

Chapter One

Introduction

1.1 Background to the Study

Stress is an unavoidable part of all human lives and can have a significant impact on many aspects of a person's wellbeing especially undergraduate-athletes who face additional stressors because they have athletic and academic performances to cope with. In psychological sciences, stress is a feeling of mental press and tension. Low levels of stress might be desired, useful and even healthy. When athletes experience stress in its positive form, it can improve biopsychosocial health and facilitate performance; it can be an important factor to motivation, adaptation and reaction to surrounding environment¹. However, high levels of stress could result in biological, psycho-social problems or cause serious harm to the body². Also cumulative stress can cause an increased susceptibility to illness and injury³. The impact of stress is individualistic and subjective by nature⁴.

Stress in people occurs generally as a result of pressures known as stressor. Stressors are both internal and external pressures that induce stress generally in people including university undergraduates most especially undergraduate-athletes. The university years are a period of time when the adolescents experience a significant amount of change and a variety of challenges. Some of the challenges faced are academic performance, social demands, adjusting to life away from home and financial challenges to mention but a few⁵. Stress among undergraduate-athletes can be overwhelming and can affect many areas of their lives. Stress has been conceptualizes as a complex dynamic transaction between environmental demands, such as those associated with high-level competition and the athlete. It can be defined as a substantial imbalance between demand (physical and/or psychological) and response capability, under conditions where failure

to meet that demand has important consequences⁶. It can simply be defined as a physical response to a feeling, situation or event that interferes with sense of well-being⁷.

Stress from a buildup of responsibility in athletes can impact mental and physical performance and is commonly referred to as a negative experience⁸. In addition, the factors or emotions that cause one to feel anxious, tense or afraid are called stressors. Stressors are both cognitive and environmental events that trigger stress⁹. Stressors vary from person to person because what someone identifies as a stressor in their life may not be considered as such to someone else. Additionally, the manner in which athletes respond to a situational or environmental stressor is often determined by their individual perception of the event because people do not perceive demands in exactly the same way¹⁰.

In addition to their general stressors, undergraduate-athletes are required to spend a substantial amount of time participating in activities related to their sports; such as attending practices and training sessions, team meetings, travels and competitions¹¹. These commitments, in addition to the normal stress associated with university life, may increase a undergraduate-athlete's risk of experiencing both physical and mental issues that may affect their overall health and wellness¹². The performance of an athlete who is stressed will decrease because when athletes at any level, either as a team or individual sports players are under pressure from the demands of their sports, the effect will be bigger on the team's performance as a whole or on a particular individual performance depending on if they participate in a team sports and if playing an individual sports⁸. Stressors among undergraduate-athletes can emerge from any factors such as psychological or social factors¹³.

Psychological stressors have profound effect on the performer's cognitive capacities. They include fear of failure, self-doubt, worry (suffering from disturbing thoughts), competitive anxiety

as well as mental fatigue (exhaustion). Fear of failure is an achievement motive disposition that predisposes individuals to experience anxiety and apprehension¹⁴. Fear of failure is a constant source of stress or anxiety that sabotages athlete or the team's performance. Sports are a highly competitive domain, where concerns about performance failure are the most prevalent sources of stress and worry for athletes. Many athletes infer a win as a standard for success and losing as a threat and perceived it as a failure. Fear of failure has been related to several maladaptive consequences on athletes, such as burnout, drop-out and high levels of worry and stress¹⁵. Also it affects the athletes' well-being, interpersonal behaviour, sports performance and academic work which led the athletes to experience stress and reduced self-perception and motivation¹⁶.

The level of fear is determined by the perceived risk of failure in a given activity or task but also by the perceived (negative) consequences associated with failing¹⁷. A rational and moderate sense of fear may urge students to expend greater effort on academic tasks. For instance, in relation to academics many students complete their assignments because they are afraid of upsetting the teacher; while others study for exams to avoid low grades. Amongst other negative outcomes, fear of failure has been associated with stress, anxiety, burnout and depression¹⁸. In essence, fear of failure causes undergraduate-athletes to experience stress and may have adverse effect on their performance.

Self-doubt is another psychological determinant of stress that could affect undergraduate-athletes in their sports performance. Self-doubt can be defined as uncertainty about one's ability, potential for success or competence in performance situation which causes an athlete to play from a position of fear, generates a tremendous amount of anxiety, drains confidence, lowers motivation and eventually ruins performance. It can stem from a fear of poor performance, a lack of self-belief, past injuries or mistakes that can affect future performance¹⁹.

Undergraduate-athletes who have self-doubt lose their focus, intrinsic motivation, confidence, indulge in self-pity and blame; as a result such athletes end up being stressed. Self-doubt includes among others, the thoughts and feeling such as wondering whether or not they have the ability to succeed at important activities and having thoughts that focus on the bad things that might occur²⁰.

Social determinants of stress on the other hands are those factors that undergraduate-athletes perceive to cause them stress by the sports community or society as a whole. Social factors that can determine undergraduate-athletes' stress level include coach-athlete relationship or relationship with coach, relationship with team mates, academic workload, parental involvement, body image issues, pressure to return to training or competition after an injury (without sufficient recovery time) and others²¹. The coach-athlete relationship can be defined as a situation in which a coach's and an athlete's cognitions, feelings and behaviors are mutually and casually interrelated. This relationship is dynamic and therefore may be viewed as a state; its nature is expected to change over time in response to the dynamic quality of human cognitions, emotions and behaviour shaped through the interaction of the relationship members²².

Studies on the self-determination theory have consistently demonstrated that autonomy-supportive coaching behaviors by leaders in the sports field (coaches, head coaches or managers) are more effective than behaviours that are controlling the act²³. The relationship between coaches and athletes, such as conflicts, unsatisfactory communications and a lack of empathy in coaches are associated with athlete stress²². Negative social interactions especially, such as unsolicited advice or intervention, not providing help when an athlete asks for it and disregard for individuals who are prominently observed in sports, were found to be strong predictors of undergraduate-athlete stress level²⁴. They also push themselves to the limit knowing that bad performances can affect relationships with coaches which can generate stress in their lives.

Furthermore, parental involvement is another social determinant of stress among undergraduate-athletes. Parental involvement has been conceptualized as “the extent to which a parent is interested in, knowledgeable about and takes an active role in the undergraduate-athlete’s life”²⁵. Parents influence their children as they grow up and attain adulthood because they play important and unique contextual roles in how young people make meaning of their lives²⁶. Parents also help their children interpret their experiences²⁷. This means undergraduate-athletes could learn how they are supposed to carry out their academic and athletic lives mostly from their parents²⁸. That is, it is possible that the current university undergraduate-athletes are more heavily influenced by their parents than any previous generation.

Large amount of research has been done to examine how parents involve in their children’s behaviour²⁵. Parents also help them understand their lives and what happens around them. Undergraduate-athletes often internalize the values they perceive their parents to hold. For example, if their parent believes an education is very important, the undergraduate-athlete will place the same value on education²⁸.

There are many factors that can impact the influence a parent has on their child’s academic or athletic achievement. These include: the age of the child; the educational attainment of the parent(s); the socioeconomic status (SES) of the family; the ethnicity of the family; the gender of the parent; the gender of the child; parental style; and the aspirations the parents have for the child²⁹. Parents continue to influence their children even after they have gone to higher institutions and this can promote positive outcomes for their college-aged child’s academics and sporting activities. This may be partially because students are attached to their parents³⁰.

Parents-child’s attachment can be a challenge as students adjust to college because they are separated from their parents for the first time. Undergraduate-athletes had an easier transition

to college when their parents were perceived to be supportive and understanding no matter what their ethnicity was. That means most students have an easier time adjusting to college when they believe their parents agree with their decision and will be there for them³¹. They are very concerned with their parents' expectations, parents need to clearly communicate what their expectations are and when there was a large discrepancy between parental expectations and the student's performance and they experienced lower levels of self-worth and school adjustment. This means that they adjust better to university when they perceive they are living up to their parents' expectations³².

In university sport, undergraduate-athletes are required to spend a substantial amount of time participating in activities related to their respective sport, such as attending practices and training sessions which are frequent and exhaustive, team meetings, frequent travelling, and competitions as well as facing a range of competitive pressures³³. Male and female report different reactions to stress, both physically and mentally; they attempt to manage stress in very different ways and also perceive their ability to do so and the things that stand in their way in different ways³⁴. Findings suggest that while women are more likely to report physical symptoms associated with stress, they are doing a better job connecting with others in their lives and, at times, these connections are important to their stress management strategies³⁵. Additionally, stress has been viewed to be higher in female undergraduate-students than their male counterparts³⁶. For example, female students have been found to experience a higher level of stress compared to male students because they tend to be emotional and sensitive toward what is happening in their surroundings³⁶. Another study reported that school boys were more stressed than school girls, which might be due the higher expectations and responsibilities that parents put on boys as well as the high standard goals that boys want to attain in their plans³⁶.

Undergraduate-athletes in private universities served as respondent in this study. The individuals in this study are believed to be more exposed to psychological and social stress than the average university students because sometimes they have to leave their university campuses to other places to engage in sporting activities that requires physical, emotional and financial demands to mention but a few. There is a need to identify specific sources of stress that significantly affect them. Therefore, this study investigated psycho-social factors as determinants of stress level among undergraduate-athletes of private universities in Oyo State. It also assessed perceived stress level of both male and female undergraduate-athletes in private universities in Oyo State.

1.2 Statement of the Problem

Naturally, everyone, including undergraduate-athlete needs a certain amount of pressure to perform at their best but when pressures exceed a person's ability to cope, the result is stress. Prolonged stress can set up distress and shut down the undergraduate-athlete's ability to cope with ordinary situations causing illnesses and affect their sports performance negatively. In the same vein, academic activities experience can be stressful for any undergraduate but undergraduate-athletes may experience even greater levels of stress due to the dual demands of sports and academics placed on them because they have to combine academic work with sporting activities unlike their counter parts (non-athletes students). Both internal and external factors (psychological and social factors) can make their learning and sporting environments complex.

Undergraduate-athletes are required to attend classes, prepare and perform well in their various assignments and tests in various courses and disciplines; they are also expected to thrive and succeed in their athletic performances as well as balancing their economic hardships, among others; all the afore-mentioned may intensify the inconsistent outcomes they obtain in their

academic and athletic performances. Consequently, stress may occur in students who are unable to cope with such demands, which may lead to anxiety, smoking, drinking problems, depression and a multitude of other mental health problems. It is important, therefore, to understand both psychological and social determinants of stress, which university undergraduate-athletes are confronted with and how these stressors impact on their sports performance. Moreover, often times people emphasize on physical forms of stress but little attention is given to psychological or social causes of stress especially among the undergraduate-athletes. There is a dearth of research examining psycho-social determinants of stress level among undergraduate-athletes of private universities in Oyo State, Nigeria. Hence, this study will investigate the psycho-social determinants of stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

1.3 Aim and Objectives of the Study

The aim of this study was to investigate the psycho-social determinants of stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

The objectives are to:

- i) ascertain perceived stress level of male and female undergraduate-athletes of private universities in Oyo State, Nigeria.
- ii) examine the relationship between psychological determinants (fear of failure and self-doubt) and stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.
- iii) determine the relationship between social determinants (relationship with coach and parental involvement) and stress level among undergraduate-athletes of private universities in Oyo state, Nigeria.

iv) ascertain the joint and relative contributions of fear of failure and self-doubt on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

v) find out the joint and relative contributions of relationship with coach and parental involvement on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

vi) determine the composite contribution of psycho-social determinants on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

1.4 Research Question

The following research question was raised and answered in the study:

i) What is the stress level among undergraduate-athletes in private universities in Oyo State, Nigeria?

1.5 Hypotheses

The following hypotheses were tested at 0.05 level of significance:

H₀₁. There will be no significant relationship between psychological determinants (fear of failure and self-doubt) and stress level among undergraduate-athletes in private universities in Oyo State, Nigeria.

H₀₂. There will be no significant relationship between social determinants (relationship with coach and parental involvement) and stress level among undergraduate-athletes in private universities in Oyo State, Nigeria.

H₀₃. There will be no significant joint contribution of psychological determinants (fear of failure and self-doubt) on stress level among undergraduate-athletes in private universities in Oyo State, Nigeria.

H₀₄. There will be no significant relative contribution of fear of failure and self-doubt and level of stress among undergraduate-athletes in private universities in Oyo State, Nigeria.

H₀₅. There will be no significant joint contribution of social determinants (relationship with coach and parental involvement) on stress level among undergraduate-athletes in private universities in Oyo State, Nigeria.

H₀₆. There will be no significant relative contribution of relationship with coach and parental involvement on stress level among undergraduate-athletes in private universities in Oyo State, Nigeria.

H₀₇. There will be no significant composite contribution of psycho-social determinants on stress level among undergraduate-athletes in private universities in Oyo State, Nigeria.

H₀₈. There will be no significant difference in stress levels between male and female undergraduate-athletes in private universities in Oyo State, Nigeria.

1.6. Significance of the Study

This study aimed at the psycho-social factors as determinants of stress level among undergraduate-athletes of private universities in Oyo State, Nigeria. The findings of this study when published will be of great importance to the undergraduate-athletes, the coaches, the parents, the sports psychologists, sports administrators and parents. Undergraduate-athletes will learn to manage their stress so as to balance their academic and sports performance as well as other aspects of their lives generally. Also, when coaches and parents are able to identify undergraduate-athletes' sources of stress level and understand the types of stressors they may experience as well as how these stressors may impact athletic performance, they will be able to adjust and ultimately limit the negative impact of stress level on these undergraduate-athletes. The sports psychologist in turn will be able to devise adequate and efficient intervention strategies which could equip the undergraduate-athletes to deal with their stress levels. Also, this study will provide athletic administrators a point of reference related to athletic stress level which may

accord the sports administrators an opportunity to better serve the undergraduate-athletes. Additionally, the outcome of the study will serve as reference point to other researcher in the field of sports psychology.

1.7 Scope of the Study

The study looked into psycho-social factors as determinants of stress level among undergraduate-athletes in private universities in Oyo state. The psychological determinants of stress level were fear of failure and self-doubt, while the social factors included coach-athlete-relationship and parental involvement. Also, two hundred and thirty-two (232) male and female undergraduate-athletes served as respondents for the study. They were drawn from three private universities in Oyo State. Lead City University, Kola-Daisi University and Ajayi Crowther University respectively.

1.8 Limitation to the Study

The major obstacle that was encountered in this research study was the difficulty in accessing undergraduate-athletes of the sample institutions because they were on vacations. The researcher intended to use printed questionnaire all through but because of their holidays, the researcher had to use online instrument to test two of the three institutions and then use printed instrument for only Lead City University athletes who were in session. To get them fill online, the researcher with the help of one of the school's worker, get the contacts of the undergraduate-athletes through their whatsapp groups and then help persuade them to fill.

Another obstacle was the time frame, online filling took a lot of time compared to physical administrations that went smoothly. The researcher had to be calling and texting almost every day to persuade them and during this process, the researcher bought some of the undergraduate-

athletes data as a form of incentive. Despite the limitations encountered, the findings of this research are adjustable to be valid.

1.9 Operational Definition

Some of the terms that were used in the study are operationally defined as follows:

Stress: This is any type of change that causes physical, emotional or psychological strain to undergraduate-athletes and causes adverse effect on their sports performance.

Stress Level: This refers to the extent to which undergraduate-athletes experience tensions, worries, pressures and anxiety in the process of pursuing their sporting activities in the universities.

Stressors: These are psycho-social factors encountered by university undergraduate-athletes which are perceived to generate stress.

Undergraduate-athlete: These are undergraduate students, which represent their universities at collegiate and inter-scholastic sports.

Social Determinants of Stress: These are social variables such as (relationship with coach and parental involvement) which cause stress among undergraduate-athletes.

Fear of Failure: This is a type of irrational belief that places excessive weight on failure which causes the undergraduate-athlete stress.

Self-doubt: This can be defined as uncertainty about undergraduate-athlete's ability, potential, success or competence in performance situation which cause them stress.

Psychological Determinants of Stress: These are psychological variables such as (fear of failure and self-doubt) which cause stress among undergraduate-athletes.

Relationship with Coach: This is an interaction between undergraduate-athletes and the coach.

Parental Involvement: This is a behaviour or drive that parents put on their children (undergraduate-athletes) to achieve a goal or excel in academics and sports, which in turn may cause stress them to stress.

Endnotes

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Chapter Two Literature Review

The related literature in this study will be reviewed under the following sub-headings:

2.1 Conceptual Studies

2.1.1 Concept of Stress

2.1.2 Stress and Sports Performance

2.1.3 Undergraduate-athletes and Stress level

2.1.4 Psychological Determinants of Stress among Athletes

2.1.5 Social Determinants of Stress in Undergraduate-athletes

2.1.6. General Overview of Fear of Failure among Athletes

2.1.7 Concept of Self-doubt and Sports

2.1.8 Coach-athlete Relationship

2.1.9 Overview of Parental Involvement and Sports Performance

2.2. Theoretical Review

2.2.1 Erikson's Stages of Psychosocial Development

2.3 Review of Empirical Studies

2.3.1 Fear of failure and Stress Level among Undergraduate-athletes

2.3.2 Self-doubt and Stress Level among Undergraduate-athletes

2.3.3 Coach-athletes Relationship and Stress Level among Undergraduate-athletes

2.3.4 Parental Involvement and Stress Level among Undergraduate-athletes

2.3.5 Interplay between Gender and Stress Level among Undergraduate-athletes

2.4 Conceptual Model

2.5 Summary of Gaps in Literature

Endnotes

2.1.1 Concept of Stress

The definitions of stress in research have been greatly debated despite the common usage and lay understanding of the word 'stress' in everyday language. The difficulty in forming a unitary definition of stress from a research perspective may stem in part from the fact that stress researchers hail from various fields of study and conduct research on different elements of stress from multiple levels of inquiry, including biological, psychological or social/environmental perspectives. Stress refers to that quality of experience, produced through a person-environment

transaction that, through either over-arousal or under-arousal, results in psychological or social distress¹. However, not all conceptualizations of stress are associated with distress. For instance, all activities in life involve some level of stress and that an optimal level of stress is needed for optimal functioning and enjoyment in life². The experience of stress can involve negative and positive emotions, sometimes simultaneously. For example, individuals can feel both hope and anxiety during a stressful experience because the outcomes are uncertain³. Research has demonstrated that positive and negative emotions co-occur during experiences of stress.

Cognitive appraisals determine whether situations are experienced as stressful. This model states that different types of appraisals, termed primary appraisals, secondary appraisals, and reappraisals, involve an assessment of both individual and situational factors. Thus, appraisals are context dependent. Primary appraisals refer to making the determination that a situation has relevance to one's well-being or values. If a particular situation is appraised as irrelevant or benign in this regard, stress is not experienced. The situation could, however, be appraised as already having caused one harm or loss, as threatening to cause one harm or loss, or as a challenge. The harm/loss, threat, and challenge appraisals indicate the situation is relevant to one's well-being or values. Secondary appraisals evaluate the availability of coping resources to deal with the harm/loss, threat, or challenge. When a situation or event is appraised as exceeding one's coping resources, the situation is experienced as stressful. Reappraisals refer to altered appraisals; previous appraisals are modified as the situation changes or new information becomes available³.

Stress is an individual's response to change in circumstance or to a threatening situation. It can be viewed as a personal reaction to an external event or demand like writing an exam or to an internal state of mind like worrying about an exam. Of interest is the fact that stress tends to

increase with the prospect of not being able to cope with the situation at hand. For most people, stress is viewed as a negative concept. However, stress can spur us on to achieve our best. For example, athletes often break world records under the stress and pressure of the Olympics. A moderate amount of stress helps to motivate us to write a term paper or prepare for an exam, and in this case, is positive and necessary. Therefore, a certain amount of stress is desirable but too much is detrimental. Today's demands and pressures guarantee that all human beings will experience stress. Stress is simply a byproduct of life. The encouraging part of this picture is that we can learn how to control or manage "excess" stress. In fact, a belief in our ability to be able to handle stress often times serves to decrease stress levels.

