and 47 women. Ten intrinsic and extrinsic elements related to motivation in sports were identified. Rather than using things from the experimenter, the variables were created using items that were collected from the participants. This was done to prevent the experimenter's potential prejudices about the potential final dimensions from influencing the results. Social reinforcement, fringe benefits, fame and fortune, outside forces, proving oneself, social benefits, mental enrichment, self-expression, sense of accomplishment, and self enhancement were the motivational variables that were discovered. To describe each factor's relative position on an intrinsic-extrinsic dimension, a term was used. The variables are given in increasing order of intrinsic motivation. i.e., the intrinsic range was rated for the final six elements, whereas the extrinsic range was rated for the first four. Subsequently, the individuals assessed the degree to which every single element influenced their choice to engage in sports. Both sexes used the motivational elements in the same way, with the exception that males used the Fringe Benefits component more frequently. Overall, a factor's likelihood of being judged as influencing actual sport participation increased with the degree of intrinsic motivation for sports.

Another study examined the impact of motivational aspects, on adult recreational sport participants' intention to continue participating in sports as well as their degree of sport involvement. The findings demonstrated that more motivation causes higher levels of

engagement. Additionally, amotivation was observed to significantly decline from the least to the most frequent participant groups, but intrinsic and extrinsic motivation showed the opposite pattern. Lastly, it was observed that amotivation was adversely connected with people's intentions to continue participating, whereas increasing intrinsic motivation to achieve and learn as well as extrinsic motivation (introjected regulation) were positively correlated. The self-determination theory receives only mediocre support from these findings (Zhariadis, Alexandris, Tsorbatzoudi & Grouios, 2006).

The goal of the study conducted by Gobancé, Berjot and Gillet (2009) was to test Vallerand's (1997) hierarchical motivational model of motivation in context of athletic performance. Results revealed that sport performance is positively impacted by selfdetermined motivation.

Rosnet et al., (2012) used person-centered method to identify motivational profiles in the study. Three motivational profiles were shown by cluster analyses in both the long-distance running athletes and the junior national fencers: a Low group, a Moderate group, and a high group. The results of both studies also showed that the highest performance levels were attained by athletes with a high motivational profile.

Further, Sinlapachai (2012), set out to determine the different motivations that participants in Assumption University's Center for Sports and Physical Fitness had for engaging in sports. The motivation theory—which includes Amotivation, Extrinsic Motivation, Intrinsic Motivation, and Self-Determination Theory—formed the basis of the study (Deci & Ryan, 2000). The outcome demonstrated that the participants' main source of motivation was extrinsic incentive, which was recognized. Amotivation was the motivational gap between men and women. Thus, extrinsic motivation—introjected and amotivation—and intrinsic motivation—to achieve—were the two types of motivation that distinguished AU staff members from students.

An evaluation of elite athletes' sport character orientation in relation to their accomplishment motivation was the goal of a distinct study conducted on Turkish National Teams. Consequently, this study demonstrated a statistically significant correlation between the traits of sport character and "external factor approach," "self-confidence," "motivation to achieve success," and "power motive." Furthermore, it was shown that the sport character was

predicted by "power motive" and "motive to achieve success" by almost 38% (Yildiz, Bingol & Yildiz, 2021).

Studies have been done to see differences in the level and type of motivation used by different genders.

Kilpatrick, Hebert, and Bartholomew's (2005) used a highly differentiated physical activity scale to examine the relation of motivation to exercise with participation in sports. The second goal was to look into how gender affected motivation. According to this study, women were more driven to maintain their weight, whereas males were more driven in terms of endurance and strength, social recognition, challenge, and, most importantly, competition. According to this study's findings, women seemed to enjoy both exercise and sports involvement equally, but men saw these activities as a way to fulfill ego-related goals that supported their engagement in sports.

Another research demonstrated gender effects on sports motivation. Sirard, Pfeiffer, and Pate (2006) conducted a study, whose goals were to: 1) find gender-specific motivating factors linked to middle school students' involvement in sports programs and attrition; and 2) investigate the connections between this age group's engagement in sports programs, physical activity, and sedentary behavior. As a consequence, eighty percent of the students had only recently (within the last year) participated, ten percent had previously engaged, and ten percent had never done so. The elements that influenced males' engagement were fitness, social advantages, and competition, listed in that order. The factor structures for girls differed slightly from those for boys were loaded as fitness, competition, and social + skill rewards. Time constraints, coaching issues, and a lack of interest were found to be attrition reasons for both genders.

Research has demonstrated the connection between motivation and anxiety, self efficacy and coping mechanisms.

Goal orientation and perceived motivational climate were found to be significant predictors of intrinsic motivation and self-efficacy in a study that looked at the relationship between these variables and intrinsic motivation and self-efficacy. Tension was inversely correlated with perceptions of the mastery climate, while enjoyment, effort, perceived

competence, and self-efficacy were positively correlated. The sole significant predictor of self-efficacy in males was the mastery motivational climate, although dispositional goal orientation and perceived motivational climate emerged as equally relevant predictors of intrinsic motivation. On the other hand, the best predictor of intrinsic motivation and self-efficacy in females was the performance motivational atmosphere. In both males and females, perceived normative ability explained a significant portion of the unique variable in intrinsic motivation and self-efficacy (Roberts & Kavussanu, 1996).

Research by Gao, Lee and Harrison (2008) demonstrated that sports motivation increased with a greater sense of self-efficacy. Whereas, according to research by Lim, Khor and Tham (2010), undergraduate students' motivation, self-efficacy, and engagement in sports were strongly correlated. Further, according to Hutchins' (2008) research findings, self-efficacy and motivation to participate in physical activity were closely related.

Dogan's (2017) research indicated that motivation is derived from self-efficacy and influenced behaviour outcomes. Thus, it was suggested that in the studies on sports participation, self-efficacy and motivation must be linked.

Lara-Sanchez et al., (2019) examined the connection between anxiety, motivational atmosphere in sports, and emotional intelligence based on whether a participant was involved in contact or non-contact sports. The main finding of this study was that, particularly in contact sports, task oriented motivational climates have a positive impact on emotional intelligence and anxiety levels.

Another study looked at the association between players' usage of psychological coping mechanisms and the perceived motivating climate on elite collegiate sports teams. It was observed that coachability was positively correlated with perceptions of a caring climate ($\beta = 0.34$). These results showed how motivating players and coaches to foster a supportive, task-oriented environment which can help athletes apply psychological coping mechanisms, enabling them to play to the best of their abilities and having a fulfilling athletic experience (Iwasaki, Solomon, Hogue, & Fry, 2021).

Zurita-Ortega, Melguizo-Ibáñez and Ubago-Jiménez (2023) conducted a study with the aim of determining the correlation between anxiety, sport motivation, physical selfconcept,

and social self-concept. The findings indicated that for female anxiety had a detrimental effect on the development of social self-concept, male sex directs sport motivation towards climate, leading to higher degrees of anxiety.

The data analysis done by Zurita-Ortega et al., (2023) showed that anxiety levels can be lowered or raised by creating sport motivation from intrinsic or extrinsic incentives. Furthermore, it has been noted that motivation derived from external values was a significant factor in the cessation of physical exercise because of the aggravation and deterioration of the professional mental image that results from the failure to meet predetermined goals.

Drawing from self-determination theory (SDT), intrinsic motivation, characterized by inherent enjoyment and interest in the activity, is considered particularly conducive to optimal sports performance. Research suggested that intrinsically motivated athletes demonstrated greater effort, commitment, and performance satisfaction as compared to their extrinsically motivated counterparts. Moreover, environmental factors such as autonomy support, competence feedback, and relatedness contributed to athletes' intrinsic motivation and overall well-being, thereby enhancing performance outcomes. Interventions aimed at fostering intrinsic motivation and psychological need satisfaction emerged as valuable tools for optimizing athletes' performance and promoting long-term engagement in sports participation.

SPORTS PERFORMANCE AND SELF-EFFICACY

Self-efficacy, rooted in Bandura's social cognitive theory, represents an individual's belief in their capability to execute specific tasks or attain desired outcomes. In the context of sports performance, self-efficacy plays a pivotal role in shaping athletes' confidence, persistence, and performance attainment.

Research has been done in both laboratory (Gould & Weiss, 1981; Weinburg, Gould, & Jackson, 1979; Weinburg, Yukelson, & Jackson, 1980; Weinburg, Gould, Yukelson, & Jackson, 1981) and field settings (George, 1994; LaGuardia & Labbe, 1993) to investigate the relationship between self-efficacy and performance. Additionally, these research (Weinburg et al., 1979; Weinburg et al., 1980; Weinburg et al., 1981; Gould & Weiss, 1981; LaGuardia & Labbe, 1993) offer correlational evidence for both.

Numerous research has revealed a positive relationship between self-efficacy and athletic and sporting performance; thus it is necessary to take this into account when analyzing the potential impact of self-efficacy in sports (Locke et al., 1984; Moritz et al., 2000; Weinberg et al., 1979). For instance, Martin and Gill (1991) discovered a strong association between runners' perceived abilities and their actual performance in distance running. This indicated that on the track, people with higher levels of self-efficacy raced faster.

Bandura's (1977; 1997) self-efficacy theory suggests that there is a causal relationship between the two variables, even if this is not always the case. This would imply that being physically fit and strong is not enough for an athlete to compete at their highest level. According to the self-efficacy hypothesis, athletes gain from having confidence in their capacity to accomplish the necessary tasks in addition to being physically fit and healthy. For instance, if two weightlifters have differing self-perceptions about their capacity to lift the weight, they might not perform at the same level while having comparable physical strength.

Weinberg, Gould, and Jackson (1979) conducted a study to examine the impact of having participants observe a confederate do a muscular leg endurance activity before they were scheduled to participate in the task themselves. The participants were informed that their objective was to complete the assignment for a longer amount of time in order to outperform the confederate. Their "competitor" was described as a varsity track athlete who either did well on the task and claimed to have a leg injury, or did poorly and claimed to have a leg ailment. Participants' self-efficacy was induced in two ways: first, by the "competitor's" injury, they felt more confident that they could outperform the confederate; second, by the "competitor's" admission that they were varsity track athletes, they felt less confident that they could compete in this scenario. Prior to performance, participants who faced off against the injured confederate had higher levels of self-efficacy, and they also completed the task for a longer period of time.

Weinberg, Yukelson, and Jackson (1980) tried to quantify the impact of private and public efficacy expectations on competitive performance by altering the above experiment. The subjects were given false feedback and asked to complete an isokinetic machine task against a confederate who either had strained knee ligaments or was a member of the track team in order to manipulate their sense of self-efficacy. Consequently, the participants in the

condition with high-manipulated self-efficacy were competing against a participant who had a knee injury and weak ligaments, and who had shown lower objective performance on a task related to the injury. The subjects in low self-efficacy condition performed against a varsity athlete who showed better performance on the leg-strength task. Furthermore, participants were assigned to either a private or public setting. In response, the subjects were invited to provide their thoughts and tactics regarding the task and competition. While participants in the public condition were required to give their replies aloud, those in the private condition were only required to write their answers on a questionnaire. Furthermore, subjects competed against each other back-to-back. The findings confirmed self-efficacy predictions and extended the findings of Weinberg et al. (1979) to a back-to-back scenario. High-efficacy respondents extended their legs substantially longer than low-efficacy subjects. Additionally, the researchers discovered that in both high- and low-efficacy scenarios, face-to-face competition yielded noticeably higher performance than back-to-back competition. While public and private situations didn't produce any significant differences in high and low self-efficacy groups.

The aforementioned techniques were combined by Weinberg, Gould, Yukelson, and Jackson (1981) to investigate the impact of pre-existing and altered self-efficacy on a competitive muscular endurance challenge. Weinberg et al. (1981) employed the self-efficacy measure that had already been used in their research (1979) and modified it using the isokinetic machine that they had previously reported in Weinberg et al. (1980). A 2 x 2 x 2 (sex by self-efficacy by modified efficacy) design was employed in this investigation. The results showed that performance changed in response to changes in efficacy expectations, with respondents with high prior and manipulated self-efficacy extending their legs noticeably longer than those with low pre-existing and manipulated self-confidence. These results corroborate the findings of Weinberg et al.'s (1979, 1980) studies and validate Bandura's (1977) hypothesis that an individual's efficacy expectations will affect their effort and perseverance when faced with hardship (Weinberg et al., 1981). Furthermore, it was discovered that performance achievements could alter self-efficacy.

All three studies (Weinberg et al., 1979, 1980, 1981) revealed gender disparities. The authors cite Deaux's (1976) reference that, in achievement-related contexts, men and women

display distinct expectations; men are driven by the desire to uphold a positive self-image, while women believe that winning and femininity are mutually exclusive or that they lack the necessary skills to succeed. This effect is most noticeable while performing tasks that are associated with men.

Vicarious experience as a source of efficacy information (Bandura, 1977) was put to the test by Gould and Weiss (1981). Gould and Weiss (1981) set out to investigate if an observer's self-efficacy and muscular endurance performance would be affected by watching a model that is similar to or different from them and makes different assertions about their level of self-efficacy. According to the results, subjects in the similar-model condition showed significantly greater muscular endurance than both, the no-model condition control group and subjects in the dissimilar-model condition.

The degree and strength of self-efficacy were also shown to be significantly correlated with performance, adding credence to Bandura's (1977, 1986) hypothesis of self efficacy. Gould and Weiss (1981), however, speculated that self-efficacy might not have worked alone. More competition with models was reported by subjects in the similar-model condition than by those in the dissimilar-model condition. This suggested that perceived similarity between the model and the observer may boost performance through both increased motivation and self-efficacy.

Valiante and Morris (2013) confirmed Bandura's claims that mastery experiences are a significant source of self-efficacy. The athletes were asked to give a brief overview of their careers, highlighting their achievements and setbacks, as well as how these events influenced their future thought processes, expectations, and emotional states. Professional golfers were found by Valiante and Morris to be able to sustain high levels of self-efficacy for extended periods of time by thinking back to their past triumphs. This is significant because the players stated that their self-efficacy beliefs produced mentalities that allowed them to be more composed and productive than they otherwise would have been, which improved their performance. This implied that mastery experiences are crucial for professional athletes to take into account since they can improve performance in the future and have long-lasting benefits.

According to Laguardia and Labbe (1993), the measures employed may not have provided a more accurate depiction of event-specific efficacy expectations than the individual's knowledge, experience, and prior accomplishments—all sources of self efficacy information. Furthermore, environmental circumstances may have a role in the development of self-efficacy, as George (1994) hypothesized. Further investigation is required to ascertain the impact of such elements.

By the late 1990s, there had been enough published research in the sports and physical activity areas to justify a meta-analysis by Moritz, Feltz, Fahrbach and Mack (2000). The average association between sports performance and self-efficacy, as determined by 45 published studies in sports and multiple other physical activity domains, was 0.38, according to their findings. The greatest moderator of the efficacy–performance link, according to Moritz and her colleagues, was concordance between self-efficacy and performance measures, which explained 12.6% of the variance. Moritz et al. (2000) also found that the nature of the task (novel, familiar), the time of assessment in relation to performance (before, after), and the self-efficacy measure (task-specific, domainspecific, single-item) were all significant moderators of the effect of self-efficacy on performance.

In a meta-analysis by Lochbaum et al., (2023), it was found that there existed a moderately favourable correlation between pre-event self-efficacy and performance. However, it was also found that high athlete-rated self-efficacy may not always translate into better performance in upcoming competitive sports.

Studies have been done to study the gender difference in self-efficacy.

The purpose of the research conducted by Karolina-Eszter Kovacs & Beáta-Erika Nagy (2016) was to investigate the motivation and coping mechanisms of teenage Debrecen handball players. The findings showed that men had higher levels of intrinsic motivation, stronger athletic coping mechanisms, and self-efficacy.

Further, a study was conducted among female athletes at LCWU (Lahore College Women University) to determine the association between self-efficacy and precompetition anxiety. It was revealed that female athletes' self-efficacy was unaffected by their anxiousness before to competition (Ahmad, Mughal, Sattar, Tirmzai, 2019). In Indian context a study

revealed that the degree of self-efficacy among hockey players, both male and female. Compared to male hockey players, female hockey players had higher levels of self-efficacy (Gayatri Devi, Anupama, 2022).

Research has been done to see the relationship between self-efficacy, sports motivation, sports anxiety and coping skills among sports-persons.

In a study whose goal was to investigate how psychological skills, and self-efficacy can be used to differentiate gymnastic performance. The study included 101 gymnasts who competed at the Hellenic Championship of Rhythmic Gymnastics and the Hellenic Championship of Artistic Gymnastics (Mean = $11.8 \pm .74$ years; 22 males and 79 females). One day before the competition, each person completed the Self-efficacy scale and the Athletic Coping Skill Inventory—28—was done just after the competition. The results showed that gymnasts who set goals and prepared for the competition, showed confidence in their ability to perform at a high level, were relaxed and competed with enthusiasm and certainty, and did not worry excessively about their performance were the ones who performed the best. The results of this study indicated that coaches should be concerned with more than just talent. For their gymnasts to do well in a competition, they also need to develop some psychological abilities in them at a young age. Gymnasts must specifically learn how to set goals, overcome obstacles, and let go of anxiety. They also need to learn how to boost their confidence and self-efficacy and prepare for competition (U.S. Academy, 2013).

