



NEAR EAST UNIVERSITY
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DEPARTMENT OF GUIDANCE AND PSYCHOLOGICAL COUNSELING

**THE EFFECT OF HUMOUR ON ANXIETY AND SPORTS
PERFORMANCE IN SECONDARY SCHOOLS IN NIGERIA**

PhD THESIS

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APPROVAL

We certify that we have read the thesis submitted by **Chall, Philip Ezekiel** titled “**The Effect Of Humour On Anxiety And Sports Performance In Secondary Schools In Nigeria**” and that in our combined opinion it is fully adequate, in scope and in quality, as a

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Declaration

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Abstract

The purpose of this study was to identify the effect of humor on anxiety and sports performance in secondary schools in Nigeria. In order to accomplish this tasks, objectives were set to include: determining the level of interest of secondary school students in sports activities, identify the factors that cause anxiety in sports performance and the extent to which humor suppress anxiety among secondary school students in sports performance, even though sports activities are essential in providing a foundation for students' career choices, however, if clouded with anxiety, it will discourage young athletes from embracing sports. Key words were gotten, related literature was searched empirically, conceptually and theoretically where a theory was gotten to direct the study. To achieve this purpose, six (6) research questions were posited to include: What are the levels of anxiety secondary school students have in sports? Is there any significant difference between girls' and boys' anxiety scores before the intervention? Is there any significant difference between girls' and boys' anxiety scores after the intervention? What are the factors that cause anxiety in sports performance in secondary school students in Nigeria? What are the available coping methods for the effects that anxiety has on the sports performance of secondary school students in Nigeria? To what extent does humor suppress anxiety among secondary school athletes in Nigeria? The mixed method research design was used for the study. A pre-test and post-test was conducted. The population for the study was 420 students randomly selected using the fishbowl method of selection from the 799 selected schools that had the required facilities. The instrument for data collection was the questionnaire which was adapted and adopted from Ronald Smith (2006) Sports Anxiety Scale 1 (SAS) 1, and the designed questions developed by the researcher which were validated by 3 teachers in the psychology and physical education departments. Data collected was subjected to quantitative analysis using frequency, percentage, mean and standard deviation where applicable. Regression and ANOVA were also adopted for data analysis. Based on the outcome of this study, Majority of the respondents indicated very high level of worry, concentration disruption and somatic trait anxiety as indicated in their high mean score (224.714; 256.2; and 256.2), compare with those who does not exhibit anxiety (32.43; 39.8, and 88.6) respectively. Therefore, the study concluded that anxiety interfere with secondary school students' performance. But a little bit of anxiety triggers better performance even though humor has a significant mediating role in dissipating anxiety especially in sports. Finally,

recommendations were made based on the findings and discussions of the study and a conclusion was made.

Keywords, humour, anxiety, sports, sports performance, and sports anxiety.

Özet

Bu çalışmanın amacı Nijerya'daki ortaokullarda mizahın kaygı ve spor performansı üzerindeki etkisini belirlemektir. Bu görevleri gerçekleştirmek için ortaokul öğrencilerinin spor etkinliklerine ilgi düzeylerini belirlemek, spor performansında kaygıya neden olan faktörleri belirlemek ve ortaokul öğrencilerinin spor performansında mizahın kaygıyı ne ölçüde bastırdığını belirlemek amaç olarak belirlenmiştir. Her ne kadar spor faaliyetleri öğrencilerin kariyer tercihlerine temel oluşturmada önemli olsa da, kaygıyla gölgelenirse genç sporcuları spora yönelmekten caydıracaktır. Anahtar kelimeler elde edildi, ilgili literatür ampirik, kavramsal ve teorik olarak tarandı ve çalışmayı yönlendirecek bir teori elde edildi. Bu amaca ulaşmak için altı (6) araştırma sorusu sorulmuştur: Ortaokul öğrencilerinin sporla ilgili kaygı düzeyleri nelerdir? Müdahale öncesi kız ve erkek çocukların kaygı puanları arasında anlamlı bir fark var mı? Müdahale sonrasında kız ve erkek çocukların kaygı puanları arasında anlamlı bir fark var mı? Nijerya'da ortaokul öğrencilerinde spor performansında kaygıya neden olan faktörler nelerdir? Nijerya'da ortaokul öğrencilerinin spor performansı üzerinde kaygının yarattığı etkilerle ilgili mevcut başa çıkma yöntemleri nelerdir? Mizah Nijerya'daki ortaokul sporcuları arasındaki kaygıyı ne ölçüde bastırıyor? Araştırmada karma yöntem araştırma tasarımı kullanılmıştır. Ön test ve son test uygulandı. Araştırmanın evrenini, gerekli olanaklara sahip seçilmiş 799 okuldan balık avı yöntemi kullanılarak rastgele seçilen 420 öğrenci oluşturmuştur. Veri toplama aracı, Ronald Smith (2006) Spor Kaygısı Ölçeği 1 (SAS) 1'den uyarlanıp benimsenen anket ve araştırmacı tarafından geliştirilen, psikoloji ve beden eğitimi bölümlerindeki 3 öğretmen tarafından doğrulanan tasarlanmış sorulardır. Toplanan veriler, uygulanabilir olduğu durumlarda frekans, yüzde, ortalama ve standart sapma kullanılarak niceliksel analize tabi tutuldu. Veri analizi için regresyon ve ANOVA da benimsenmiştir. Bu çalışmanın sonucuna göre, ankete katılanların çoğunluğu, yüksek

ortalama puanlarında (224.714; 256.2; ve 256.2) belirtildiği gibi, kaygı göstermeyenlerle karşılaştırıldığında çok yüksek düzeyde kaygı, konsantrasyon bozukluğu ve bedensel sürekli kaygı belirtmişlerdir (224.714; 256.2; ve 256.2). sırasıyla 32,43; 39,8 ve 88,6). Bu nedenle çalışma, kaygının ortaokul öğrencilerinin performansını etkilediği sonucuna varmıştır. Ancak mizahın özellikle sporda kaygıyı gidermede önemli bir aracı rolü olmasına rağmen, biraz kaygı daha iyi performansı tetikliyor. Son olarak araştırmada elde edilen bulgulara ve tartışmalara dayalı olarak önerilerde bulunularak bir sonuca varılmıştır.

Anahtar Kelimeler, mizah, kaygı, spor, spor performansı ve spor kaygısı.

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List of Abbreviations

TRCN Turkish Republic of North Cyprus

MNE Ministry of National Education

TETFUND Tertiary Education Trust fund

SAS 1 Sports Anxiety Scale 1

NYSC National Youth Service Corps

ASAT4 Anxiety Sports Assessment Test4

CHAPTER ONE

Introduction

Given the importance of sports in the physical, mental, social and emotional development of an individual, it has become a mandatory aspect of learning (Okediji, 2015). As a result, it is not only taught in the classroom but also manifest in practice.