Theoretical rationale for stress in sports occurs in four stages, the presence of an environmental demand, and perception of the demand, the stress response and the behavioural consequences. The process begins with a task that the athlete may need to complete, such as obtaining possession of the soccer ball close enough to the goal and hearing teammates and coaches shout, "shoot the ball." It can also include testing a new skill learned at practice during a game, which had only been behaviorally rehearsed at practice⁴. . In either circumstance, the athlete's interpretation of the task's relative challenge is assessed through the lens of their perceived capabilities to accomplish the task whether athletes perceive the demands of a task in threatening or non-threatening terms may be related to the degree of their trait or state anxiety⁵.

Stress is a widespread phenomenon all around during all human lifespan. All people have experienced it throughout their history and throughout human history. Stress is one the special characteristics of life and its presence has been much highlighted so that in fine arts and literature of all eras it has been addressed⁶. The reason of the widen presence and inclusiveness of stress in human communities is the complexity of human social, personal, and ecological environment,

multiple and simultaneously interactions of human with surrounding issues, and diversity in stress expression⁷. In psychological sciences, stress is viewed as a feeling of mental press and tension. Low levels of stress might be desired, useful, and even healthy. Stress, in its positive form, can improve bio psychosocial health and facilitate performance.

Furthermore, positive stress is considered as an important factor to motivation, adaptation, and reaction to surrounding environment. However, high levels of stress could result in biological, psychological, and social problems and even serious harms to people⁸. Stress may be either external with environmental source, or caused by internal perceptions of the individual. The latter form, in turn can produce anxiety, and/or other negative emotions and feelings such as press, pain, sadness, etc., and result in serious psychological disorders such as post-traumatic stress disorder (PTSD)⁹. Studies in the field of executive functioning and cognitive performance have investigated the role of different factors in the variance of quantity and quality of such processes. One of the major related factors in these studies, is the role of stress on cognitive and higher cortical functions. Stress is the problem of the millennium. Today's life is mixed up with stress in all its aspects¹⁰.

External factors are not in their essence stressful and/or threatening; yet the individuals' perceptual systems interpret them as such. Stress triggering factors, such as sudden and horrible blares, or observing specific types of objects that resemble acute incidents for individuals, may be interpreted as strains. Human experience stress or percept issues as threatening/dangerous whenever she/he cannot believe to have adequate resources to cope with such obstacles (stimuli, people, situations and others¹¹. Despite day to day and frequent use of the term "stress", studies in this domain have not gained a suitable conclusion yet it is in part because of the ambiguity in defining stress and theoretical approaches to studying it¹¹.

2.1.2. Stress and Sports Performance

Athletes and students both have something in common. They both perform their tasks with varying stress levels. Stress can be a physical, mental or emotional demand, which tends to disturb the homeostasis of the body. Used rather loosely, the term may relate to any kind of pressure, be it due to one's job, schoolwork, marriage, illness or death of a loved one¹². The common denominator in all of these is change. Loss of familiarity breeds this anxiety with any change being viewed as a threat⁵. The issue of stress is an important aspect of performance. Whether it is during the tense moments of a championship game or amidst that dreaded examination, stress affects our performance via changes in the body, which can be identified by certain indicators. One misconception though with performing under pressure is that stress always has a negative connotation. Many times, the stress of competition may cause a negative anxiety in one performer but positive excitement in another. That is why one frequently hears how elite players' thrive under pressure, when most others would crumble¹³.

Not all stress is bad for athlete's performance. Stress can affect performance in two different ways. Stress can help when it makes athletes more alert, more motivated to practice, and gain a competitive edge. In the right amount, stress helps prepare, focus, and perform at optimal level. Conversely, too much stress, or bad stress, can cause performance anxiety, which hurts your health and does not allow you to play relaxed, confident, and focused in competition. You are always going to be nervous teeing it up in a Major Championship. It is very natural and it is a good thing. It means that you want it¹⁴. Every competitive athlete experiences some stress; good and bad, the stress may be positive and helpful or instill anxiety and apprehension. Pre-game jitters can cause some athletes not to sleep well at night before competition. Some athletes

cannot eat in the morning before a big game. Pre-competition jitters may make you feel like you have to throw up¹⁵.

To feel pleasure or delight in anticipation for competition (what is called positive pregame jitters). High level of activation will help one perform to the best point where one may be too jacked to play well. Too little or too much of stress can cause ones performance to turn down. The ability to cope effectively with pregame nerves is critical to consistent peak performance¹⁶.

The paradoxical nature of sports and the multidimensional nature of stress render complex the relationship between sports and stress. Stressors may be associated with physiological, psychological or social dimensions. However, an examination of the research suggests that psychological dimensions of stress level may be the most significant operating in the sports environment. Sport is viewed as the totality of those institutionalized games whose outcomes are dependent upon physical prowess. Associated with such activities are certain cultural values, such as norms and sanctions which reflect the values and ideologies peculiar to sports¹⁷. The pervasiveness of organized sports, the fact that stress is a universal human phenomenon, and the importance of understanding the relationship between sports and stress level in order to initiate appropriate stress management techniques. It is paradoxical because it is a human endeavor that may be playful or serious, important or trivial, expressive or instrumental, and intrinsically or extrinsically rewarding. In the United States and in other industrialized nations throughout the world, sports participants, coaches, and spectators have become increasingly concerned with the rational pursuit of athletic victories. The ubiquitous "We are number one" chant is symptomatic of the near neurotic obsession with winning, an obsession found at all levels of organized sports- from the professional to the youth leagues¹⁸.

Sport is an important cultural activity which may provide a value dimension for social identity, social comparison, and social status. Cultural expectations related to success in sports are well established. The socialization process from childhood to adulthood places considerable importance upon achieving success (winning), high levels of performance, and the extrinsic rewards of sports¹⁹. Success in sports is an important status determinant in American adolescent culture. Achievement in sports and the improvement of performance through "discipline" and "hard work" are at the core of sports ideology. The emphasis upon the "performance principle" is that sports may result in excessive demands being placed upon athletes by coaches, parents, peers and by undergraduate-athletes themselves²⁰.

The competitive ethos permeates the ideologies of all the regulative social institutions in American society²¹. However, perhaps nowhere is the competitive ethos so openly displayed and accepted as in American schools. The educational system promotes competition in all aspects of sports and academic life. The sports programs of many schools and colleges assume importance far beyond the confines of the athletic field or the gymnasium. Sports situations present both opportunities and demands on individuals. In sports situations, individuals may have opportunities for self-expression, self-evaluation, and social rewards²². They may be confronted with physical demands that they may or may not be able to meet, and with demands for success that may or may not be self-imposed. In addition, they may be constrained to act self-interestedly and against the interests of others, primarily because of the structural features of sports. The rules of institutionalized sports specify the competitive actions between individuals (or teams) which are necessary for victory. However, as in other real-life situations, sports represent an impure competitive situation. That is, sport is neither purely competitive nor purely cooperative. It involves a complex set of goals and sub-goals for individuals and teams. For example, members

of basketball or football teams may be involved in cooperative relationships while striving for victory, but may be involved in competitive relationships while striving for places on the "first team" or while striving for star status²³.

Although athletic competition has been indicted by some critics of sports, it should be realized that competition is not necessarily harmful to individuals and may not necessarily cause distress unless it becomes excessive, inappropriate, indiscriminate, or results in some form of punishment by the social environment. Unfortunately, the appropriate balance of competition in one's life is not easily determined²⁴. Negative social consequences (e.g., loss of self-esteem or social status) of sports competition or the problems generated by sports competition (e.g., anxiety) emerge because organized sports is not isolated from the complexities of everyday life. To some extent, the degree to which sports may be a situational stressor depends upon the particular model of sports operating and upon the particular reinforcement contingencies operating for particular individuals. It is important to note that stressors are both individually and as situation permit. Therefore, it is appropriate to identify two models of sports that underscore the importance of situational specificity: athletic-sports and play-sports. Athletic-sports is competitive and highly organized; it is typical of most organized sports in the United States. Play-sports involve values and orientations which are considerably different from athletic-sports. The differences between the two models focus primarily upon factors related to motivations, kinesthetic orientations and interpretations, and orientations toward innovation and technology²⁵.

The capacity of sports to produce stress reactions depends upon how sports situations may contribute to: disrupting or endangering one's important goals and values, creating uncertainty about one's physical survival, threatening the maintenance of one's identity and also affecting the ability to control one's environment. Because of the importance of sports in society,

sports situations in which individuals are denied opportunities for success may cause distress, especially if those individuals place considerable importance upon achieving success in sports. Although success and failure are relative concepts that should relate both to performance factors and to performance consequences, success and failure are defined in absolute terms, i.e., winning and losing. Thus, some individuals, especially athletes, may become confused about the relative value of their performances and about how they should react publicly to them. For example, individuals may perform adequately, or even exceptionally, but also may be members of losing teams. These individuals may become confused concerning the relationship between their positive self-evaluations and their teams' negative evaluations. It also may be difficult for these athletes to express their positive self-evaluations publicly without placing their "team loyalties" in question. It is more accurate to state that winners and losers are made by their experiences in a social context of other people who, to a major degree, determine the targets for their efforts and the structure of standards and goals related to those efforts²⁶.

The range of stimuli capable of producing stress reactions in humans is exceedingly wide and depends upon the ages, experiences, and intellectual capacities of individuals. Sports situations which may be stressful for children may not be stressful for adults, and vice versa. Stress reactions that may appear in a specific manner in children may appear in a different manner in adults, and vice versa. The greatest pressure comes only from myself". This statement could apply to every professional athlete. However the athletes who learn to control this pressure and channel it into their performance are the ones who prevail into the elite. This provokes an implication which is necessary for successful performance, focus only on what the athlete can control. Don't over-analyze; it's important to recognize your own strengths and to maintain your own belief²⁷. By doing this they begin to reinforce their strengths and improve on their

weaknesses through training which in turn assists with building mental superiority, gaining control of performance and building on previous successes.

It would appear incredibly simple for an athlete to continue with the processes they have been implementing on course to the top, however this is always easier said than done, hence a support network is essential. It is crucial that the athletes, in conjunction with their support network, reviews the successful components which helped them achieve elitism and try to implement these within the post winning program in order to continue their success. From a psychological perspective, these include finding the self-belief they had prior to winning, relaxation and “Autopilot Connection”, also known to be either “The Zone” or “Flow”. Following on from this, research suggests athletes set subsequent goals post winning period and approaching the next competition as they did the last was deemed a successful attribute for continued success²⁸. An implication of this for psychologists is to ensure that they assist the athlete in approaching the next competition with the same focus and belief as the last, and in this process, ignoring distractions, purely focusing on process and performance rather than outcome.

Even though stress could be perceived as an illusion, there is no doubt that athletes will always encounter stress in their sporting career. As much as they could convince themselves it is not there, at some point, the stress could mount up. Hence it is paramount to assist the athlete in developing effective coping mechanisms. If the athlete can utilize these mechanisms, the world is their oyster. Have a game plan, focus on that, keep thoughts positive and in perspective, and finally challenge yourself.

2.1.3. Undergraduate-athlete and Stress Level

Although the transition from high school to university is generally a stressful time for everyone, undergraduate-athletes in their first year of university often face a unique set of

stressors. In addition to the stress of learning to live on their own, they must learn to adjust to university life and its academic and athletic demands. Undergraduate-athletes stress level over performance and they are often pressured to push themselves to the limit knowing that bad performances can affect relationships with coaches, as well as a decrease in scholarship. Undergraduate-athletes are also pressured academically. If a student-athlete does not maintain a specific GPA they might not be allowed to participate in competitions. Undergraduate-athletes also have more pressure with their social lives. One bad post on social media or one slip up with school authorities might find an athlete suspended from the team²⁹. All of this is added on top of the regular pressures of being a student like studying for a big exam, adjusting to living alone, and balancing time for a healthy social life. Undergraduate-athletes have less time in their day to deal with the average problems of being a student³⁰. Time management is extremely important, and it is not uncommon for an athlete to slip up and make a simple mistake. There are several examples of possible sports related stressors experienced by an undergraduate-athlete: they include, learning to adjust to the extensive demands of their time from their commitment to their sports, fear of being red-shirted, or benched, during their freshman (Red-shirted means the athlete attends classes and team practices but is not allowed to play against other teams for the entire season), worrying about conflicts with their coaches, adjusting to the change from being a high school star athlete to one of the new members of the team and the fear of being injured while participating in their sports³¹.

Although some of the stressors felt during the period of schooling alleviate as the undergraduate-athletes adjust to school life, they are replaced by others that generally last throughout their academic years. Undergraduate-athletes deal with stress both off and on the field. Each of them maintains a certain academic grade level in order to remain on their team. For many,

the demands of keeping up their grades and attending classes combined with rigorous sports practices and game schedules are a very stressful situation. Additional factors adding to the stress levels of university athletes may include: financial stress such as paying for school, keeping a scholarship or paying for everyday needs, working at a part time job, worrying about performing well in their sports, the pressure to win, academic tests, missing classes, tests and assignments because of team travel, making up missing assignments and tests because of team travel, studying, social life, peer pressure, not getting the necessary amount of sleep and not eating correctly³².

Participating in sports and schooling can be discouraging among undergraduate-athletes for a good reason. One study showed that 30 percent to 50 percent of athletes in their adolescent years experience burnout. Burnout, also called overreaching, is fairly common among undergraduate-athletes who combine sports with academics and it can have a negative impact on other activities. There are also other sobering aspects of stress among young athletes. Sports are far from being a safe activity. Undergraduate-athletes are as vulnerable to injuries and pain as casual and professional athletes. As if the injuries are not bad enough, young athletes are also relied upon to perform well, sometimes even when they are physically unable. In one study, young players reported that they felt their coaches pressured them to play even while they were injured³³.

Stress can also come from parents and school coaches. Both groups may expect their young athletes to show a good performance, placing the heavy burden of meeting an authority figure's expectations on the children. Negative actions such as name-calling, yelling and swearing can also worsen the situation, particularly since these are directed at the young athletes. Interscholastic sports are a traditional part of American education. However, a reexamination of its effects and the pressure it bears down on adolescents must be considered.

Young athletes already go through plenty of stress level at school and it is incumbent upon school coaches to ensure that their athletes are not overworked or overstressed³⁴.

2.1.4 Psychological Determinants of Stress among Athletes

Taken part in sports is a means of providing consistent physical activity and training which could lead to improved physical and mental health for the participants. The psychological determinant factors of stress in undergraduate-athletes have long been of interest to athletes, coaches and sport psychologists because everyone desire a good result³⁵. Psychological stressors have profound effect on the undergraduate-athlete's cognitive capacities. They include fear of failure, self-doubt, worry (suffering from disturbing thoughts), competitive anxiety as well as mental fatigue (exhaustion). There are certain moments during competition, which appear to carry great psychological significance, when the momentum starts to shift in one direction or another. These situations require undergraduate-athlete to remain completely focused and calm in the face of difficult circumstances³⁶.

Determining the personality profile and psychological state of an undergraduate-athlete is a very important topic of research in psychological studies in the field of sports. There is now good evidence that athletic success and participation in physical activity can be predicted by personality traits and psychological state. Undergraduate-athlete performance is described as carrying out specific physical routine or procedures by one who is trained or skilled in physical activity at the university level. The term "sports" subsumes all forms of physical activity that contribute to physical fitness, mental well-being and social interaction³⁷. These include play, recreation, organized, casual or competitive sports and indigenous sports or games.

Performing in university's sporting activities is influenced by a combination of physiological, psychological and socio-cultural factors. The mental health model of sports

performance purports that an inverse relationship exists between psychopathology and athletic performance. The model postulates that as an athlete's mental health either worsens or improves, performance should fall or rise accordingly³⁸. During the past years, there has been dramatic increased interest and participation in sport at the collegiate, as well as professional and leisure levels. It was recorded that, there has been sports of one description or another played by undergraduate-athletes in private universities in Nigeria, such as athletics, basketball, soccer, tennis, badminton, volleyball and others. Undergraduate-athletes are subjected to different emotional difficulties as well as stress. Because of the increased push or quest towards efficiency and success, it has become of great interest to players, coaches, administrators, spectators and owners to identify psychological attributes and stress levels associated with superior sport performance, as a primary stage of facilitating undergraduate-athletes developments³⁹.

Based on the foregoing personal experiences. The researcher holds the conviction that psychological factors associated with undergraduate-athletic performance such as fear of failure, self-doubt and stress may play a key role in relation to athlete's performance⁴⁰. Stress can be seen as a psychological and physical strain or tension generated by physical, emotional, social, economic or occupational circumstances, events or experiences that are difficult to manage or endure. Based on this explanation undergraduate-athletes performance may be adversely affected by stress⁴¹. Usually, universities annually allocate funds for the development and/or maintenance of sport facilities to fulfill students' needs and encourage sport participation of the university community. Particularly, in Nigerian universities, there are active and viable sport teams. However, participation in such teams required high level of commitments, hard work, obedience, tolerance and selfless devotion. Undergraduate-athletes life revolves primarily

around membership, which indirectly discourages students who intend to participate in sports solely for recreational purpose⁴².

2.1.5 Social Determinants of Stress in Undergraduate-athletes

Stress has been seen tightening its grip on the undergraduate-students, as they have to compete at every step of their academic career in this changing world. Stress in academic system can have negative consequences if it is not properly managed. Social factors such as coach-athlete relationship and parental involvement causes stress if not properly managed⁴³. There is often a lot of pressure that comes along with pursuing a degree and one's education, which is studying, homework, tests, laboratory, reading, and quizzes. There is the stress of doing all of the work, balancing at a time and finding time for co-curricular activities⁴⁴. Academic stress can lead to students being unable to perform to the best of their abilities in examinations, frequent school refusal, phobia, physical complaints, irritability, and decreased interest in school work⁴⁵. It can also affect the society by not producing good leaders who can move the country forward. High stress, if not well managed can affect students negatively, unable to get along with friends or roommate, test anxiety and unable to adjust to new environment and so on⁴⁶.

Consequently, unable to cope with these challenges by undergraduate students lead to stress. Students in higher institution experience stress because they stay away from home, live independently without family members, and take new responsibilities both personally and academically. Living away from home could be a challenge for an individual who has never been away and more contents, to master in small amount of time and increased responsibilities could be stressful for the students, all these challenges lead to academic stress⁴⁷. Stress affects undergraduate students academically and athletically and also change the way they acts and thinks

in school⁴⁸. If an undergraduate-athlete is not able to cope effectively with academic stress, then serious psycho-social-emotional health consequences may result⁴⁸.

Social activities are the engagement of undergraduate-students in activities which is not academic in nature. Social activities include spending time with friends, attending parties, being involved in team sports, being a member of a club, going to local parks, chatting with family and friends⁴⁹. One more thing that is essential to help reduce stress is the social support that can be gained from friends, teachers and family. Stress effects are lowered with a good social support group. That is why, an excellent and healthy relationship with friends, teachers and family are vital. People, who are friendless and alone, are more risky to stress and also mental related problems⁵⁰. Undergraduates experience various developmental stressors in their day-to-day activities in order to overcome from those stressors. There are different relaxations techniques which will help the undergraduate-athletes to cope with that stress and help them to live a better and happier life. Some of the techniques are deep breathing exercises, progressive muscle relaxation techniques, visualization also known as free guided relaxation or visual guided imagery, exercises, laughter, listening to calming music, stretching relaxes, meditation techniques such as yoga or transcendental meditations, cuddle with a pet or a hug of a loved one⁵¹.

In addition to undergraduate-athletic status serving as a buffer against body dissatisfaction, the athletes may record less stress than their non-athlete counterparts from getting ripped off, social conflicts over fear of failure and self doubt⁵². A partial explanation for these findings may be that the undergraduate-athlete has an established social niche. As a member of their athletic team, the athlete is involved from the start with a social group that shares similar interests because the athlete has a built in social group, they likely would have a built in support system to help them with certain types of stress⁵³.