Another study was done whose primary goal was to examine the connections between beach handball players' psychological profiles in terms of competitive anxiety, mood, and self-efficacy. Determining the psychological profile's ability to predict competitive anxiety, moods, and self-efficacy was the second goal. The findings had demonstrated statistically significant relationships between the investigated dimensions and an impressive potential of athletes' psychological make-up to predict competitive anxiety, emotions, and overall self-efficacy. Moreover, despite a few minor variations between men and women, the results showed that both genders had a good deal of commonalities (Reigal et al., 2019)

Research has consistently demonstrated a positive association between self-efficacy and sports performance across various athletic domains, with high self-efficacious individuals

exhibiting enhanced skill execution, goal setting, and resilience in the face of adversity. Moreover, interventions targeting self-efficacy enhancement have shown promise in improving athletes' performance outcomes, underscoring the practical implications of this psychological construct in sports settings.

SPORTS PERFORMANCE AND ANXIETY

There are several elements that increase competitive anxiety, such as gender and the sort of sport performed (Vealey, 1990; Burton, 1990; Martens, 1990). A significant amount of research has been conducted in the area of competitive/sports anxiety to discover interpersonal differences that will aid in the development of tailored interventions for athletes looking to enhance their performance. Nonetheless, numerous investigations have yielded inconsistent findings. Research indicated that a robust correlation exists between anxiety in sports and athletic performance. Previous studies have shown that, depending on other psychological aspects like self-efficacy and other variables like gender, anxiety can have either beneficial or detrimental impacts on competitive performance (Gallucci, 2008).

A study examined the association between multidimensional competitive state anxiety and the cognitive (digit span) and motor (perceptual-motor speed) sub-components of performance in two groups of hockey players: an experimental group prior to a significant game, and a control group prior to a regular training session. A 'time-toevent' experimental paradigm was used to show that better perception- motor speed performance coincided with a rise in somatic anxiety 20 minutes before to the hockey game (Cale & Jones, 1989).

Studies have also demonstrated the detrimental effects of anxiety on sports performance. An athlete may find it more difficult to manage the negative impacts of anxiousness and finish activities at the same time (Alder, Ford, Causer, & Williams, 2018). The decline in sports performance is due to competitive anxiety, with poorer performance resulting from higher anxiety levels (Islam, Marwat, Manzoor, Luqman, & ullah, 2021). Specific stressors associated with the athlete experience might give birth to anxiety symptoms in athletes, which can have an impact on performance as well as everyday life (Conant-Norville & Vu, 2021). In healthy collegiate athletes, anxiety can also have an impact on neuropsychological evaluations, resulting in poorer performance and slower reaction times. (Shaver,

Hunt & Tomczyk, 2020). An athlete's capacity to compete may be hampered by severe cognitive symptoms of anxiety, such as negative thought patterns and failure-oriented expectations, which can also cause an athlete to become self-fulfilling in their failure (Kadwe, 2019).

Research has indicated significant gender differences in terms of anxiety and its impact on sports performance.

A research on the relationship between gender and competitive anxiety revealed that feminine females scored highly on the anxiety scale. (Martens, Vealey, & Burton, 1990).

According to a study done on Portuguese athletes, female athletes had higher somatic and cognitive anxiety than male athletes (Dias, Cruz & Fonseca, 2010).

Further, O'Donoghue and Neil (2015), found female athletes reported higher degrees of worry and anxiety related to competitive traits.

Similarly, a study by Erlingsdóttir et al., (2018), tried to create a multivariate model that would explain handball performance from a psychological standpoint and to examine psychological abilities, mental toughness, and anxiety in elite handball players as functions of category (age group) and sex. A total of 174 handball players (18.8 ± 3.5 years) took part in the research. The findings indicated that men were less anxious than women. The main distinguishing factors for the men and women, respectively, were emotional control during practice and ease of competition

Correia and Rosado (2019), proposed a relationship between gender disparities in sports and players' sport anxiety was examined. Of the 601 Portuguese athletes included in this study, 172 (28.6%) were female and 429 (71.4%) were male. They came from a range of team (basketball, handball, rugby, soccer, volleyball) and individual (athletics, climbing, orienteering, surfing, swimming, tennis) activities. The general level of sports anxiety was higher in female and individual athletes. The study's findings demonstrated that athletes' assessments of anxiety vary according to their gender and the kind of sport they play.

In an investigation to determine the association between female athletes at LCWU (Lahore College Women University) and their level of self-efficacy prior to competition.

Ahmad et al., (2019), found that there was a negative correlation between sports performance and both physical and cognitive anxiety.

But on the contrary there have been studies that refute these claims.

As in a study by Smith et al., (2009) discovered, males reported higher degrees of disruption of concentration in competitive sport circumstances, while girls and senior athletes worried more about performing poorly.

It was discovered by Ichraf et al., (2013), that while women show greater cognitive anxiety ($p < 0.001$) than men, men express higher physical anxiety ($p < 0.001$) and self-esteem ($p < 0.001$). Psychologists should focus heavily on emotional state control, particularly in team sports.

In an Indian context, Anupama and Gayatri Devi's study (2022), found that there were notable distinctions between male and female hockey players in terms of Performance Anxiety Dimensions like Somatic, Worry, and Concentration Disruption. Compared to female hockey players, male hockey players showed more concerns, attention issues, and an easier time becoming distracted by outside distractions.

Some studies present an alternative viewpoint that differs from the ones mentioned above.

In another study by Williams and Perry (1989), they looked at the degree of self-confidence and competitive trait anxiety and evaluated whether these symptoms helped or hindered performance in three different skill levels of tennis for both males and girls. The three groups did not differ in terms of the severity of somatic anxiety; however, the advanced group reported higher levels of self-confidence, and the novice group reported reduced cognitive anxiety intensity. In contrast to the predicted progressive growth across ability level, only advanced players reported greater facilitative interpretations. In terms of anxiety intensity and self-confidence, men and women were equal, however men perceived anxiety as being more helpful.

Athletes in individual sports typically reported greater ratings of cognitive anxiety compared to those in team sports, depending on the type of sport (Martens et al., 1990).

Compared to gender or sport, competitive experience and performance status were found to be more significant variables in the study of multidimensional anxiety and coping (Hanton et al., 2008).

Dias et al. (2010) discovered that athletes from specific sports had higher levels of somatic anxiety and worry. However, subsequent research, found that competitive anxiety is not significantly impacted by the sport (Hanton et al., 2008). O'Donoghue and Neil (2015) also did not discover any variations in competitive anxiety between players in solo and team sports.

Studies have been done to see relationship between motivation and anxiety. Anxiety and Achievement Motivation were found to have a substantial negative association in a study (Haider, Khan, Ahmad & Khan, 2011). Another research also suggested the same. It was found that there is a strong inverse link between sports achievement motivation and anxiety related to competition. The study's conclusion was that motivation levels decreased when worry levels rise, or vice versa (Das, Dhar, and Singh, 2023).

A weak positive correlation was found between sports competition anxiety and intrinsic motivation in a study by Gupta and Hai (2023), that examined sports competition anxiety, hardiness, and intrinsic motivation in young adults. This suggested that when young adults' intrinsic motivation rises, so does their sports competition anxiety. According to another study by Melguizo-Ibáñez, Zurita-Ortega, Ubago-Jiménez, López-Gutiérrez, and González-Valero (2023), males' orient sports motivation towards climate, resulting in higher degrees of anxiety.

A significant amount of study has been conducted to determine how motivation and self-efficacy, relate to sports anxiety. According to a study by Djurovic and colleagues, low self-efficacy is the only way through which elevated anxiety hinders sports accomplishment (Djurovic, Grujic, Popov, Sokic, 2021).

A study was conducted to determine the connection between motivation, anxiety, and self-efficacy. In that study that examined the connection between core psychological demands (competence, autonomy, and interpersonal relationships) and anxiety (somatic anxiety, cognitive anxiety, and self-efficacy), results demonstrated that, whereas controlled motivation has the opposite impact, autonomous motivation helps to interpret the impression of self-efficacy and favours performance in competition (Mercader-Rubio et al., 2023).

Numerous studies have attempted to determine whether sports anxiety and coping skills among athletes are related. For example, a study conducted by Abellanos & Broa (2023) found a significant correlation between athletes' coping strategies and sports anxiety; however, the range of sports anxiety did not significantly affect athletes' coping skills.

Therefore, one can say that moderate levels of arousal can enhance performance, excessive anxiety can impair athletes' concentration, decision-making, and motor performance. The multidimensional nature of sports anxiety encompasses cognitive, somatic, and behavioral components, each of which can exert detrimental effects on athletes' performance outcomes. Equally strong research indicated a negative and positive relationship between sports anxiety and performance, with negative effects associated with decreased performance quality and increased risk of errors. Negative effective of anxiety can be overcome by management techniques, such as relaxation training, cognitive restructuring, and stress inoculation and have been shown to alleviate anxiety symptoms and enhance athletes' performance readiness in competitive settings.

In a comprehensive work, a few researchers (Mellalieu, Neil, Halton, Fletcher, 2009; Vosloo, Ostrow, Watson, 2019; Zarauz, Ruiz-Juan, 2014) incorporated analyses in their studies to check for gender variations in pre-competition anxiety, showing differences in the levels of cognitive anxiety and/or self-efficacy. Conversely, some researchers found no such differences in several investigations (Martens, Vealey, & Burton, 1990). All of these could imply that the evaluation of pre-competitive anxiousness may be influenced by outside variables. Because of a number of predecessors, it should be viewed as a sequential occurrence (Weinberg & Gould, 2010). According to the notion of multidimensionality, three elements have been found in this regard: physical anxiety, cognitive anxiety, and self-efficacy (Weinberg & Gould, 2010)

SPORTS PERFORMANCE AND COPING SKILLS

Coping skills encompass the cognitive and behavioral strategies that individuals utilize to manage stress, adversity, and performance-related challenges. Effective coping mechanisms are crucial for athletes to navigate the pressures of competition, maintain focus, and optimize performance outcomes.

Numerous studies have examined performance athletes' coping mechanisms. Coping strategies have therefore been found to be linked to a variety of mental characteristics, including performance (Mahoney, 1989) and accident susceptibility (Hanson, McCullagh, & Tonymon, 1992). Simultaneously, coping skills are crucial for the design of personal development programs for athletes, which aim to improve their sports performance and balance between their personal and professional lives, as well as their motivation, involvement, and resilience to setbacks (Cosma et al., 2020).

Data analysis of a study by Cosma et al. (2020) revealed that peaking under pressure and overcoming adversity were the least represented coping mechanisms, whereas freedom from concern and coachability were the most strongly represented.

In a study aimed at characterizing psychological adaptations in male sprinters from Jamaica and evaluating the distinctions between elite and sub-elite athletes. According to the findings, coping abilities were a major predictor of mental toughness, and top athletes showed higher levels of mental toughness than the sub-elite group (Beckford and others, 2016).

To study the gender difference in taking up different coping skills, numerous studies have been done.

Although both male and female athletes use problem- and emotion-focused coping, Goyen and Anshel (1998) found that there were notable distinctions in the coping mechanisms employed by the two genders of athletes. For example, when faced with stressors like pain, injury, and criticism, male athletes tended to respond with problem focused coping mechanisms. However, in reaction to these stressors, females tended to adopt emotion-focused coping (Anshel, Porter, & Quek, 1998; Madden, Kirkby, & McDonald, 1989).

Yoo (2001) also discovered evidence that suggested men employ more problem focused coping mechanisms than women, which was consistent with what Goyen and Anshel (1998) had suggested. Females employed more transcendental coping techniques in addition to more emotion-focused coping techniques.

The idea that women are more prone than men to turn to social support when they're under stress has been supported by a number of researchers (Campen & Roberts, 2001; Crocker & Graham, 1995; Kolt, Kirkby, & Lindner, 1995; Philippe, Seiler, & Mengisen, 2004).

Women employed detachment, positive reinterpretation, emotional venting, and social support more frequently. To deal with the same stressor, men employed association and suppression of competing activity.

Furthermore, it has been discovered that ego-orientation significantly mediated the coping behavior's displayed by elite female athletes, but not elite male athletes. In other words, female athletes with high ego orientation tend to use more denial and less active coping and planning (Pensgaard & Roberts, 2003).

According to a study, men were better than women in setting objectives, finding strategies to reach them, and being mentally ready for potential trouble spots. Men are more driven to handle stressful situations and have greater self-confidence in their talents than women do. Goal setting, mental preparation, confidence, and accomplishing motivation were found to differ significantly between males and girls ($p=.014$) (Cosma et al., 2020).

There have been studies that refute the above research. Anshel and Delany (2001) also discovered no difference in the levels of wishful thinking and social support between males and females. Gender variations in coping have received only partial support from other studies. For instance, gender did not differ in the application of problem-focused coping methods, according to reports from Kolt et al. (1995) and Crocker and Graham (1995). Nonetheless, data from this two research suggests that female athletes employ emotion-focused coping mechanisms more frequently than male athletes, such as turning to social support.

According to Hammermeister and Burton's (2004) research, men and women evaluated stressful situations similarly.

Lastly, gender did not appear to be a factor in how athletes coped with stressful situations, according to research by Bebetos and Antoniou (2003) and Pensgaard, Roberts, and Ursin (1999).

A few conclusions are extracted. First, coping mechanisms employed by sportsmen demonstrate their ability to set aside worries during crucial matches or life events, or even address challenges unique to daily existence. Second, in order to get through difficult times, athletes rely on their coach or mentor, seeking his counsel and assistance.

Athletes believe that practicing or competing under duress will not be difficult for them—rather, it will just cause them more stress. Moreover, sportsmen claim that they are unable to remain composed and optimistic in the face of stress and that they are unable to calm down or distance themselves from the circumstance (Cosma, Chiracu, Stepan, Cosma, Nanu, Paunescu, 2020)

The obtained results can serve as the basis for the development of psycho-education programs for athletes and coaches to increase their awareness of the importance of psychological training.

Studies highlight the importance of adaptive coping strategies, such as problem-solving, emotion regulation, and social support seeking, in mitigating the negative impact of stress and anxiety on sports performance. Athletes equipped with robust coping skills demonstrate greater resilience, psychological well-being, and performance consistency in competitive environments. Furthermore, interventions aimed at enhancing coping skills have been shown to yield positive effects on athletes' performance and mental health outcomes, underscoring the value of incorporating coping-focused interventions in sports programs.

In a comprehensive study conducted by Ángel et al., (2023), it was found that autonomous motivation is a more positive type of motivation because it supports competitive performance and helps to interpret self-efficacy, whereas controlled motivation has the opposite effect. The significance of this research is in its demonstration that, in the context of sports, an athlete's self-perception negatively influences pre-competitive physical anxiety in an indirect manner. This association is attributed to task orientation and the lack of demotivation towards sport. However, there was no similar effect on cognitive anxiety.

CHAPTER - 3

METHODOLOGY

AIM

To study the gender differences in sports performance and its correlates among young adult athletes.

OBJECTIVES

Based on the review of literature and the need of the study following objectives were formulated for the present research:

1. To assess the level of sports performance, motivation, self- efficacy, sports anxiety and coping skills among male and female young adult athletes.
2. To assess the relationship between sports performance and sports motivation, self-efficacy, sports anxiety and coping skills in both female and male young adult athletes.
3. To explain the gender differences in terms of sports performance, sports motivation, self efficacy, sports anxiety and coping skills.
4. To assess the role of sports motivation, self efficacy, sports anxiety and coping skills in determining sports performance among male and female young adult athletes.

HYPOTHESES

Following hypothesis were formulated for the present study:

1. Sports performance will be positively correlated to intrinsic and extrinsic motivation and negatively correlated to amotivation in among the young adult athletes.
2. Sports performance will be positively correlated to self-efficacy in among the young adult athletes.
3. Sports performance will be related to coping skills adopted by both the genders.
4. Sports performance will be related to performance anxiety in both genders.
5. There will be significant differences among male and female young adult athletes in the level of sports performance, sports motivation, self- efficacy, sports anxiety and coping skills.

6. Anxiety will be negatively related to motivation and self-efficacy.

SAMPLE

The sample constituted of 60 young adult athletes with 30 being females (50%) and the remaining 30 being males (50%) coming from various states in India, practicing in the Tau Devi Lal Stadium, Panchkula. The sample was purposively selected. The sample aged between approximately 18-25 with training and competition experience in athletics of 1-10 years. The athletes played sprint, race walking, athletics, hurdles, track and field. All of them played individual sports. The sample varied in terms of area of residence. Some came from urban, other from semi-urban and rural areas.