The existence of sports can be traced to the existence of mankind, as it manifested in diverse forms to include, running, jumping, farming, dancing, wrestling, and other physical activities (Wood, 2013). However, sports was officially documented in Nigeria in 1904 under the British colonial administration. It became part of the school curriculum, and some activities included were netball, football, basketball, running. Anxiety and high expectations from spectators, fans, coaches, family who watched them, skyrocketed the hearts of athletes (Vanderhoof, 2017). However, humor as a relief, and an entertainer is employed to relieve anxiety, tension, and create a positive environment. Therefore, adding it to sports, is expected to improve the athletes' performance which is associated with the monotony of practice in sports.

Consequently, this study seeks to investigate the effects of humor on anxiety in sports performance in secondary schools in Nigeria. In order to accomplish this task, objectives were set to include: determining the level of interest of secondary school students in sports activities, identify the factors that cause anxiety in sports performance and the extent to which humor suppress anxiety among secondary school students in sports performance. It became obvious to have this study, as research by Hasanah and Refanthira (2019) identified anxiety as one of the primary reasons for poor performance in sports. According to the study, athletes get extremely anxious whenever competition is in sight leading to nervousness and breakdown. Therefore

the findings from the research will give and insight on the topic the effects of humor on anxiety and sports performance of secondary school students in Nigeria.

Statement of the Problem

Sports is one way to relieve tension, but when blended with the desire to win, to please the audience, and to outshine others, sometimes triggers anxiety and other emotional pressure from the person. Already, sport is seen by some individuals as an agonistic activity which involves many strenuous activities and as such requires lots of practice (Gaetano, Paloma & Gaetano, 2015). These practical activities are already too stressful to add psychological pressure to it. Previous studies such as Gaetano, et al (2015); and Raiola, & Nughes, (2015); Stults-Kolehmainen and Sinha (2014) found stress and anxiety as impeding factors to individual performance in sports as well as other activities. As fans, families, coaches and co-athletes' expectations continuous to skyrocket, the anxiety level of athletes also skyrocket, even at secondary school (Vanderhoof, 2017). Against this backdrop, the present study therefore seeks to determine the extent to which anxiety performance affects the learning and mastery of basic skills in sports at the secondary school level in Nigeria.

Sports generally promote healthy lifestyles (Unsal, Reyhan & Aydemir, 2018), improve self-esteem and increases peers' acceptance. All sports require constant practices to develop skills. The anxiety to become a perfect player increases the athletes' anxiety level. This is compounded with monotonous daily practice which is usually not enjoyable. Perhaps, adding a little fun will make things easier; hence, this study, "humor and anxiety performance in sports in secondary schools in Nigeria".

Humor generally has psychological, social and physical benefits (Özkara, 2013). For many years, many researchers have been working on the impact of humor, especially

in occupational settings (Edwards & Jones, 2016; Godfrey, 2016) that humor cuts across all fields: education, psychology, sociology, linguistics and even philosophy. Humor is one's ability to recognize that life is enjoyable and focus on things that make one feel at ease (Aydın, 2005). This implies that anything could be humorous but depends on individual preferences and interpretations. Regardless of what humors an individual, it is important to note that the main aim of humor include: to please, relieve, and entertaining mankind (Akkaya, 2011). It relieves tension and creates positive environment (Jeder, 2015). Perhaps adding humor to sports will reduce anxiety, stress, and boredom associated with monotonous practice associated with most sports.

According to Ronglan and Aggerholm (2014) humor is an important counterbalance to the seriousness that is associated with sports and trainings. Sports, in many ways, are an extremely repetitive and monotonous structured life which makes humor essential, especially within the sport setting. Without humor the entire practice becomes extremely serious, and sometimes devastating. Going by Aristotle (2004) description of humor as social interaction, it is meant to ease tension. In view of this feature, this study focuses on how humor helps athletes overcome performance anxiety in sport.

Given the importance of sports in body and mental building, educational system all through the world now includes sports as a mandatory aspect of learning (Okediji, 2015). As a result it's not only taught in the classroom as part of the school curriculum but also manifest in practice. The existence of sport can be traced back to the existence of mankind as it can manifest in diverse forms including running, farming, jumping, dancing, wrestling, or other physical and activities (Wood, 2013). In Okediji (2015)'s view, sports is needed by man to satisfy his healthy living, for relaxation as well as for aesthetic needs.

Although sports have been in existence as mankind, however, its official documentations in Nigeria could be traced back to 1904 when Nigeria was still under the British Colonial administration. During that period, Sport was included in the school curriculum and labeled as Physical education. Till date, sport still remains integral part of primary, secondary and tertiary institutions in Nigeria (Wood, 2013). In their views, Johnson, Sylvester and Adesanmi (2010) explain that even today, Physical Education still remain essential in Nigeria education and has extended to include training for self-defense to an extent that most schools now enlist the services of the armed forces, police, or some paramilitary such as scout, civil defense to train the students in practical and other sports. The one-year mandatory National Youth Service Corps (NYSC) starts with mandatory two weeks or more drill on different types of sports by trained police, soldiers and civil defense.

This study therefore seeks to investigate effect of humor on anxiety and sports performance in secondary schools in Nigeria. Like in most developing countries, the sports commonly practice in Nigerian secondary schools include basketball, football, javelin, races, among others with football being the most popular, followed by basketball, different categories of tract events, and others (Owoeye *et al*, 2012). As a result, secondary schools, primary schools and other levels of education do not only engage in sports to improve their health but also see it as means to generate funds through inter-school competition in both local as well as national levels. Most, if not all the sports, have teams for both male and female students. Often, schools compete against each other in some of these sports which make it more interested and gain fans from different classes of people who cheer and support their teams. While most of these sports are played by males, there are female teams also. As the game grows and

become more popular, so also are the interest of the players and the intensity of the expectations of the spectators.

The more the fans and spectators, the higher the zeal to compete and win the trophy; to impress not just themselves but also those who believe in them and support them. This has created -tension and the desire to win which seems to have taken over the humor and fun associated with sports. It has now triggered great anxiety and tension in the athletes even if the game is to be played within the school without external viewers. This is so because, the viewers, teachers, and even the coach have great expectations on the athletes which could affect their self-esteem, disrupt concentration, motivation and the entire and increase tension and anxiety. This situation seems to have steered sports clear from its original objectives to be included in the school curriculum as indicated in the Nigeria philosophy of education including:

- *The inculcation of national consciousness and attitudes for the survival of the individual and the Nigerian society;*
- *The training of the mind in the understanding of the world around;*
- *The acquisition of appropriate skills, abilities and competence both mental and physical as equipment for the individual to live in and contribute to the development of the society (Okediji, 2015; P190)*

The above extract indicates that the primary objectives for institutionalizing sports including basketball was not for students to become famous, win trophies, etc. While all these are good, it is also imperative to refocus the aim and objectives of physical and health education to benefit individual and improve health and physical stamina. Against this background, this study seeks to determine the impact of humor on anxiety and sports performance in secondary schools in Nigeria. This chapter of the study therefore, embodies an overview of the problem being investigated, as well as clearly states the research objectives, scope of the study and justifications or significant of the study.