2.1.6 General Overview of Fear of Failure among Athletes

Every year millions of athletes experience what they perceive as failure. The nature of competition, with clear-cut winners and losers, often sets athletes up for failure. Still, many athletes have a hard time coping with failure. Fear of failure occurs when one's level of aspiration exceeds his or her present level of ability, which results in efforts that seem inadequate⁵⁴. Fear of failure exerts such a powerful influence that unless appropriate action is taken, a person will suffer from a terrible feeling of impending failure⁵⁴. Fear of failure is often a result of faulty perceptions, which may stem from or have been molded by an individual's views of winning and losing, and expressions like, "winning is everything." The athlete who tries to shut out failure is shutting out the realities of life in general and sport in particular.

It could be argued that how undergraduate-athletes deal with or learn from their failures is what makes them stronger and more successful. Winning and losing is a part of athletics. How winning or losing is dealt with may well determine whether or not an athlete develops a fear of failure. If fear of failure exists in an undergraduate-athlete's life, the chances of ever learning from failure or success are minimal⁵⁵. When an undergraduate-athlete succumbs to fear of failure, he or she gives up accepting the challenge to improve. As a result, learning will not likely take place because the athlete will not want to challenge him or herself to overcome the fear of failure⁵⁶.

An undergraduate-athlete with a fear of failure will most likely have low self-confidence and unhealthy attributional learning tendencies⁵⁷. For example, this athlete may attribute his or her success internally to either effort or ability to help him or herself feel better. Undergraduate-athlete will likely do this in an attempt to enhance his or her self image, that is, to look good in the eyes of others. If this same athlete fails, he or she will likely attribute their failure externally to luck or task difficulty⁵⁷. In this case, the athlete will attribute his or her failure externally to serve

as a self-protecting mechanism. This protects the ego of the athlete in that he or she had little or no control over the circumstances and outcome. Fear of failure has also been shown to lead athletes on a cohesive team to create self-protecting biases or self-handicapping strategies⁵⁸. Self-protecting biases serve an undergraduate-athlete with a fear of failure by allowing that athlete to blame the causes of his or her failure on external factors beyond his or her control. This self-handicapping strategy allows the undergraduate-athlete to create an excuse for his or her failure. Common problems used to excuse poor or disappointing performances by athletes with a fear of failure include stress and an assortment of impending ailments and or injuries⁵⁹. For example, an undergraduate-athlete might state, "I did not perform well today because I have the flu."

Low self-confidence has also been an attributing factor to fear of failure⁶⁰. If an undergraduate-athlete has or develops a high self-confidence, he or she may not feel the need to use self-handicapping strategies to cover up for any perceived inadequacies. If he or she has low self-confidence, it will likely add to his or her fear of failure. Success enhances self-confidence. Failure generally decreases self-confidence, leaving the athlete with a fear of failure that may be compounded with unhealthy attributional tendencies and stress⁶¹. Because fear of failure is generally a negative experience, most undergraduate-athletes will go to great lengths to avoid failing. Those who fear failure will often refuse to take on a new or existing challenge. If a less demanding task is not available to this undergraduate-athlete, he or she will likely become discouraged and will more often quit rather than risking future failure⁵⁵. In order to more fully understand fear of failure and what impacts an undergraduate-athlete's fear, greater attention must be given to individual experiences of undergraduate-athletes experiencing fear of failure.

Several potential dangers associated with fear of failure have been signaled in sport, academic settings and even business environments⁶². The consequences for an individual

experiencing fear of failure can be distressing, since over time, individuals with fear of failure will experience lower levels of self-esteem and self-efficacy, as well as, negative affective, cognitive and behavioral consequences⁶³. In sport domain, fear of failure has been related to a variety of maladaptive consequences. Despite the limited research conducted on sport context, fear of failure has been associated with stress or burnout⁶⁴. Moreover, fear of failure has been associated with high levels of worry, stress and anxiety and has been shown to affect undergraduate-athlete's interpersonal behavior, sporting performance, and well-being⁶⁴. Consequently, fear of failure can have important implications for undergraduate-athletes.

2.1.7 Concept of Self-doubt and Sports

While watching sports competitions, it can be often seen that athletes are satisfied with victory, unhappy in cases of failure, and excited to compete again regardless of the result. Athletes do not seem to give up. The efforts they show are great, involving sacrifices on various levels, such as being 100 percent involved in the training, forgetting about themselves and others, not having enough time to spend with family and friends or to socialize, etc. It seems that nothing can stop them from their desire to participate and win sports competitions. Are all athletes the same, regardless of their sport? Do they all see themselves as winners? Undergraduate-athletes routinely encounter the same challenges throughout daily life as it is for a usual athlete. Obvious examples include high-stakes academic tests, athletic competitions, and conflict within meaningful personal or work relationships⁶⁵. They may experience doubts about their ability and their capacity to perform well as they approach and engage these tasks. For all the reasons, which taken together argue that feelings of self-doubt and uncertainty are aversive, undergraduate-athletes who chronically experience doubt will develop some strategy to deal with that state. Even transitory feelings of self-doubt about one's competence are not likely to stand unchallenged, and

one of the most compelling research arenas has been centered on how self-doubt concerns play a role in inventive, even ironic, cognitive and behavioral ways that undergraduate-athletes try to manage their experience of self-doubt⁶⁶.

Self-doubt is an indecisive state of mind. It is quite acceptable that everyone gets self-doubt before an event but the success of his or her effort depends on how well he overcomes it⁶⁷. If someone passes a negative comment about us we express denial but we accept the inner voice of self-doubt innocently and submissively. Usually players who are bothered by self-doubt lose their focus, intrinsic motivation and confidence resulting in unsatisfactory performance. As a result of all this the player indulges in self-pity and blame. The ensuing condition deteriorates further⁶⁸.

Coaches advice the players to increase effort even though it is a wise suggestion trying harder will always be a conscious effort which in turn leads to mental stress. So the important thing is to know the root cause of self-doubt and take action by increasing self-awareness⁶⁹. By doing so instead of being self-conscious one can take the awareness to the all-powerful subconscious level. Undergraduate-athlete can on a daily basis tune into their feelings and emotions and ask themselves “where am I? What am I doing? How am I feeling?”, pay attention to the negative feelings and emotions like defensiveness and insecurity, trace any hurt to its source, follow real self needs, express real feelings openly and honestly. For the sake of confidentiality you may do so before a sport psychologist or counselor⁷⁰.

As self-doubt concerning personal abilities increases, global self-esteem tends to decrease because self-doubt presents the threat to global evaluations of oneself. Hence, self-doubt can lead to both self-handicapping (i.e., creating or claiming obstacles that reduce the probability of success while at the same time providing an excuse for failure) and overachievement (i.e., striving to perform

beyond one's capabilities) in order to protect the self from the implications of failure⁷¹. As such, self-doubt is often studied in the context of performance. Self-doubt includes thoughts and feelings such as wondering whether or not one has the ability to succeed at important activities, having thoughts that focus on the bad things that might occur, feeling unsure of one's abilities more often than not, and experiencing greater emotional impact as a result of avoiding failure than achieving success. Among university students, self-doubt is negatively related to variables such as achievement motivation, self-esteem, and narcissism and positively related to variables such as self-handicapping, social anxiety, and "impostor" feelings in which success is perceived as undeserved⁷².

It has been proposed that people who experience high levels of self-doubt tend to reduce their level of effort or quickly settle for mediocre solutions when faced with difficulties, challenges, or setbacks in performance situations⁷³. Thus, while self-doubt might be a more or less natural reaction to failure, it might be the resilience and ability to regain confidence that is critically important to successful performance when self-doubt occurs. However, subjective overachievement (i.e., the psychological approach to and process of a performance) can occur when self-doubt is combined with a concern over performance⁷⁴. While overachievers tend to perform well on tasks, the challenge to being an overachiever is that the motive to perform well might be driven more by a desire to gain social approval than by intrinsic motives such as the inherent satisfaction in being able to perform a task⁷⁵. Despite the potential risks of the overachievement relation to self-

doubt, a common message appearing in recent sport and exercise psychology (SEP) literature is that some level of self-doubt might actually be beneficial to performance in sport, at least in some circumstances⁷⁶. For instance, there is an important distinction between performance efficacy (i.e., perceived capabilities to be successful during the practice phase of competition) and preparatory efficacy (i.e., perceived capabilities to be successful immediately before the start of competition) and the role that self-doubt might play in each⁷⁷. Self-doubt at game time can act as a barrier to athletes' effectively using their skills because as performance efficacy decreases, performance level tends to decrease; therefore, efficacy beliefs should be as high as possible when competition begins⁷⁸.

Alternatively, when athletes already have at least a minimal level of efficacy, some self-doubt during the preparatory phase of competition can be beneficial because it might help protect against overconfidence and complacency, as well as motivate athletes to expend increased effort in practice as a way to continue to enhance personal growth, skill development, and skill execution capabilities⁷⁹. While theoretical arguments supporting the potential benefits to self-doubt are compelling, there is little research to date directly exploring the complexities of the relationships among self-doubt, preparatory efficacy, and performance efficacy specifically in the sport and exercise context⁸⁰.

The benefits of self-doubt to performance in sport and exercise were observed in a recent experimental study with participants who were skilled in their ability to skip rope⁸¹. The experimental group received information that the rope they were going to use in a competition would be more difficult than the rope used in practice trials. This manipulation was a way to decrease self-confidence and induce self-doubt among the participants in the experimental group. Results showed that those in the experimental group, but not the control group, improved performance on the 1-minute skipping competition task. The reason for the improvement was not clear, as there was little support for increased effort being the reason for the increase in performance. Despite study limitations, this research provides evidence that the relationship between self-confidence and performance might be more complex than generally thought and that a little self-doubt might actually be helpful to performance in sport and exercise⁸¹.

2.1.8 Coach-athlete Relationship

Sports coaches are responsible for innumerable aspects of athletes' learning and development, and as such, effective coaching can be extremely complex. It is therefore important that researchers look to identify this social factor in relation to stress among undergraduate-athletes and their coaches. A coach is the kind of person who will be one of the most influential for a young athlete.

Coach-athlete relationship is defined as a state in which coach and an athlete's thoughts of commitment, feelings of closeness and complementarities behaviors are mutually interdependent.

Commitment refers to the purpose of the coach and athlete to form a close and healthy long-standing partnership⁸². However, closeness has been defined as the emotional experienced between the dyad members and is characterized by appreciation, trust, and respect for one another. Complementarities reflect the level of co-operation between the coach and athlete and incorporate behaviors such as friendliness, responsiveness, and willingness as well as the key roles each member undertakes in the dyad⁸².

There is a lot of research regarding the psychological impact a coach has on an athlete and a team's success. Various coaching styles have been shown to have either a positive or a negative effect on performance. There is even evidence showing that a coach's behavior and actions can affect the motivation of athletes⁸³. All coaches have their own unique coaching style and the way it is implemented will affect their athletes' performance. The impact on an athlete's motivation and performance can be extremely significant; the varying styles of coaching could either fulfill or neglect an athlete's psychological needs⁸⁴. Recent research has shown that an autonomy supportive coaching style/behavior fulfill the needs of undergraduate-athletes and result in a greater success overall in their improvement and performance⁸⁴. Youth and undergraduate school athletes prevailed most under democratic and social support coaching styles; in university athletes, it was suggested that a democratic style of coaching led to more team cohesion and freedom⁸⁵.

Coaches have the power to motivate their athletes' minds and muscles as they train to improve performance⁸⁶. The only way to achieve this is by maintaining a positive relationship with their players and proving that they can trust and fully commit to their team.

Many athletes will continue to learn and grow with multiple coaches along the way. It is a coach's job to be one that many would call a role model as they will be impacting their athlete's lives more than they originally may think. To be a successful coach and role model, it will be important

for them to consider many different coaching styles that will be most effective for their team's performance⁸⁷. Sports coaches are responsible for innumerable aspects of athletes' learning and development, and as such, effective coaching can be extremely complex. It is therefore important that researchers look to identify factors that influence coaching effectiveness, as well as key outcomes that stem from it. Research had suggested that the relationship between coach and athlete viewed as central to effective coaching for athletic performance and development⁸⁸.

The coach-athlete relationship could be viewed as a social interaction in which athletes and their coach's closeness (bond experienced), commitment towards others (to maintain a closeness bonding over the time) and complementarities by both parties (the type of interaction) are independent. Athletes who participated in individual sports are more satisfied rather than team sports because their relationship is closer, committed with their coaches⁸⁶. However, in technical training, it was required a lot of cognitive efforts from both parties. The coaches are responsible for provided feedback, ensure that the athletes understand, and be able to demonstrate, describe and explain in each of the tasks in the training session or in competition. Therefore, it is not just about concerning learning or improving skills, it also about creating a positive environment and relations for better results. Athlete with a high level of closeness and commitment either with their members or coaches has better predictor in coaching behaviors⁸⁹. The higher quality in a coach-athlete relationship, the higher satisfaction among undergraduate-athlete and the coach. Therefore, coaching is a critical factor in order to make the team successful, each member needs to ensure that they could work together to accomplish the task and achieved the goal and objective of the team. Effective coaching occurs when athletes perform in their sports followed by their coach's intentions while finding an athlete's satisfaction. A good relationship between coach and athlete can bring positive results in competition and the coach usually seen by others as

effective coaches⁹⁰. An effective coaching behavior can be resulting in athletes reach their personal achievements, performance goals and positive psychological outcomes.

The higher quality in a coach-athlete relationship, the higher satisfaction among athletes and coaches in coaching relationships. Moreover, ‘An Attachment Theory Perspective in the Examination of Relational Processes Associated With Coach-Athlete Dyads’, revealed that individuals who have less anxiety and less avoidance in terms of good quality in the coach-athlete relationship can lead a person to be more positive because of their established a positive internal working models of self and with others. Therefore, by having a positive relationship and effective coaching environment can lead the athletes and coaches to develop themselves feel supported with each other⁹¹.

2.1.9 Overview of Parental Involvement and Sports Performance

Undoubtedly, parents’ influence on a child’s involvement in sports and physical activity is significant. As the demands of youth sports participation have become more complex and competitive, so has the role of a parent become more difficult⁹². It is usually parents who provide the first opportunity for their child to take up a sport. They also have significant influence on a child’s decision on continuing or quitting a sport at some later point in time⁹³. In the last few years, researchers’ interest on the influence of parenting styles on a variety of psychological factors linked to youth participation in sports has significantly increased. One of the most frequently analyzed issues has been parental involvement in youth sports activity, i.e., its intensity, forms and outcomes⁹⁴.

On one hand, parental help seems to be very important (e.g., bringing their child to a training session, supporting them during competition, motivating them when discouraged, providing them with feedback or sharing a child’s success and progress in sports), but, on the other hand, parents’

actions at times may hinder a young athlete's development and adaptation to sports⁹⁵. This is not only connected with parents' inappropriate, rude or aggressive behavior such as shouting, insulting or criticizing others during a game or even engaging in violent behavior. Such actions hamper both the good spirit and mutual understanding found in sport and may result in a child quitting sports⁹⁶. However, other more subtle behaviors by parents, often read by others as parental dedication, readiness to help or their committed involvement, can be perceived by a young athlete as overwhelming and controlling⁹⁷.

Family involvement in youth sports has also different meanings depending on the type of sport. Parents are more engaged when their child plays individual sports or when they are at the early specialization stage in their sport⁹⁸. Initial analysis from a pilot study (an unpublished report using questionnaires assessing the participation of young professional athletes' parents from the Department of Psychology at The University School of Physical Education, Kraków) also showed that the type of parental support and the level of involvement was connected to the type of sport their child played (individual vs. team). Parents of young gymnasts or figure skaters perceived their child's sports as more time- and financially-demanding in comparison to parents of volleyball players. There were also differences found in parents' expectations, volleyball players' parents declared no special expectations in terms of their child's sports success⁹⁹.

Besides providing instrumental support, parents also play an important role as role models, especially if they have sports-related experience or their interest in sports is seen in action, e.g., they have a sports-related job or do sports, even recreationally¹⁰⁰. A study pointed that parents emphasize their commitment more by daily behaviors and activities than by verbal communication. These aspects include self-discipline and the productive use of one's time; a child's success in sports could be then directly attributed to their parents¹⁰¹. Parental involvement

is a multidimensional construct consisting of parent support and pressure behaviors. Parent support has been linked to adaptive outcomes such as child enjoyment and enthusiasm, autonomy, and self-perception of sport skill¹⁰². Parental involvement has been linked to maladaptive outcomes such as perceptions of a threatening sports performance environment, discontent with sports performance, and performance anxiety and negative affect¹⁰².

Parents are those responsible for the introduction of their children to physical or sporting activity and are guarantors of transport, access and emotional and economic support. All these aspects, as well as parents' physical activity and the importance or interest they show in getting their children physically active, are the issues which determine their attitudes and positive or negative behavior towards their children's sport practice¹⁰³. Thus, it is important to examine the involvement parents can have in their children's sport, and the pressure they exert, because these aspects might condition children's commitment in those activities¹⁰⁴. As a result, parental involvement has been associated with sport participation in early ages, but little is known about the understanding of the parent support and pressure perceptions in sport. In fact, despite the identifiable positive influence of parental support, some studies have reported negative aspects. For example, it has been shown that parental expectations are a source of stress among young athletes, quite possibly as a result of the extent of the athletes' awareness of their parents' commitments¹⁰⁵.

2.2 Theoretical Review

2.2.1 Erikson's Stages of Psychosocial Development

Erikson's Stages of Psychosocial Development is a theory introduced in the 1950s by the psychologist and psychoanalyst Erik Erikson. It built upon Freud's theory of psychosexual development by drawing parallels in childhood stages while expanding it to include the influence

of social dynamics as well as the extension of psychosocial development into adulthood¹⁰⁶. It posits eight sequential stages of individual human development influenced by biological, psychological, and social factors throughout the lifespan. This bio-psychosocial approach has influenced several fields of study, including gerontology, personality development, identity formation, life cycle development, and more^{107,108}.

Function

Stages arise as individuals grow and face new decisions and turning points during childhood, adolescence, and adulthood. Each stage is defined by two opposing psychological tendencies – one positive/syntactic and negative/dystonic. From this develops an ego virtue/strength or mal-development, respectively. If the virtue is adopted, it can help to resolve the current decision or conflict. It will also help subsequent stages of development and contribute to a stable foundation for core belief systems in relating to the self and the outer world¹⁰⁸. The opposite is true with the adoption of the mal-developed quality. As an example, the ego identity crystallizes in stage 5, during adolescence. The two opposing qualities are ego identity and confusion/diffusion. Those who develop ego identity yield the virtue of fidelity, while the inability to do so – ego confusion – creates a quality of repudiation. With a stronger sense of ego identity, the interaction with the outer and inner world is of rejecting incongruent evaluations of self and a decreased level of anxiety, respectively¹⁰⁹.

While adopting the syntonic attribute is clearly beneficial in this example, doing so should be done within reason. Extreme ego identity can become fanaticism, which can create unhealthy interactions with the self and others. One must navigate the two opposing values in each stage to find a balance, instead of only striving for the positive quality. Straying too far towards the

positive tendency can be maladaptive, while leaning too far toward the negative can be malignant¹⁰⁸.

Components

Some scholars have attempted to confine stages to specific ages, but Erikson did not initially define this. Instead, there are periods within childhood, adolescence, and adulthood. Each stage provides an example in which the positive attribute may be furthered.

Stages of Childhood

Stage 1 – Infancy period: Trust vs. Mistrust

- Virtue: Hope, Mal-development: Withdrawal
- Concomitant Freudian stage: oral stage
- Example: Secure environment provided by the caregiver, with regular access to affection and food

Stage 2 – Early Childhood period: Autonomy vs. Shame, doubt

- Virtue: Will, Mal-development: Compulsion
- Concomitant Freudian stage: anal stage
- Example: Caregiver promotes self-sufficiency while maintaining a secure environment

Stage 3 – Play Age period: Initiative vs. Guilt

- Virtue: Purpose, Mal-development: Inhibition
- Concomitant Freudian stage: genital stage
- Example: Caregiver encourages, supports, and guides the child's own initiatives and interests

Stage 4 – School Age period: Industry vs. Inferiority

- Virtue: Competence, Mal-development: Inertia (passivity)

- Concomitant Freudian stage: latency stage
- Example: Reasonable expectations set in school and at home, with praise for their accomplishments

Stage of Adolescence

Stage 5 – Adolescence period: Identity vs. Identity confusion

- Virtue: Fidelity, Mal-development: Repudiation
- Example: Individual weighs out their previous experiences, societal expectations, and their aspirations in establishing values and ‘finding themselves.’