Owing to the sensitive nature of the study, all required administrative permissions were taken from the competent authorities. Only those athletes were included who were willing to participate or contribute to the study. The tools were administered in a group setting, assuring confidentiality and anonymity of data.

TOOLS

Keeping in view the variables to be measured, the aim of the study and the nature of the sample, appropriate tools with satisfactory psychometric properties were selected. The following tools were used in the present study-

1. Sports Performance Perceptions Scale (SPPS) (Adam, Ferguson, Mosewich & Kowalski, 2023):

Athletes' self-reported and retrospective perceptions of their sport performance are measured using the 32-item Sport Performance Perceptions Scale (SPPS) (Adam, 2019).

It started because of a requirement in research for a sport-specific performance metric.

Currently, anthropometric measures (Santos Dawson, Matias, Rocha, Minderico, Allison, Sardinha, & Silva, 2014), movement screens (Kraus, Schütz, Taylor, & Doyscher, 2014), accelerometers (Sato et al., 2009), time trials (Currell & Jeukendrup, 2008), and tests of muscular endurance (Hawley, Williams, Vickovic, & Handcock, 1992) are among the tools used by researchers to measure sport performance. Singleitem self-report measures of perceived sport performance have also been established by researchers (e.g., Doorley,

Kashdan, Weppner, & Glass, 2022; Robazza, Pellizzari, Bertollo, & Hanin, 2008), but these may not fully reflect the intricacies of sport. Athletes in any sport can use the SPPS, a multidimensional self-report measure of perceived athletic performance, which takes little to no financial resources, little time to administer, and little administrator training.

What does this scale measure- This 32-item Sport Performance Perceptions Scale (SPPS), a recently developed measure, is based on five dimensions of sport performance perceptions and evaluates situations in general, training-specific, and competition-specific domains. The five dimensions are: Athletic Development, Master and Development, Preparedness and Strategy, Recovery and Injury Prevention and Psychological Skills.

The SPPS is multidimensional, consistent with the proposed conceptual model, and has adequate reliability (Cronbach's $\alpha = .89 - .94$), according to the findings of first psychometric evaluations (SEM).

2. *Sports Motivation Scale (SMS-28)(Brière, Vallerand, Blais, & Pelletier, 1995):*

This measure evaluates people's reasons for participating in sports. It evaluates seven different motivational types: extrinsic, defined and introjected laws; as well as intrinsic motivation toward achievement, knowledge, stimulation as well as amotivation. It has total 28 items, with 4 items for each of the 7 sub-scales and a 7-point Likert's rating system. (Brière, Vallerand, Blais, & Pelletier, 1995). The 7 sub-scales are placed on a 7-point continuum ranging from, does not correspond at all to corresponds exactly with a mid-point of (4) for corresponds moderately. The 7 dimensions are Intrinsic Motivation to Know, Intrinsic Motivation to Accomplish, Intrinsic Motivation to Experience Stimulation, Extrinsic Motivation-Identified Regulation, Extrinsic Motivation- Introjected Regulation, Extrinsic Motivation External Regulation and Amotivation.

Many studies have been done with SMS-28 scale like Sinlapachai's study (2012), which was set out to determine the different motivations that participants in Assumption University's Center for Sports and Physical Fitness had for engaging in sports. The results of the study confirmed that it is a reliable and valid scale. Another study by Bayyat, Almoghrabi & Ay (2016) confirm that different versions of this scale can reliably and validly measure the different forms of motivation towards sports.

3 *Athletic Self Efficacy Scale (ASES)(Koçak, 2020):*

It is a measure of an athlete's self-efficacy that possesses psychometric qualities and is consistent with the established theoretical framework. It is a 16-item, 4-sub-dimension Athlete Self-Efficacy Scale, having 5 point Likert's scoring. The sub-dimensions of the scale are named Sport Discipline Efficacious (things 1-2-3-4), Psychological Efficacious, Professional Thought Efficacious, and Personality Efficacious. The scale's lowest possible score is 16, while the greatest possible score is 80. To assess the average scores and self-efficacy levels to be gained from the scale, three levels were established. These range from 0.00 to 1.66 points for low athlete self-efficacy, 1.67 to 3.33 points for moderate athlete self-efficacy, and 3.34 to 5.00 points for strong athlete self efficacy (Koçak, 2020).

In a study, whose aim was to develop a measurement tool with psychometric properties that can measure the self-efficacy beliefs of athletes, it was found in the reliability and validity analysis of the scale, where exploratory and confirmatory factor analyses were used, that Chronbach's Alpha reliability coefficient value of the total scale is 0.88. The scale was generally a perfect fit, according to the results of the validity and reliability analyses. Thus, it can be concluded that the Athlete Self Efficacy Scale (ASES) is a reliable and valid assessment instrument that may be used to ascertain adult athletes' levels of self-efficacy (Koçak, 2020).

4 *Sports Anxiety Scale (SAS-2)(Smith, Smoll, Cumming and Grossbard, 2006):*

An assessment of somatic and cognitive trait anxiety in athletic performance contexts is conducted using the multidimensional, 15-item SAS-2 test. Each item on the scale had a Likert answer system with four points. The SAS-2 is composed of the subscales measuring worry, somatic anxiety, and concentration disturbance. Participants rate each item related to the statement. A low score indicates a less severe form of that specific competitive anxiety type, and a high score indicates a greater risk of expressing that specific anxiety type. Each subscale has a value that spans from one to four. The subscale item values are averaged to determine the score (Viladrich, Sousa, Jannes, & Ramis, 2015). The factor structure and internal consistency of the SAS-2 are both strong points (Ramis, Viladrich, Sousa, & Jannes, 2015).

According to Smith and Smoll (1990), the scale was reported to have acceptable reliability (Chronbach's alpha coefficient between 0.74 and 0.92) and good factorial validity across samples from various age groups.

Many studies have been done to prove the reliability and validity of this scale, which include the one done by Karadag and Asci (2015), who found this scale to have internal consistency (Chronbach's Alpha coefficient) of 0.65, 0.78 and 0.67 for somatic anxiety, worry and concentration disruption, respectively

5 *Athletic Coping Skills Inventory (ACIS) (Smith et al. 1995):*

A well validated psychological test, the Athletic Coping Skills Inventory 28 ("ACSI28") gauges an athlete's psychological coping abilities in seven crucial domains. The ACSI-28 offers guidance to athletes who wish to get a better grasp of certain mental skills that may affect performance. Athletes respond to 28 questions covering various aspects of performance psychology. Coping With Adversity, Peaking Under Pressure, Goal Setting/Mental Preparation, Concentration, Freedom From Worry, Confidence and Achievement Motivation, and Coachability are the seven sport-specific subscales found in the ACSI-28. A Personal Coping Resources score, which is derived by adding the scales, is thought to represent a complex psychological skills construct. The ACSI28's factorial validity was confirmed by confirmatory factor analyses, which also showed that all seven subscales for male and female athletes closely match the underlying component structure. Test-retest reliability coefficients for the majority of the subscales and the overall score were rather high. (Smith, Schutz, Smoll & Ptacek, 1995).

The original subscales were found to be internally consistent, with an alpha range of .62 to .78 and a total alpha of .86 for the personal coping resources scale, as reported by Smith et al., (1995). Sum of the subscales or the final score in each subscale has a range of values from 0 to 12, with higher scores denoting stronger performance on that subscale. Higher scores indicate more strength. The total scale score goes from a low of 0 to a high of 84.

PROCEDURE

The present investigation aims at studying gender differences in sports performance and its correlates among young adult athletes. The data was collected from the sample in a group setting. All distractions from the assessment environment were removed, and it was ensured that all participants have the proper materials to complete the assessment. Before administering the of the scales, the participants were told about the (a) about the purpose of

the questionnaire; (b) not to spend too much time on any one statement, as there are no right or wrong answers; (c) the importance of reading each item carefully and responding truthfully; and (d) that they may ask questions if they are unsure about the content or wording of any of the items. There was no time limit set for administration. Most athletes completed the questionnaire in about 20-25 minutes.

Before the administration of the tools, all the permissions were taken from all the competent authorities. A close rapport with the subjects was built and only those willing to participate and contribute in the study were given the questionnaire. Also all the participants were made to fill a socio-demographic sheet to get information about their experience and training in their sports, how were they introduced to the sports and any medical history if they have any as these things could affect the findings of the present study.

SCORING

The scoring of each scale used in the present study was done according to the respective manual instructions, and the data was then tabulated.

STATISTICAL ANALYSIS

1. Descriptive Statistics: Mean and standard deviation were computed for the following variables along with their sub scales- Sports performance (Athletic development, mastery and development, preparation and strategy, psychological skills, recovery and injury prevention), sports motivation (Intrinsic motivation to know, intrinsic motivation to experience stimulation, intrinsic motivation to accomplish, extrinsic motivation-identified, extrinsic motivation- introjected, extrinsic motivation- external regulation, amotivation), athletic self efficacy (Sports Discipline, psychological, professional thought, personality), sports anxiety (Somatic, worry, concentration disruption) and coping skills (coping with adversity, concentration, coachability, confidence and achievement motivation, goal setting and mental preparation, peaking under pressure, freedom from worry) amongst male and female young adult athletes.

2. Pearson Product Moment Correlations were calculated to assess the relationship between Sports performance and sports motivation, athletic self-efficacy, sports anxiety and coping skills along with their sub-scales and to assess the relationship between all the variables with each other among males and females young adult athletes.
3. T-ratios were calculated to assess the difference between male and female young adult athletes in terms of sports performance and sports motivation, athletic self-efficacy, sports anxiety and coping skills along with their sub-scales.
4. Step-wise multiple regression analysis was used to assess the impact of sports performance and sports motivation, athletic self-efficacy, sports anxiety and coping skills along with their sub-scales on sports performance of male and female young adult athletes.

CHAPTER - 4 RESULTS AND DISCUSSION

The aim of the study was to see the gender differences in sports performance and its correlates among young adult athletes. Data gathered from the scales with the 60 athletes generated a significant amount of information about their experiences of being a sports person and how it affected their performance. The results and discussion chapter is divided into 4 parts- Descriptive Statistics (Level of Sports performance and its correlates), Correlations (Relationship of Sports Performance with Sports Motivation, Self-efficacy, Anxiety and Coping Skills), T-ratio (Gender differences in Sports Performance and its correlates under study) and Regression (Predictors of Sports Performance).

LEVEL OF SPORTS PERFORMANCE AND ITS CORRELATES:

The first objective was to assess the level of Sports Performance, Motivation, Self-Efficacy, Sports Anxiety and Coping Skills among male and female young adult athletes.

Table No. 1 showed means and standard deviation of young adult athletes on Sports performance and its various correlates under study.

It showed that athletes were high on overall sports performance and its sub-scales like Athletic Development, Mastery Development, Recovery and Injury Prevention and Psychological Skills. This might mean that they highly focused on their development as an athlete and mastery of their sports specific skills. They also fully took care of themselves once injured and focused on their recovery to play better in next match. They also highly felt that they could manage their emotions and feelings at the time of training and competition.

While they were moderate on Preparedness and strategy sub-scale. This might mean that they were moderately prepared and confident in making strategic decision in competition. This might also mean that they don't think too much about making a strategy for the game but they will still strategies and prepare to maximize the outcome.

Athletes were seen to be high on Intrinsic Motivation to Know and Intrinsic Motivation to Accomplish. This may mean that they love to know more about the sport they play and they think that sports is necessary to Accomplish various goals in life. They were seen to be moderate on Intrinsic Motivation to Experience Stimulation, Extrinsic Motivation- Identified

Regulation, Extrinsic Motivation Introjected Regulation and Extrinsic Motivation External Regulation and Amotivation. This may mean that they moderately believed that they play their sport because of the exciting experiences and intense feelings they felt while playing that sport and also because they perhaps thought that sports is the best way to meet new people and grow as a human. This also showed that they somewhat believed that they played their sport to avoid guilt or anxiety, or to attain ego enhancements or pride, and also to receive some type of external rewards. They also moderately showed reduction in motivation to play their sport.

The athletes were found to be high on all the dimensions of Self-Efficacy i.e. Sports Discipline, Psychological Efficacy, Professional thought and Personality. They were thus high on self-efficacy. This might mean that they highly feel that they were physically, psychologically and professionally enough as an athlete. They also highly believed that they had a personality that is fair, confident, cooperative and responsible, which can help in competition.

The Table No. 1 also showed that athletes were low on Somatic Anxiety which might have meant that they rarely expressed their anxiety via physical complaints and distress. They were also found to be low on concentration disruption which might mean anxiety doesn't really disrupt their concentration. They were moderate on worry, by which it might be inferred that there was some amount of worry caused due to pre-competition anxiety. They were thus low on overall anxiety.

Table No: 1 *Showing the means and standard deviation of young adult athletes on Sports performance and its correlates.*

Variable		Mean	SD	Interpretation
Sports performance	SP-Athletic Development	5.77	1.27	High
	SP- Mastery Development	5.83	7.87	High
	SP-Preparedness & Strategy	5.47	1.38	Moderate
	SP-Recovery & Injury Prevention	5.92	1.33	High
	PS-Psychological Skills	5.59	1.32	High
	SP-Total	5.67	9.96	High
Sports Motivation	IM- to Know	21.70	5.46	High
	IM- to Accomplish	21.80	5.13	High
	IM- to Experience Stimulation	20.87	5.57	Moderate

	EM- Identified	18.93	5.93	Moderate
	EM- Introjected	20.88	4.98	Moderate
	EM- External Regulation	19.58	6.49	Moderate
	Amotivation	15.03	8.40	Moderate
Self- efficacy	SE-Sports Discipline	16.60	3.40	High
	SE-Psychological Efficacy	16.43	3.59	High
	SE- Professional Thought	16.11	3.56	High
	SE- Personality	16.43	3.57	High
	SE- Total	65.28	12.19	High
Sports Anxiety	Anxiety- Somatic	1.98	0.79	Low
	Anxiety- Worry	2.02	0.99	Moderate
	Anxiety-Concentration Disruption	1.82	0.81	Low
	Anxiety- Total	1.97	2.31	Low
Coping Skills	Coping with Adversity	7.67	2.72	Moderate
	Coping-Coachability	8.05	3.32	Moderate
	Coping-Concentration	8.33	2.53	Moderate
	Coping- Confidence & Achievement Motivation	8.98	2.70	Moderate
	Coping- Goal Setting and Mental Preparation	8.25	2.68	Moderate
	Coping- Peaking under Pressure	6.67	3.74	Moderate
	Coping-Freedom from Worry	5.38	3.00	Moderate
	ACSI	53.17	12.30	Moderate

SE= Self-Efficacy; IM=Intrinsic Motivation; EM=Extrinsic Motivation; SP=Sports Performance; ACSI= Athletic Coping Skills Inventory Score, Psy Skills= Psychological Skills

Besides this, they were found to be moderate on all the dimensions of Coping Skills i.e. Coping with Adversity which may mean that they were neither too great nor poor while dealing with troublesome situations and could quickly bounce back from mistakes and setbacks, they were also moderate on Coachability and Concentration which might mean that they were moderately open to constructive criticism without taking them personally and learn from instructions and they were not easily distracted. They were also moderate on Confidence and Achievement Motivation, Goal Setting and Mental Preparation, Peaking under Pressure and Freedom from Worry. This might mean that they were somewhat confident and positively motivated and gave 100% to their sport. They sometimes, not always set and worked towards the goals and set a mental game plan for competition, they moderately felt challenged in

pressure situations and it also might mean that athletes weren't too pressurized and also not free from worrying about performing poorly or what other would think if they lose. Thus they were moderate on the overall Coping Skills score.

As part of another objective of the present study, an attempt was also and to look into how male and female athletes differ in terms of their sports performance and its various correlates under study.

Gender differences

Table No. 2 showed Means and Standard Deviation of male and female young adult athletes on sports performance and its correlates under study.

It showed that both male and female athletes were high on Athletic Development, Mastery & Development and Recovery & Injury Prevention. Which might mean that they were working with full force towards becoming a better athlete, master skills that will help them become a better athlete and improve their performance. It also might mean that both the genders highly took care of themselves when they got injured and gave themselves time to recover for the new game.

Table no- 2: Showing means and standard deviation of male and female young adult athletes on Sports performance and its correlates.