Aims of the study

The aim of this study is to determine the impact of humor and anxiety in sports performance in secondary schools in Nigeria. Specifically, the study seeks to:

1. Determine the level of interest secondary school students has in sport activities
2. Identify the factors that causes anxiety in sport performance in secondary schools' students in Nigeria
3. Determine the extent to which humor suppresses anxiety among secondary schools' athletes during sport
4. Examine the extent to which humor could be adopted in enhancing sport performance in secondary schools' students
5. Determine whether humor has a mediating effect on anxiety and sports performance in secondary schools
6. To determine the extent to which performance anxiety affects the learning of basic skills in sports at secondary school students in Nigeria.

Research Questions

1. What are the levels of anxiety secondary school students have in sports?
 - a. Is there any significant difference between girls' and boys' anxiety scores before the intervention?
 - b. Is there any significant difference between girls' and boys' anxiety scores after the intervention?
2. What are the factors that cause anxiety in sports performance in secondary school students in Nigeria?
3. What are the available coping methods for the effects that anxiety has on the sports performance of secondary school students in Nigeria?

4. To what extent does humor suppress anxiety among secondary school athletes in Nigeria?
5. To what extent could humor be adopted in managing students' anxiety in secondary school sports activities?
 - a. Is there any significant difference between the means of anxiety scores before and after the intervention?
 - b. Do the girls or boys benefit significantly more than their counterparts?
6. What is the mediating effect of humor in the relationship between anxiety and sports performance in secondary school students?
7. To what extent would humor affect the learning of basic sports skills in secondary school students in Nigeria?
 - a. Is there a significant difference between the means of basketball performance skills scores between girls and boys before and after the intervention?
 - b. Do the girls or boys benefit significantly more than their counterparts?

Significance of the study

Secondary school sports activities are essential in providing a foundation for students' career choices. However, if clouded with anxiety, it will discourage young athletes from embracing sports. For instance, a recent study by Hasanah and Refanthira (2019) identified anxiety as one of the primary reasons for poor performance in sports. According to the study, athletes get extremely anxious when competition is in sight leading to nervous breakdown for some, poor performance for others, and sometimes absenteeism. The very mention of sports in a formal context already indicates that there will be competition; even in a friendly match (Muhammad, Alamgir, Sami & Salahuddin, 2017). This study therefore will serve as an eye opener to coaches, teachers as well as fans that unknowingly create pressure or anxiety on their idols due

to high expectations. By this, they will learn to reduce pressure by encouraging the young athletes to enjoy the sport with relaxed minds and try to enjoy themselves rather than trying to win. This is necessary because a recollected mind sees things more clearly, rarely makes costly mistakes (Kanniyan, 2015). By just playing well, the likelihood of winning becomes even greater (Georgakaki & Karakasidou, 2017). Eliminating anxiety in sport therefore is imperative as it helps improve the athletes' chances of winning. Anxiety is unpleasant to sports (Zhang, Woodman, & Roberts, 2018), and should be eliminated at all cost.

Students should first be re-oriented into seeing sports as a game, before allowing the spirit of competition to set in. Getting a child going with basic skills at early age will not only help encourage exercise, but serve as a foundation for staying active in later life. The study will provide information for researchers on the relationship of humor and anxiety performance in sports, psychology, guidance and general education. Also, it is expected to draw the attention of coaches, sports administrators, and physical education teachers to a subtle way of imparting knowledge of practical skills to learners for a better output.

The study will also propose different strategies that will help secondary school students in calming down their anxiousness in case of competition. The outcome of this study will help policy makers to revisit the aim and objectives of physical education in secondary schools to minimize the spirit of competition which triggers so much anxiety.

Limitations of the study

Some teachers and schools were not cooperative as they found the study distracting to their normal lessons of the day. Some of the questionnaires distributed were not properly answered and thus discarded. This affected the actual sample size studied.

CHAPTER TWO

THEORETICAL BACKGROUND

In this chapter, relevant literature that is related to this topic is presented to establish a study gap as well as provide a premise that could be used for comparison of the present study. The literature review covers theoretical framework, conceptual framework, and empirical studies. The primary concern of this study is to investigate the extent to which humor relieves anxiety in sports performance. The study is therefore built around some psychological theories that explain the mechanism of humor. Martin and Ford (2018) identified three theories of humor that try to explain all aspects of humor and the application of each theory to a unique context. In other words, while the three theories attempt an explanation of the different aspects of humor; each theory explains a unique aspect of humor. All three theories are reviewed in this section and their connections with sports, and anxiety in performance.

Theoretical framework

One theory that constitutes a premise for this study is the Relief theory: The Relief theory is one of the theories of humor. The theory works on the premise that humor reduces tension or stress (Lynch, 2002). According to Martin and Ford (2018), relief theory emphasizes “motivational mechanisms of interpersonal needs”. In line with this theory, humor is said to provide relief from tension. The theory is common among those who are of the view that laughter is beneficial to health (Meyer, 2000). The theory works on the assumption that pleasant sensation is experienced when humor replaces sadness, anxiousness, pain, and fear or pent-up nervous energy (Martin & Ford, 2018). In Sports, certain practices trigger anxiety or anxiousness such as fear of losing, the anxiousness of winning, the desire to outshine all other athletes,

competitions and many other pent-up emotions that need releasing could be released through a little bit of humor. Perhaps, this explains the name of the theory in which Lynch (2002) explains that there 'is a release of nervous energy'. The nervous laughter released as a result of humor helps in uncomfortable situations. Supporting this view, Gilbert, Gilbert, and Morawski (2007) pointed out that the amount of pressure, stress or anxiety associated with sports could make relief humor essential in sports. Kimball and Freysinger (2003) added that relief humor could be adopted in sports time to minimize arousal while in times of low arousal or boredom time, it could be used to increase arousal levels, and in the process improve athletes' mood (Berk, 2001). Gould and Diefenbach (2002) also approved that relief humor could be applied in sports, especially when faced with the anxiety associated with competition. This theory therefore supports that humor is important in sports to relieve tension among participants and lighten the heavy atmosphere that becloud not only the athletes but also the spectators and fans.

Another important theory is the Superiority theory. This theory of humor is widely cited in literature (Martin & Ford, 2018; Kimball & Freysinger 2003; Lynch, 2002). This theory emphasizes the taking advantage of others weaknesses. Martin and Ford (2018) revealed that humans sometimes find humor in another's misfortune. The desire to win also makes a team hostile or malicious against their opponents, such that, in an extreme situation, they find no issue taking advantage of their opponent's weaknesses. It could take the form of ridiculing others or it may be self-derision (Lynch, 2002). It triumphs by hurting others or going out of society's norms to satisfy selfish aims. It can manifest in diverse forms in sports. The most essential is by defeating opponents, causing emotional or bodily harm to opponents; and laughing over opponents' mistakes or misfortune such as blooper of bad plays (Meyer, 2000;

Lynch, 2002). It could even be seen when a coach disciplines other athletes by compelling them to run some laps around the field.