Stages of Adulthood

Stage 6 – Young Adulthood period: Intimacy vs. Isolation

- Virtue: Love, Mal-development: Distantiation
- Example: Individual forms close friendships or long-term partnership

Stage 7 – Adulthood period: Generativity vs. Stagnation/Self-absorption

- Virtue: Care, Mal-development: Rejection
- Example: Engagement with the next generation through parenting, coaching, or teaching

Stage 8 – Old Age period: Integrity vs. Despair

- Virtue: Wisdom, Mal-development: Disdain
- Example: Contemplation and acknowledgment of personal life accomplishments

A ninth stage was added by Erik Erikson’s wife, Joan Erikson. It considers new challenges experienced with continued aging and incorporates aspects from all previous eight stages of psychosocial development.

The sequential layout of Erikson’s Stages of Psychosocial Development might initially suggest that stage outcomes become fixed once the next stage is engaged. While there is a fixed

sequence, resolution can be a life-long process, re-activated at various times depending on life events that affect the ego strength or mal-developed belief pattern. Resolution is not required to move on to the next stage. Additionally, with advancement to a new stage, preceding stages are questioned and must be reintegrated¹¹⁰. This is why his theory is sometimes referred to as an ‘epigenetic principle.’ Additional research suggests that the latter four stages are, to an extent, a repetition of previous stages¹¹¹. As an example, the stage of intimacy can be considered a combination of autonomy and trust. Thus, the developmental stages and formation of identity is an ever-evolving process, as opposed to a rigid concrete system¹¹².

Clinical Significance

Several clinical tools and further research have emanated from and have undergone significant influence by Erikson’s Stages of Development:

1. Studying Erikson’s stages serve as a basis of treatment for different recovery stages of mental illness. For example, the initial stage of trust vs. mistrust parallels the mental illness recovery stage concerning the acceptance of the mental illness and trusting the idea of recovery¹¹³.
2. The Erikson Psychosocial Stage Inventory (EPSI) was based on Erikson’s stages, and the modified version following it (MEPSI) is a reliable tool used to assess psychosocial development^{114, 115}.
3. A model of psychodynamic psychotherapy is based on the concept and staging of Erikson’s theory¹⁰⁸.

Nursing, Allied Health, and Inter-professional Team Interventions

Erikson's Stages of Psychosocial Development can be utilized by mental health providers when treating patients who are facing periods of adjustment or turning points in life. When taken in the appropriate context to social and cultural factors, it can be a means for the patient to

augment awareness and understanding of themselves. While many stages focus on periods early in life, it can serve as a conceptual and possibly actionable guide for those later in life as well¹¹⁶. This area continues to be an active focus of research, as Erickson's developmental maturity in mid-life is studied alongside global cognitive and executive function, as well as emotional health¹¹⁷.

2.3 Review of Empirical Studies

2.3.1 Fear of failure and Stress Level among Undergraduate-athletes

Self-consciousness can be seen as a fear of negative evaluation or criticism in a social factor determinant of stress level. Self-consciousness has also been related to the fear of not living up to standards and expectations held by others and by oneself. The inability to meet these standards or expectations, for many undergraduate-athletes, results in feelings of perceived failure. To protect self-confidence/esteem many student-athletes may try to avoid failure, thus becoming self-conscious and possibly have fear of failure¹¹⁸. Failure is often a defeat in the eyes of others, as well as a loss of self-esteem. The more ego-involved an individual inculcate in his or her sports, the more bitter failure will likely be¹¹⁸. "Why do highly motivated athletes who train hard and obviously want to do well contribute to their own self-destruction ...?"¹¹⁹. One answer to this question is fear of failure. Fear of failure is often considered a motivation that is activated in achievement situations that allows a person to avoid failure instead of reaching for success¹²⁰. Unless a person is positive, success cannot be achieved, he or she will likely adopt some avoidance or defensive strategies (i.e., attributional tendencies) toward specific situations¹²⁰.

Two different types of fear of failure were pointed out in this context¹²¹. The first type is the introverted fear of failure, in which individuals would be expected to fear devaluation of self-confidence or esteem. The second type is extroverted fear of failure in which individuals would be

expected to fear social devaluation. Social devaluation would include perceived negative evaluations from others or non-attainment of prescribed standards. Devaluation of self-confidence would include not living up to personal goals or your "ideal self". Fear of nonattainment of certain standards approaches, negative consequences may occur¹²⁰. Nonattainment of a standard itself should not lead to a fear of failure. Failure or success should give individual information about his or her skill level and allow them to learn from their mistakes. However, if punishment should occur as a result from nonattainment of a standard, an individual may feel that future failure is unavoidable and that he or she should engage in failure avoidant behaviors.

It is important that the specific type of fear that undergraduate-athletes are experiencing be identified (e.g., fear of looking bad in front of others, fear of being punished by others, or fear of letting yourself down). Undergraduate-athlete with a fear of failure could experience fear both in academic achievement and sports¹²⁰. Both situations may be seen in a way that potentially leads to a negative evaluation. In both situations, undergraduate-athlete with fear of failure demonstrates failure avoidant tendencies to others' negative evaluations. Model of fear of failure assumes that, Fear of failure involves the anticipation of fear of failure combined with the motive to avoid It failure¹²². The fear of not successful in one's career can be so strong that an undergraduate-athlete with fear of failure may avoid the task entirely to avoid personal shame and public humiliation¹²². For example, undergraduate-athlete will not try a new sports task if he or she is having phobia for failure, instead he or she will just avoid the situation all together. For failure to have personal meaning to an individual, that the person must have or have taken a vested interest or responsibility for the failure¹²⁰. This way the person not only expects failure but also assumes the responsibility for failing. As a result, fear of failure can cause the individual to lose value in other

peoples' eyes, and therefore develop a reason not to lose. In the end, the individual doesn't want to experience shame.

A study shows the effects of anxiety and fear of failure in 75 (seventy-five) female elite gymnasts. Members of the gymnastics National team were administered a multi-section questionnaire at a National gymnast training camp. The inventory consisted of a number of questions about perceived stress. For example, "In your gymnastics, what do you find most stressful?" Results revealed that for these gymnasts, sources of stress fit into eight broad categories: (a) performance of skill, (b) fear of evaluation, (c) aspects of competition, (d) fear of making mistakes, (e) expectations from self and others, (f) time pressures, (g) environmental conditions, and (h) fear of injury. In the above study, all eight categories were related to fear of failure. The primary sources of stress among the members of the National team were performing the necessary skills properly, fear of evaluation, and the experience of competition (i.e., fear of failure). Based on these results, the researchers indicated a strong need to enhance young gymnast's self-confidence in regard to skill execution, as well as, a need to eliminate potential fears¹²³.

A study revealed the external attributions for success and avoidance of failure in undergraduate students. In the study, failure-avoidant students were those who strove to avoid the negative implications of failure in terms of damage to their self-esteem. The participants were identified as failure-avoidant (possessing a fear of failure) through an experimental manipulation of different failure provoking situations which assessed their performance following failure and in response to a face saving excuse¹²⁴. Students whose performance decreased after failure but whose performance improved when given a face-saving excuse constituted the failure-avoidant group. Results indicated that the failure-avoidant students attributed good outcomes to external

causes more than any other group. In fact, the failure-avoidant group also had a tendency not to see good outcomes as a product of their own behaviors. Success was attributed to external factors rather than to the self.

This might be partially explained by the student-athletes not having to live up to high expectations. The researcher stated that if success is externally attributed than failure must also be externally attributed and therefore not perceived as the individual's fault¹²⁴. Another study state avoidance of achievement motivations. This defines a negative performance-oriented goal as one that would most likely cause a negative response in achievement settings (e.g., a preference for easy or difficult tasks, withdrawal of effort in the face of failure, or decrease in task enjoyment).

Another research assessed undergraduate students enrolled in a personality to psychology course for extra credit. The participants were assessed for achievement motivation, fear of failure, competence expectancies, achievement goals, competence perceptions, and intrinsic motivations. The students were asked a series of questions about how they felt the class was going and how well they were doing. Achievement motivation and fear of failure were measured during the first session. Competence expectancies were assessed in the second session and after all multiple-choice test taking. Fear of failure was measured, 27-item of fear of failure were measured¹²⁵. This scale represents and assesses the various components of fear of failure. Fear of failure scores have been linked to threat appraisal, reported anxiety, task distraction, negative outcome focus, and various self protective attribution propensities¹²⁵. Results indicated that mastery goals were those that focused on the attainment of competence and task master, whereas, achievement motivation was oriented toward the possibility of success. On the other hand, performance-avoidance goals focused on the avoidance of negative outcomes, while fear of failure was oriented toward the possibility of failure.

In conclusion, if achievement situations pose a threat or the possibility of failure on student-athletes, then fear of failure and performance is activated through avoidance in order to avoid failure. Reducing the fear of failure has been a topic of many studies^{120,125,126}. Increase in pressure to achieve in sports brings about an increase in anxiety and a fear of failure. As a result, there are likely two different motive components involved with fear of failure¹²⁶. The first fear of failure component describes a self-concept based on low perceived ability and worrying about the correctness of one's performance while the second component describes an emotional component of fear of failure and its social consequence¹²⁶. These motive components may lead one to believe that applied motivation training will lead to an increase in fear of failure and the fear of social consequences of failure. For example, the more time and energy invested in motivating the subjects to win, the higher the hope for success which often directly increases the fear that one may fail.

Swimmers possessed a fear of failure based on Achievement Motivation Grid^{127,128}. Subjects were divided into a control group and an experimental group. The experimental group was put through a motivational training programme. The goal of the motivational training program was to train the swimmers to attribute their failure to ability (i.e., admit failure). These swimmers were asked to concentrate on task-oriented achievement behaviors rather than outcome. The control group participated in regular practice sessions but did not take part in the motivational training. The authors hoped that by placing emphasis on the action (i.e., achievement behavior) that pressure or worry would decrease. The results indicated that the experimental group had an increase in motivation parameters (i.e., their hope for success and their motivation to complete the task increased and replaced the debilitating fear of failure that once held them back). However, this increase was only for a short 23 period of time. When tested at a later time, the effects (i.e.,

their hope for success) decreased. This may indicate that motivational training take place as a required and regular part of practice, in order to have a carryover effect in competition. On the other hand, there was a permanent and marked decrease in fear of the social consequences of failure.

In summary, the training program allows the subjects to put more focus on the achievement behavior (action) instead of the outcome. The researchers also recommended that the instrument used to indicate whether or not the subjects had a fear of failure should be combined with an interview or questionnaire in future fear of failure studies¹²⁶.

2.3.2 Self-doubt and Stress Level among Undergraduate-athletes

Self-doubt has been defined as uncertainty about one's abilities, potential for success or competence in performance situations. As self-doubt concerning personal abilities increases, global self-esteem tends to decrease because self-doubt presents the threat to global evaluations of oneself. Hence, self-doubt can lead to both self-handicapping (i.e., creating or claiming obstacles that reduce the probability of success while at the same time providing an excuse for failure) and overachievement (i.e., striving to perform beyond one's capabilities) in order to protect the self from the implications of failure. As such, self-doubt is often studied in the context of performance¹²⁹.

Self-doubt includes thoughts and feelings such as wondering whether or not one has the ability to succeed at important activities, having thoughts that focus on the bad things that might occur, feeling unsure of one's abilities more often than not and experiencing greater emotional impact as a result of avoiding failure than achieving success. Among university undergraduate-athletes, self-doubt is negatively related to variables such as achievement motivation, self-esteem

and narcissism and positively related to variables such as self-handicapping, social anxiety and “impostor” feelings in which success is perceived as undeserved¹³⁰.

It has been proposed that people who experience high levels of self-doubt tend to reduce their level of effort or quickly settle for mediocre solutions when faced with difficulties, challenge or setbacks in performance situations. Thus, while self-doubt might be a more or less natural reaction to failure, it might be the resilience and ability to regain confidence that is critically important to successful performance when self-doubt occurs. However, subjective overachievement (i.e., the psychological approach to and process of a performance) can occur when self-doubt is combined with a concern over performance. While overachievers tend to perform well on tasks, the challenge to being an overachiever is that the motive to perform well might be driven more by a desire to gain social approval than by intrinsic motives such as the inherent satisfaction in being able to perform a task¹³¹.

Despite the potential risks of the overachievement relation to self-doubt, a common message appearing in recent sports and exercise psychology (SEP) literature is that some level of self-doubt might actually be beneficial to performance in sports, at least in some circumstances. For instance, there is an important distinction between performance efficacy (i.e., perceived capabilities to be successful during the practice phase of competition) and the role that self-doubt might play in each. Self-doubt at game time can act as a barrier to athletes' effectively using their skills because as performance efficacy decreases, performance level tends to decrease; therefore, efficacy beliefs should be as high as possible when competition begins. Alternatively, when student-athletes already have at least a minimal level of efficacy, some self-doubt during the preparatory phase of competition can be beneficial because it might help protect against overconfidence and complacency, as well as motivate undergraduate-athletes to expend increased

effort in practice as a way to continue to enhance personal growth, skill development, and skill execution capabilities. While theoretical arguments supporting the potential benefits to self-doubt are compelling, there is little research to date directly exploring the complexities of the relationships among self-doubt, preparatory efficacy and performance efficacy specifically in the sports and exercise context¹³².

The benefits of self-doubt to performance in sports and exercise were observed in a recent experimental study conducted by Tim Woodman and colleagues with participants who were skilled in their ability to skip rope. The experimental group received information that the rope they were going to use in a competition would be more difficult than the rope used in practice trials. The manipulation was a way to decrease self-confidence and induce self-doubt among the participants in the experimental group. Results showed that those in the experimental group, but not the control group, improved performance on the 1-minute skipping competition task. The reason for the improvement was not clear, as there was little support for increased effort being the reason for the increase in performance. Despite study limitations, this research provides evidence that the relationship between self-confidence and performance might be more complex than generally thought and that a little self-doubt might actually be helpful to performance in sports and exercise¹³².

People routinely encounter challenges throughout daily life. Obvious examples include high-stakes academic tests, athletic competitions, and conflict within meaningful personal or work relationships. People may experience doubts about their ability and their capacity to perform well as they approach and engage these tasks. For all the reasons described above, which taken together argue that feelings of self-doubt and stress are aversive, undergraduate-athletes who chronically experience doubt will develop some strategy to deal with that state. Even transitory feelings of self-doubt about one's competence are not likely to stand unchallenged, and one of the

most compelling research arenas has been centered on how self-doubt concerns play a role in inventive, even ironic, cognitive and behavioral ways that people try to manage their experience of self-doubt. Defining self-doubt is fraught with the same issues as defining virtually every construct in social and personality psychology¹³³. Natural language and everyday discourse ensures confusion. However, the Oxford English Dictionary does a nice job defining self-doubt as the (subjective) state of uncertainty with regard to the truth or reality of anything; uncertainty of belief or opinion. The condition of being (objectively) uncertain. That is, a state of affairs such as to give an occasion for hesitation or uncertainty. Self-doubt is the act or state of doubting oneself, it is a “subjective sense of doubt or instability in self-views”¹³⁴.

One further simple but crucial distinction is important to acknowledge in presenting contemporary research on self-doubt. Judgments of self-worth have been partitioned usefully into two dimensions: self-competence and self-liking. To oversimplify, self-liking is “the value one place on experience of oneself as a social object, a good or bad person;” self-competence on the other hand is “the value one place on imprint of general self-efficacy on identity”¹³⁵. For the past five decades, many have assumed or held a one-dimensional view of self-worth or self-esteem, where general self-liking is equivalent to global self-esteem and feelings of self-competence are but one of its many sources. Given that, self-doubt as we use the concept should be described as doubt about one’s feelings of self-competence¹³⁶.

So, in sum, uncertainty about one’s ability and confidence for success are now generally regarded as fundamental features of self-evaluation¹³⁷. As noted above, such uncertainty would be quite troubling given that “competence is an inherent psychological need of the human being”¹³⁸. Undergraduate-athletes are not the same when it comes to one component of a scale called the SOS (Subjective Overachievement Scale). Although most undergraduate-athletes surely

experience doubt about their competence at times, some might even question it seriously. One of the two factors of the SOS was developed to see the experience of doubt about competence. The self-doubt subscale approaches the construct of self-doubt broadly, without providing any kind of strategy undergraduate-athletes might use to cope with it. Self-doubt is treated as a general sense of feeling unsure about one's competencies, abilities, and thus outcomes in daily life that stem from those abilities. Individuals who experience chronic self-doubt are faced with the unsettling experience of uncertainty about their capacity to cause a desired outcome.

Moreover, the items comprising the self-doubt subscale ask about respondents' preoccupation with the prospect of failure, the desire to avoid negative outcomes, and the self-implicating nature of failure feedback or information. For example, the subscale includes items such as "More often than not I feel unsure of my abilities," "As I begin an important activity, I usually feel confident in the likely outcome" (reverse-scored), and "For me, avoiding failure has a greater emotional impact (e.g., sense of relief) than the emotional impact of achieving success (e.g., joy, pride)." Beyond self-efficacy beliefs about specific actions and outcomes, the self-doubt subscale was written to tap the self-relevant aspects of such thoughts and feelings.

More recently, literature acknowledges that judgments and feelings of self-worth are multifaceted; subordinating the one (competence) to the other (liking and acceptance) blurs important distinctions¹³⁹. For our purposes, conflating the concepts of self-doubt and self-liking is problematic (and has been historically) because conventional measures of self-worth include them both. There is a clear and compelling focus on competence concerns, rather than self-liking or esteem, in the early distinction they drew between fixed and growth mindsets. In the fixed mindset, people believe that their basic qualities, such as their intelligence or talent, are stable and unchanging. Such individuals typically spend their time documenting their intelligence, or talent,

rather than developing them further¹⁴⁰. They also tend to believe that talent alone produces success, and they downplay the role of effort, learning, perseverance – the very prospect of change. In the growth mindset, people believe that the most basic abilities can be developed, usually through hard work, dedication, and learning. Talent is a starting point, but only that. The growth mindset is associated with resilience to challenges and failure, a greater appeal for learning for its own sake, and higher intrinsic motivation. Self-doubt about one's competence would appear inimical to establishing a growth mindset and problematic for generating feelings of intrinsic motivation. By definition, self-doubt is attention to one's self, a focus on "hesitation" and "uncertainty," and measuring oneself rather than fully engaging in tasks in an unselfconscious way¹⁴⁰.

It is certainly recognize that the concept "self-doubt" can be complex and even elusive¹⁴¹. Here, we hope to be clear in construing self-doubt as doubt about one's own competence. Defined this way, we expect self-doubt to have implications for the self-competence component of self-esteem uniquely. Speaking colloquially, chronically self-doubtful individuals might be viewed as having a wide confidence interval around judgments of their ability. Rather than straightforwardly seeing themselves as incompetent or expecting poor performance, seeing themselves as gifted and expecting excellence, these individuals entertain the prospect that they are not easily able to point confidently, with precision, to their level of competence.

Importantly, self-doubt should also be distinguished from other related concepts such as self-efficacy and self-concept clarity¹⁴². Self-efficacy is generally regarded as an expectation about how one will perform in a given domain; by contrast, self-doubt reaches beyond a specific sense of performance efficacy, reflecting an individual's investment – even rumination – over how to view them. Self-concept clarity refers broadly to the individual's clarity or certainty or

consistency in the many self-images that, taken together, comprise one's self-concept. Self-doubt about competence is intended to signify a lack of clarity exclusive to the competence domain, albeit one that we regard as central to one's judgment of one's global self-worth¹⁴³.