Variable		Gender	Means	Standard Deviation	Interpretation
Sports Performance	SP-Athletic Development	M	5.63	1.52	High
		F	5.91	.95	High
	SP-Mastery & Development	M	5.59	1.46	High
		F	6.08	10.99	High
	SP-Preparedness & Strategy	M	5.24	1.58	Moderate
		F	5.69	1.12	High
	SP-Recovery & Injury Prevention	M	5.64	1.73	High
		F	6.20	.67	High
	SP-Psychological Skills	M	5.25	1.59	Moderate
		F	5.93	.88	High
	SP-Total	M	5.42	7.36	Moderate
		F	3.93	11.72	Moderate
Sports Motivation	IM- to Know	M	20.70	6.47	Moderate
		F	22.70	4.09	High
	IM- to Accomplish	M	21.27	5.91	Moderate
		F	22.33	4.25	High
	IM- to Experience Stimulation	M	19.20	6.39	Moderate
		F	22.53	4.06	High
	EM- Identified	M	18.67	5.88	Moderate
		F	19.20	6.07	Moderate
	EM- Introjected	M	19.73	5.50	Moderate
		F	22.03	4.10	High
	EM- External Regulation	M	19.57	6.53	Moderate

Self-Efficacy	Amotivation	F	19.60	6.56	Moderate
		M	13.27	7.96	Moderate
		F	16.80	8.60	Moderate
	SE-Sports Discipline	M	15.97	4.06	High
		F	17.23	2.51	High
	SE- Psychological Efficacy	M	16.03	4.24	High
		F	16.83	2.82	High
	SE-Professional Thought	M	15.93	3.78	High
		F	16.30	3.39	High
	SE-Personality	M	15.80	4.00	High
		F	17.06	3.02	High
Sports Anxiety	SE-Total	M	63.73	14.22	High
		F	66.83	9.75	High
	Anxiety-Somatic	M	2.03	.73	Low
		F	1.92	.86	Low
	Anxiety-Worry	M	2.12	1.07	Moderate
		F	1.91	.93	Low
	Anxiety-Concentration Disruption	M	1.81	.82	Low
		F	1.83	.81	Low
	Anxiety-Total	M	1.98	2.16	Low
		F	1.96	2.48	Low
Coping Skills	Coping with Adversity	M	7.60	2.99	Moderate
		F	7.73	2.46	Moderate
	Coping-Coachability	M	7.87	3.31	Moderate
		F	8.23	3.37	Moderate
	Coping-Concentration	M	8.20	2.70	Moderate
		F	8.47	2.39	Moderate
	Coping-Confidence & Achievement Motivation	M	9.13	2.98	Moderate
		F	8.83	2.42	Moderate
	Coping-Goal Setting & Mental Preparation	M	8.13	2.89	Moderate
		F	8.37	2.51	Moderate
	Coping-Peaking under Pressure	M	6.13	3.13	Moderate
		F	7.20	4.25	Moderate
	Coping-Freedom from Worry	M	6.00	3.03	Moderate
		F	4.77	2.90	Moderate
	ACSI-Total	M	52.73	14.56	Moderate
		F	53.60	9.78	Moderate

SE= Self-Efficacy; IM=Intrinsic Motivation; EM=Extrinsic Motivation; SP=Sports Performance; ACSI= Athletic Coping Skills Inventory Score, Psy Skills= Psychological Skills

But male and female athletes apparently differed on Preparedness and Strategy and Psychological Skills. Females were seemingly higher on both the dimensions. This might mean that female athletes were more confident in making strategic decisions in the competition as compared to males and also more prepared mentally. This also might mean that when it came to dealing with emotions in the competition female athletes were better at it than their male counterparts.

Table No. 2 also showed that sports performance of both male and female athletes was moderate, which might mean there was no difference in sports performance based on these dimensions in both genders in this study.

The results in Table No. 2 further showed that female athletes were high on all dimensions of intrinsic motivation than males, which indicate that female athletes were more motivated to play the sport because they loved to know more about it and get more information on it and were more motivated to play the sport because they thought it helped in achieving certain goals in other areas of life too. Female athletes also showed higher motivation to play sport because they found pleasure in experiencing intense emotions during the game. Female athletes were high on Extrinsic Motivation- Introjected Regulation than male athletes, which showed that female athletes were more concerned and put pressure on themselves to play the sport in order to avoid guilt or anxiety or to attain ego-enhancements or pride.

Both males and females were moderate on Extrinsic Motivation-Identified Regulation, Extrinsic Motivation-External Regulation and Amotivation. This showed that both male and female athletes had a desire to be identified, know other people and develop other aspects of their life through sports. They both equally showed reduction in motivation to play their sport.

Through the research (Table no. 2) it was also found that males and female athletes were equal on all the dimensions of Self-Efficacy. This might mean that both male and female athletes thought of themselves as confident, able to excel in their sports and had physical, psychological and cognitive abilities to do so.

Both genders had low somatic anxiety, which indicated that both of them didn't express their anxiety via physical symptoms. *Another findings from this table were that both* were seen to have low concentration disruption due to anxiety. Male athletes were seen high on worry as compared to female athletes and this finding was similar to a study done by Anupama and Gayatri Devi's (2022) where they found that there were notable distinctions between male and female hockey players in terms of Performance Anxiety Dimensions like Somatic, Worry, and Concentration Disruption. Compared to female hockey players, male hockey players showed more concerns, attention issues, and an easier time becoming distracted by outside distractions.

Meanwhile, these results were opposite to the study by Further, O'Donoghue and Neil (2015), where they found that female athletes reported higher degrees of worry and anxiety related to competitive traits. These results also opposed the study done by Smith et al., (2009)

where they showed that males reported higher degrees of disruption of concentration in competitive sport circumstances, while girls and senior athletes worried more about performing poorly. Further, these results also opposed the study by Correia and Rosado (2019), where it was found the general level of sports anxiety was higher in female and individual athletes. The study's findings demonstrated that athletes' assessments of anxiety vary according to their gender and the kind of sport they play. It was also seen through the results in Table No. 2 that both male and female athletes showed moderate coping skills on all the sub-scales of Athletic Coping Skills Inventory. It might mean that both males and females had average coping skills. These results were similar to another study where it was found that gender did not appear to be a factor in how athletes coped with stressful situations, according to research by Bebetos and Antoniou (2003) and Pensgaard, Roberts, and Ursin (1999). Which clearly was indicated in the sports performance as for both genders its moderate or average. These results were in sync with a study by Hammermeister and Burton's (2004) research, where it was found that men and women evaluated stressful situations similarly. Moreover, these findings were opposite to a study where goal-setting, mental preparation, confidence, and accomplishing motivation were found to differ significantly between males and girls ($p=.014$) (Cosma, Chiracu, Stepan, Cosma, Nanu, Paunescu, 2020).

RELATIONSHIP OF SPORTS PERFORMANCE WITH SPORTS MOTIVATION, SELF-EFFICACY, ANXIETY AND COPING SKILLS:

The second objective of the present study was to assess the relationship between sports performance and motivation, self-efficacy, sports anxiety and coping skills in female and male young adult athlete population. Following were the results:

Sports Performance

Table No. 3 showed correlation of Sports Performance with related variables in young adult athletes and also a comparative picture of the correlational profile for both male and female athletes, separately.

Sports performance total score: It was seen here that in all the three groups Sports performance was highly positively correlated to Mastery and Development. This might mean that in all the groups sports performance was increasing if the sports specific skills to master

the sport were increasing. It was also seen that sports performance was also highly positively correlated in all the groups to Preparedness and Strategy and Recovery and Injury prevention. It showed that in all the groups if the athlete was fully prepared and had a strategy in mind then sports performance increased.

Psychological Skills was positively correlated to sports performance in males and total sample which might mean that if males handled their emotions more carefully during competition then their performance might have increased.

It was also seen that Sports performance was highly positively correlated with Intrinsic motivation, two sub-scales of Extrinsic motivation (identified and introjected regulation) and four sub-scales of Coping skills (i.e. confidence and achievement motivation, concentration, coping with adversity, goal setting and mental preparation) and Self efficacy, in total sample. This proved the first hypothesis.

Athletic Development: From Table No. 3 it was inferred that Athletic Development was positively correlated with Preparedness and Strategy and Self-efficacy- Professional Thought in all three profiles. Which might mean that development of an athlete increased, if an athlete was prepared and had a strategy and also by having a professional orientation towards the sport, irrespective of gender.

Table No- 3: Showing comparison of correlation of Sports Performance with related variables in young adult male, female and total sample of athletes.

Variable	Males	r value of males	Females	r value of Females	Total	r value of Total
SP-AD	SP-Total	0.939**	SP- Preparedness & Strategy	0.803**	SP- Preparedness & Strategy	0.847**
	SP-Mastery & Development	0.892**	SE- Total	0.786**	SE- Total	0.822**
	Coping-Confidence & Achievement Motivation	0.886**	SE- Professional Thought	0.784**	SP-Psychological Skills	0.811**
	SP-Psychological Skills	0.88**	SP- Recovery & Injury Prevention	0.772**	SE- Professional Thought	0.800**
	SP-Preparedness & Strategy	0.867**	SE- Personality	0.761**	SE- Personality	0.757**
	SE-Total	0.836**	Coping- Concentration	0.624*	SP- Recovery & Injury Prevention	0.749**
	SE-Professional Thought	0.828**	Coping- Goal Setting & Mental Preparation	0.563**	Coping-Confidence & Achievement Motivation	0.746**
	ACSI	0.809**	ACSI	0.549**	ACSI	0.731**
	SE-Psychological Efficacy	0.789**	Coping-Confidence & Achievement Motivation	0.526**	SE- Psychological Efficacy	0.694**
	IM- to Experience Stimulation	0.784**	SE- Sports Discipline	0.496**	IM- to Accomplish	0.688**
	IM- to Accomplish	0.784**	IM- to Accomplish	0.467*	Coping- Concentration	0.677**
	EM-Introjected	0.76**	SE- Psychological Efficacy	0.451*	Coping- Goal Setting & Mental Preparation	0.664**
	SP-Recovery & Injury Prevention	0.756**	SP- Psychological Skill	0.63**	IM- to Experience Stimulation	0.645**
	SE-Personality	0.755**	Coping-Coachability	0.45*	IM- to Know	0.610**
	Coping- Goal setting & Mental Preparation	0.731**			EM-Introjected	0.574**
	Coping-Concentration	0.72**			SE- Sports Discipline	0.571**
	IM- to Know	0.722**			SP- Total	0.552
	Coping with Adversity	0.703**			Coping with Adversity	0.536**
	EM-Identified	0.670**			EM-Identified	0.496**
	SE-Sports Discipline	0.589**			Coping- Coachability	0.423*
	EM-External Regulation	0.508**				
	Coping- Coachability	0.421*				
	Coping-Peaking Under Pressure	0.39*				
SP-MD	SP-Total	0.957**	SP Total	0.961**	SP- Total	0.877**
	SP-Psychological Skills	0.922**				
	SE-Total	0.901**				
	SP-Preparedness & Strategy	0.894**				
	SP-Athletic Development	0.892**				
	Coping-Confidence & Achievement Motivation	0.884**				
	SE-Professional Thought	0.858**				
	SE-Personality	0.842**				
	Coping with Adversity	0.827**				
	SE-Psychological Efficacy	0.823**				
	IM- to Experience Stimulation	0.822**				
	IM- to Accomplish	0.818**				
	IM- to Know	0.808**				
	ACSI	0.783**				
	SP-Recovery & Injury Prevention	0.775**				
	Coping-Concentration	0.736**				
	EM-Identified	0.725**				
	Coping-Goal Setting & Mental Preparation	0.684**				
	EM-Introjectory	0.682**				
	SE-Sports Discipline	0.668**				
	Coping- Peaking under Pressure	0.485**				
	EM-External Regulation	0.478**				
SP-PS	SP-Total	0.95**	SP-Athletic Development	0.803**	SP- Athletic development	0.847**
	SP- Mastery & Development	0.894**	SE-Personality	0.773**	SP-Psychological Skill	0.838**
	SP-Psychological skills	0.892**	SP-Recovery & Injury Prevention	0.747**	SE-Personality	0.831**
	SP- Athletic development	0.867**	SP-Psychological Skill	0.708**	SE- Total	0.794**
	SE-Personality	0.855**	SE-Professional Thought	0.624**	SP- Recovery & Injury Prevention	0.762**
	SE-Total	0.849**	IM- to Accomplish	0.606**	IM- to Accomplish	0.743**
	ACSI	0.834**	Coping- - Concentration	0.561**	Coping- - Concentration	0.716**
	Coping with Adversity	0.829**	SE-Sports Discipline	0.512**	IM- to Know	0.715**
	Coping-Confidence & Achievement Motivation	0.829**	IM- to Experience Stimulation	0.511**	IM-to Experience Stimulation	0.710**
	Coping- Concentration	0.824**	Coping-Confidence & Achievement Motivation	0.483**	ACSI	0.710**
	IM-to Know	0.817**	Coping- Goal Setting & Mental Preparation	0.476**	SE-Professional Thought	0.705**
	IM-to Accomplish	0.808**	EM- Identified	0.472**	Coping-Confidence & Achievement Motivation	0.681**
	SE-Psychological Efficacy	0.795**	ACSI	0.466**	SE-Psychological Efficacy	0.667**
	IM-to Experience Stimulation	0.790**	IM-to Know	0.465**	Coping with Adversity	0.651**
	SP- Recovery & Injury Prevention	0.787**	SP- Total	0.402*	SP- Total	0.622**
	SE-Professional Thought	0.768**	Coping with Adversity	0.366*	Coping-Goal Setting & Mental Preparation	0.593**
	EM- Identified	0.697**	SE-Total	0.67**	EM- Identified	0.591**
	Coping-Goal Setting & Mental Preparation	0.673**	SE- Psychological Efficacy	0.38*	SE-Sports Discipline	0.576**
	EM-Introjected	0.667**			EM-Introjected	0.514**
	SE-Sports Discipline	0.586**			Coping- Coachability	0.303*
	Coping- Peaking under pressure	0.554**			Coping- Peaking under pressure	0.269*
	EM-External Regulation	0.389*				
SP-RI	SP- Total	0.877**	SE-Personality	0.804**	SP- Preparedness & Strategy	0.762**
	SE-Psychological Efficacy	0.788**	SP- Athletic Development	0.772**	SP- Athletic Development	0.749**
	SP- Preparedness and strategy	0.787**	SP- Preparedness & Strategy	0.747**	SP-Psychological Skill	0.748**
	SP- Mastery & Development	0.775**	SE-Total	0.704**	SE- Total	0.713**
	EM-Identified	0.76**	SP-Psychological Skill	0.703**	SE-Personality	0.707**
	SP-Athletic Development	0.756**	SE- Professional Thought	0.665**	SE- Psychological Efficacy	0.699**
	SP-Psychological skills	0.75**	Coping- - Concentration	0.568**	Coping-Confidence & Achievement Motivation	0.620**
	SE-Total	0.733**	Coping-Confidence & Achievement Motivation	0.566**	IM- to Accomplish	0.603**
	Coping with Adversity	0.725**	ACSI	0.528**	ACSI	0.594**
	Coping-Confidence & Achievement Motivation	0.717**	SE- Sports Discipline	0.489**	Coping with Adversity	0.594**
	SE-Personality	0.699**	IM- to Accomplish	0.444*	IM-to Experience Stimulation	0.584**
	EM-Introjected	0.695**	SE- Psychological Efficacy	0.417*	SE-Professional thought	0.581**
	IM-to Accomplish	0.665**	SP- Total	0.395*	SP- Total	0.577**
	IM-to Experience stimulation	0.656**	Coping- Goal Setting & Mental Preparation	0.52**	EM- Identified	0.569**
	ACSI	0.639**			Coping- Concentration	0.547**
	IM-to Know	0.618**			EM- Introjected	0.546**
	SE-Professional thought	0.61**			IM- to Know	0.545**
	Coping- Goal Setting and Metal Preparation	0.597**			Coping- Goal Setting and Metal Preparation	0.540**
	EM-External Regulation	0.594**			SE-Sports Discipline	0.502**
	Coping- Concentration	0.591**			EM-External Regulation	0.338*
	SE-Sports Discipline	0.490**			Coping- Peaking Under Pressure	0.259*
	Coping- Peaking Under Pressure	0.473**				
SP-Psy Skills	SP-Total	0.95**	SE-Personality	0.728**	SP- Preparedness and strategy	0.838**
	SP-Mastery & Development	0.922**	SP- Preparedness & Strategy	0.708**	SP-Athletic Development	0.811**
	SP- Preparedness and Strategy	0.892**	SP- Psychological Skills	0.703**	SE- Total	0.800**
	SP-Athletic Development	0.88**	SE Total	0.668**	SE- Personality	0.794**
	SE-Total	0.856**	Coping-Concentration	0.625**	SP-Recovery and Injury Prevention	0.748**
	Coping-Confidence & Achievement Motivation	0.843**	ACSI	0.595**	SE-Psychological Efficacy	0.729**
	IM-to Know	0.826**	Coping with Adversity	0.585**	ACSI	0.711**
	SE-Psychological Efficacy	0.825**	SE- Professional Thought	0.556**	Coping-Confidence & Achievement Motivation	0.696**
	SE-Personality	0.822**	EM-Identified	0.543**	SE-Professional thought	0.691**
	SE-Professional thought	0.802**	SE-Psychological Efficacy	0.478**	Coping with Adversity	0.690**
	Coping with Adversity	0.782**	SE-Sports Discipline	0.443*	Coping- Concentration	0.688**
	ACSI	0.780**	IM-to Accomplish	0.397*	IM- to Know	0.680**
	IM-to Experience Stimulation	0.766**	SP-Athletic Development	0.63**	IM-to Experience stimulation	0.637**
	Coping- Concentration	0.761**	Coping Confidence and achievement motivation	0.54**	EM- Introjected	0.623**
	SP-Recovery and Injury Prevention	0.750**			IM- to Accomplish	0.600**
	Coping -Goal Setting & Mental Preparation	0.734**			Coping -Goal Setting & Mental Preparation	0.581
	EM-Introjected	0.728**			SE-Sports Discipline	0.564**
	IM-to Accomplish	0.682**			EM- Identified	0.563**
	EM-Identified	0.628**			SP- Total	0.555**
	SE-Sports Discipline	0.578**			Coping -Peaking Under Pressure	0.319*
	EM-External Regulation	0.454**			EM-External Regulation	0.307*
	Coping- Peaking Under Pressure	0.438*				
SP-Total	SP-Mastery & Development	0.957**	SP- Mastery and Development	0.961**	SP- Mastery and Development	0.877**
	SP- Preparedness & Strategy	0.950**	SP- Preparedness and Strategy	0.402*	SP- Preparedness and Strategy	0.622**
	SP-Psychological Skills	0.950**	SP- Recovery and Injury Prevention	0.395*	SP- Recovery and Injury Prevention	0.577**
	SP-Athletic development	0.939**			SP-Psychological Skills	0.555**
	SE-Total	0.892**			SP-Athletic development	0.552**
	Coping-Confidence & Achievement Motivation	0.888**			SE-Personality	0.535**
	SP-Recovery & Injury Prevention	0.877**			SE-Psychological Efficacy	0.532**
	SE-Psychological Efficacy	0.861**			IM-to Experience Stimulation	0.514**
	SE-Personality	0.849**			Coping-Confidence & Achievement Motivation	0.499**
	Coping with Adversity	0.828**			IM- to Know	0.492**
	SE-Professional Thought	0.824**			IM-to Accomplish	0.473**
	ACSI	0.821**			SE- Total	0.449**