Unlike relief theory which has positive impact, superiority humor rather expresses negative vibes. For this study, it expresses how humor can negatively be used in sports. Users of this theory may make jokes to show their superiority over others or to show their malice or discriminative attitudes toward a person, or a group (Ford & Ferguson, 2004). Such humor is usually discouraged in sports because of its negative impact on its target.

Another important theory of humor worth considering in this study is the Incongruity theory. This theory, according to Martin and Ford (2018) sees laughter as a function of anticipating an outcome which is different from what was expected. Lynch (2002) explains that the congruity theory works on the premise that humour occurs when there is an inconsistency between what we expect and the actual occurrence. Zhan (2012) sees incongruity as the most important element of humour. The theory sees the unexpected outcome as a joke that is worth laughing at. When applied to sports, the athletes find it funny when their opponents experience fall. In other words, when their fellow player goes against the usual pattern, it becomes humorous to them (Wilkins & Eisenbraun, 2009). These theories specifically attempt to explain the causes of humor and how it can occur in sports to relieve tension. The subsequent theories attempt to describe humor and how humor relieves anxiety in different situations, especially, in sports.

According to Dewitte and Verguts (2001), incongruity usually comprises two or more elements that are dissimilar in every respect yet trying to combine. It is based on

cognitive given that the individual involved must have first perceived the lack of consistency of the two elements even before attempting to connect them. It is meant to trigger humor not to threaten or hurt anyone. Since it is unexpected, it induces laughter. Some of the sports bloopers, especially tripping over balls, kicking the ball to one's opponents or wrong teams, among others are examples of incongruity humor as applied in sports

Having understood the various theories of humor, it is important to understand some key concepts of this study as perceived by different writers. One predominant concept in this study is humor. Like many other concepts, humor has no definite definition as many authors across different fields of study define and redefine the concept to suit specific contexts. It has been associated with synonyms such as playfulness, enjoyment, funny and laughter. Cotrell (1987) sees it as a trait of joyful action, speech or writing. Cotrell further defined humour as a statement that provokes laughter or leads to a feeling of enjoyment. This often occurs amid self-elating actions at stressful, anxious and troubled times which are caused by various negative environmental and psychological factors (Stuss, 1999), Holmes (2002) opined that a laugh at work is an antidote to stress. However, it can be viewed as a psychological and physical well-being which feeds social relationships, decreases work-related stress and reveals positive traits (Ilhan 2005). In sports, humor also maintains cultural and educational importance where teachers use it in everyday practice to guide and correct learners. Jones (2018) attested that humor in Sports teaching is fun.

Denotatively, humor as defined in *The Oxford English Dictionary*: “is that quality of action, speech, or writing which excites amusement; oddity, jocularly, facetiousness, comicality fun.” Furthermore, same dictionary further defined humor as “the faculty

of perceiving what is ludicrous or amusing, or of expressing it in speech, writing, or other composition; jocose imagination or treatment of a subject”. It is relative because what makes one person laugh might actually be annoying to another. From these definitions one can deduce about four essential components of humor. These are: (1) a social context, (2) a cognitive-perceptual process, (3) an emotional response, and (4) the vocal-behavioral expression of laughter (Martin, 2010).

The Social Context of Humor: Although some individuals sometimes laugh even while alone, probably because they remember something funny, some personal experience, or when watching comedy; however, these examples are referred to as “pseudo-social” (Martin & Ford, 2018). It is pseudo because the participant is alone even though his or her reaction is a response to social stimuli presented in a book, video, or relieving memory. Humor takes place in almost every social situation even among strangers, religious gatherings, and schools, even as serious as a hospital situation, humor can still consciously or unconsciously occur (van Hooff & Preuschoft, 2003). One way to invoke social humor is play. A Psychologist once referred to play meant to trigger humor as ‘Paratelic’ which sets it apart from other serious or goal-oriented plays, also called ‘telic’ (Martin, 2010). Humans switch between seriousness and playfulness to maintain their sanity whether in business meetings, lecture rooms, or even during religious gatherings. In such gathering, humor is usually brief but enough to lighten the heaviness of the environment. For instance, someone may make a humorous quip during a serious gathering, like meeting which causes people to laugh or smiles and release some tension before continuing with the serious event (Wilkins & Eisenbraun, 2009). When the setting is casual, people can feel at ease and make jokes randomly to past time (Martin, 2010).

Cognitive-Perceptual Processes in Humor: Humor also has cognitive importance. In other words, humor aimed at lightening the mood, coming up with the right humor in the right atmosphere requires mental ability in processing information's, ideas, actions in a creative way such that no one is offended in the process and at same time make the atmosphere peaceful (Martin, 2010). Weighty verbal utterance as well as nonverbal actions that are capable of triggering humor have some degree of cognitive process (Aydan, 2015). Several pieces of the literature revealed that humor emerges from images, words, texts or events that go contrary to the expected end - that is unexpected turns of events, surprise, incongruousness, and odd or unusual situations (Martin & Ford, 2018; Zhan, 2012; and Wilkins & Eisenbraun, 2009). These events were described by Wilson (2005) as "no serious social incongruity." Although non-serious it also embodies cognitive elements even though it manifests in the form of teasing, jokes or witty batter. All these needs activities could only be achieved through cognitive perceptual process.

Emotional Aspects of Humor: The way we respond to humor is not limited to intellectual process alone; there is also the need to be in a right state of mind. Our emotional state sometimes makes us see humor as insults rather than fun. Generally, humor is meant to evoke some degree of pleasant emotional response (Potrac, *et al.*, 2017). According to Szabo (2003) humor puts people in good mood. Earlier studies such as Mobbs *et al* (2003) also commented on the emotional aspect of humor. Accordingly, exposure to some humorous cartoons awakens the limbic system of the brain (Mobbs *et al.*, 2003). The funnier the cartoon, the more activated the limbic system of the brain will be. It is this same part of the brain that is responsible for pleasurable emotions. This emotion is usually connected with enjoyable activities such as funny jokes, eating, music, sexual activity, sometimes even drugs. This is the reason

why humor is enjoyable and evokes laughter (Martin, 2010). This indicates that humor is essentially an emotion capable of bringing out some sort of cognitive processes. For this reason, (Potrac, *et al.*, 2017) is of the view that humor can evoke all types of emotions such as jealousy, joy, or fear. Others are mirth, amusement, cheerfulness, hilarity, or merriment (Martin, 2010).

Till date, most scholars are yet to clearly explain the emotional nature of humor. While studies like Martin and Ford (2018); Zhan (2012); and Wilkins and Eisenbraun (2009) all acknowledged in their diverse studies that humor is associated with some cognitive process; however, not many studies have focused on the emotional process of humor.