2.3.3 Coach-athlete Relationship and Stress Level among Undergraduate-athletes

High school coaching is a demanding profession¹⁴⁴. The sports environment is complex, ever-changing and poses significant psychological and health risks for coaches¹⁴⁵. As many theories in psychology suggest, our actions, behavior and personality is greatly influenced by those within our lives, whether friends, parents, teachers, or in a sporting scenario, our coaches. Perceived coaching styles/behaviors have been found to predict undergraduate-athlete stress. With much of the coaching field being dominated by coaches who possess a goal-orientated and coach-centered approach to coaching, the results have a tendency to be the predominant focus. For some coaches, how the player gets to the successful end result is not important, which explains coaches direct linear approach to coaching and decision-making. Sport is primarily based on providing opportunities, so when an undergraduate-athlete has lack of control and autonomy in the decisions influencing their actions and performance in sport, it can generate to stress¹⁴⁶. Furthermore, university school coaches must be willing to fill a variety of roles that are not in the job description, such as serving as the team's de facto athletic trainer, organizing team fundraisers, running off-season camps, supervising athletes in the weight room, being an amateur sports psychologist, mentoring undergraduate-athletes and teaching life skills. In addition to the various roles coaches are facing, there are increased pressures to win due to the societal change sports has undergone¹⁴⁷.

It is critical for university school athletic programs to retain seasoned, effective and talented coaches in order to maintain the educational component of high school sports, while

assuring a high-quality athletic program. When the best high school coaches experience productivity and longevity, they will provide their services year-after-year which will, in turn, have a positive impact on their undergraduate-athletes.

When an undergraduate-athlete becomes absorbed into games, they may likely connect their identity with the sport. Therefore, if a coach has control over the direction of sport, it may be thought that a coach has control of the shaping of an athlete's identity. As an undergraduate-athlete becomes somewhat 'powerless' in the decision making process with a lack of autonomy, it may be assumed that their identity and personal development spirals out of their control¹⁴⁷. When this occurs, athletes may be stressed out, due to the confusion, and therefore detach themselves from sport in attempt to regain control of their identity¹⁴⁸. This in itself is a highly emotional process, as feeling the need to detach yourself from a sport which you are highly involved in just to gain control of your self-identity can be perceived as a big decision and lifestyle change.

Coaches may also be at a greater risk for stress because of the variety of roles they are required to fulfill in the position, many of which require an extensive amount of social interactions between school and undergraduate-athletes. Through interviews with coaches, coaches experienced a number of stressors including conflict with other coaches, their own staff and parents, athlete concerns, pressure and expectation, competition preparation, organizational management, and isolation¹⁴⁹.

Relationships are more than the sums of their constituent interactions; relationships are an ongoing series of interpersonal interactions where each person's behavior affects the other person's subsequent behaviours¹⁵⁰. In the sports environment, one aspect that may be especially important to investigate, for a variety of outcomes, is the relationship between coaches and their

players. There is support that coaches' and athletes' emotions, thoughts and behaviors may be associated with interpersonal satisfaction.

As a result of the focus of sport today primarily being directed towards winning and results, coaches may push their athletes to their physical and mental limitations. Coaches may enforce repetitive practice in hope to see success. This may result in overtraining; training to the extent where there are no benefits, just consequences¹⁵¹. With no evidential benefits, undergraduate-athletes may have no motives to continue and therefore become de-motivated to continue trying, resulting in withdrawal from sport. In addition, players may devalue sport. Devaluation in sport relates to the loss of interest and resentment a person holds towards a sport due to a coach's focus on performance, oppose to the individual holistically¹⁵². This means that by a coach highlighting results and winning as the key focus instead of holistic undergraduate-athlete development, undergraduate-athletes may become detached from the sport; they may feel that they are participating because they have to, instead of intrinsically wanting to, thus causing stress¹⁵².

One of the models of assessing the coach-athlete relationship is through the use of Jowett and colleagues interdependence three C's model (closeness, commitment, and complementarily). Jowett and colleagues conceptualized the coach-athlete relationship as a situation in which people's emotions, thoughts, and behaviors are mutually and causally interconnected. The researchers believed that in the coach-athlete relationship, the three Cs (closeness, commitment and complementarily) were essential because they reflected the coaches' and athletes' thoughts, feelings, and behaviors. The relationship between coaches and athletes is commonly cited as a key component to effective coaching due to coaches and athletes fulfilling practical, emotional,

social and psychological needs¹⁵³. Additionally, the coach-athlete relationship has been shown to play a central role in the psychosocial development of young athletes¹⁵³.

In Jowett and colleagues' three C's model, the subcomponents of closeness, commitment and complementarity all play important roles in determining if the coach-athlete relationship is beneficial. Closeness is defined as the emotional or affective interdependence that is expressed through liking, respecting, trusting, and appreciating one another. In the model, commitment represents the willingness and dedication to maintain the relationship over time. These thoughts of commitment are demonstrated by relationships that are jointly merged and destined for long-term unification. The final aspect of the model, complementarity, assesses whether coaches and athletes are cooperative in their actions and goals. Moreover, interpersonal behaviors of the complementarity sub-theme involve members feeling at ease while being responsive and ready. If coaches and athletes feel as if they are moving toward the same goals and each pair's actions are in conjunction, complementarity will be high.

Previous studies have focused almost exclusively on the effects of the coach-athlete relationship from the athlete's standpoint. In these studies, the coach-athlete relationship has been used to examine the quality of coach-athlete relationship from the perspective of the athlete in regards to an athlete's general happiness and relationship interdependence and satisfaction¹⁵⁴. One study in particular has investigated the coach-athlete relationship in regards to athlete stress. All of the three dimensions of the coach-athlete relationship were negatively related to stress¹⁵⁴. Even though these studies have added to the knowledge of the coach-athlete relationship, they have largely ignored coach outcomes. In fact, the inter-personal relationship between coaches and undergraduate-athlete was "uncharted territory in sports psychology research"¹⁵⁵. This important

topic- both for undergraduate-athletes and coaches - remained largely unexplored and unmeasured for several more years.

Few studies have investigated the coach-athlete relationship with a specific focus on the coach. In two studies that investigated aspects that were related to the quality of the coach-athlete relationship, higher quality of relationship was related to more positive attributes. Specifically, coaches' self-efficacy was positively related to all three dimensions of the coach-athlete relationship¹⁵⁶. A second study indicates that in a coach-athlete dyad, enhanced commitment was associated with a high degree of other-efficacy, or confidence in the other person's capacities to help¹⁵⁷. Other studies have investigated the relationship between the coach-athlete relationship and a coach's satisfaction. Relationship interdependence was positively related to coach satisfaction. Albeit in limited number, these studies all indicate that high quality coach athlete relationships are associated with more positive outcomes¹⁵⁸. Therefore, even though initial support for the benefit of a high quality coach-athlete relationship has been found, more research is needed to investigate other common coaching outcomes. One of the outcomes that may be linked to the quality of the coach-athlete relationship is coach burnout.

Due to the void of empirical work examining the coach-athlete relationship in relation to stress levels, these two constructs were further investigated to see if the coach-athlete relationship impacts a coach's level of burnout. Better understanding the coach-athlete relationship from the coach's perspective, along with the quality of the coach-athlete relationship serving as a potential coaching burnout correlate, will help advance knowledge in the coach-athlete domain.

One of the studies done on coach-athlete relationship is reviewed here and Coach-Athlete Relationship Questionnaire was used to assess coaches' perspectives of their relationship with athletes they coach¹⁵². The 11-item questionnaire is a self-report instrument that measures

affective, cognitive, and behavioral aspects of the coach-athlete relationship on three subscales. The three subscales are: closeness (e.g., I feel close to my athletes), commitment (e.g., I feel committed to my athletes), and complementarity (e.g., When I coach my athletes, I am ready to do my best). Of the 11 items, four items measured the construct of closeness, three items measured commitment, and four items measured complementarity. Coaches indicated their perceived relationship with their athletes on a 7-point Likert-type response format with scores ranging from (1) Strongly disagree to (7) Strongly agree. Reliability for the 11-item scale was demonstrated¹⁵².

A modified version of the Athlete Burnout Questionnaire (ABQ) was also used to assess the perceived levels of stress in coaches¹⁵⁹. The new measure, renamed the Coaching Burnout Questionnaire (CBQ), was comprised of 15 items separated into three subscales, each containing five items. Each item was modified in a manner that "coach" replaced "athlete" and "coaching" replaced "sports participation." The three subscales are: reduced sense of accomplishment (e.g., I am not achieving much in coaching), emotional and physical exhaustion (e.g., I feel overly tired from my coaching), and sports devaluation (e.g., I have negative feelings toward coaching). The stem for each item asks coaches to indicate how often they feel this way, and a 5-point Likert-type response format is used with scores ranging from (1) almost never, (2) rarely, (3) sometimes, (4) frequently, and (5) almost always. A total mean score was calculated for each subscale. The CBQ is based on the ABQ that was initially tested for reliability and validity in an adolescent athlete population. The use of the ABQ with coaches has some support with acceptable internal consistency found in a group of Lithuanian coaches¹⁶⁰.

However, the internal consistency was for the scale in total and not for each subscale. Additionally, the ABQ has been used across a range of sports populations¹⁶¹. Therefore, as only

one study has used the ABQ with coaches with limited reliability and despite the coach being firmly situated in the sports context, caution should be given in regards to the results drawn from the current study until a full validation of the CBQ is completed.

Therefore, in addition to fulfilling academic demands and maintaining a variety of responsibilities, undergraduate-athletes must manage relationships with teammates, coaches, family members, and peers. The relationship between undergraduate-athlete and coach is a unique component of sports participation, in which both coaches and undergraduate-athletes have responsibilities to uphold. Coaches generally provide feedback, discipline, and organization, while undergraduate-athletes are expected to perform at a high level physically and mentally, respect the decisions of the coach, and facilitate relationships within the team¹⁶². Distinct components of the coach-athlete relationship, such as the physical aspects of stretching and skill development and the highly emotionally charged context of sports competition, can lead to deep friendships¹⁶³. Large amounts of time together can lead to interpersonal connections, but can also contribute to problems¹⁶⁴. Indeed, the opportunity for a high volume of interaction does not necessarily correlate with progress in the quality or efficacy of the communication between the coach and undergraduate-athletes¹⁶⁵.

University coaches define the strategies for how their undergraduate-athletes will optimize performance. The power dynamic often extends beyond the realms of physical training, into diet and weight control, and even into other interpersonal relationships¹⁶⁶. Coaches establish practice plans and set line-ups to decide who will start, who will play, and who will sit out. They often play a role in determining the future of the athletes they work with by creating opportunities or taking them away. Relationship between a coach and an athlete generally plays a central role in the latter's physical and psychosocial development¹⁶⁷. As athletes rely on coaches to impart

knowledge, and coaches rely on athletes to acquire expertise, the duo is dependent on one another to accomplish performance goals¹⁵⁸. The power dynamic between coach and athlete is centrally important to the quality of athlete's sports experience. Unfortunately, this important relationship is relatively understudied¹⁶⁸.

Overall, much of what has been mention relates to the coach being predominantly in control of the direction and decision surrounding an athlete's involvement in sport. As stress can be influenced by significant others, such as coaches, it suggests that stress is not only based on physiological exhaustion, but also social complications. The lack of awareness a coach has in relation to the power in the coach-athlete relationship can fundamentally trigger stress, due to the assumption that coaches have the responsibility to make decisions within sport. Instead, power in the coach-athlete should be seen as constantly shifting, meaning that undergraduate-athletes too should have the freedom to make decisions and have input in regards to direction and choices surrounding their involvement in sport. Coaches should therefore be more aware of how influential their input is, so instead to telling an athlete what to do, they could instead scaffold and guide their learning in order to give them a sense of achievement. This would ultimately retain engagement within sport and reduce the chances of been stressed out, as undergraduate-athletes may recognize that they do have control of their own lives. Instead of sport and coaches controlling the shaping of their identity, sport instead can act as a tool to guide and enhance self-identity and a positive development.

2.3.4 Parental Involvement and Stress Level among Student-athletes

Parents are an essential influence on an adolescent. Parental involvement reflects a dedication to the child and positive attention to the child-rearing process. Parental involvement can be defined in at least three ways: direct interaction with the child, also known as engagement

(e.g. having a discussion), being accessible to your child but not directly (e.g. children are in one room and parents are in another room), and responsibility for children (e.g. making sure that homework is completed)¹⁶⁹.

Mothers and fathers have unequal roles in the family setting. More specifically, mothers are more often responsible for daily supervision and medical care in infancy and early childhood¹⁷⁰. When fathers are involved, they spend more time in playful interactions than mothers. Consequently, fathers tend to serve more as a playmate rather than a caretaker¹⁷⁰. Fathers tend to engage their children in tactile, physical, and stimulating activities. As the children grow older fathers tend to engage in less rigorous recreational activities, such as walks, outings, and private talks (Child Trends, no date). Mothers are seen as the providers of food and love while providing a relationship of sensitivity in the environment that emphasize cognitive and language outcomes¹⁷¹.

All in all mothers are the nurturers and fathers are the entertainment. However, there are limited studies that examine these types of trends in athletics. Conventional images of motherhood and fatherhood could push couples toward unequal parenting¹⁷². In most studies regarding parental involvement mothers show greater involvement than fathers¹⁷³. For example, an argument was debated on that the ideology of intensive motherhood which states that mothers have an exclusive responsibility to children, while fathers are the second-best substitutes. Equal sharing parental roles transform gender-based roles of mothers and fathers into human roles. This would result in a world where fathers are involved in the day-to-day care of children as much as the mothers¹⁷². Human roles that allow for daily chores of doing laundry, cooking, and cleaning are not designated to a mother or a father. Equally sharing is not role reversal. Allowing family obligations to overtake career intentions while still maintaining a commitment to work should be the norm.

In sports, parental involvement on a continuum ranging from under-involvement to over-involvement. On this continuum moderate involvement seems to facilitate a positive sports career, while both disinterested parents and overly engaged parents may play a disruptive role. It is no surprise that athletes of disinterested parents are more likely to drop out and need more support from other socializing agents such as teachers or coaches¹⁷⁴. On the other hand, athletes with over-involved parents do not complain about lack of interest or support, but they may perceive high levels of parental pressure¹⁷⁴.

The subsequent study will use the Parental Acceptance-Rejection Theory (PAR Theory) to extend the research of parental involvement in sports. The PAR Theory predicts that parental rejection has consistent negative effects on psychological adjustment and behavioral functioning of both children and adults. PAR Theory is divided into three subcategories: the personality sub-theory, coping sub-theory, and the socio-cultural systems sub-theory¹⁷⁵. When applied to athletics, the negative consequences of the personality sub-theory highlight some characteristics of children who have been pressured to participate and perform well in athletics. Parents that are extremely critical of their children's athletic performance are often perceived as being negative¹⁷⁶. This six extreme pressure from parents may contribute to the child feeling stressed during competition and create a sense of failure due to not meeting parents' expectations¹⁷⁶.

Parental involvement has been conceptualized as "the extent to which a parent is interested in, knowledgeable about, and takes an active role in the undergraduate-athlete's life"¹⁶⁷. Involvement in an undergraduate-athlete's life often reflects a parent's dedication to the child and positive attention to the child-rearing process. More involvement is generally better than less involvement when parents provide them with resources and support that facilitate a sense of autonomy¹⁷⁸. Conversely, the use of controlling behaviors (e.g., extreme rules, withholding

benefits due to performance, psychological abuse based on performance) can make undergraduate-athlete feel negatively stressed for the extent of their parents' involvement; and therefore undermine undergraduate-athlete autonomy¹⁷⁸. It is generally understood that when parents are nurturing and form a secure relationship with their children, that children benefit socially, emotionally, physiologically, and personally¹⁷⁸. For example, in a study, 100 mothers from Halifax, Nova Scotia were examined to determine how parenting styles and maternal emotional styles are related to child regulation and social development. The conclusions showed that parenting styles and maternal emotional styles were interrelated to such a high degree that a research instrument was created to test these variables¹⁷⁹.

In another study, researchers examined 98 children, mothers, and preschool teachers to document the interactions between parenting styles and children's negative effect in play behaviors such as rough-and-tumble play. The purpose of this study was to explore the links of parenting styles and parental involvement in children's play behaviors. Results reported that lower levels of parental pessimism were associated with higher levels of well-being in young children. On the contrary, parents that reported high levels of authoritarian parenting were more likely to exhibit negative play behaviors and lower levels of well-being. This is important because parents that are generally negative could influence their children in a way that produces unwanted behaviors, and serves to create a stressful parent-child relationship.

Additionally, parental involvement has been observed to be positively associated with student-athlete behaviors and attitudes in sporting activities¹⁸¹. During university, parents become less involved with monitoring student's behaviors and more concerned with their learning opportunities at school¹⁸¹. It is relevant to the present study because it brings to light the fact that a moderate amount of parental involvement is hard to obtain. The moderate amount of parental

involvement is essential for the parents to communicate interest and care to the child¹⁸². Parents are often either too involved or they are too distant. Translated into the world of sports, this study would suggest mothers and fathers of student-athletes need to gain a moderate amount of involvement to ensure that their child's sporting experience is one of pleasure and joy.

Youth sports participation has been on the rise with recent evidence suggesting that 90% of student take part in some form of organized sports between the ages of 5 to 17¹⁸³. For most families, sports constitute a central role in parent-child interaction, parent-child time together, and family leisure time. Parental involvement is of utmost importance to parents and children alike¹⁸³. It has been lamented that "everybody talks about parents in sports, but nobody does any research on them!"¹⁸⁴. Henceforth, more research should be conducted on parents' perceptions in the parent-athlete relationship. Such an investigation will provide a perspective not otherwise seen in the literature.

Parents and coaches play the most distinct role influencing adolescent athletes. Parental influence has been emphasized, especially with regard to the positive and negative involvement they can exert on their children (undergraduate-athlete) examined the pattern of involvement of parents in youth sports¹⁸⁵. The study reinforced the fact that children (undergraduate-athlete) tend to report enhanced sports enjoyment when they perceive their parents are positively involved and satisfied with their sports participation. Then again, when parents are over-involved, hold excessively high expectations, and exert too much pressure, undergraduate-athlete report heightened stress and thereby reduce sports enjoyment¹⁸⁶. This means that the over-involved parents are child-centered and are best described as those who frequently attend practices, provide unsolicited coaching from the sidelines, give frequent directives to their child to try harder, and engage in conflict with the coach over their child's playing time¹⁸⁶. The over-involved parent

poses the greatest risk to the long-term development of young athletes. Athletes of over-involved parents experience greater parental pressure argue more frequently with coaches and officials, experience more problems with eating and sleeping, show less effort and enjoyment during training sessions, and are more likely to drop out of sports than athletes of normal, supportive parents¹⁸².

In an article entitled “The coach/ parent/ athlete relationship”, parental involvement is described on a continuum ranging from under-involvement to over-involvement¹⁸⁶. Under-involved refers to a relative lack of emotional, financial, or functional investment on the part of parents. Moderate levels of involvement are characterized by firm parental direction, but with enough flexibility so that the undergraduate-athlete is allowed significant involvement in decision-making. Parents are supportive, but ultimate decisions about participation and levels of achievement are made by the undergraduate-athlete. Over-involved parents have an excessive amount of involvement in the athletic success of their children. Over-involved parents are thought to support their own hidden agenda, hoping the undergraduate-athlete’s success will provide later opportunities in education or sporting careers. Moderate involvement seems to facilitate a sports career, whereas under-involvement (e.g., disinterested parents), and overly engaged parents may both play a disruptive role.

It is no surprise that student-athletes of disinterested parents are more likely to drop out and need more support from other socializing agents such as lecturers or coaches. On the other hand, undergraduate-athletes with over-involved parents do not complain about lack of interest or support but they do perceive high levels of parental pressure to perform at their highest level¹⁸⁶. These parents would be those who are excitable and fanatical. The excitable parent is typically supportive but tends to get ‘caught up in the heat of the moment’¹⁸⁷. During practices or

competitions they are typically loud, yelling encouragement or instructions to players, coaches, and/or officials. The excitable parent also tends to be overly concerned with the physical welfare of their ward. This is the type of parent that runs on to the field every time their ward takes a bump or bruise. Although such actions are taken in the best interests of the student-athlete, they can be embarrassing and distracting. The undergraduate-athlete of excitable parents often try to discourage their parents from attending practices or competitions¹⁸².