	IM-to Experience Stimulation	0.815**			ACSI	0.433**
	IM-to Know	0.809**			EM- Identified	0.420**
	IM-to Accomplish	0.802**			Coping -Goal Setting & Mental Preparation	0.415**
	Coping-Concentration	0.776**			EM- Introjected	0.403***
	EM-Introjected	0.757**			SE-Sports Discipline	0.393**
	EM-Identified	0.747**			Coping with Adversity	0.389**
	Coping-Goal Setting & Mental Preparation	0.731**			Coping- Concentration	0.383**
	SE-Sports Discipline	0.621**			SE- Professional Thought	0.381**
	EM-External Regulation	0.522**				
	Coping- Peaking Under Pressure	0.502**				

Note: **p<0.01; *p<0.05
SE= Self-Efficacy; IM=Intrinsic Motivation; EM=Extrinsic Motivation; SP=Sports Performance; ACSI= Athletic Coping Skills Inventory Score; Psy Skills= Psychological Skills

Although the correlates of Athletic Development in female group were present in the male group but the correlates that were specifically seen in male athletes only and not present in the female athletes were, between Athletic Development and Sports performance- Psychological skills, Intrinsic motivation to experience stimulation, Extrinsic motivation- introjected regulation, Intrinsic motivation to know, etc. So we may say that male athletes, if they improved their coping skills, were intrinsically and extrinsically motivated and had high self-efficacy, had improved athletic development. While women on the other hand, if had better coping skills, were intrinsically motivated to accomplish and had high self-efficacy, had better athletic development.

Mastery and Development: The correlates of Mastery and Development for males were a lot which means that they can improve their mastery in sports specific skills by improving on all these aspects while on the other had this was not the same for the female athletes.

Preparedness and Strategy: It can be seen from Table No. 3 that Preparedness and Strategy was positively correlated with Self-efficacy, Coping skills (confidence & achievement motivation, concentration, peaking under pressure), Intrinsic motivation to accomplish, know and experience stimulation, Extrinsic motivation- identified regulation, etc. in both males and female profiles. This may mean that both the genders can improve their strategy making skills by working on these dimensions. Basically the result for correlation for Preparedness and Strategy was almost identical to what came out for Sports performance (total score) in the males and total sample.

Females showed that their Preparedness and Strategy improved if they had better coping skills, high self-efficacy, and were intrinsically motivated along with extrinsic motivation-identified regulation (meant that they identified with the sport).

Recovery and Injury Prevention and Psychological skills: Recover and Injury Prevention and Psychological Skills in both males and females can be improved by working on self-efficacy, having intrinsic motivation and coping skills.

Psychological Skills can be improved both in males and females by improving extrinsic motivation too. In males Confidence and Achievement motivation was highly correlated with Psychological skills and plays a more crucial role in improving it as compared to females.

Sports Motivation

Table No. 4 showed comparison of correlation of sports motivation and its sub-scales with related variables in young adult male, female and total sample of athletes.

Intrinsic Motivation to Know: In females athletes it could be seen that intrinsic motivation to know was positively correlated with anxiety- worry, somatic and concentration disruption. Which might mean that for female athletes, as intrinsic motivation to know increased, pre-competition anxiety increased, which further increased performance. This finding was in sync with the study by Gupta and Hai (2023), where weak positive correlation was found between sports competition anxiety and intrinsic motivation. This suggested that when young adults' intrinsic motivation rises, so does their sports competition anxiety. It is also in sync with Cale and Jones (1989) study of hockey players. But same could not be seen in male athletes.

In male athletes' Self-efficacy, Coping skills, Sports performance and two sub-scales of Extrinsic Motivation came out to be positively correlated with Intrinsic Motivation to Know.

Whereas, Intrinsic Motivation to Know was positively correlated to Preparedness and Strategy in both genders. This showed that Preparedness and Strategy was an important variable to consider while seeing performance of an athlete as it affected motivation too in all three group profiles (male, female and all athletes in general).

Intrinsic Motivation to Accomplish: In Intrinsic Motivation to Accomplish was positively correlated to Sports performance and Self-Efficacy in both genders.

Amongst male athletes it was seen from the Table No. 4 that Extrinsic Motivation-Introjected and External regulation was positively correlated with Intrinsic Motivation to Accomplish, which might imply that when males attached a sense of pride to their sport and when there was ego involvement in the task then their Intrinsic Motivation to Accomplish may have shown an increase. This coincided with a study done by Kilpatrick, Hebert, Bartholomew (2005), where it was found that men saw these physical activities as a way to fulfill ego-related goals that supported their engagement in sports.

Table No-4: Showing comparison of correlational profiles of motivation with related variables in young adult male, female and total sample of athletes.

Variable	Male	r value for male	Female	r value for Females	Total	r value for Total	
IM-to Know	SE-Personality	0.839**	IM-to Accomplish	0.688**	IM- to Experience Stimulation	0.746**	
	IM-to Experience Stimulation	0.832**	Anxiety (worry)	0.504**	IM-to Accomplish	0.730**	
	SP-Psychological Skills	0.826**	IM- to Experience Stimulation	0.499**	SP- Preparedness and Strategy	0.715**	
	SE- Total	0.825**	SP- Preparedness and Strategy	0.465**	SP- Psychological Skills	0.680**	
	SP -Preparedness & Strategy	0.817**	Anxiety Total	0.465**	SE- Personality	0.624**	
	Coping with Adversity	0.810**	Somatic anxiety	0.413*	SP-Athletic Development	0.610**	
	SP- Total	0.809**	Anxiety- Concentration disruption	0.404*	SE- Total	0.588**	
	SP- Mastry and Development	0.808**			EM- Introjected	0.567**	
	ACSI	0.794**			Coping Confidence and Achievement Motivation	0.560**	
	Coping-Confidence & Achievement Motivation	0.789**			SP- Recovery and Injury Prevention	0.545**	
	SE- Professional Thought	0.768**			ACSI	0.520**	
	IM to Accomplish	0.747**			SE- Professional Thought	0.494**	
	SE-Psychological Efficacy	0.733**			SP- Total	0.492**	
	EM- Introjected	0.725**			Coping with Adversity	0.481**	
	SP- Athletic Development	0.722**			SE-Sports Discipline	0.471**	
	Coping -Goal Setting & Mental Preparation	0.719**			SE-Psychological Efficacy	0.470**	
	Coping- Concentration	0.709**			Coping -Goal Setting & Mental Preparation	0.451**	
	Coping- Peaking Under Pressure	0.648**			Coping- Concentration	0.449**	
	EM- Identified	0.634**			EM- Identified	0.426**	
	SP-Recovery & Injury Prevention	0.618**			Coping- Peaking Under Pressure	0.344**	
	SE-Sports Discipline	0.582**			Amotivation	0.284*	
	EM- External Regulation	0.4*					
IM-to Accomplish	IM-to Experience Stimulation	0.834**	IM-to Know	0.688**	IM-to Experience Stimulation	0.743**	
	Coping-Confidence & Achievement Motivation	0.822**	SP- Preparedness & Strategy	0.606**	SP -Preparedness & Strategy	0.743**	
	SP- Mastry and Development	0.818**	IM- to Experience Stimulation	0.569**	IM-to Know	0.730**	
	SP -Preparedness & Strategy	0.808**	SE- Sports discipline	0.496**	SP- Athletic Development	0.688**	
	SP- Total	0.802**	SP-Athletic Development	0.467**	Coping Confidence and Achievement Motivation	0.662**	
	SP- Athletic Development	0.784**	SE- Personality	0.448*	SE- Total	0.614**	
	IM- to Know	0.747**	SP- Recovery and Injury Prevention	0.444*	SP- Recovery and Injury Prevention	0-.603**	
	EM- Identified	0.745**	Coping Confidence and Achievement Motivation	0.421*	SP -Preparedness & Strategy	0.600**	
	Coping with Adversity	0.736**	SP- Psychological Skills	0.397*	SE- Personality	0.599**	
	SE- Total	0.726**	SE- Professional Thought	0.377*	SE- Sports Discipline	0.578**	
	ACSI	0.712**	SP- Total	0.371*	SE- Professional Thought	0.572**	
	SE-Professional thought	0.7**	Coping -Freedom from worry	-0.4*	EM- Identified	0.563**	
	SP-Psychological Skills	0.682**			Coping with Adversity	0.534**	
	SE-Personality	0.672**			ACSI	0.518**	
	SP- Recovery & Injury Prevention	0.665**			Coping- Concentration	0.502**	
	Coping- Peaking Under Pressure	0.658**			EM- Introjected	0.479**	
	Coping- Concentration	0.639**			SP- Total	0.473**	
	SE- Sports Discipline	0.607**			Coping -Goal Setting & Mental Preparation	0.427**	
	EM- Introjected	0.598**			SE-Psychological Efficacy	0.391**	
	SE-Psychological Efficacy	0.597**			Coping- Peaking Under Pressure	0.292*	
	Coping -Goal Setting & Mental Preparation	0.572**			Coping -Freedom from worry		-0.316*
	EM- External Regulation	0.48**					
IM-to Experience Stimulation	IM to Accomplish	0.834**	IM to accomplish	0.569**	IM- to Know	0.746**	
	IM to Know	0.832**	SP-Preparedness and strategy	0.511**	IM to accomplish	0.743**	

	SP- Mastry and Development	0.822**	IM- to Know	0.499**	SP-Preparedness and strategy	0.710**	
	SP- Total	0.815**	SE-Personality	0.393*	SP- Athletic Development	0.645**	
	EM- Identified	0.795**	Coping- Freedom From Worry	-0.469**	SP-Psychological Skills	0.637**	
	SP -Preparedness & Strategy	0.790**			SE-Personality	0.636**	
	SP- Athletic Development	0.784**			SE- Total	0.610**	
	Coping-Confidence & Achievement Motivation	0.772**			SP- Recovery & Injury Prevention	0.584**	
	SP-Psychological Skills	0.766**			SE-Professional thought	0.554**	
	Coping with Adversity	0.755**			Coping with Adversity	0.553**	
	SE-Personality	0.732**			Coping-Confidence & Achievement Motivation	0.552**	
	SE- Total	0.731**			EM- Introjected	0.552**	
	SE-Professional thought	0.715**			EM- Identified	0.534**	
	ACSI	0.696**			SP- Total	0.514**	
	SP- Recovery & Injury Prevention	0.656**			ACSI	0.512**	
	SE-Psychological Efficacy	0.646**			Coping- Concentration	0.494**	
	Coping- Concentration	0.632**			SE-Psychological Efficacy	0.494**	
	Coping- Peaking Under Pressure	0.627**			SE- Sports Discipline	0.468**	
	Coping -Goal Setting & Mental Preparation	0.615**			Coping- Peaking Under Pressure	0.404**	
	EM- External Regulation	0.607**			Coping -Goal Setting & Mental Preparation	0.398**	
	SE- Sports Discipline	0.5**			EM- External Regulation	0.264*	
					Coping- Freedom From Worry		-0.417**
EM- Identified	IM-to Experience Stimulation	0.795**	EM-Introjected	0.717**	ACSI	0.888**	
	Coping with Adversity	0.775**	Coping- Peaking Under Pressure	0.585**	Coping with Adversity	0.686**	
	SP- Recovery & Injury Prevention	0.760**	SP- Psychological Skills	0.543**	EM-Introjected	0.632**	
	SP- Total	0.747**	Amotivation	0.493**	Coping- Peaking Under Pressure	0.620**	
	IM to Accomplish	0.745**	SP- Preparedness and Strategy	0.472**	SP- Psychological Skills	0.591**	
	SP- Mastry and Development	0.725**	Coping- Goal Setting and Mental Preparation	0.459*	EM-External regulation	0.575**	
	EM- External Regulation	0.722**	Coping- Confidence & Achievement Motivation	0.451*	SP- Recovery & Injury Prevention	0.569**	
	SP- Preparedness and Strategy	0.697**	EM-External regulation	0.434*	SP- Psychological Skills	0.563**	
	ACSI	0.685**	Coping- Concentration	0.403*	IM to Accomplish	0.563**	
	Coping- Peaking Under Pressure	0.683**	Coping with Adversity	0.59**	Coping-Confidence & Achievement Motivation	0.559**	
	SP- Athletic Development	0.670**	ACSI	0.48**	IM-to Experience Stimulation	0.534**	
	Coping-Confidence & Achievement Motivation	0.664**	Coping- Freedom From Worry	-0.49**	Coping- Goal Setting and Mental Preparation	0.528**	
	Coping- Concentration	0.644**			Coping- Concentration	0.528**	
	IM to Know	0.634**			SP- Athletic Development	0.496**	
	SP- Psychological Skills	0.628**			SE- Personality	0.476**	
	SE- Personality	0.618**			SE- Total	0.446**	
	SE- Total	0.613**			IM-to Know	0.426**	
	SE- Psychological Efficacy	0.612**			SP- Total	0.420**	
	EM- Introjected	0.595**			SE- Psychological Efficacy	0.413**	
	Coping- Goal Setting and Mental Preparation	0.592**			SE- Professional Thought	0.385**	
	SE- Professional Thought	0.592**			SE- Sports Discipline	0.292*	
	Coping- Freedom From Worry	-0.366*			Amotivation	0.292*	
					Coping- Freedom From Worry		-0.427
EM- Introjected	SP- Athletic Development	0.760**	EM-Identified	0.717**	EM-Identified	0.632**	
	SP-Total	0.757**	Coping- Peaking Under Pressure	0.689**	SP-Psychological Skills	0.623**	