Laughter as an Expression of the Emotion of Mirth: The category of the manifestation of humor is as laughter. Laughter expresses emotion of mirth. According to Wild et al, (2003), mirthful pleasure accompanying humor also has an expressive component such as smiling or laughter. If the intensity is low, a faint smile is observed, but when high, a broader grin appears until it manifests into a chuckle and then laughter (Martin, 2010). This implies that the intensity increases as one becomes more emotional due to humor; when at its highest intensity, the emotion is manifested through loud guffaws, reddening of face and other body movement often accompanied by slapping one's thigh, rocking one's body, throwing back the head, holding one's stomach, jumping or bouncing around (Martin, 2010). Thus, emotion of mirth is well expressed through laughter in same as frowning, yelling, scowling or clenching ones' fist expresses emotion of anger. Recent studies revealed that laughter is not only meant to express playful behavior but also help in reducing anxiety and stress (Owren & Bachorowski, 2003). Laughter does not only affect the one laughing, it also affects the listener. In other words, laughter has direct effect on listener by arousing his emotions. This explains why we laugh just by seeing others laughing (Gervais & Wilson, 2005).

When this happens, laughter is said to serve a biosocial function as it evokes positive emotions of the group members. It is contagious because by seeing someone laugh, it is sometimes impossible not to feel mirthful. Laughter serves as a motivator as it makes people to behave in a particular way (Shiota *et al.*, 2004).

From the foregoing, we can conclude that the psychological process of humor comprises a social context, a cognitive appraisal process, an emotional response as well as the vocal-behavioral expression of laughter (Martin, 2010; Wild et al., 2003).

The function of humour in Sport

Humor is essential in every gathering involving a group of people from different cultures or backgrounds. It is an effective tool in ensuring harmony. The Group Humor Effectiveness Model (GHEM) is one of the popular models developed by Romero and Pescosolido (2008) to determine how humor impacts a group positively, that include sports. According to the model, when group is in harmony, their effectiveness increases. As a result, Romero and Pescosolido (2008) recommended that humor be adopted in group to enhance productivity, creativity, cohesiveness, and reduction of stress which is essential feature needed in sports given that most sports are played in groups such as basketball, football, even race. According to Romero and Pescosolido (2008) humor does not only improve productivity, it also improves communication, collective cognition, and leadership, group viability, learning, reduced turnover, group viability and group cohesion. Fine and Soucey (2005) confirm that humor improves productivity by creating enabling environment where group members work with peace and calm mind. In same vein, Avolio, Klein and Kuiper (2006) acknowledged the place of humor in sports when they pointed out that humor improves cheerfulness, and positive mood which are all essential for productivity. These traits are essential and

can be adopted by athletes to create positive sporting environment. Lynch (2002) pointed out that humor reduces stress, social inequality, controlling coaches, pressure to succeed, gender or racial stereotypes, pressure to attain academic success, injury, as well as curtail the pressure to learn new skills and plays, as well as reduces the pressure of inadequate social support (Kiball & Freysinger, 2003). Cohesion is importance to sports performance. According to Martin et al (2010) a cohesive team is important in sports as it enhances performance. When there is lack of cohesion social loafing and self-handicapping may occur leading to poor performance (Carron & Burke, 2004).

When a team is cohesive, it has a better chance of success, and cohesiveness could be achieved through the use of humor. Humor enhances the sense of acceptance of both self as well as accepting others, and by so doing, team cohesion is achieved (Klein & Kuiper, 2006; Carron, Hausenblas, & Eyes, 2005). Humor plays essential role while forming a group as it helps in easing tension, helps in building rapport and organizing interaction in the team (Franzini, Fine & Soucey, 2005). At the storming phase in grouping, there is usually conflict and tension which can only be minimize through humor which has the ability of reducing tension, through evoking happiness or laughter (Olsson et al, 2002).

Lynch (2002) pointed out that humor is essential in sports as it helps coaches make clear their instructions, clarify rules without necessarily punishing or humiliating offender (Lynch, 2002). Again, coaches could adopt clarifying humor to moderate, facilitate, or enforce team rules while still ensuring that team members are well supervised and their behaviors are check (Bloom, et al., 2003)

In sports, humor is not just for entertainment but also helps to eliminate tension which is usually associated with sports, especially in competition (Longstaff & Gervis, 2016; Sharp, Hodge, & Danish, 2015; Lambert & Barley, 2001). Lynch (2002) and Meyer (2000) identified several broad functions of humor to include: identification, differentiation, clarification, resistance, control or enforcement. According to these authors, identification as well as clarification is positive role of humor whereas control or enforcement, and resistance have negative functions. The identification function occurs when new members are being welcomed in the team to help them integrate (Lynch, 2002; Meyer 2000) which is important in sports as it helps in building team cohesion. The clarification function of humor, according to Lynch (2002) is basically meant to remove any form of misunderstanding and thus helps in describing as well as clarifying the individuals role and responsibility as well as individual position in the team (Lynch, 2002). Positions and other issues could be clarified in a team without hurting anyone. In this case, corrections are given without necessarily punishing the offender. Athletes in sports could use clarification humor to clear confusion and enhance understanding among teams. As such, it could be used as intervention (Lynch, 2002). Differentiation humor is on the negative sides as it can lead to division or separation into different economic class, power structure, ethnicity, nationality, gender, or religion (Meyer, 2000; Lynch, 2002). While using such humor, it is important for the user to bear in mind the feelings of everyone and to ensure that no one feels excluded. In other words, differentiation humor usually leads in prejudice. Sports team is expected to be receptive, inclusive and unity, if at all there should be division, it should be very minimal. For this reason, Lynch (2002) advices that differentiation humor should not be used in sports because it can result in unhealthy feelings of superiority and discrimination. Like differentiation humor, there is also

control/enforcement humor that also has negative impact given that no one likes to be controlled.

Humor and anxiety in Sport performance

Anxiety has been defined as personal feeling of tension, uneasiness, nervousness, and worry. Anxiety is an emotion regarded as a feeling of tension, emotional state and physical changes (Chan 2000). Meanwhile, Rector (2008) is of the view that a certain amount of anxiety (normal and necessary) leads one to act on concerns and protects from harm and is essential for one's survival. To Knorrning (2005), anxiety is a normal feeling that one experience when confronted with danger, tense situation, stress, threat, or when uncomfortable. Anxiety could be individual state, a trait, or situation (Horwitz, 2017). It has been described by earlier researchers as unpleasant emotion and believes to require some degree of cognitive processing prior to its experience (Zhang, Woodman, & Roberts, 2018; Woodman & Hardy, 2001). The cognitive and somatic anxiety could take place at either state level or as a trait. Individual one's traits anxiety depends largely on a number of factors including environmental threats which contribute largely on individual performance (Cheng, Hardy, & Markland, 2009).

Anxiety has various symptoms (Brown, 2002) therefore various treatments. The most common anxiety includes:

Performance anxiety: which is fear about one's ability to perform a specific task, it can occur with any given task, when feelings of intense fear and distress are overwhelming and prevent us from doing everyday things, an anxiety may be the cause (Brown, 2002).

Panic: Considered by panic attacks—unexpected feelings of terror—occasionally striking repeatedly and without warning. Often mistaken for a heart attack, a panic

attack causes powerful, physical symptoms including chest pain, heart palpitations, dizziness, shortness of breath and stomach upset (Brown, 2002).

Phobias: Most people with particular phobias have numerous causes. To avoid panicking, someone with specific phobias will work hard to avoid their triggers. Depending on the type and number of triggers, this fear and the attempt to control it can seem to take over a person's life (Brown, 2002).