Research suggests that the parent who poses the greatest risk to the long-term development of undergraduate-athletes is the fanatical parent. These affected undergraduate-athlete of fanatical parents exhibit greater parent pressure, argue with coaches and officials, have a familiarity with difficulties eating and sleeping, experience less effort and enjoyment during training sessions, and more likely to drop out of the sports¹⁸². Fanatical parents are those who are controlling, confrontational, and preoccupied with wins and losses. An effective parent should be one that understands their role and expectations with being a sports parent¹⁸². Their primary role as a parent is to provide emotional, financial, and provisionary support for their children. Examples of emotional support include helping the child deal with winning and losing, talking sports strategy, offer verbal encouragement, and helping the child understand the lessons that sports can teach¹⁸². Examples of financial and provisionary support include paying school sports fees, buying new sports equipment, and any other ancillary or provisional needs that an undergraduate-athlete will encounter¹⁸².

In sports psychology, researchers have used several developmental theories to examine the influence of parents. The word influence in this case, is used synonymously with the word involvement. Competence motivation theory indicated that children reported higher levels of athletic competence and intrinsic motivation when they received frequent positive comments from

their parents and perceived positive parental beliefs about their competencies¹⁸⁸. This theory has been one of the most commonly used motivational theories in sports¹⁸⁹.

Many scholars in the field of sports psychology have used this competence motivation theory to address difference facets of the sports psychology paradigm. One study that is pertinent to purposes of the current examined the relationship between 227 youth athletes and parents regarding the children's perceptions or parental influence and their psychosocial responses to competitive soccer participation. The first hypothesis proposed that undergraduate-athlete who perceives their parents' behaviors and attitudes as more supportive would have more positive attitudes sporting experiences. For example, undergraduate-athlete will have higher perceptions of competence, enjoyment and intrinsic motivation¹⁹⁰. The second hypothesis proposed that the, "undergraduate-athlete's perception of their parent's behaviors and attitudes will be more strongly related to their self-perceptions of competence, enjoyment, and motivation that reported parental behaviors and attitudes". Their results demonstrated that mothers and fathers who perceived themselves as positive role models, who demonstrated positive beliefs about their child's capability, and who frequently gave positive responses to performance successes were associated with undergraduate-athletes who had higher perceived competence, enjoyment, and intrinsic motivation¹⁹⁰.

An evidence-based theory that is rooted in parenting and attempts to predict major causes, consequences, and other correlates of interpersonal—especially parental—acceptance and rejection, is the Parental Acceptance-Rejection Theory (PAR Theory)¹⁷⁵. The use of the PAR Theory in sports has been limited; however this theory has influenced the work of numerous researchers examining conceptual parenting models stretching as far back as 1930¹⁹¹. In turn, PAR Theory has been used as a theoretical perspective in hundreds of studies covering all major

American ethnic groups in over 60 countries^{175,191}. This theory has been tested multi-culturally, across ages and genders, and is reliable in predicting negative affect and worldviews among undergraduate-athlete perceived to be rejected¹⁷⁵. Parents of undergraduate-athletes also often choose between promoting their child's athletics or academics. Parents that pushed for athletic success did not put a similar emphasis on academics¹⁹². Parents can have a "health perspective" on sports and promote balance between sports and academics in their child's life¹⁹³. Parents that push winning and sports accomplishments did not encourage their child as heavily in their academic achievements.

It has been shown that there is variation between how parents influence academics and sports¹⁹⁴. Parents had more of an impact on the sports participation of their daughter than on her academics. It was suggested that this was because sports is optional whereas academics are required. It is also possible for athletics and academics to interact¹⁹⁴. Parents being involved in their child's school-based sports might help the parent and adolescent interact about educational matters. The differences between parental influence on academics and athletics and the possible intersection of the two make it important to consider both aspects.

Parental involvement is very important to contemplate when studying the athletic participation of an individual. Parents often are the main reason that children start participating in sports^{196,185}. "Parents play an integral role in youth sports programmes"¹⁹⁷. Parental involvement can strongly predict how involved a child will be with a sports¹⁹⁸. If a parent is supportive or pressuring an undergraduate-athlete to be involved in a sports, the he or she most likely will participate in that sports. This is especially true at the youth sports level. Girls participated in sports that their parents showed interest in either by coaching or just expressing positive attitudes¹⁹⁴. It would be logical to believe the same would be true for boys.

Lastly, parental involvement remains an important factor throughout their child's athletic career¹⁹⁸. That means parents are still influential after their child has gone to college. Family factors need to be taken into consideration when studying the behavior of a collegiate undergraduate-athlete¹⁹⁹. It was believed that parents had an impact on how the undergraduate-athlete behaved with their athletics. University undergraduate-athletes' who believed their parents found success in their sports to be important had higher levels of confidence and stress than the athletes who perceived their parents placed less importance on success²⁰⁰. These undergraduate-athletes thought they were better, and worried more about failing when their parents pushed success. Their attitude toward their sports was impacted by their perception of the value their parents put on winning. Parental involvement was one of the most important family characteristics to impact an undergraduate-athlete's success in university. Parents have the ability to impact expectations this population holds for their college athletic and academic experiences²⁰¹.

2.3.5 Interplay between Gender and Stress Level among Undergraduate-athletes

A stressor unique to undergraduate-athletes is balancing a dual role of being both a college student and an athlete engaged in a highly competitive environment. A study was conducted on the dual roles of undergraduate-athletes and concluded that the undergraduate-athletes who learn to separate their roles do not have a negative impact on their well-being. Undergraduate-athletes who do not separate their roles but view themselves as both a student and an athlete together have a lower level of well-being. Those who do not separate their roles often reach an imbalance in each area which results in role confusion and creates stress²⁰².

An important area to examine is any possible gender differences in perception of stress amongst university undergraduate-athletes. While a few studies have been focused specifically on gender differences, most studies only look at it as a side note for discussion purposes.

A study focused specifically on gender differences and stress coping. They used lack of goal attainment as the measure of stress. They report that females used higher levels of seeking social support and increasing effort to manage goal frustration to cope with stress. They found that males are less likely than females to use problem-focused coping mechanisms, which was contrary to much of popular belief¹¹⁵. Both males and females reported using problem-focused coping and self-blame coping at a high rate. It hypothesized that this is from the competitive nature of athletics experienced by both males and females.

Gender differences contribute greatly to the study of the effects of stress on self-esteem and health habits. It was found that the majority of females expressed feeling stress often, while a minority of males expressed this. The study suggests that high stressed females are more likely to practice poor health habits, and have a lower perception of self-esteem¹⁵². In sports, gender differences in the levels of stress have focused on samples of coaches and athletes. Some studies have shown that female coaches experience higher levels of stress compared to their male counterparts, while some others have suggested the lack of gender differences in stress levels or even higher levels in male coaches^{203,204,205}.

The majority of studies on stress in athletes have been carried out using the Athlete Stress Questionnaire (ASQ). ASQ consists of three subscales, namely reduced sense of accomplishment, physical/emotional exhaustion, and devaluation. Reduced sense of accomplishment is accompanied by feelings of failure and reduced efficacy. Physical/emotional exhaustion refers to such feelings as physical and mental fatigue during athletic performance, and devaluation refers to a decrease in the importance of sports participation²⁰⁶. Symptoms of stress in soccer players significantly increase during the season, but these changes are not a function of gender differences²⁰⁷. Moreover, a study revealed stress in collegiate swimmers and found no significant

difference between men and women in the subscales of ASQ²⁰⁸. Similarly, a study reported no significant difference in stress between male and female students who regularly participated in training and competition²⁰⁹.

Empirical studies on the influence of gender on stress were found to be contradictory and mixed up²¹⁰. For example, some researchers found out that female students have experienced a higher level of stress compared to male students' counterpart because they tend to be extra emotional and sensitive toward what is happening in their surroundings²¹¹. The same finding occurs that, female students reported a higher level of stress than their male counterparts concerning the time pressure dimension of stress²¹². More to these findings, stress and anxiety levels among female college students were found to be elevated compared to counterparts²¹³. Possible elucidations for female students experiencing higher stress levels could include women taking on the role of being the caretaker of the family while also working and being a successful student. Females usually report a higher level of self-imposed stress and report more physiological reactions to stressors than males while males report lower stress levels because they are taught to be masculine and not show emotional weakness.

In another study, the association between gender and stress has also shown that women found themselves in more stressful situations than males²¹⁴. A factor in women feeling more stressed is how they perceive life events and the responsibilities of taking on social roles. Also, women tend to be more affected by the stress and energy of those around them. Other reason women have higher stress level is that they tend to cope more emotionally than men while men deal with stress and frustration on a rational non-emotional level. Researchers have suggested that emotion-focused coping is ineffective and more likely to be associated with psychological distress than is problem-focused coping²¹⁴. Unlike these findings, school boys are more stressed than

school girls. This might be due the higher expectations and responsibilities that parents put on boys as well as the high standard goals that boys want to attain in their plans²¹⁵.

Likewise, in a study conducted in Ghana, male students were found to experience a higher level of stress than female students²¹⁰. On the other hand, other studies reported that there is no significant difference between male and female on academic stress²¹⁶. The result of a study revealed that the majority of the male participants 37 out of 63 were found experiencing a moderate level of stress. The rest of male participants 26 were found having lower stress level. However, there was no male student who experienced a high level of stress. Regarding the female participants, the majority of them, 41 out of 60 experienced moderate, 17 lower and 2 higher levels of stress. The frequency distributions of male and female indicated that they more or less had a similar level of stress even though female students a bit seemed more prone to stress than their counterparts. The chi-square test result indicated that there was no statistically significant difference in stress scores between male and female students.

Following the findings, the present study showed that students' stress scores did not show statistically significant difference across their gender. However, it is also important to note that there are several studies which detected a significant difference in stress scores between males and female. For instance, female students are more vulnerable to stress than males. This could be explained by the fact that females are more subjected to community pressure and they are still under the pressure of cultural habits²¹⁷. On the other hand, male students are more stress than female students which might be due to the high standard parental and social expectations. It was guess that the self-contradictory results on the relations between gender and stress might be associated with methodological problems and sample variations²¹⁵.

2.4 Conceptual Framework

2.4.1 Conceptual Model / Framework

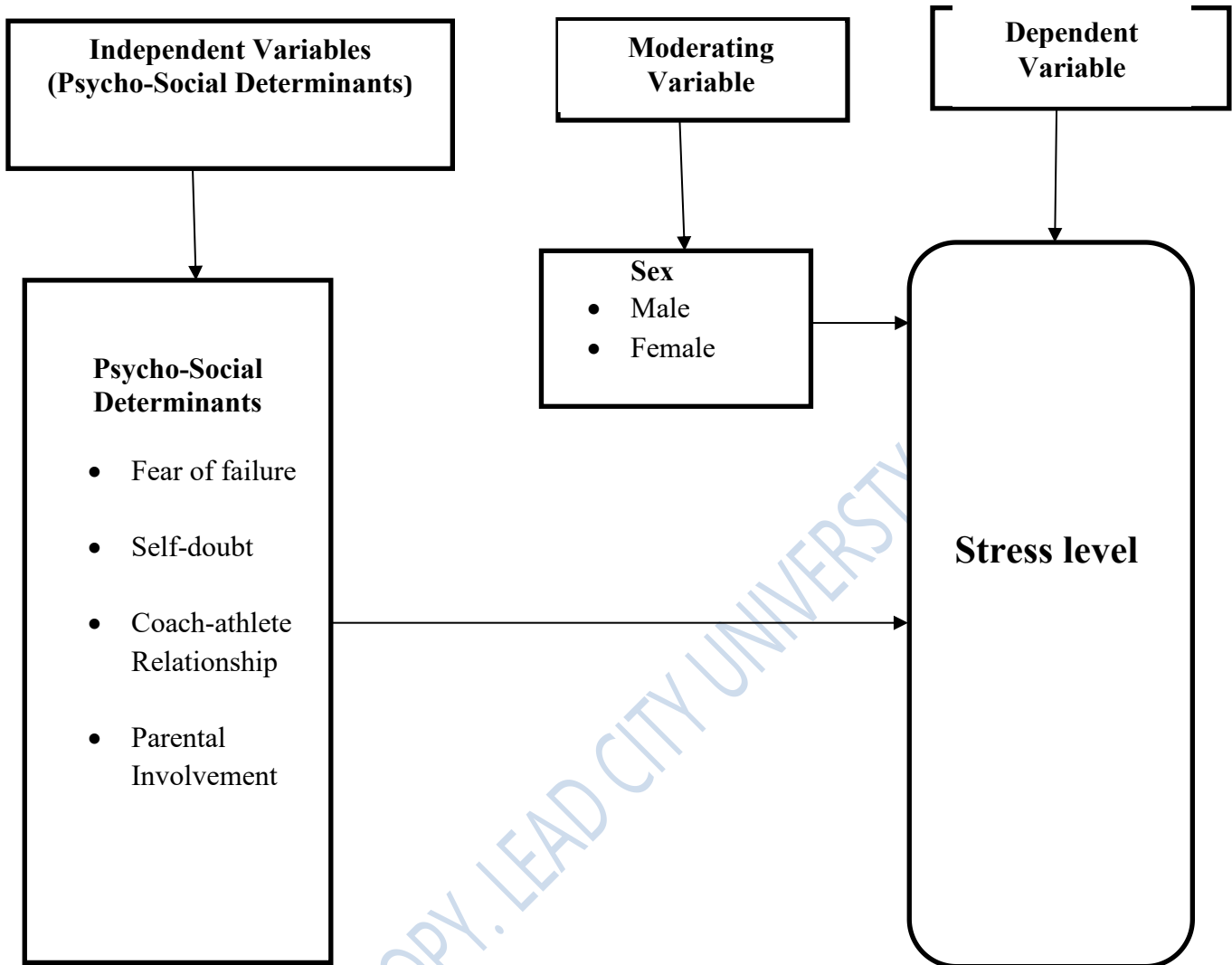


Fig. 2.4.1: A Framework Showing the Psycho-Social Determinants of Stress level among Undergraduate-Athletes of Private Universities in Oyo State

Source: Researcher (2022).

Endnotes

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Chapter Three

Methodology

This chapter presents methods and procedures for the study. The chapter will be discussed under the following sub-headings:

3.1 Research Design

3.2 Population of the Study

3.3 Sample and Sampling Techniques

3.4 Description of the Research instruments

3.5 Validity of Research Instrument

3.6 Reliability of the Research Instrument

3.7 Data Collection

3.8 Data Analysis

3.1 Research Design

The descriptive survey research design was employed for this study. This was chosen because it is an investigation in which self-report data will be collected from sampled participants with the purpose of describing the population of interest.

3.2 Population of the Study

The population for this study comprises of all male and female undergraduate-athletes of private universities in Oyo State, Nigeria.

3.3 Sample and Sampling Techniques

The sample for this study consists of two hundred and thirty-two male and female undergraduate-athletes. Purposive sampling technique was used to select three out of seven private universities in Oyo State because these are universities that are actively participating in

sports among the seven private universities in Oyo State (See Appendix II). The selected universities include Lead City University, Ibadan, Kola Daisi University, Ibadan and Ajayi Crowther University, Oyo. Proportional sampling technique was used to select the respondents, whereby 40% was selected from each sample. Thus 106 respondents were selected from Lead City University, Ibadan, 90 males and 16 females, 40 from Kola Daisi University, 24 males and 16 females, Ibadan and 86 from Ajayi Crowther University Oyo, 51 males and 35 females. (See Appendix III).

3.4 Description of the Research instruments

Questionnaire was used as instrument for data collection in this study. The questionnaire is in four (4) sections. Section A elicits information on demographic characteristics of the respondents. Sections B-D, were modified, structured questionnaire, reports information on the variables of the study. The questionnaire was close ended type. For Section B, the Perceived Stress Scale (PSS) was used to get information on the level of stress experienced by the undergraduate-athletes and the responses is on four point ratings of Never (N) Sometimes (S) Often (O) Very Often (VO). This implies that some respondents never (not at all) perceive stress, some do sometimes, maybe twice a week, some four times in a week (Often) while others are six to seven times a week (Very Often).

Section C, Psychological Determinant Scale (PDS) gathers information on psychological variables of fear of failure and self-doubt in undergraduate-athletes. The items in this section is in line with the modified Likert type technique of summated ratings of 'Strongly Agree' (SA), 'Agree' (A), 'Disagree' (D), 'Strongly Disagree' (SD). Finally, Section D, which is Social Determinant Scale (SDS), gathers information on social variables of relationship with coach and parental involvement. This was divided into two parts (D-I and D-II) respectively. Items on D-I

responses was on four point ratings of ‘Not at all (NA), Somewhat (SW), Moderately So (MS), Very much So (VMS), while items on D-II responses were also on four point ratings of ‘Strongly Agree’ (SA), ‘Agree’ (A), ‘Disagree’ (D), ‘Strongly Disagree’ (SD).

3.5 Validity of Research Instrument

Validity indicates whether the instruments measure what they were designed to measure. It is the most critical criterion of sound measurement and indicates the degree to which an instrument measures what it purports to measure. To ensure validity of the instrument, a draft of the modified structured questionnaire was presented to the researcher’s supervisor and other experts within and outside the department of Kinesiology, Sports Science and Health Education, Lead City University, Ibadan. Comments and suggestions from these experts were studied carefully and followed to improve the quality of the instrument.

3.6 Reliability of the Research Instrument

Reliability is the degree to which research instrument method produces stable and consistent results. The corrected version of the questionnaire was administered on thirty (30) respondents who possessed same characteristics with the respondents but was not part of those that was used for actual study. Undergraduate-athletes from University of Ibadan were used. The collected data was also collated and subjected to Cronbach Alpha method to determine the internal consistency of the instrument. The internal consistency of each subscale of the instrument was computed separately which yielded the reliability co-efficient index as follows: Perceived Stress Scale (PSS) 0.62, Psychological Determinant Scale (PDS) 0.89, Coach-Athlete Relationship Scale 0.88 and Parental involvement 0.93, respectively.

3.7 Data Collection

The research permit was obtained from the University management to aid in collection of data from the study areas. Questionnaires were administered by the researcher with the help of four (4) trained research assistants and also by using online survey system.

3.8 Data Analysis

The descriptive statistics of frequency counts and percentages were used to analyze the demographic data in Section A as well as the research question. Inferential statistics of Pearson moment correlation coefficient (PPMC) was used to test hypotheses 1 and 2, Multiple Regression was used to test hypotheses 3-7, while T-test was used to test hypothesis 8. All hypotheses were tested at 0.05 Alpha levels.

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Chapter Four Results and Discussion of Findings

This chapter presents results of the analysis as well as the discussion of findings.

4.1 Demographic Data Analysis

4.2 Presentation of Data

4.2.1 Research Questions

4.2.2 Hypotheses

4.3 Discussion of Findings

4.1 Demographic Data Analysis

The analysis of socio-demographic characteristics of the participants is presented in table 4.1.

Table 4.1.1: Distribution of Participants by Name of Institution

Name of Institution	Frequency	Percent
Lead City University, Ibadan	106	45.7
Kola Daisi University	40	17.2
Ajayi Crowther University	86	37.1
Total	232	100.0

Source: Field Survey, 2022. Researcher.

Table 4.1.1: reveals that 106 (45.7%) of the respondents are from Lead City University with the highest response, followed by 86 (37.1%) from Ajayi Crowther University while Kola Daisi University with the lowest respondents of 40 (17.2%).

Table 4.1.2: Distribution of Participants by Sex

Gender	Frequency	Percent
Male	164	70.7
Female	68	29.3
Total	232	100.0

Source: Field Survey, 2022. Researcher.

Table 4.1.2: reveals that 164 (70.7%) of the participants are males, while 68 (29.3%) were females. Most of the respondents are males.

Table 4.1.3: Distribution of Participants by Age

Age	Frequency	Percent
Less than 18 Years	70	30.2
19 - 21 Years	86	37.1
22 - 24 Years	33	14.2
25 Years and above	43	18.5
Total	232	100.0

Source: Field Survey, 2022. Researcher.

Table 4.1.3: reveals that 86 (37.1%) of the respondents were in the age range of 19-21 years, 70 (30.2%) were less than or equal to 18 years old, 43 (18.5%) were 25 years and above while 33 (14.2%) were 22–24 year old. This means that, most of the participants were in the age range of 19-21 years, while the participants who were 22-24 years were the least respondents.