	IM-to Experience Stimulation	0.753**	Amotivation	0.549**	Coping Goal Setting and Mental Preparedness	0.606**	
	SP-Psychological Skills	0.728**	Coping Goal Setting and Mental Preparedness	0.447*	SP- Athletic Development	0.574**	
	IM-to Know	0.725**	ACSI	0.402*	IM- to Know	0.567**	
	Coping- Goal Setting & Mental Preparation	0.724**	EM-External Regulation	0.47**	EM-External Regulation	0.553**	
	SP-Recovery & Injury Prevention	0.695**	Coping- Freedom From Worry	-0.391*	IM-to Experience Stimulation	0.552**	
	SE-Psychological Efficacy	0.693**			SP-Recovery & Injury Prevention	0.546**	
	SP-Mastery & Development	0.682**			Coping- Peaking Under Pressure	0.541**	
	SP-Preparedness & Strategy	0.667**			SP-Preparedness & Strategy	0.514**	
	SE-Professional Thought	0.655**			SE-Psychological Efficacy	0.500**	
	SE-Total	0.653**			ACSI	0.489**	
	EM-External Regulation	0.652**			IM-to Accomplish	0.479**	
	Coping-Confidence & Achievement Motivation	0.645**			Amotivation	0.460**	
	SE-Personality	0.621**			Coping-Confidence & Achievement Motivation	0.455**	
	IM-to Accomplish	0.598**			Coping with Adversity	0.431**	
	EM-Identified	0.595**			SE-Total	0.427**	
	ACSI	0.541**			SE-Personality	0.421**	
	Coping with Adversity	0.512**			SP- Total	0.403**	
	Coping-Concentration	0.504**			Coping-Concentration	0.374**	
	Coping- Peaking Under Pressure	0.412**			SE-Professional thought	0.355**	
					Coping- Freedom From Worry		- 0.396**
EM- External Regulation	EM-Identified	0.722**	Coping- Peaking Under Pressure	0.696**	EM-Identified	0.575**	
	EM-Introjected	0.652**	Amotivation	0.693**	Coping- Peaking Under Pressure	0.566**	
	Coping-Confidence & Achievement Motivation	0.645**	EM- Identified	0.434*	EM-Introjected	0.553**	
	IM-to Experience Stimulation	0.607**	Anxiety- Worry	0.366*	Coping- Goal Setting & Mental Preparation	0.385**	
	SP-Recovery & Injury Prevention	0.594**	EM- Introjected	0.47**	SE-Psychological Efficacy	0.373**	
	SP-Total	0.522**	Coping- Freedom from Worry	-0.395*	Amotivation	0.362**	
	Coping- Goal Setting & Mental Preparation	0.510**	Coping- Coachability	-0.582**	SP-Recovery & Injury Prevention	0.338*	
	SP-Athletic Development	0.508**			Coping-Confidence & Achievement Motivation	0.324*	
	IM-to Accomplish	0.480**			Anxiety Worry	0.314*	
	SP-Mastery & Development	0.478**			SP-Psychological Skills	0.307*	
	SP-Psychological Skills	0.454*			Coping with Adversity	0.284*	
	SE-Psychological Efficacy	0.449*			IM-to Experience Stimulation	0.264*	
	SE-Professional thought	0.415*			Coping- Freedom from Worry		- 0.440**
	IM-to Know	0.400*			Coping- Coachability		- 0.279*
	Coping-Peaking Under Pressure	0.391*					
	SE-Total	0.386*					
	SE-Personality	0.368*					
Amotivation	Coping-Freedom from Worry	-0.502**					
	Anxiety-Concentration Disruption	0.685**	EM-External Regulation	0.693**	Anxiety Concentration Disruption	0.590**	
	Anxiety-Total	0.471**	Coping- Peaking Under Pressure	0.604**	Coping-Peaking Under Pressure	0.532**	
	Coping-Peaking under Pressure	0.401*	EM- Introjected	0.549**	EM- Introjected	0.460**	
	Coping-Coachability	-0.478**	Anxiety- Concentration Discipline	0.526**	Anxiety Total	0.443**	
			Anxiety- Worry	0.510**	EM-External Regulation	0.362**	
			EM- Identified	0.493**	Anxiety Worry	0.333**	
			Anxiety Total	0.466**	EM-Identified	0.292*	
			SE- Professional Thought	-0.431*	IM- to Know	0.284*	
			Coping- Freedom from Worry	-0.482**	Anxiety Somatic	0.270*	
			Coping- Coachability	-0.536**	Coping- Coachability		- 0.484**

					Coping- Freedom from Worry		- 0.359**
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Note: **p<0.01; *p<0.05
SE= Self-Efficacy; IM=Intrinsic Motivation; EM=Extrinsic Motivation; SP=Sports Performance; ACSI= Athletic Coping Skills Inventory Score; Psy Skills= Psychological Skills

In male athletes, Coping skills were positively correlated to Intrinsic Motivation to Accomplish but in female athletes only 2 sub- scales of Coping skills which were Confidence and Achievement Motivation and Freedom from Worry were positively and negatively correlated to Intrinsic Motivation to Accomplish respectively. Which might mean that in female athletes as worry about winning the match increased, Intrinsic Motivation to Accomplish goals increased.

Here too Preparedness and Strategy came out to be correlated with Intrinsic Motivation to Know in all the athletes, irrespective of gender,

Intrinsic Motivation to Experience Stimulation= Intrinsic Motivation to Experience Stimulation was negatively correlated to freedom from worry in females and was seen to affect performance though motivation. It was also seen that Intrinsic Motivation to Experience Stimulation in females was positively correlated to Personality dimension of Self-Efficacy.

For male athletes, there were many positive correlates for Intrinsic Motivation to Experience Stimulation which included Coping skills, Self-efficacy and Sports performance. This may mean that Intrinsic Motivation to Experience Stimulation increased, as all these variables improved.

Extrinsic motivation- Identified Regulation = Extrinsic motivation- Identified Regulation was seen to positively correlated to extrinsic and intrinsic motivation in male athletes and only extrinsic motivation in female athletes. It might mean that in male athletes' extrinsic motivation to be identified with the sport was somewhat related to internal values and thus as intrinsic motivation increased, this dimension may also have increased. It can be seen to be positively correlated to Amotivation in female athletes. Which might mean that when Extrinsic Motivation- Identified Regulation increased, there was reduction in motivation to play that sport in females. This can be because as one person starts to see game as medium to meet new people then the goal (to meet new people) becomes more important than any other goal. It was also further seen that self-efficacy didn't play much of a role in deciding Extrinsic Motivation- Identified Regulation in females but Coping skills did.

It was seen to positively correlate with all the Coping skills, Self-efficacy and Sports performance too in male athletes.

Also results revealed that, it was positively correlated with Preparedness and Strategy in both genders and negatively correlated to Freedom from Worry for all athletes, irrespective of gender.

Extrinsic Motivation- Introjected Regulation = Results revealed that, Extrinsic Motivation- Introjected Regulation too correlated positively with Amotivation in female athletes. Here one could say that has because now sports becomes a medium to avoid guilt or anxiety or to attain ego-enhancements or pride, the fun in the game gets lost and amotivation sets in. Self-efficacy here too didn't play much of a role in deciding Extrinsic Motivation-Introjected Regulation in female athletes whereas, Coping skills did.

On the other hand, it was also seen that Extrinsic Motivation Introjected regulation was positively correlated to Intrinsic Motivation to Know and Accomplish, Sports performance, Self -Efficacy and Coping skills in male athletes which might mean that seeing sports as way to enhance ego and pride comes with more interest to know about the sport and its practices, accomplish goals and improve other aspects of life too. This finding was similar to the findings by *Zhariadis, Alexandris, Tsorbatzoudi and Grouios (2006)*, where they conducted a study to examine the impact of motivational aspects on adult recreational sport participants' intention to continue participating in sports as well as their degree of sport involvement. Where it was found that increasing intrinsic motivation to achieve and learn as well as extrinsic motivation (introjected regulation) are positively correlated.

It was also seen that Peaking Under Pressure (a sub-scale of coping skills) came out to be positively correlated to Extrinsic Motivation- Introjected Regulation for all sportspersons. Which might mean that an athlete who used sports as a medium to avoid guilt or anxiety, may had an increased ability to excel under hard conditions and see them as challenge.

Extrinsic Motivation- External Regulation: Extrinsic Motivation- External Regulation was positively correlated to Amotivation and worry (anxiety-sub-scale). This may imply that as sports start to be about external rewards than internal happiness then feeling of worry anxiety increased and wanting to play the sport also decreased for females. It was negatively correlated to coachability (sub-scale of coping skills) in women, which means that as the game

becomes more about external rewards the ability to take criticism positively decreased in women.

In male athletes Intrinsic Motivation to Know and Accomplish, Sports performance, Self-Efficacy and Coping skills in males, this might mean that seeing sports as way to achieve external rewards comes with increase in interest to know more about the sport and its practices and accomplish goals and improve other aspects of life too.

Amotivation: Amotivation was positively correlated with anxiety and Coping Peaking Under Pressure and negatively with Coping- Coachability in all 3 groups. This might mean that as anxiety increased in athletes their will to continue the game decreased along with a decreased in ability to take criticism positively.

Motivation clearly positively impacted sports performance in these results. These findings are in sync with *Rosnet, Gillet, Nerjot, Vallerand, Amoura and Elizabeth (2012) used person-centered method to identify motivational profiles in the study. The results of both studies also showed that the highest performance levels were attained by athletes with a high motivational profile.*

In women athletes as extrinsic motivation increased amotivation increased. This means for women when game became more about outer benefits then their motivation to play the game decreased.

Self-efficacy

Results in Table No. 5 showed comparison of correlation of Self -Efficacy with related variables in young adult male, female and total sample of athletes.

Table 5: Showing comparison of correlation of self-efficacy with related variables in young adult male, female and total sample of athletes.

Variable	Male	r value of male	Female	r value of female	Total	r value of total
Self - Efficacy (Total)	SE-Personality	0.923**	SE-Professional Thought	0.903**	SE-Personality	0.913**
	SE-professional Thought	0.909**	SE-Personality	0.892**	SE-professional Thought	0.897**
	SE-Psychological Efficacy	0.902**	SP-Athletic Development	0.786**	SP-Athletic Development	0.822**

	SP-mastery & Development	0.901**	Coping-Concentration	0.752**	SP-Psychological Skills	0.800**
	SP-Total	0.892**	SP-Recovery & Injury Prevention	0.704**	SP-Preparedness & Strategy	0.794**
	Coping-Confidence & Achievement Motivation	0.868**	SE-Discipline	0.696**	SE-Psychological Efficacy	0.787**
	SP-Preparedness & Strategy	0.849**	SP-Psychological Skills	0.668**	SE-Sports Discipline	0.776**
	SE-Total	0.836**	ACSI	0.626**	Coping-Confidence & Achievement Motivation	0.773**
	IM-to Know	0.825**	SE-Psychological Efficacy	0.525**	ACSI	0.756**
	ACSI	0.820**	Coping with Adversity	0.512**	Coping-Concentration	0.734**
	SE-Sports Discipline	0.805**	Coping- Goal Setting & Mental Preparation	0.457*	SP-Recovery & injury Prevention	0.692**
	Coping with Adversity	0.802**	Coping-Coachability	0.447*	Coping-Goal Setting & Mental Preparation	0.654**
	Coping-Goal Setting & Mental Preparation	0.778**	IM- to Accomplish	0.371*	IM- to Accomplish	0.614**
	Coping-Concentration	0.733**	SP-Preparedness & Strategy	0.67**	IM-to Experience Stimulation	0.610**
	SP-Recovery & injury Prevention	0.733**	CopingConfidence & Achievement Motivation	0.65**	IM- to Know	0.588**
	IM-to Experience Stimulation	0.731**			SP- Total	0.449**
	IM-to Accomplish	0.726**			EM-Identified	0.446**
	EM-Introjected	0.653**			EM-Introjected	0.427**
	EM-Identified	0.613**			Coping-Coachability	0.400**
	Coping-Peaking Under Pressure	0.424*				
	EM-External Regulation	0.386**				
	Coping-Coachability	0.374**				

Note: **p<0.01; *p<0.05

SE= Self-Efficacy

IM=Intrinsic Motivation

EM=Extrinsic Motivation

ACSI= Athletic Coping Skills Inventory Score

SP=Sports Performance

Psy Skills= Psychological Skills

For athletes in general Sports performance was seen to correlate positively with Self Efficacy leading to accepting the second hypothesis. The more the athlete believed in his/her capacities the better his/her performance. These results coincided with a study by Weinberg, Gould, and Jackson (1979), Weinberg, Yukelson, and Jackson (1980, 1981) and Weinberg,

Gould, Yukelson, and Jackson (1981) where they found that self-efficacy does impact performance positively. Results from the present study also coincide with Martin and Gill's (1991) study, where they discovered a strong association between runners' perceived abilities and their actual performance in distance running. This indicated that on the track, people with higher levels of self-efficacy raced faster. But contrarily, the results opposed the study where it was found that high athlete-rated self-efficacy may not always translate into better performance in upcoming competitive sports (Lochbaum et al., 2023).

It was also seen (Table No. 5) that Preparedness and Strategy was positively correlated to self-efficacy in all 3 groups. Coping strategies (which include coping-goal setting & mental preparation, coping-confidence & achievement motivation, coping- concentration) were also positively correlated to Self-Efficacy in all 3 groups. These findings coincided with a study by U.S. Academy (2013). The results of the study showed that gymnasts who set goals and prepared for the competition, showed confidence in their ability to perform at a high level, relaxed and competed with enthusiasm and certainty, and did not worry excessively about their performance were the ones who performed the best. Another theory that coincided with these results is by Bandura (1977, 1997). According to the self-efficacy hypothesis, athletes gain from having confidence in their capacity to accomplish the necessary tasks in addition to being physically fit and healthy. For instance, if two weightlifters have differing self-perceptions about their capacity to lift the weight, they might not perform at the same level while having comparable physical strength

Recovery and Injury Prevention (sub-scale of sports performance) was positively correlated to self-efficacy in both genders. This showed that if athletes had good coping skills, high confidence, were mentally prepared and had a strategy in hand along with good recovery and took care of themselves when they were injured, they might have increased self-efficacy.

Intrinsic Motivation to Accomplish increased Self-Efficacy in female athletes while in male group both extrinsic and intrinsic motivation increased self-efficacy. Results again showed that females operated on intrinsic motivation to be self-efficient and thus improved performance. We can say here that internal happiness and strength mattered to women more with respect to self-efficacy as compared to men.

In female sample Athletic Development and Psychological Skills (sub-scales of sports performance) positively correlated with self-efficacy. This might mean that when women focused on development of their athletic self by going to training every day, etc. and also worked on controlling and managing emotions at the time of competition, then this lead to increase in their self- efficacy.

In male athletes Mastery & Development (sub-scale of sports performance) increased self-efficacy. So, these results may say that self-efficacy of a male athlete increased if he had good sport skills and knows all the sport specific movements. This finding coincided with a study by Valiante and Morris (2013) which confirmed Bandura's (1977, 1986) claims that mastery experiences are a significant source of self-efficacy.

Sports Anxiety

Table No. 6: showed comparison of correlation of Sports Anxiety with related variables in young adult male, female and total sample of athletes.

Amongst athletes in general, Sports Anxiety was found to be positively correlated to Amotivation and negatively correlated to Coping skill of Freedom from Worry. This means that when anxiety increased, motivation to play the sport decreased even more, and when the athletes worried more about winning and losing and what others will think when they lose, then anxiety increased in both males and females. This result partially accepted the hypothesis 6.

In female athletes it was seen that as the anxiety increased, their motivation to know more about the sport also increased, which might mean that they attempt to decrease their anxiety by getting more information about the sport.

Table No- 6: *Showing comparison of correlation of anxiety with related variables in young adult male, female and total sample of athletes.*

Variable	Male	r value for males	Females	r value for females	Total	r value for total
Anxiety (Total)	Anxiety-Worry	0.838**	Anxiety-Worry	0.969**	Anxiety-Worry	0.895**
	Anxiety-Worry	0.823**	Anxiety Somatic	0.946**	Anxiety Somatic	0.894**
	Anxiety-Somatic	0.815**	Anxiety- Concentration Disruption	0.942**	Anxiety- Concentration Disruption	0.878**
	Amotivation	0.471**	Amotivation	0.466**	Amotivation	0.443**
	Coping-Freedom from Worry	-0.561**	IM-to Know	0.465**	Coping- Peaking Under Pressure	0.273*
	Coping-Coachability	-0.448*	Coping-Freedom from Worry	-0.424*	Coping-Freedom from Worry	-0.462**
					Coping-Coachability	-0.389**

Note: **p<0.01; *p<0.05

Whereas for male athletes Coping Skills of Coachability was negatively correlated to Sports Anxiety, which might mean that as anxiety decreased, the ability of an athlete to take instructions properly and take criticism positively without getting upset increased.

In total sample Coping Skill of Peaking Under Pressure also came to be positively correlated to anxiety, which may reveal that an athlete who sees hard situations as challenges has high anxiety.

There was no direct correlation reported between Sports Anxiety and sports performance, thus rejecting the hypothesis 4.

Coping skills

Table No. 7 showed comparison of correlation of coping skills with related variables in young adult male, female and total sample of athletes.

The table showed that Preparedness and Strategy and Psychological Skills here came out to be positively correlated to Coping skills in the 3 groups. This might mean that if athletes were fully prepared and had better strategies along with a strong mind then they might take better ways to cope with stressful situations.

Here (Table No.7) it was revealed that Coping skill of Concentration was strongly and positively correlated to coping skills in both genders. It might mean that if concentration on sports was increased, athlete isn't easily distracted, was able to focus even in the worst situations in competition then this leads to better usage of coping skills. In both genders we saw that Coping skill of Confidence and Achievement Motivation, Coping skill of Goal Setting & Mental Preparation, Coachability, Coping-Peaking Under Pressure, Extrinsic Motivation- Introjected Regulation, Identified Regulation, Self -Efficacy, Recover and Injury prevention, Athletic Development were positively correlated to Coping skills score. This might mean that better coping skills were taken up if all these variables were increasing in both genders.

Table No-7: Showing comparison of correlation of Coping Skills with related variables in young adult male, female and total sample of athletes.