Generalized Anxiety Disorder (GAD). GAD produces chronic, exaggerated worrying about everyday life. This can consume hours each day, making it hard to concentrate or finish routine daily tasks. A person with GAD may become tired by worry and experience headaches, tension or nausea (Brown, 2002).

Social Anxiety: Unlike shyness, this causes intense fear, often driven by irrational worries about social humiliation "saying something stupid," or "not knowing what to say." Someone with social anxiety disorder may not participate in conversations, contribute to class discussions, or offer their ideas, and may become isolated. Panic attack symptoms are a common reaction (Brown, 2002).

Measures of anxiety in the context of Sport performance

Anxiety affects performance in sport (Horwitz, 2017). To assess one's perceived anxiety especially how it affects performance be it sports, work, or other context, several researchers have made different propositions. One of such assessment tools is that developed by Smith, Smoll, and Schutz (1990) to measure anxiety in sports and was called the Sport Anxiety Scale (SAS). The instrument was developed to comprise three subcomponents to assess worry, concentration disruption as well as somatic anxiety. It was revised by Smith, Smoll, Cumming, and Grossbard (2006) given the inconsistency existing between child and adult anxiety; and the revise version created was labeled the SAS-2. The instrument was further modified in 2003 and labeled

CSAI-2R to improve the factor structure (Cox, Martens, & Russell, 2003). The component of the questionnaires are structured in such a way that users may choose to administer a single-item version of the CSAI-2 (Hardy & Hutchinson, 2007) which requires lesser time compared with the entire instrument. In like manner, Barlow, Woodman, Gorgulu, and Voyzey, (2016); Woodman, Barlow, and Gorgulu, (2015); Woodman and Davis, (2008) also developed an instrument referred to as the Mental Readiness Form (MRF) comprising three single-item factors and meant to measure: tension/somatic anxiety; worry/cognitive anxiety; and self-confidence. This instrument is less intrusive and as a result, it offers convenience. The choice of which instrument to use depends largely on the objective of the study and the anticipated outcome. When only CSAI-2 or CSAI-2R is adopted, then the intensity of anxiety symptoms will be assessed (Wagstaff, Neil, Mellalieu, & Hanton, 2012). However, other instruments also abound for measuring anxiety. On the other hand, other instruments could be adopted in assessing anxiety including self-made or non-standardized instruments. Sometimes, there are researchers who adapt these existing instruments and modify them to meet their objectives. Again, Cheng et al. (2009) proposed the Three-Factor Anxiety Inventory (TFAI) which consists of cognitive anxiety, physiological anxiety, and the regulatory function of anxiety. There is some support for this perspective (Cheng, Hardy, & Woodman, 2011)

Differentiating Anxiety from Fear

Ancient Greek thought considered fear to be a central subject. The age of renowned philosophers like Aristotle (384 BCE-322 BCE), Epicurus (341 BCE-270 BCE), and Galen (129 BCE-200 CE) is when the idea of dread was first formulated (CE 129– CE 216). For instance, according to Aristotle's Theory of Contrariety, the universe's complexity may be reduced to its most fundamental pairs of opposites (e.g., hot versus

cold). According to Aristotle, the antithesis of confidence is fear, and he linked a person's level of dread to circumstances such as financial hardship, social isolation, humiliation, physical discomfort, terminal disease, and death, among other things (Price, 2005). Thoughtful responses to fear were offered by other great philosophers, including Epicurus and Galen, who came after Aristotle (Hall, 2018).

Epicurus and Galen disagreed on how to handle dread, but they did agree that fear is the result of the painful anticipation or imagining of unpleasant experiences (Perusini & Fanselow, 2015). Some of the most important debates on anxiety in the present day may be traced back to these ancient perspectives. Freud contended in his book "The Theory of Psychoanalysis" that all irrational apprehensions may be traced back to one or more identifiable origins. That is, people know where their fears are coming from since they can identify and avoid actual danger (fight or flight). In contrast to fear, anxiety is a unique emotion. Whereas the triggers for fear are either apparent (a spider, for example) or explainable (being in a dark room), the causes of anxiety are more nebulous.

Anxiety, according to Freud, is "fear's natural progression" this means that anxiety feels similar to dread in that it causes comparable feelings to be perceived, but anxiety seems more convoluted and less concrete than terror. Specifically, avoiding fear will be a skill quickly acquired, whereas avoiding worry will take longer to master. For instance, if someone is frightened by a spider, that dread will diminish after they've moved on from the spider. The opposite is true for athletes who have performance anxiety before a crucial competition as they struggle to control or overcome their nerves. Neurobehavioral evidence has also supported the idea that anxiety is separate

from fear (Perusini & Fanselow, 2015). Particularly, the activation of the subcortical forebrain (Price, 2005) is linked to the initiation of post-encounter defense (i.e., reaction toward the current threatening circumstance) in a terrified individual. Anxious people, on the other hand, are more likely to engage in pre-encounter defense (i.e., react in potentially harmful circumstances where the normal "threat" has not yet been met) because of the increased activity of their prefrontal cortex (e.g., Mobbs et al., 2009).

Effect of Anxiety on Sports Performance

The following are some of the ways in which anxiety might impair performance:

Impact on a person's psyche: The human body's focus is instantly and naturally drawn to the source of any perceived danger. Anxiety, as highlighted by Ampofo-Boateng (2009), causes one to lose focus and cause one to stress over how well one will do in a competitive setting. The impact on one's mental state might vary from a little concern to a lot of fear. Anxiety has been identified in numerous studies as a major psychological element influencing athletic performance (Raglin, & Hanin, 2000)

The influence on the brain and spinal cord (CNS): The brain and spinal cord make up what is known as the central nervous system (CNS). The brain and spinal cord are at the heart of the body because they coordinate and control the actions of every organ and muscle. Anxiety has a direct impact on the sympathetic nervous system and the connection between the body and the central nervous system, impairing a person's ability to carry out mental functions in an efficient and effective manner, and thus having a direct impact on the athletic performance of the individual.

Athletes' nervousness, elevated blood pressure, and other symptoms directly connected to the central nervous system have been shown by researchers to have a

negative impact on their mental preparation and competition results (Muhammad, Alamgir, Sami, & Salahuddin, 2017). Catecholamine, often known as epinephrine or dopamine, is a neurotransmitter that is released in response to anxiety and stress. The long-term and short-term memories of those exposed to these substances suffer as a result. The affected individual may become irritated and forgetful, as well as suffer from a diminished ability to sleep or a disrupted sleep pattern, as well as feelings of terror.

Some common mental consequences of anxiety include:

- Concentration issues; your mind keeps wandering
- Irregularities in the learning process
- Memory loss, disarray, and decision paralysis (Muhammad et al., 2017).
- Consequences on the body's physiological system

Physiological impacts are modifications to the functioning of certain bodily organs. Muscles tremble, pulse races, sweats, and respiration quicken are just some of the many ways in which anxiety may manifest physically (Arlington, 2013).

Below, are some of the physiological consequences of anxiety?