Table 4.1.4: Distribution of Participants by Level

Level	Frequency	Percent
100 Level	87	37.5
200 Level	56	24.1
300 Level	36	15.5
400 Level	32	13.8
500 Level	21	9.1
Total	232	100.0

Source: Field Survey, 2022. Researcher.

Table 4.1.4: reveals that 87 (37.5%) of the respondents were 100 level student, 56 (24.1%) from 200 level, 36 (15.5%) were 300 level, 32 (13.8%) from 400 level while 21 (9.1%) were 500 level student. The table shows that 100 level student have the highest response while 500 level student were the lowest respondents.

Table 4.1.5: Distribution of Participants by Type of Sports being engaged in

Age	Frequency	Percent
Athletics	22	9.5
Basketball	20	8.6
Badminton	15	6.5
Football	133	57.3
Table Tennis	15	6.5
Swimming	15	6.5
Lawn Tennis	4	1.7
Handball	4	1.7
Scrabble	2	.9
Cycling	2	.9
Total	232	100.0

Source: Field Survey, 2022. Researcher.

Table 4.1.5: reveals the types of sports being engaged in by the respondents 133 (57.3%) participated in football, 22 (9.5%) in athletics, 20 (8.6%) in basketball, 15 (6.5%) in badminton, 15 (6.5%) in table tennis, 15 (6.5%) in swimming, 4 (1.7%) in lawn tennis, 4 (1.7%) in handball, 2 (0.9%) in scrabble and 2 (0.9%) in cycling. The table shows that those that participated in football responded more and those involved in scrabble and cycling were the least respondents.

Table 4.1.6: Distribution of Participants by Years of experience

Years of experience	Frequency	Percent
Less than 5 Years	165	71.1
6-10 Years	43	18.5
Above 10 years	24	10.3
Total	232	100.0

Source: Field Survey, 2022. Researcher.

Table 4.1.6: reveals the years of experience of the respondents 165 (71.1%) were less than 5 years in sport activities, 43 (18.5%) were 6-10 years, 24 (10.3%) were above 10 years of experience. From the table will could see that the highest participants were less than 5 years.

4.2 Presentation of Data

4.2.1 Research Question

The research question below was answered:

Research Question1: What is the stress level among undergraduate-athletes in private universities in Oyo State, Nigeria?

Table 4.2.1: Descriptive statistics of the stress level among undergraduate-athletes in private universities in Oyo State, Nigeria.

S/N	Statements	Almost Never	Sometimes	Fairly Often	Very Often
1	How often have you been upset because of something that happened unexpectedly?	48 (20.7%)	100 (43.1%)	58 (25.0%)	26 (11.2%)
2	How often have you felt that you were unable to control the important things in your life?	38 (16.4%)	99 (42.7%)	59 (25.4%)	36 (15.5%)
3	How often have you felt nervous and "stressed"?	19 (8.2%)	90 (38.8%)	82 (35.3%)	41 (17.7%)
4	How often have you felt confident about your ability to handle your personal problems?	17 (7.3%)	57 (24.6%)	73 (31.5%)	85 (36.6%)
5	How often have you felt that things were going your way?	9 (3.9%)	104 (44.8%)	85 (36.6%)	34 (14.7%)
6	How often have you found that you could not cope with all the things that you had to do?	43 (18.5%)	97 (41.8%)	69 (29.7%)	23 (9.9%)
7	How often have you been able to control irritations in your life?	31 (13.4%)	73 (31.5%)	77 (33.2%)	51 (22.0%)
8	In the last month, how often have you felt that you were on top of things?	26 (11.2%)	80 (34.5%)	84 (36.2%)	42 (18.1%)
9	How often have you been angered because of things that were outside of your control?	32 (13.8%)	85 (36.6%)	81 (34.9%)	34 (14.7%)
10	How often have you felt difficulties were piling up so high that you could not overcome them?	40 (17.2%)	102 (44.0%)	68 (29.3%)	22 (9.5%)
Total		1190 (51.29%)		1130 (48.71%)	

Source: Field Survey, 2022. Researcher

Table 4.2.1 indicates that 26 (11.2%) respondents responded very often to how often they have been upset because of something that happened unexpectedly, 58 (25.0%) fairly often, 100 (43.1%) sometimes, 48 (20.7%) almost never. 36 (15.5%) responded very often to how often they

felt when they were unable to control the important things in their life, 59 (25.4%) fairly often, 99 (42.7%) sometimes, 38 (16.4%) almost never. 41 (17.7%) responded how often they felt nervous and "stressed", 82 (35.3%) fairly often, 90 (38.8%) sometimes, 19 (8.2%) almost never. 85 (36.6%) responded very often to how often they felt confident about their ability to handle personal problems, 73 (31.5%) fairly often, 57 (24.6%) sometimes, 17 (7.3%) almost never.

In addition, 34 (14.7%) responded very often to how often they felt that things were going their way, 85 (36.6%) fairly often, 104 (44.8%) sometimes, 9 (3.9%) almost never, 23 (9.9%) responded very often to how often they found that they could not cope with all the things that they had to do, 69 (29.7%) fairly often, 97 (41.8%) sometimes, 43 (18.5%) almost never. 51 (22.0%) responded very often to how often they have been able to control irritations in their lives, 77 (33.2%) fairly often, 73 (31.5%) sometimes, 31 (13.4%) almost never.

Furthermore, 42 (18.1%) responded very often how often they felt they were on top of things in the last month, 84 (36.2%), fairly often, 80 (34.5%), sometimes, 26 (11.2%) almost never. 34 (14.7%) responded very often to how often they have been angered because of things that were outside of their control, 81 (34.9%) fairly often, 85 (36.6%) sometimes, 32 (13.8%) almost never. 22 (9.5%) responded very often to how often they felt difficulties were piling up so high that they could not overcome them, 68 (29.3%) fairly often, 102 (44.0%) sometimes, 40 (17.2%) almost never. The table further revealed that 48.71% respondents very or fairly often adopted the perceived stress scale items developed while 51.29% respondent sometimes or almost never adopted the stress scale items which indicated that higher percentages of the stress level among undergraduate-athletes in private universities in Oyo State, Nigeria were highly affected.

4.2.2 Hypotheses

The following hypotheses were tested in this study.

H₀₁: There will be no significant relationship between psychological determinants (fear of failure and self-doubt) and stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

Table 4.2.2: Inferential statistics of Pearson Moment Correlation Coefficient (PPMC) of relationship between psychological determinants (fear of failure and self-doubt) and stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

		fearoffailure	selfdoubt	stresslevel
fear of failure	Pearson Correlation	1	.548**	.036
	Sig. (2-tailed)		.000	.582
	N	232	232	232
self doubt	Pearson Correlation	.548**	1	.083
	Sig. (2-tailed)	.000		.205
	N	232	232	232
stress level	Pearson Correlation	.036	.083	1
	Sig. (2-tailed)	.582	.205	
	N	232	232	232

Source: Field Survey, 2022. Researcher

Table 4.2.2 indicates a Pearson Product-Moment Correlation Coefficient which was computed to assess the significant relationship between psychological determinants (fear of failure and self-doubt) and stress level among undergraduate-athletes in private universities in Oyo State, Nigeria. The result shows that there was a positive correlation between fear of failure and stress level among undergraduate-athletes in private universities in Oyo State [$r = 0.036$, $n = 232$, $p = 0.582$], the significance level is >0.05 we fail to reject the null hypothesis and conclude

that there is insufficient evidence to conclude that there is a significant linear relationship between fear of failure and stress level while result also shows that there was a positive correlation between self-doubt and stress level among undergraduate-athletes in private universities in Oyo State [$r = 0.083$, $n = 232$, $p = 0.205$], the significance level is >0.05 we fail to reject the null hypothesis and conclude that there is insufficient evidence to conclude that there is a significant linear relationship between self-doubt and stress level.

H₀₂: There will be no significant relationship between social determinants (relationship with coach and parental involvement) and stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

Table 4.2.3: Inferential statistics of Pearson Moment Correlation Coefficient (PPMC) of relationship between social determinants (relationship with coach and parental involvement) and stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

		relationship withcoach	parentalpressure	stresslevel
relationshipwithcoach	Pearson Correlation	1	.150*	.270**
	Sig. (2-tailed)		.023	.000
	N	232	232	232
Parentalpressure	Pearson Correlation	.150*	1	.026
	Sig. (2-tailed)	.023		.690
	N	232	232	232
Stresslevel	Pearson Correlation	.270**	.026	1
	Sig. (2-tailed)	.000	.690	

N	232	232	232
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Source: Field Survey, 2022. Researcher

Table 4.2.3 indicates a Pearson Product-Moment Correlation Coefficient which was computed to assess the significant relationship between social determinants (relationship with coach and parental involvement) and stress level among undergraduate-athletes in private universities in Oyo State, Nigeria. The result shows that there was a positive correlation between relationship with coach and stress level among undergraduate-athletes in private universities in Oyo State [$r = 0.270$, $n = 232$, $p = 0.000$], the significance level is <0.05 we reject the null hypothesis in favor of the alternative and conclude that there is sufficient evidence to conclude that there is a significant linear relationship between relationship with coach and stress level. While result also shows that there was a positive correlation between parental pressure and stress level among undergraduate-athletes in private universities in Oyo State [$r = 0.026$, $n = 232$, $p = 0.690$], the significance level is >0.05 we fail to reject the null hypothesis and conclude that there is insufficient evidence to conclude that there is a significant linear relationship between parental pressure and stress level.

H₀₃: There will be no significant joint contribution of psychological determinants (fear of failure and self-doubt) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

Table 4.2.4: Regression Analysis of joint contribution of psychological determinants (fear of failure and self-doubt) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

Model	R	R Square	Adjusted Square	Std. Error of the Estimate
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1	.084 ^a	.007	-.002	4.64163
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Model		Sum of Squares	df	Mean Square	F	Sig.	Remark
1	Regression	35.222	2	17.611	.817	.443 ^b	Not Significant
	Residual	4933.739	229	21.545			
	Total	4968.961	231				

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Remark
		B	Std. Error	Beta			
1	(Constant)	22.976	1.967		11.683	.000	Significant
	fearoffailure	-.008	.048	-.013	-.169	.866	Not Significant
	Selfdoubt	.120	.104	.091	1.153	.250	Not Significant

Source: Field Survey, 2022

As indicated in table 4.2.4: A multiple regression was carried out to investigate whether no joint contribution of psychological determinants (fear of failure and self-doubt) could significantly predict undergraduate-athletes stress level. The results of the regression indicated that the model explained 0.70% of the variance and that the model was not a significant predictor of stress in undergraduate-athletes in Oyo State, $F(2,229) = 0.82$, $p = .443$. While the psychological determinant of self-doubt score did not contribute significantly to the model ($B = .120$, $p=.25$), also fear of failure did not in any way contributed to the stress level among

undergraduate-athletes of private universities in Oyo State, Nigeria as (B = -.008, p=.87). Therefore, we fail to reject the null hypothesis.

H₀₄: There will be no significant relative contribution of fear of failure and self-doubt and level of stress among undergraduate-athletes of private universities in Oyo State, Nigeria.

Table 4.2.5: Regression Analysis of relative contribution of fear of failure and self-doubt and level of stress among undergraduate-athletes of private universities in Oyo State, Nigeria.

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.084 ^a	.007	-.002	4.64163

Model		Sum of Squares	Df	Mean Square	F	Sig.	Remark
1	Regression	35.222	2	17.611	.817	.443 ^b	Not Significant
	Residual	4933.739	229	21.545			
	Total	4968.961	231				

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Remark
		B	Std. Error	Beta			
1	(Constant)	22.976	1.967		11.683	.000	Significant

fearoffailure	-.008	.048	-.013	-.169	.866	Not Significant
Selfdoubt	.120	.104	.091	1.153	.250	Not Significant

Source: Field Survey, 2022

As indicated in table 4.2.5: A multiple regression was carried out to investigate whether no relative contribution of fear of failure and self-doubt could significantly predict undergraduate-athletes stress level. The results of the regression indicated that the model explained 0.70% of the variance and that the model was not a significant predictor of stress level in undergraduate-athletes in Oyo State, $F(2,229) = 0.82$, $p = .443$. While the psychological determinant of self-doubt score did not contribute significantly to the model ($B = .120$, $p=.25$), also fear of failure did not in any way contributed to the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = .008$, $p=.87$). Therefore, we fail to reject the null hypothesis.

H₀₅: There will be no significant joint contribution of social determinants (relationship with coach and parental involvement) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

Table 4.2.6: Regression Analysis of joint contribution of social determinants (relationship with coach and parental involvement) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.271 ^a	.073	.065	4.48446

Model		Sum of Squares	Df	Mean Square	F	Sig.	Remark
1	Regression	363.686	2	181.843	9.042	.000 ^b	Significant
	Residual	4605.276	229	20.110			
	Total	4968.961	231				

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Remark
		B	Std. Error	Beta			
1	(Constant)	18.894	1.858		10.170	.000	Significant
	Coach-athletes relationship	.222	.052	.272	4.232	.000	Significant
	Parental involvement	-.009	.039	-.014	-.224	.823	Not Significant

Source: Field Survey, 2022

As indicated in table 4.2.6: A multiple regression was carried out to investigate whether no joint contribution of social determinants (relationship with coach and parental involvement) could significantly predict undergraduates-athletes stress level. The results of the regression indicated that the model explained 7.30% of the variance and that the model was a significant predictor of stress level among undergraduate-athletes in Oyo State, $F(2,229) = 9.042$, $p = .000$. Social determinant of parental involvement score did not contribute significantly to the model ($B = -.009$, $p = .82$), while relationship with coach contributed significantly to reducing the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = .222$, $p = .000$).

The final predictive model was: Stress level = 18.894 + (0.222*coach relationship) + (-.0.009*parental involvement).

H₀₆: There will be no significant relative contribution of relationship with coach and parental involvement on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

Table 4.2.7: Regression Analysis of relative contribution of relationship with coach and parental involvement on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.271 ^a	.073	.065	4.48446

Model		Sum of Squares	Df	Mean Square	F	Sig.	Remark
1	Regression	363.686	2	181.843	9.042	.000 ^b	Significant
	Residual	4605.276	229	20.110			
	Total	4968.961	231				

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Remark
		B	Std. Error	Beta			
1	(Constant)	18.894	1.858		10.170	.000	Significant

Coach	.222	.052	.272	4.232	.000	Significant
Parentalinvolvement	-.009	.039	-.014	-.224	.823	Not Significant

Source: Field Survey, 2022

As indicated in table 4.2.7: A multiple regression was carried out to investigate whether no relative contribution of social determinants (relationship with coach and parental involvement) could significantly predict undergraduate-athletes stress level. The results of the regression indicated that the model explained 7.30% of the variance and that the model was a significant predictor of stress level among undergraduate-athletes in Oyo State, $F(2,229) = 9.042, p = .000$. Social determinant of parental involvement score did not contribute significantly to the model ($B = -.009, p=.823$), while relationship with coach did contributed significantly to reducing the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = .222, p=.000$). The final predictive model was: $\text{Stress level} = 18.894 + (0.222*\text{coach relationship}) + (-.0.009*\text{parental involvement})$.

H₀₇: There will be no significant composite contribution of psycho-social determinants on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

Table 4.2.8:Regression Analysis of composite contribution of psycho-social determinants on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.186 ^a	.034	.026	4.57722

Model		Sum of Squares	df	Mean Square	F	Sig.	Remark
1	Regression	171.193	2	85.596	4.086	.018 ^b	Significant
	Residual	4797.768	229	20.951			
	Total	4968.961	231				

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Remark
		B	Std. Error	Beta			
1	(Constant)	18.435	2.632		7.005	.000	Significant
	totalpsychodet	.033	.030	.071	1.086	.278	Not Significant
	totalsocialdet	.081	.030	.177	2.720	.007	Significant

Source: Field Survey, 2022

As indicated in table 4.2.8: A multiple regression was carried out to investigate the composite contribution of psychological and social determinants could significantly predict undergraduates' athletes stress level of undergraduate-athletes of private universities in Oyo State, Nigeria. The results of the regression indicated that the model explained 3.40% of the variance and that the model was a significant predictor of stress among undergraduate-athletes in Oyo State, $F(2,229) = 4.086$, $p = .018$. Social determinant score did contribute significantly to the model ($B = .081$, $p = .007$), while psychological determinant score did not contribute significantly to the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = .033$, $p = .278$). The final predictive model was: $\text{Stress level} = 18.435 + (0.33 * \text{psychological determinant}) + (.081 * \text{social determinant})$.

H₀₈: There will be no significant difference in stress levels between male and female undergraduate-athletes of private universities in Oyo State, Nigeria.

Table 4.2.9: Independent Samples Test of stress levels between male and female undergraduate-athletes of private universities in Oyo State, Nigeria.

	Levene's Test for Equality of Variances		t-test for Equality of Means							Remark
	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
totalstress Equal variances assumed	.001	.981	1.008	230	.314	.50825	.50415	-.48509	1.50159	Not Significant
Equal variances not assumed			1.030	131.379	.305	.50825	.49341	-.46782	1.48432	Not Significant

Source: Field Survey, 2022

As indicated in table 4.2.9: An independent-samples t-test was conducted to compare the stress level of male and female undergraduate-athletes of private universities in Oyo State. There were significant differences ($t(230) = 1.008, p = 0.314$) in the scores with mean score for Male ($M = 14.57, SD = 3.55$) was higher than and Female ($M = 14.06, SD = 3.37$). The magnitude of the differences in the means (mean difference = 0.51, 95% CI: -0.485 to 1.502) was significant. Hence, H₁ was supported. i.e there is a significant difference in stress levels between male and female undergraduate-athletes of private universities in Oyo State, Nigeria.

4.3 Discussion of Findings

As indicated in table 4.2.2, the mean = 32.33 is the sample mean of the differences between psychological determinants and stress level score, the standard deviation = 10.72 which is also the measure of variation obtained from the difference of the two paired determinants. The

95% confidence interval shows that the mean of the differences is as low as 30.95 and as high as 33.72, which in fact indicates that the psychological determinant scores is higher than the stress level score. The p – value is 0.000 which is less than the our level of significant score at 0.05, this implies the rejection of the null hypothesis and we conclude that there is a significant difference relationship between psychological determinants (fear of failure and self-doubt) on the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria in that it shows that some of the respondents fear failure and have self-doubt in them as they tend to develop coping mechanisms to manage whatever failure they may encounter, they do not want failure at any time or people knowing that they are stressed or afraid as not to loose important relationships.

As indicated in table 4.2.3, the mean = 35.43 is the sample mean of the differences between social determinants and stress level score, the standard deviation = 10.39 which is also the measure of variation obtained from the difference of the two paired determinants. The 95% confidence interval shows that the mean of the differences is as low as 34.08 and as high as 36.77, which in fact indicates that the social determinant scores is higher than the stress level score. The p – value is 0.000 which is less than our level of significant score at 0.05, this implies the rejection of the null hypothesis and we conclude that there is a significant relationship difference between social determinants (relationship with coach and parental involvement) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria. In that it shows that some of the respondents believed the importance and availability of coach and parents relationship to be successful athletes. They remained stable over time as all situations in feelings, thoughts, and behaviors are well coordinated which made them feel appreciated for the sacrifices their coach experienced in order to improve their performances. Also, parental involvement strategies also positively contributed tremendously as to their parent encourages them to talk to

them about any problems or worries that they may have with my sports and sometimes parent changes mealtime so that athletes can train or go to competitions. i.e. “When I am coached by my coach, I feel my sport career is promising”, “My parent changes mealtimes so that I can train and go to competitions”.