Variables	Male	r value of males	Female	r value of females	Total	r value of total
ACSI	Coping-Concentration	0.885**	Coping-Concentration	0.819**	Coping-Concentration	0.852**
	Coping with Adversity	0.868**	Coping-Confidence & Achievement Motivation	0.735**	Coping with Adversity	0.809**
	SP-Preparedness & Strategy	0.834**	Coping with Adversity	0.711**	Coping-Confidence & Achievement Motivation	0.779**
	SP-Total	0.821**	Coping-Goal Setting & Mental Preparation	0.693**	SE- Total	0.756**
	SE-Total	0.820**	SE-Psychological Efficacy	0.648**	Coping-Goal Setting & Mental Preparation	0.739**
	Coping-Confidence & Achievement Motivation	0.814**	SE-Personality	0.638**	SE-Psychological Efficacy	0.737**
	SP-Athletic Development	0.809**	SE-Total	0.626**	SP-Athletic Development	0.731
	IM-to Know	0.794**	SP-Psychological Skills	0.595**	SE-Personality	0.724**
	SE-Professional Thought	0.784**	SE-Professional Thought	0.573**	SP-Psychological Skills	0.711**
	SP-Mastery & Development	0.783**	SP-Athletic Development	0.549**	SP-Preparedness & Strategy	0.710**
	SP-Psychological Skills	0.780**	SP-Recovery & Injury Prevention	0.528**	SE-Professional Thought	0.698**
	SE-Psychological Efficacy	0.778**	SP-Preparedness & Strategy	0.466**	EM-Identified	0.588**
	SE-Personality	0.778**	Coping-Peaking under Pressure	0.458*	Coping-Coachability	0.553**
	Coping-Goal Setting & Mental Preparation	0.775**	EM-Introjected	0.402*	SP-Recovery & Injury Prevention	0.549**
	IM-to Accomplish	0.712**	EM-Identified	0.48**	IM-to Experience Stimulation	0.521**
	IM-to Experience Stimulation	0.696**	Coping-Coachability	0.46**	IM-to Know	0.520**
	EM-Identified	0.685**			IM-to Accomplish	0.518**
	SP-Recovery & Injury Prevention	0.639**			EM-Introjected	0.489**
	Coping-Coachability	0.635**			Coping-Peaking under Pressure	0.471**
	SE-Sports Discipline	0.564**			SE-Sports Discipline	0.437**
	EM-Introjected	0.541**			SP- Total	0.433**
	Coping-Peaking under Pressure	0.539**			Anxiety-Concentration Disruption	-0.278*

Note: **p<0.01; *p<0.05

SE= Self-Efficacy; IM=Intrinsic Motivation; EM=Extrinsic Motivation; SP=Sports Performance; ACSI= Athletic Coping Skills Inventory Score, Psy Skills= Psychological Skills

In total sample and males all the sub-variables of Sports performance and the Total Sports performance along with Self-efficacy were correlated positively with coping skills. This may state that if good coping skills were adapted then this may lead to increased performance in athletes. This proves hypothesis three right.

It was also seen that in male athletes' intrinsic motivation was seen to correlate positively with coping skills score, while for female athletes only two dimensions of extrinsic motivation correlated positively with their coping skills.

GENDER DIFFERENCES IN SPORTS PERFORMANCE AND ITS CORRELATES UNDER STUDY:

The third objective was to explain the gender differences in terms of sports performance, sports motivation, self efficacy, sports anxiety and coping skills.

Results in Table No. 8 showed differences (t-ratios) between young adult male and female athletes in terms of sports performance, motivation, self-efficacy and coping skills. The table showed that only two variables showed significant t-ratio value, that were, Intrinsic Motivation to Experience Stimulation (significant at 0.01 level) and Self-Efficacy-Psychological Efficacy (significant at 0.05 level). This meant that Male and female athletes differed significantly in Intrinsic Motivation to Experience Stimulation, with female athletes being higher on this variable. Both the genders also differ significantly in Self-Efficacy-Psychological Efficacy, with females again being higher on this dimension. It showed that females had higher ability to manage emotions at the time of crisis and they play their sport to because they love to experience the strong emotions that were attached to it. They readily manage them and effectively use these emotions to get the best out of the competition.

On all the other dimensions, males and females don't differ. These results opposed the studies done by Dias, Cruz and Fonseca (2010) also by Martens, Vealey, & Burton (1990) where their results showed that females showed higher anxiety than males. This partially accepted hypothesis 5.

Table No-8: Showing differences (T-ratios) between young adult male and female athletes in terms of sports performance, motivation, self-efficacy and coping skills.

Variable		Gender	Means	SD	T-Ratio
Sports Performance	SP-Athletic Development	M	5.63	1.52	0.863
		F	5.91	.95	
	SP-Mastery & Development	M	5.59	1.46	1.221
		F	8.06	10.99	
	SP-Preparedness & Strategy	M	5.24	1.58	1.276
		F	5.69	1.12	
	SP-Recovery & Injury Prevention	M	5.64	1.73	1.656
		F	6.20	.67	
	SP-Psychological Skills	M	5.25	1.59	2.056
		F	5.93	.88	
	SP-Total	M	27.35	7.36	1.761
		F	31.80	11.72	
Motivation	IM- to Know	M	20.70	6.47	1.431
		F	22.70	4.09	
	IM- to Accomplish	M	21.27	5.91	0.803
		F	22.33	4.25	
	IM- to Experience Stimulation	M	19.20	6.39	2.410**
		F	22.53	4.06	
	EM- Identified	M	18.67	5.88	0.346
		F	19.20	6.07	
	EM- Introjected	M	19.73	5.50	1.836
		F	22.03	4.10	
	EM- External Regulation	M	19.57	6.53	0.020
		F	19.60	6.56	
	Amotivation	M	13.27	7.96	1.652
		F	16.80	8.60	
Self-Efficacy	SE-Sports Discipline	M	15.97	4.06	1.454
		F	17.23	2.51	
	SE- Psychological Efficacy	M	16.03	4.24	0.861*
		F	16.83	2.82	
	SE-Professional Thought	M	15.93	3.78	0.396
		F	16.30	3.39	
	SE-Personality	M	15.80	4.00	1.384
		F	17.06	3.02	
	SE-Total	M	63.73	14.22	0.985
		F	66.83	9.75	
Anxiety	Anxiety-Somatic	M	2.03	.73	0.534
		F	1.92	.86	
	Anxiety-Worry	M	2.12	1.07	0.800
		F	1.91	.93	
	Anxiety-Concentration Disruption	M	1.81	.82	0.063
		F	1.83	.81	
	Anxiety-Total	M	1.98	2.16	0.505
		F	1.96	2.48	
Coping Skills	Coping with Adversity	M	7.60	2.99	0.189
		F	7.73	2.46	
	Coping- Coachability	M	7.87	3.31	0.425
		F	8.23	3.37	
	Coping-Concentration	M	8.20	2.70	0.405
		F	8.47	2.39	
	Coping-Confidence & Achievement Motivation	M	9.13	2.98	0.428
		F	8.83	2.42	
	Coping-Goal Setting & Mental Preparation	M	8.13	2.89	0.334
		F	8.37	2.51	
	Coping-Peaking under Pressure	M	6.13	3.13	1.107
		F	7.20	4.25	
	Coping-Freedom from Worry	M	6.00	3.03	1.612
		F	4.77	2.90	
	ACSI- Total	M	52.73	14.56	0.271
		F	53.60	9.78	

Note: **p<0.01; *p<0.05

SE= Self-Efficacy; IM=Intrinsic Motivation; EM=Extrinsic Motivation; SP=Sports Performance; ACSI= Athletic Coping Skills Inventory Score

PREDICTORS OF SPORTS PERFORMANCE:

The fourth objective was to assess the role of motivation, self-efficacy, sports anxiety and coping skills in determining sports performance among male and female young adult athletes.

Results exhibited in Table No. 9 showed stepwise multiple regression for the total sample with dependent variable as Sports Performance and its related variables (Sports Motivation, Self-Efficacy, Sports Anxiety and Coping Skills as independent variables.

The results revealed that Personality dimension of Self-efficacy and Intrinsic motivation to Experience stimulation emerged to be significant predictors of Sports performance (total score) for sports persons in general irrespective of their gender. All these variables together account for 33.7% variance ($R^2=0.337$, $F=14.476$, $df=2,57$, $p<0.05$).

For these sportspersons having any efficacious personality explained 28.6% variance in their sports performance and while Intrinsic motivation to Experience stimulation explained 5% variance in their sports performance.

The beta value for personality dimension of Self-efficacy $\beta=0.976$ and for Intrinsic motivation to Experience stimulation $\beta= 0.520$ indicated that higher the level of perceiving that one has a self-efficacious Personality and higher the Intrinsic motivation to Experience stimulation better was the sports performance as beta values were positive.

Table No.10 showed results of stepwise multiple regression of young adult male athletes with dependent variable as Sports Performance and its related variables as independent variables.

The results revealed that Coping skill of Confidence & Achievement Motivation, a psychological perception of being Self-efficacious and Intrinsic motivation to experience stimulation came out to be significant predictors of Sports performance (total score) in male athletes. All these variables account for 91.3% variance ($R^2= 0.913$, $F=90.53$, $df=3,26$, $p<0.05$). This coincides with the self-efficacy hypothesis by Bandura (1977, 1997). This hypothesis proposed that confidence is a major variable that affects self-efficacy which further affects performance.

Table No-9: *Showing multiple regression for the total sample with dependent variable as Sports Performance and its related variables as independent variables.*

Variable	B	T	pt	Multiple R ²	F	Df	P(F)	R ² change	F change	P(F) change
SE-Personality	0.976	2.505	0.15	0.286	23.274	1,58	0.000	0.286	23.274	0.000
IM-to Experience Stimulation	0.520	2.083	0.42	0.337	14.476	2,57	0.000	0.050	4.338	0.042

R²=0.337, F=14.476, df=2,57, p<0.05

SE= Self-Efficacy

IM=Intrinsic Motivation

Table No-10: *Showing multiple regression of young adult male athletes with dependent variable as Sports Performance and its related variables as independent variables.*

Variables	B	t	pt	Multiple R ²	F	Df	p(F)	R ² change	F change	P(F change)
Coping-Confidence & Achievement Motivation	1.03	4.077	0.000	0.788	104.33	1,28	0.000	0.788	104.33	0.000
SE-Psychological Efficacy	0.73	4.951	0.000	0.893	113.09	2,27	0.000	0.105	26.57	0.000
IM-to External Stimulation	0.26	2.395	0.000	0.913	90.53	3,26	0.000	0.019	5.74	0.000

R²= 0.913, F=90.53, df=3,26, p<0.05

SE= Self-Efficacy

IM=Intrinsic Motivation

Amongst the male athletes Coping skills of Confidence & Achievement Motivation explained 78.8% of variance, Self-efficacy-Psychological efficacy explained 10.5% variance and Intrinsic motivation to experience stimulation explained 1.9% variance in the sports performance (total score). This might mean that if male athletes had high confidence in themselves and were positive minded, consistently gives 100% to his practice and worked to improve his skills, then there was a high chance their sports performance might be high too.

The beta value for Coping-Confidence and Achievement Motivation $\beta=1.03$, Self efficacy-Psychological efficacy $\beta= 0.73$ and Intrinsic motivation to experience stimulation was $\beta= 0.26$, indicated that higher the level of Coping skill of Confidence & Achievement motivation, better perception of Self-efficacy and being Intrinsic motivation to experience stimulation, higher will be the sports performance of the male athletes as beta values were positive.

Surprisingly there emerged no significant predictors for Sports performance for female athletes.

Further Table No. 11 showed multiple regression in total sample, male and female athletes with criterion variables being the sub variables of Sports performance (i.e. Athletic Development, Mastery & Development, Preparedness and Strategy, Recovery and Injury Prevention and Psychological Skills) and related variables as independent variables. Table also showed the corresponding values of R^2 change as respective contribution of each predictor to the variance of sub dimensions of sports performance.

The results revealed that in male athletes Coping skill of Confidence and Achievement motivation came out to be a significant predictor of athletic development, mastery and development and psychological skills (sub-scales of sports performance). Coping skill of Confidence & Achievement motivation explained 78.4%, 78.1%, 71.1% variance in athletic development, mastery and development and psychological skills (sub-scales of sports performance) respectively for male athletes. The respective beta values of Coping skill of Confidence and Achievement motivation were positive for all these variables.

Table No-11: Showing predictors of Sports Performance and its dimensions for all athletes in general, male and female athletes separately. Respective contribution of each prediction is in parentheses.

Variable	Male	Female	Total
Athletic Development	Coping-Confidence & Achievement Motivation= (0.784)	SE-Professional Thought= (0.614)	SE-Professional Thought= (0.639)
	EM-Introjected= (0.061)	IM-to Know= (0.077)	EM-Introjected= (0.096)
	Anxiety-Concentration Disruption= (0.049)	SE-Psychological Efficacy= (0.063)	IM-to Accomplish= (0.033)
			SE-Psychological Efficacy= (0.024)
			Coping-Coachability= (0.016)
Mastery & Development	Coping-Confidence & Achievement Motivation= (0.781)	No Significant Predictors for Mastery and Development	No Significant Predictors for Mastery and Development
	SE-Psychological Efficacy= (0.075)		
	IM-to experience Stimulation= (0.027)		
	Anxiety-Somatic= (0.018)		
	Coping- Freedom from Worry= (0.016)		
Preparedness and Strategy	SE- Personality= (0.732)	SE- Personality= (0.598)	SE- Personality= (0.691)
	IM-to Accomplish= (0.099)	IM- to Know= (0.129)	IM-to Accomplish= (0.093)
	Coping- Concentration= (0.048)	EM- Identified= (0.045)	Coping- Concentration= (0.019)
		Amotivation= (0.043)	
Recovery and Injury Prevention	SE-Psychological Efficacy= (0.621)	SE- Personality= (0.646)	SE- Personality= (0.500)
	EM- Identified= (0.124)		SE- Psychological Efficacy= (0.082)
			IM- to Accomplish= (0.057)
Psychological Skills	Coping-Confidence & Achievement Motivation= (0.711)	SE- Personality= (0.531)	SE- Personality= (0.631)
	SE- Psychological Efficacy= (0.101)	EM- Identified= (0.113)	EM- Identified= (0.101)
		Coping- Freedom from Worry= (0.080)	Coping- Freedom from Worry= (0.026)
		EM- External Regulation= (0.055)	Coping- Concentration= (0.017)
		IM-to Know= (0.059)	
SP- Total	Coping-Confidence & Achievement Motivation= (0.788)	No Significant Predictors for SP- Total	SE- Personality= (0.286)
	SE- Psychological Efficacy= (0.105)		IM- to Experience Stimulation= (0.050)
	IM- to Experience Stimulation= (0.19)		

SE= Self-Efficacy; IM=Intrinsic Motivation; SP=Sports Performance; ACSI= Athletic Coping Skills Inventory Score, Psy Skills= Psychological Skills

This may mean that if male athletes had high confidence and were optimistic about achievement and they gave all they had to their practice and worked to improve their sport skills, then there was a high chance of their athletic development, gaining mastery development and inculcating psychological skills (sub-scales of sports performance) might be high too. It was seen that Self-Efficacy-Psychological Efficacy came out to be a significant predictor in male athletes for Mastery and Development, Recovery and Injury and Psychological skills. Their contribution was 7.5%, 62.5%, 10.1% in predicting Mastery and Development, Recovery and Injury and Psychological skills, respectively, in male athletes. All their beta values were positive, and this might mean that if males increased their psychological efficacy, it can affect their Mastery and Development, Recovery and Injury and Psychological skills in the competition. It could be clearly seen that in male athletes a major portion of their recovery from an injury and injury prevention was affected by their psychological efficacy i.e. how they deal with their emotions at the time of crisis. It could also be seen that in male athletes, that Anxiety- Concentration Disruption, Somatic Anxiety came out to be significant predictors in Athletic Development and Mastery and Development, with predicting 4.9% and 1.8% of variance in Athletic Development and Mastery and Development, respectively. Their beta values were negative; therefore, one could say that as anxiety decreased in male athletes their Athletic Development and Mastery and Development improved. Moreover, in male athletes it was seen that Intrinsic Motivation to Experience Stimulation and to Accomplish were significant predictors of Mastery and Development and Preparedness and Strategy, with predicting 2.7% and 9.9% of variance in Mastery and Development and Preparedness and Strategy, respectively, in male athletes. Their beta values were positive, which might mean that intrinsic motivation is needed in some amount for mastery in skills and strategy to take place. Extrinsic Motivation-Introjected and Identified regulation also came out to be significant predictors of Athletic Development and Recovery and Injury Prevention, with predicting 6.1% and 12.4% variance in Athletic Development and Recovery and Injury Prevention, in male athletes. Their beta values were also positive, this might indicate that in male athletes' extrinsic motivation is equally important for improving or predicting development as an athlete and come out of crisis situations like injury.