Side effects in the stomach and intestines: Anxiety and panic attacks are associated with stomach problems, which may have a negative impact on an athlete's performance (Muhammad et al., 2017). When he has to use the restroom more often than usual, it may be because of diarrhea or frequent urine. Dizziness is a common symptom of stomach distress (Stannard, 2013)

Powerful impact on muscles: Muscles may be affected by worry, according to the National Institutes of Health. The twitching, uncontrollable shaking of a worried player's hands is only one symptom (Muhammad et al., 2017). Whether at rest, in

motion, or when holding anything, the affected person may experience tremors or twitches. Muscle tension, whereby the person experiences tight and, at times, painful muscles, is another musculoskeletal impact of worry (Stannard, 2013).

Influence on breathing and on glands: Hyperventilation is the state of rapidly breathing. Hyperventilation is a common reaction to stress and anxiety (Muhammad et al., 2017). The National Institute of Mental Health (NIMH) reports that excessive sweating is a frequent sign of anxiety, since the sweat glands generate more perspiration than usual in times of stress. The player's respiratory pattern may also shift; she may find herself breathing more quickly or less often. The sensation of choking and gasping for air is common among patients with breathing difficulties (Bouras & Holt, 2007).

Alternate physical consequences: The effects of anxiety are not limited to the brain. The heart, for instance, may be impacted, leading to either a rapid or erratic beating. Headaches, sleeplessness, and exhaustion are also possible (Muhammad et al., 2017). Dry mouth and trouble swallowing are only two examples of the issues that might arise in the oral cavity.

Repercussions on the heart and blood vessels: Heart rate, palpitations, and blood pressure may all rise in response to anxiety. Increased synthesis of stress hormones such as adrenaline, noradrenaline, and cortisol cause these alterations.

Effect of anxiety on skin and hair: The negative effects of anxiety on the skin include a lack of radiance, the appearance of acne, and other skin problems. Anxiety has been linked to the onset of certain skin conditions. Stress and anxiety are significant causes of hair loss (Muhammad et al., 2017). The under-active thyroid, or hypothyroid, may cause hair loss, dull skin, and other symptoms if it is triggered by stress over an extended period of time.

Results in Behavior: Anxiety also has behavioral repercussions, such as increased anger, discontent, difficulty communicating, and unfriendliness (Muhammad et al., 2017).

Alterations in character: One's personality consists of their unique, persistent patterns of thinking, feeling, and acting across different contexts and times. It is believed that both a "genetic" component (often referred to as temperament) and environmental interactions contribute to shaping each person's unique personality. Stress hormones are a component of everyone's internal environment, and for some individuals, it means a change in personality (Muhammad et al., 2017).

People who suffer from anxiety often exhibit the following personality shifts:

- a. unhappiness, b. unfriendliness, c. frustration, d. anger, and e. aggressiveness. F. Reduced concern for timekeeping and appearance Obsessive/compulsive behavior (trying to cope with unwanted repeated thoughts or obsessions, by engaging in compulsive behavior rituals such as counting, checking, washing, etc.)
- g. Work inefficiency/productivity, lying/excuses, defensiveness/suspiciousness, communication issues/isolation, impulsivity/impulse buying/gambling/sex, and so on are all symptoms of depression (Muhammad et al., 2017).

Ways that Anxiety affects Sports Performance

Anxiety affects the overall performance through the following ways:

Psychological effect: Concentration towards any external threat takes place in human body immediately and automatically. Ampofo-Boateng (2009) noted that anxiety disrupts the attention and worries about the performance in competitive situation. The

effect on a person's thinking can range from mild worry to extreme terror. In another research study, anxiety was considered one of the main important psychological factors that has influence on sports performance (Raglin & Hanin, 2000).

Effect on central nervous system (CNS) The central nervous system (CNS) is the part of the nervous system consisting of the brain and spinal cord. The central nervous system is so named because it integrates information it receives, coordinates and influences the activities of all parts of the body. (Muhammad, et al., 2017).

Researcher has shown that anxiety effect on the mental level of an athlete and the changes on the performance, in the shape of feelings of nervousness, high blood pressure etc. are directly related to central nerves system (Ampofo-Boateng, 2009). In another way, Anxiety and stress stimulate the production of Catecholamine commonly known as epinephrine, or epinephrine and dopamine. These chemicals have adverse effect on memory, both long term memory and short-term memory of the person affected. The Person becomes forgetful and irritable and can experience lack of concentration, feeling of fear and decreased sleep or disturbed sleep pattern (Muhammad, et al., 2017).

Following are some of the general mental effects of anxiety:

- a. Difficulty concentrating, racing thoughts
- b. Trouble learning new information
- c. Forgetfulness, disorganization, confusion
- d. Difficulty in making decisions

Physiological effects

Physiological effects refer to the changes which take place in the movements of different organs of the body. Anxiety affects directly or indirectly different functions of the body in various ways which include muscles shake, fast heartbeat, sweating fast breathing (Arlington, 2013). Some of the physiological effects of anxiety are discussed below.

Gastrointestinal effects

When a person is feeling anxious or having an anxiety attack, he can experience some gastrointestinal upset which affects the performance of the athlete. He can have frequent urination or diarrhea, where needs to use the bathroom more than normal. If someone has stomach upset, it may be accompanied by dizziness (Stannard, 2013).

Muscular effects

The National Institutes of Health (NIH) noted that anxiety can also have an effect on individual's muscles. For example, the anxious player may have tremors, where he has a shaking movement that he cannot control. These tremors or twitches can occur when the individual is still, moving or holding an item. Another muscular effect of anxiety is muscle tension, where the individual has tight muscles that can sometimes feel painful (Stannard, 2013).

Breathing effects and glandular effects

Rapid breathing is known as hyperventilating. Hyperventilation can be a normal response when you are anxious. A common symptom of anxiety, according to the NIH, is sweating; a situation where, the sweat glands produce more sweat than normal.

The player can also experience changes in breathing: he may have shortness of breath or rapid breathing. When the patient has shortness of breath, it can feel like she is choking and grasping for air (Bouras & Holt, 2007).

Other effects on the body

Anxiety can also affect other parts of the body. For example, the heart can be affected, resulting in either a pounding heart or an irregular heartbeat. The player can also have headaches, insomnia and fatigue. Problems with the mouth and throat can happen, such as a dry mouth or difficulty swallowing.

Effect on cardiovascular system

Anxiety can lead to increased heart rate, palpitations, increased blood pressure. All these changes take place in the body by more production of stress hormones like adrenalin, noradrenalin and cortisol.

Effect of anxiety on skin and hair

Anxiety can affect the skin badly in terms of loss of glow, development of acne etc. Certain skin diseases like psoriasis and eczema are known to appear because of anxiety. Hair fall is also very common in constantly anxious people. Prolonged anxiety could trigger under-active thyroid or hypothyroid, which in turn, could lead to many losses of hair, loss of glow on skin, and other symptoms.

Behavioral effects

Anxiety effects also on the behavior of an individual because Anger, displeasure, problems in communication and unfriendliness are the common effects of anxiety.