As indicated in table 4.2.4: A multiple regression was carried out to investigate whether no joint contribution of psychological determinants (fear of failure and self-doubt) could significantly predict undergraduate-athletes stress level. The results of the regression indicated that the model explained 0.70% of the variance and that the model was not a significant predictor of stress level in undergraduate-athletes in Oyo State, $F(2,229) = 0.82$, $p = .443$. While the psychological determinant of self-doubt score did not contribute significantly to the model ($B = .120$, $p=.25$), also fear of failure did not in any way contributed to the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = -.008$, $p=.87$). Therefore, we fail to reject the null hypothesis and conclude that there is no significant joint contribution of psychological determinants (fear of failure and self-doubt) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

As indicated in table 4.2.5: A multiple regression was carried out to investigate whether no relative contribution of fear of failure and self-doubt could significantly predict undergraduates-athletes stress level. The results of the regression indicated that the model explained 0.70% of the variance and that the model was not a significant predictor of stress level in undergraduate-athletes in Oyo State, $F(2,229) = 0.82$, $p = .443$. While the psychological determinant of self-doubt score did not contribute significantly to the model ($B = .120$, $p=.25$), also fear of failure did not in any way contributed to the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = .008$, $p=.87$). Therefore, we fail to reject the

null hypothesis and conclude that there is no significant relative contribution of psychological determinants (fear of failure and self-doubt) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

As indicated in table 4.2.6: A multiple regression was carried out to investigate whether no joint contribution of social determinants (relationship with coach and parental involvement) could significantly predict undergraduate-athletes stress level. The results of the regression indicated that the model explained 7.30% of the variance and that the model was a significant predictor of stress level among undergraduate-athletes in Oyo State, $F(2,229) = 9.042, p = .000$. Social determinant of parental involvement score did not contribute significantly to the model ($B = -.009, p=.82$), while relationship with coach contributed significantly to reducing the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = .222, p=.000$). Therefore, we reject the null hypothesis and conclude that stress level will significantly influence the joint contribution of social determinants relationship with coach and fail to reject that stress level will not significantly influence the joint contribution of social determinants of parental involvement of stress level among undergraduate-athletes in Oyo State.

As indicated in table 4.2.7: A multiple regression was carried out to investigate whether no relative contribution of social determinants (relationship with coach and parental involvement) could significantly predict undergraduates-athletes stress level. The results of the regression indicated that the model explained 7.30% of the variance and that the model was a significant predictor of stress level among undergraduate-athletes in Oyo State, $F(2,229) = 9.042, p = .000$. Social determinant of parental involvement score did not contribute significantly to the model ($B = -.009, p=.823$), while relationship with coach did contributed significantly to reducing the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = .222,$

$p=.000$). Therefore, we reject the null hypothesis and conclude that stress level will significantly influence the relative contribution of social determinants relationship with coach and fail to reject that stress level will not significantly influence the relative contribution of social determinants of parental involvement of stress level among undergraduate athletes in Oyo State.

As indicated in table 4.2.8: A multiple regression was carried out to investigate no composite contribution of psychological and social determinants could significantly predict undergraduates-athletes stress level of undergraduate-athletes of private universities in Oyo State, Nigeria. The results of the regression indicated that the model explained 3.40% of the variance and that the model was a significant predictor of stress level among undergraduate-athletes in Oyo State, $F(2,229) = 4.086$, $p = .018$. Social determinant score did contribute significantly to the model ($B = .081$, $p=.007$), while psychological determinant score did not contributed significantly to the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = .033$, $p=.278$). Therefore, we reject the null hypothesis and conclude that stress will significantly influence the composite contribution of psychological determinants relationship and fail to reject that stress level will not significantly influence the composite contribution of social determinants among undergraduate-athletes in Oyo State.

As indicated in table 4.2.9: An independent-samples t-test was conducted to compare the stress level for male and female undergraduate-athletes of private universities in Oyo State. There were significant differences ($t(230) = 1.008$, $p = 0.314$) in the scores with mean score for Male ($M = 14.57$, $SD = 3.55$) was higher than and Female ($M = 14.06$, $SD = 3.37$). The magnitude of the differences in the means (mean difference = 0.51, 95% CI: -0.485 to 1.502) was significant. Hence, we fail to reject H_0 as H_1 was supported. I.e. there is a significant difference in stress

levels between male and female undergraduate-athletes of private universities in Oyo State, Nigeria.

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Chapter Five Conclusion

- 5.1 Summary of Findings
- 5.2 Conclusion
- 5.3 Recommendation(s)
- 5.4 Contribution to Knowledge
- 5.5 Suggested Areas for Further Research

5.1 Summary of Findings

The purpose of this study is to investigate the psycho-social determinants of stress level among undergraduate-athletes of Private Universities in Oyo State, Nigeria. To achieve the purpose of the study, samples for this study consist of two hundred and thirty-two male and female undergraduate-athletes. Purposive sampling techniques were used to select three out of seven private universities in Oyo State because these were universities that are actively participating in sports among the seven private universities in Oyo State. The selected universities include Lead City University, Ibadan, Kola Daisi University, Ibadan and Ajayi Crowther University, Oyo. Proportional sampling techniques were used to select the respondents, whereby 40% will be selected from each sample. Thus 106 respondents were selected from Lead City University, Ibadan, 40 from Kola Daisi University, Ibadan and 86 from Ajayi Crowther University, Oyo. Mixing methods of data collection were used. The questionnaire was administered by the researcher with the help of four (4) trained research assistants and online survey system (Google forms were used using the link below: https://docs.google.com/forms/d/1GNc9omjRn4Fk8vDDc5pMTI0ChsrjBr1B59hvhzO_T7k/edit).

Research question were posed and eight hypotheses were postulated to guide the study, descriptive statistics of frequency counts, percentages and charts were used to analyze the

demographic data in Section A. Inferential statistics of T-test were used to test hypotheses 1 and 2, Multiple Regression were used to test hypotheses 3-7, while T-test were used to test hypothesis 8. All hypotheses were tested at 0.05 Alpha levels.

As indicated in table 4.2.2, the p – value is $0.000 \leq 0.05$, this implies the rejection of the null hypothesis and we concluded that there is a significant difference relationship between psychological determinants (fear of failure and self-doubt) on the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

As indicated in table 4.2.3, the p – value is $0.000 \leq 0.05$, this implies the rejection of the null hypothesis and we concluded that there is a significant relationship difference between social determinants (relationship with coach and parental involvement) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

As indicated in table 4.2.4: the model was not a significant predictor of stress level in undergraduate-athletes in Oyo State, $F(2,229) = 0.82$, $p = .443$. While the psychological determinant of self - doubt score did not contribute significantly to the model ($B = .120$, $p=.25$), also fear of failure did not in any way contributed to the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = -.008$, $p=.87$). We fail to reject the null hypothesis and conclude that there is no significant joint contribution of psychological determinants (fear of failure and self-doubt) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

As indicated in table 4.2.5: the model explained 0.70% of the variance and that the model was not a significant predictor of stress level in undergraduate-athletes in Oyo State, $F(2,229) = 0.82$, $p = .443$. While the psychological determinant of self-doubt score did not contribute significantly to the model ($B = .120$, $p=.25$), fear of failure did not in any way contributed to the

stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = .008, p=.87$). We failed to reject the null hypothesis and conclude that there is no significant relative contribution of psychological determinants (fear of failure and self-doubt) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

As indicated in table 4.2.6: the model was a significant predictor of stress level among undergraduate-athletes in Oyo State, $F(2,229) = 9.042, p = .000$. Social determinant of parental involvement score did not contribute significantly to the model ($B = -.009, p=.82$), while relationship with coach contributed significantly to reducing the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = .222, p=.000$). We rejected the null hypothesis and concluded that stress level will significantly influence the joint contribution of social determinants relationship with coach and we fail to reject that stress level will not significantly influence the joint contribution of social determinants of parental involvement of stress level among undergraduate-athletes in Oyo State.

As indicated in table 4.2.7: the model was a significant predictor of stress level among undergraduate-athletes in Oyo State, $F(2,229) = 9.042, p = .000$. Social determinant of parental involvement score did not contribute significantly to the model ($B = -.009, p=.823$), while relationship with coach did contributed significantly to reducing the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = .222, p=.000$). We rejected the null hypothesis and concluded that stress level will significantly influence the relative contribution of social determinants relationship with coach and we fail to reject that stress will not significantly influence the relative contribution of social determinants of parental involvement of stress level among undergraduate-athletes in Oyo State.

As indicated in table 4.2.8: the model was a significant predictor of stress level among undergraduate-athletes in Oyo State, $F(2,229) = 4.086$, $p = .018$. Social determinant score did contribute significantly to the model ($B = .081$, $p=.007$), likewise, psychological determinant score did not contributed significantly to the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria as ($B = .033$, $p=.278$). We rejected the null hypothesis and concluded that stress will significantly influence the composite contribution of psychological determinants relationship and we fail to reject that stress level will not significantly influence the composite contribution of social determinants among undergraduate-athletes in Oyo State.

As indicated in table 4.2.9: the stress level for male and female undergraduate-athletes of private universities in Oyo State had significant differences ($t(230) = 1.008$, $p = 0.314$) in the scores with mean score for Male ($M = 14.57$, $SD = 3.55$) were higher than the Female ($M = 14.06$, $SD = 3.37$). The magnitude of the differences in the means (mean difference = 0.51, 95% CI: -0.485 to 1.502) was significant. Hence, we fail to reject H_0 as H_1 was supported. I.e. there is a significant difference in stress levels between male and female undergraduate-athletes of private universities in Oyo State, Nigeria.

5.2 Conclusion

The respondents rejected most of the fear of failure as items contributing as psychological determinant factors and we infers that these items does not contribute as such to their psychological determinant factors. Respondents also accepted or agreed with most of the Self-doubt Scale as items' contributing as their psychological determinant factors. The research also infers that all the Coach-Athlete Relationship Scale act as items contributing as the Social Determinant factors of the respondents in relating to their coach. While, Parental involvement Scale also act as items contributing as the Social Determinant factors by the respondents when their parents get involved.

As indicated in table 4.2.2, there is a significant difference relationship between psychological determinants (fear of failure and self-doubt) on the stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

As indicated in table 4.2.3, there is a significant relationship difference between social determinants (relationship with coach and parental involvement) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

As indicated in table 4.2.4: there is no significant joint contribution of psychological determinants (fear of failure and self-doubt) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

As indicated in table 4.2.5; there is no significant relative contribution of psychological determinants (fear of failure and self-doubt) on stress level among undergraduate-athletes of private universities in Oyo State, Nigeria.

As indicated in table 4.2.6; stress will significantly influence the joint contribution of social determinants relationship with coach and we failed to reject that stress will not significantly influence the joint contribution of social determinants of parental involvement of stress level among undergraduate-athletes in Oyo State.

As indicated in table 4.2.7: stress will significantly influence the relative contribution of social determinants relationship with coach and we fail to reject that stress will not significantly influence the relative contribution of social determinants of parental involvement of stress level among undergraduate-athletes in Oyo State.

As indicated in table 4.2.8: stress will significantly influence the composite contribution of psychological determinants relationship and we fail to reject that stress level will not significantly

influence the composite contribution of social determinants among undergraduate-athletes in Oyo State.

As indicated in table 4.2.9: there is a significant difference in stress levels between male and female undergraduate-athletes of private universities in Oyo State, Nigeria.

5.3 Recommendation(s)

On the basis of the findings of the present study, the discussion and conclusions thereof, the following recommendations were made:

- I. There is need in an effort of the sports personnel such as coaches, trainer, sports psychologist and parent should help their athletes maintain normal levels of psycho-social stress; they should promote the health and fitness of their athletes.
- II. The executives of institutions in conjunction with the sports personnel and parents should plan workshops to assist their athletes to manage psycho-social stress and in that way to help them achieve balance in their lives.
- III. Athletes should feel free to talk over their problems with friends/ team-mate, sports personnel and family members including parents when experiencing psycho-social stress of any form.
- IV. Athletes should be taught how to use meditation and progressive relaxation to initiate the relaxation response when faced with psycho-social stress in their lives.
- V. Athletes should be encouraged to take part in a variety of social activities to alleviate psycho-social stress.
- VI. Sports personnel and parents can further steps to set clearer targets with clear policies, plan and recognition for achievement of its athletes.

VII. Finally, university management should use periodic anonymous surveys to obtain students' feedback questionnaires about study, general lifestyle and possibly other concerns which will include sport-activities.

5.4 **Contribution to Knowledge**

Undergraduate students are required to manage a variety of stressors related to academic, social, and financial commitments. In addition to the burdens facing most university students, undergraduate-athletes must devote a substantial amount of time to improving their sporting abilities. The strength and conditioning professional sees the athlete on nearly a daily basis and is able to recognize the changes in performance and behavior an athlete may exhibit as a result of these stressors. As such, the strength and conditioning professional may serve an integral role in the monitoring of these stressors and may be able to alter training programs to improve both performance and wellness.

5.5 **Suggested Areas for Further Research**

- I. A comparative study of psychological determinants fear of failure and self-doubt on mental stress level among undergraduate-athletes of public and private universities in Oyo State, Nigeria
- II. A comparative study of social determinants of coach pressure and parental pressure on stress level among undergraduate-athletes of public and private universities in Oyo State, Nigeria.
- III. Psychological factors as predictors of sports violence among selected tertiary institutions in Oyo State.
- IV. A comparative study could be conducted to examine the levels of stress, types and sources, and coping strategies in selected universities in Oyo State. This could provide additional

information about variables, and to compare the effectiveness of particular intervention strategies and policies in reducing stress among tertiary institutions.

- V. This study could be replicated among secondary schools in Oyo State to investigate the psycho-social determinants of stress and the coping techniques used.
- VI. A study could be done to investigate why female athletes seem less able than males to cope with stressful situations.

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Appendix I

Lead City University, Ibadan Department of Kinesiology, Sports Science and Health Education Questionnaire

Psycho-Social Factors as Determinants of Stress Level among Undergraduate-Athletes in Private Universities in Oyo State, Nigeria

Dear Respondent,

I am a postgraduate student of the above. I am carrying out a research on Psycho-Social factors as determinants of Stress level among Undergraduate-Athletes in Private Universities in Oyo State, Nigeria and I would be grateful if you would kindly assist in completing a copy of the questionnaire on the research topic. All information supplied will be highly appreciated and kept in strict confidentiality.

Ruth B. Ajayi
Researcher

Section A Demographic Characteristics

Instruction: Please tick (✓) in the brackets as they apply to you in each of the following items

- (1) Name of Institution
- (2) Sex: Male () Female ()
- (3) Age: Less than 18 years () 19-21 years () 22-24 years ()
25 years and above ()
- (4) Level: 100 Level () 200 Level () 300 Level () 400 Level () 500 Level ()
- (5) Faculty: (please specify).....
- (6) Department: (please specify).....

- (7) Type of Sports being engaged in (please specify).....
 (8) Years of experience Less than 5 years () 6-10 years () Above 10 years ()

SECTION B: Perceived Stress Scale (PSS)

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate with and check how often you felt or thought a certain way.

Almost never (AN) Sometimes (S) Fairly often (FO) Very Often (VO)

S/N	ITEMS	AN	S	FO	VO
	Perceived Stress Scale				
1	How often have you been upset because of something that happened unexpectedly?				
2	How often have you felt that you were unable to control the important things in your life?				
3	How often have you felt nervous and "stressed"?				
4	How often have you felt confident about your ability to handle your personal problems?				
5	How often have you felt that things were going your way?				
6	How often have you found that you could not cope with all the things that you had to do?				
7.	How often have you been able to control irritations in your life?				
8.	In the last month, how often have you felt that you were on top of things?				
9.	How often have you been angered because of things that were outside of your control?				
10	How often have you felt difficulties were piling up so high that you could not overcome them?				

SECTION C: Psychological Determinant Scale (PDS)

Instruction: Kindly tick (√) the column appropriate to your responses. Please, read each of the following statements carefully. For each of the statements, choose the matching answer that best describes your view about items.

Strongly Agree (SA), Agree (A), Strongly Disagree (SA), Disagree (D)

S/N	ITEMS	SA	A	D	SD
	Fear of Failure				
1	When I am not performing well in my sports, I feel that I am less valuable than when I am playing well.				
2	When I am not succeeding in my sports, I get down on myself easily.				
3	When I am failing on my sports, it is embarrassing if others were there to see it.				
4	When I am failing in my game, I believe that everybody knows				

	I am failing.				
5	When I am failing in my game, it is often because I am not smart enough to perform successfully.				
6	When I am failing in my game, I blame my lack of talent.				
7.	When I am failing in my sports, I am afraid that I might not have enough talent.				
8.	When I am failing in my sports, my future seems uncertain.				
9.	When I am failing in my sports, I believe that my future plans will change.				
10	When I am not succeeding in my sports, people are less interested in me.				
11	When I am not succeeding in my sports, people seem to want to help me less.				
12	When I am not succeeding in my sports, people tend to leave me alone.				
13	When I am failing in my sports, I lose the trust of people who are important to me.				
14	When I am failing in my sports, important others are not happy.				
15	When I am failing in my sports, friends and fans are disappointed at me.				
	Self-doubt Scale				
16	More often than not I feel unsure of my abilities in sports				
17	For me, avoiding failure in sports has a greater emotional impact (e.g., sense of relief) than the emotional impact of achieving success in sports (e.g., joy, pride)				
18	When engaged in sports, most of my thoughts turn to bad things that might happen (e.g., failing) than to good				
19	I sometimes find myself wondering if I have the ability to succeed in sporting activities				
20	I often wish that I felt more certain of my strengths and weaknesses in sports				
21	As I begin playing sports, I usually feel confident in my ability. (R)				
22	Sometimes I feel that I don't know why I have succeeded in sports				
23	As I begin playing sports, I usually feel doubtful in the likely outcome				

Section D: Social Determinant Scale (SDS)

D-I: Coach-Athlete Relationship Scale

The items in this section ask you about your relationship with your coach. In each case, please indicate with and check how often you felt or thought a certain way.

Not at All (NA), Somewhat (SW), Moderately So (MS), Very Much So (VMS)

S/N	ITEMS	NA	SW	MS	VMS
	Coach-Athlete Relationship Scale				
1.	When I am coached by my coach, I feel at ease				
2.	When I am coached by my coach, I feel responsive to his/her efforts				
3.	When I am coached by my coach, I am ready to do my best				
4.	When I am coached by my coach, I adopt a friendly stance				
5.	I feel that my sport career is promising with my coach				
6.	I feel appreciation for the sacrifices my coach has experienced in order to improve my performance				
7.	When I am coached by my coach, I think both of us can work appropriately in achieving the goals set				
8.	When I am coached by my coach, I feel my sport career is promising				
9.	I like been coach by my coach				

Section D – II (Parental involvement)

The items in this section ask you about your feelings when you are pressurized by your parents. Please indicate how often you felt or thought a certain way.

Strongly Agree (SA), Agree (A), Strongly Disagree (SA), Disagree (D)

S/N	ITEMS	SA	A	D	SD
	Parental involvement				
1.	My parent sometime tells me how they think I can improve on my game techniques.				
2.	During training in school, my parents sometimes signal to me what I should do.				
3.	My parents push me to train harder.				
4.	My parents get upset with me if they see my sports performance is going down.				
5.	After training, my parent tells me where I did not try hard enough.				
6.	After training, my parent praise me for trying hard and improving.				
7.	My parent does cheer me up before a game or match.				
8.	My parents take an active role in my training by doing such things as teaching, being on a committee, or helping with social events.				
9.	My parent does discuss my progress with my coach.				
10.	My parent encourages me to talk to them about any problems or worries that I may have with my sports.				
11.	My parent changes mealtimes so that I can train and go to competitions?				

Appendix II

Table 3.1: List of all Private Universities in Oyo State, Nigeria

S/N	Name of Institution	Location
1	Lead City University	Ibadan
2	Dominican University	Ibadan
3	Kola-Daisi University	Ibadan
4	Ajayi Crowther University	Oyo
5	Atiba University	Oyo
6	Dominion University	Lagos-Ibadan Expressway
7	Precious Cornerstone University	Ibadan

Appendix III

Table 3.2: Population of undergraduates for Lead City University

S/N	University/Institution	Population	Sex		Sample (40%)
1.	Lead City University	265	Male	225	106
			Female	40	
2.	Kola Daisi University, Ibadan	100	Male	65	40
			Female	35	
3.	Ajayi Crowther University, Oyo	215	Male	127	86
			Female	88	
Total		580		580	232

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