Table No. 11 also showed that in female athletes Self-efficacy- Personality emerged out to be a significant predictor of preparedness & strategy, recovery & injury prevention and psychological skills (sub-scales of sports performance). Self-efficacy- Personality explained 59.8%, 64.6% and 53.1% variance in Preparedness and Strategy, Recovery & Injury Prevention and Psychological Skills (sub-scales of sports performance) respectively in females. The beta values of Self-efficacy- Personality was positive in all these variables. This might mean that if female athletes had a personality of a good athlete i.e. fair play, high self-confidence, team work and responsibility then there was high chance that their Preparedness and Strategy (PS), recovery and injury prevention and psychological skills (sub-scales of sports performance) maybe high too.

In females Amotivation emerged to be a significant predictor of PS, which explained 4.3% of variance in PS. Its beta value was negative, which means more the amotivation lesser will be PS in females. In females' athletes, Self-efficacy-Professional Thought and Psychological Skills came out to be important predictors of Athletic Development, with predicting variance of 61.45 and 6.3% in Athletic Development, respectively. Their beta values were positive, thus indicating that females became better athletes if they improved their athletic thinking and psychological efficacy. Thus if they kept their minds strong and positive, then it improved their athletic development. It was also seen in female athletes that Extrinsic Motivation-Identified Regulation was a significant predictor in Preparedness and Strategy and Psychological Skills. They contributed 4.5% and 5.5% of variance in Preparedness and Strategy and Psychological Skills, respectively, in female athletes. Their beta values were positive, this might mean that female athletes when identified with their sport more, they became psychologically stronger, were better prepared before competition and had better plans and strategies. Extrinsic Motivation-External regulation and Coping-Freedom from Worry were also significant predictors of Psychological Skills in female athletes as they contributed 5.5% and 8%, respectively, towards variance in Psychological Skills. Their beta values were positive too, thus indicating that women athletes better managed their emotions and feelings in a competition when they didn't have to worry about winning or losing or about what will people think if they lose and also when they were motivated by some external reward like money, etc.

Intrinsic Motivation to Know came out to be a significant predictor of Athletic Development, Preparedness and Strategy and Psychological Skills in females. It explained 7.7%, 12.9% and 5.9% variance in Athletic Development, Preparedness and Strategy and Psychological Skills in females.

It was also seen that Self-efficacy-Personality came out to be a significant predictor of Preparedness and Strategy in males, females and total sample. Self-efficacy-Personality explained 73.2%, 59.8% and 69.1% variance in Preparedness and Strategy in males, females and total sample respectively. The beta values of Self-efficacy-Personality was positive in males, females and total sample, this may indicate that in all 3 groups, if athletes had a good athletic personality i.e. fair play, high self-confidence, team work and responsibility, then there was a high chance that they maybe be prepared and had a strategy in mind before competition and will be confident in making strategic decisions in competition.

CHAPTER - 5

OVERVIEW, PRACTICAL IMPLICATIONS, LIMITATIONS, SUMMARY

OVERVIEW

- The sample was seen to be high on all the dimensions of Sports performance except Preparedness and Strategy. Athletes were moderate on all sub-scales of Motivation and Amotivation except Intrinsic Motivation to Know and Intrinsic Motivation to Accomplish where they were high. They were high on all dimensions of Self Efficacy. They were also seen to be low on all dimensions of anxiety except worry where they were moderate. Athletes were moderate on all dimensions of coping skills.
- Male and female athletes differed on Preparedness and Strategy, intrinsic motivation and Extrinsic Motivation- Introjected regulation, with females being higher on all of these variables. Male athletes were higher on worry anxiety than females counterparts.
- It was seen for male athletes that there were so many correlates for sports performance and not that much for females, this may imply that female athletes were more focused and knew where to work on to improve their outcome while males on the other had a lot of ways by which they improved their performance and weren't restricting themselves to just a few methods.
- The results also showed that intrinsic motivation was majorly affected by Preparedness and Strategy (sub-scale of sports performance) in case of both male and female athletes and anxiety could actually positively affect performance in female athletes by increasing motivation.
- It was also seen that when females worried more about winning, their intrinsic motivation to accomplish and experience stimulation increased and when they were anxious, their motivation to know about the sport more increased. This might be a way through which female athletes try to overcome the anxiety as knowing more about the unknown helps reduce anxiety.
- It was also seen here that male athletes again like sports performance had a lot of ways though which they increased their intrinsic motivation which wasn't true for the female athletes.
- Hence one could deduce that all the 3 types of extrinsic motivations were positively correlated with amotivation in female athletes and negatively with freedom from worry for female athletes. Which means that female athletes operate on intrinsic motivation

to increase sports performance. These results get support from the study by Zurita-Ortega, Ubago-Jiménez, Melguizo-Ibáñez, & González-Valero, (2023) where it was noted that motivation derived from external values was a significant factor in the cessation of physical exercise because of the aggravation and deterioration of the professional mental image that results from the failure to meet predetermined goals. Male athletes, on the other hand had different ways to increase their extrinsic motivation and sports performance too.

- In motivation too, like sports performance, correlates for female athletes were lesser than male counterparts. Hence, we can say that males can improve their motivation through various ways, but women only focused on some limited number of ways to improve motivation.
- Results adequately proved that as self-efficacy increases sports performance increases. Here too Preparedness and Strategy (sub-scale of sports performance) emerged out to be an important variable affecting self-efficacy for all athletes irrespective of gender. Here too it was seen that women athletes rely more on intrinsic motivation than men for enhancing their self-efficacy. Women athletes apparently could increase their self-efficacy by handling their emotions better in the competitions.
- Results may indicate that under anxiety provoking situations, male athletes lost the ability to focus on what was being told and took criticism badly during high anxiety, while females started to gather more information about the sport they play to reduce that high anxiety.
- Results also implied that better coping skills for women relied on their Extrinsic Motivation- Identified and Introjected regulation and for male athletes it relied on Intrinsic motivation. Here too Preparedness and Strategy and Psychological Skills emerged to be positively correlated to Coping skills score in both genders. It can be clearly seen that both genders use all kinds of coping skills to improve their performance.
- Thus, Preparedness and Strategy (sub-scale of Sports performance) was found to be positively correlated to intrinsic motivation, self-efficacy and coping skills.
- The present study found that there was a significant difference between both genders only in terms of Self-Efficacy based on a sense of Psychological Efficacy and Intrinsic

Motivation to Know with female athletes being higher on both as compared to male counterparts. Otherwise, no other significant difference between the two genders substantially hint towards similar capacity to perform, similar coping and motives among both male and female athletes.

- As far as prediction of sports performance was concerned, it was seen that Confidence and Achievement Motivation came out to be a major predictor for male athletes in determining Sports performance in male athletes. Self-efficacy and Intrinsic Motivation to Know came out to be significant predictors in female athletes. These results were backed by Bandura's (1977, 1997) self-efficacy hypothesis.

PRACTICAL IMPLICATIONS

The present study can be used to determine which psychological variables—such as Motivation, Self-efficacy, Sports anxiety and Coping mechanisms were positively or adversely correlated with Indian players' athletic performance. Knowing these variables enables focused actions to strengthen areas of strength and improve areas of weakness. It will not only improve our theoretical knowledge but also provide useful insights to the larger sports community, encouraging the creation of specialized solutions to maximize athletic performance. Hence, this study has practical implications for sportspersons, coaches, selection teams, training teams and in fact also the policy makers, as the results might aid in the following:

- ***Customized Mental Training Plans:*** Customized mental training plans may be created by learning more about the psychological characteristics of Indian athletes. Depending on the particular needs of the athletes, these programs could concentrate on developing particular skills, such as boosting motivation, coping skill refinement, or self-efficacy.
- ***Improving Mental Toughness:*** Athletes' ability to perform mentally is vital. This research can help with the creation of programs meant to help Indian sportsmen build mental toughness. Their ability to bounce back from setbacks and pressure can help them better manage the difficulties that come with intense competition. ***Encouraging Mental Health and Wellness:*** Promoting athletes' general psychological well-being can also be accomplished by looking at the connection between psychological variables and athletic performance. Techniques for reducing tension and anxiety as well as upholding an

optimistic outlook maybe be created with the help of this study which further might benefit athletes' general mental health in addition to their performance.

- **Cultural Aspects:** This research can investigate how cultural elements might affect the psychological components of sports performance, given the diversity of Indian cultures. For interventions to be effective with Indian athletes, they must be specifically designed to take cultural quirks into account. Directing Coaching and Training Programs: This research can help coaches, trainers, and sports organizations improve their coaching and training initiatives. Training methods that include physical and mental components can be developed more holistically with the help of psychological insights into performance.
- **Informing Sports Psychology help:** The findings will draw attention to how crucial it is to incorporate sports psychology help into Indian players' training regimens and support networks. Working together with sports psychologists to offer specialized therapies and mental health resources could be one way to do this. Contributing to National Sports Policies: The body of evidence that guides national sports policies could be strengthened by this present study. This research may help governments and sports associations develop programs meant to improve Indian athletes' mental health on a variety of fronts.

In order to enhance athletes' performance and mental well-being by means of this study on sports performance and associated factors, subsequent actions maybe be looked at-

1. **Create Targeted Interventions:** The results of the study can be utilized to create interventions that are specifically targeted at improving psychological aspects of athletic performance. For example, creating training plans to increase athletes' self-confidence if it is found to be a crucial component.
2. **Putting findings into Practice:** Sports psychologists can put the findings into practice by developing mental training regimens. Techniques to raise motivation, control stress and anxiety, and strengthen coping mechanisms can all be included in these programs. They can make sure that the athletes' whole training routines incorporate these programs.
3. **Teach Athletes and Coaches:** Results of the study can be shared with athletes, coaches, and any pertinent parties. By giving them educational resources and workshops so they can comprehend the role psychological aspects play in athletes' success. Giving coaches

the knowledge and skills they need to integrate mental health training into their coaching methods is important for this study to be put in use.

4. ***Foster a Positive Team Culture:*** Stressing the importance of a positive team culture for psychological health can be beneficial. Promote a friendly atmosphere, open communication, and team-building exercises for athletes. The psychological well-being and mental toughness of athletes can be enhanced by a supportive team environment. This study can help back the need for this.
5. ***Raise understanding of Mental Health:*** These results can create awareness and push for greater understanding of mental health within the athletic community. Decrease the stigma associated with mental health problems and motivate athletes to get help when they need it. Offer options like counselling services or access to sports psychologists.
6. ***Incorporate Relaxation and Mindfulness Techniques:*** This study can make sure that high awareness is created and relaxation and mindfulness exercises in athletes' training regimens are included.
7. ***Provide Tailored Assistance:*** Acknowledge the unique distinctions among sports people. Customize interventions to target certain issues or opportunities for development noted in the study.
8. ***Work Together with Sports Organizations:*** Share the results with institutions that support athlete development, governing bodies, and sports organizations. Inform these groups about your research findings in order to have an impact on training plans, policies, and support systems that can enhance athletes' mental well-being and performance.
9. ***Longitudinal Monitoring and Evaluation:*** Create a system for continuous monitoring and assessment of athletes' performance and mental well-being across time. This may entail ongoing evaluations, systems for providing feedback, and modifications to therapies in response to athletes' changing requirements.
10. ***Promote Holistic Development:*** This study can back the claim that holistic athlete development, is important for psychological and physical growth. Encouraging players

to partake in extracurricular activities that enhance general well being in order to promote a sustainable and well-rounded approach to performance is important.

This study can make a major difference in the mental well-being and athletic performance of athletes by putting this knowledge into actionable solutions and creating a friendly, cooperative sports environment. It is vital to uphold transparent communication with athletes and stakeholders during the entire procedure to guarantee the efficacy and pertinence of your endeavors. By elucidating the interplay between these psychological constructs, researchers and practitioners can develop targeted interventions aimed at optimizing athletes' performance outcomes and promoting psychological well-being in sports settings. Moving forward, interdisciplinary approaches that integrate psychological principles with practical training strategies hold promise for enhancing athletes' performance readiness, resilience, and overall success in competitive sports environments.

LIMITATIONS

One of the major limitations of this study was that it was conducted on a relatively small sample size that is only 60 young adult athletes. For results to be generalized, it needs to be conducted on a larger sample.

The sample was purposively selected, as sports-persons from individual sports were only selected. Similar research is suggested for players engaging in team sports.

The study used only some scales that are quantitative in nature. Had this study used both qualitative and quantitative measures, it would have helped understanding the sample better and would have better implications in terms of of interventions.

The study uses correlation as tool to assess the relation between variables, thus no cause-effect relationship can be expressed.

Owing to practical implications and time constraints, this study could not cater to the differences in terms of team sports, experienced and naive athletes, injured and healthy athletes. Differences can be due to training techniques given by coaches too and also whether the family supports them or not.

SUMMARY

The aim of the study was to study the gender differences in sports performance and its correlates among young adult athletes. The main objectives of this study were:

1. To assess the level of sports performance, motivation, self- efficacy, sports anxiety and coping skills among male and female young adult athletes.
2. To assess the relationship between sports performance and sports motivation, self-efficacy, sports anxiety and coping skills in both female and male young adult athletes.
3. To explain the gender differences in terms of sports performance, sports motivation, self efficacy, sports anxiety and coping skills.
4. To assess the role of sports motivation, self efficacy, sports anxiety and coping skills in determining sports performance among male and female young adult athletes.

The hypotheses formed for this study were:

1. Sports performance will be positively correlated to intrinsic and extrinsic motivation and negatively correlated to amotivation among young adult athletes.
2. Sports performance will be positively correlated to self-efficacy among young adult athletes.
3. Sports performance will be related to coping skills adopted by both the genders.
4. Sports performance will be related to sports anxiety in both genders
5. There will be significant differences among male and female young adult athletes in the level of sports performance, sports motivation, self- efficacy, sports anxiety and coping skills.
6. Sports anxiety will be negatively related to motivation and self-efficacy.

The sample constituted of 60 young adult athletes with 30 being females (50%) and the remaining 30 being males (50%) coming from various states in India, practising in the Tau Devi Lal Stadium, Panchkula. The sample was purposively selected. The sample aged between

approximately 18-25 with training and competition experience in athletics of 1-10 years. The athletes played sprint, race walking, athletics, hurdles, track and field. All of them played individual sports. The sample varied in terms of area of residence. Some came from urban, other from semi-urban and rural areas.

Owing to the sensitive nature of the study, all required administrative permissions were taken from the competent authorities. Only those athletes were included who were willing to participate or contribute in the study. The tools were administered in a group setting, assuring confidentiality and anonymity of data.

In this study the data was collected from the sample in a group setting. All distractions from the assessment environment were removed, and it was ensured that all participants have the proper materials to complete the assessment. Before administering the of the scales, the participants were told about the (a) about the purpose of the questionnaire; (b) not to spend too much time on any one statement, as there are no right or wrong answers; (c) the importance of reading each item carefully and responding truthfully; and (d) that they may ask questions if they are unsure about the content or wording of any of the items. There was no time limit set for administration. Most athletes completed the questionnaire in about 20-25 minutes.

Before the administration of the tools, all the permissions were taken from all the competent authorities. A close rapport with the subjects was built and only those willing to participate and contribute in the study were given the questionnaire. Also all the participants were made to fill a socio-demographic sheet to get information about their experience and training in their sports, how were they introduced to the sports and any medical history if they have any, as these things could affect the findings of the present study.

The gist of the findings is given below:

- The present study found that there was a significant difference between both genders in Self-Efficacy-Psychological Efficacy and Intrinsic Motivation to Know with females being higher on both.
- It was also seen that females operated on intrinsic motivation to increase sports performance and self-efficacy but better coping skills for women relied on their extrinsic motivation- identified and introjected regulation and males relied on intrinsic motivation.

- Preparedness and strategy (sub-scale of sports performance) emerged out to be an important variable affecting self-efficacy, sports performance, intrinsic motivation and coping skills for all the athletes. An efficacious personality predicted Preparedness and strategy for all the sportspersons.
- It was seen for male athletes, that there were so many correlates for sports performance and motivation and not that much for females counterparts, it may say that female athletes were more focused and know where to work on to improve their outcome while males have a lot of ways (like improving self-efficacy, coping skills, intrinsic motivation) by which they improve their performance and motivation and aren't restricting themselves to just a few methods.
- It could be clearly deduced that both genders use all kinds of coping skills to improve their performance. Women athletes could increase their self-efficacy by handling their emotions better in the competitions while men may improve it by mastering their skills in the game.
- It was also revealed that when female athletes worried more about winning, their intrinsic motivation increased. Whereas, when anxiety started to increase, male and female athletes may have different responses towards it. Male athletes might lose the ability to focus on what was being told and started taking criticism badly during high anxiety, while females started to gather more information (Intrinsic Motivation-to Know) about the sport they play to reduce that high anxiety.
- It was seen that Confidence and Achievement Motivation came out to be a major predictor for males in determining Sports performance in males. While, self-efficacy and Intrinsic Motivation to Know came out to be significant predictors of sports performance in female athletes.

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