Personality changes

The term personality is used to describe the consistent individual patterns of thoughts, emotion, and behavior that characterize each person across time and situations. Each individual's personality is thought to be influenced by both an inherited "genetic" component (usually called temperament) and by their interactions with the environment. Some people experience personality changes in response to stress hormones, which are part of their internal environment. The following changes in personality are not uncommon to observe in people who are anxious:

- a. displeasure
- b. unfriendliness
- c. Frustration
- d. Anger
- e. Aggressive feelings and behavior
- f. Decreased interest in appearance
- g. Decreased concern with punctuality
- h. Obsessive/compulsive behavior (trying to cope with unwanted repeated thoughts or obsessions, by engaging in compulsive behavior rituals such as counting, checking, washing, etc.)
- i. Reduced work efficiency or productivity
- j. Lying or making excuses to cover up poor work
- k. Excessive defensiveness or suspiciousness
- l. Problems in communication

m. social withdrawal and isolation

n. Impulsivity (expressed as impulse buying, gambling, sexual behavior, or similar)

(Muhammad, et al., 2017)

Methods for Dealing with Anxiety

Anxiety disorders are quite real and should be treated as such. The road to recovery requires more than just determination and discipline. The good news is that the treatment of patients with mental diseases has come a long way in the previous twenty years. Most anxiety disorders may be treated with one or a combination of the following methods, albeit the specific method depends on the kind of condition being treated.

Medication: Antidepressants and other drugs intended to treat anxiety are often used for the treatment of anxiety disorders.

Psychotherapy: During psychotherapy (a kind of counselling), the client is encouraged to express any and all feelings related to their experience with mental illness. Therapeutic dialogue is a method used by mental health practitioners to aid patients in better comprehending and managing the symptoms of their patients' disorders (Muhammad et al., 2017).

CBT (cognitive-behavioral treatment): A common kind of treatment for those with anxiety disorders, CBT teaches patients how to identify and alter the thoughts and actions that contribute to their distress (Muhammad et al., 2017).

The Relationship between Coping and Sport Injury Anxiety among Athletes

Research has found that an athlete's perception and evaluation of a situation determines whether or not he feels anxiety. One athlete may not perceive the injury or

situation as stressful, while the other athlete could experience heightened anxiety because the perceived demands of the situation outweigh the perceived coping resources (Albison & Petrie, 2003). Anxiety surrounding injury, or sport injury anxiety, is an important research area because the previous literature focusing on anxiety and injury has demonstrated negative consequences for athletes. Sustaining an injury or being concerned about the potential of an injury in sport can result in anxiety for athletes, and anxiety has been found to be maladaptive in the sport domain (Mullen, Lane, & Hanton, 2009). Anxiety can have cognitive and somatic components that can lead to adverse effects. Cognitive anxiety is associated with mental effects and concentration disruptions, such as mind-wandering, self-doubts, and concerns about poor performance.

In addition to anxiety being a result of injury, high levels of anxiety can lead to injuries through the cognitive and somatic elements. Cognitively, the athletes can be distracted from their performance because they are concerned about irrelevant cues. This cognitive distraction can result in the narrowing of their peripheral vision, making them less aware of their surroundings, which could lessen their reaction time to external events such as an approaching opponent or a change in their environment (Walker, Thatcher & Lavalley, 2010). Increased somatic anxiety can lead to increased muscle tension, which has been shown to lead to an increased risk of injury because tight muscles have a higher likelihood of tearing or straining (Mullen et al., 2009). It has also been found that athletes with high levels of anxiety are related to decreases in performance, (Thatcher & Lavalley, 2010).

Decreased performance is often a result of high levels of both cognitive and somatic anxiety. Athletes with high cognitive anxiety have reported less favorable perceptions of sport participation and decreased self-confidence (Mullen, et al., 2009). This can

result in athletes becoming unsure and doubtful about their actual capabilities. The high levels of somatic anxiety, such as muscle tightening or increased heart rate can lead to earlier muscle fatigue. This would cause athletes to be unable to perform to their actual abilities, therefore resulting in a decreased performance level (Podlog & Eklund, 2010). The literature has demonstrated a strong link between increased anxiety and injury incidents. Studies have found that athletes with higher levels of sport-specific anxiety, such as competitive trait anxiety, sustained more injuries during sport than athletes who are less anxious (Kolt & Kirkby, 2016). Athletes who became injured while playing their sport displayed higher anxiety levels than athletes who did not sustain an injury during their sport (Lavallée & Flint, 2013). When athletes were prevented from participating in their sport due to an injury, they demonstrated higher levels of anxiety than unrestricted athletes (Tomalski, 2013).

Furthermore, athletes with more severe injuries have been shown to have higher anxiety levels than athletes with no injuries or less severe injuries (Smith, Scott, O'Fallon, & Young, 2014). Through these studies, the findings that anxiety tended to lead to increased injuries and that sustaining an injury often leads to increased anxiety were supported for various sport types, competitive levels, and both genders. However, even though a relationship has been found between anxiety and injury, it is still unclear as to how the athletes appraise their injuries and what sustaining an injury means to them. There are many aspects of an injury that could cause athletes anxiety such as impairments to athletic identity, impaired body image, or worries of re-injury (Walker et al., 2010). Because of this link between sport injury and anxiety, sport injury anxiety has begun to be researched as a specific form of anxiety. Sport injury anxiety is a sport specific anxiety that focuses on athletes' anxiety in regards to sustaining an injury during their sport performance (Cassidy, 2011). This type of

anxiety focuses on the athletes' cognitive appraisal of injury, identifying what sustaining an injury would conceptually mean to the athlete. In past research, seven different sub factors of sport injury anxiety were found to be most prominent with athletes. These are anxieties related to losing athleticism, being perceived as weak, experiencing pain, losing social support, letting down important others, experiencing re-injury, and having impaired self-image.

Because anxiety in sport can produce negative consequences for athletes, it is important to understand how athletes cope with their anxiety. When athletes cope with stressful situations, they are consciously altering their thoughts or behaviors in attempts to alleviate the stressful situation. Coping serves to ameliorate stressful emotions associated with the event and/or to modify the relationship between the athlete and the environment. Two broad types of coping frequently referenced in the literature are approach and avoidance coping. Approach coping is when an individual directly addresses or focuses on alleviating the stressor at the source. Avoidance coping, on the other hand, is when an individual distances himself or herself from the stressor and evades actively confronting the stressor (Kim & Duda, 2003). Anxiety is lessened when athletes perceive that their coping resources outweigh the demands of the stressful situation.

Previous research has suggested that approach coping strategies tend to be more beneficial, while avoidance coping strategies are viewed as maladaptive (Eubanks & Collins, 2000; Giacobbi & Weinberg, 2004; Kim & Duda, 2003). Literature has demonstrated that athletes do use coping strategies when dealing with sport anxiety and that the coping strategies are related to the type of anxiety athlete's experience. While coping research demonstrates that athletes use various strategies to cope with anxieties related to sport, coping with sport injury anxiety has not yet been examined

in the sport psychology literature. The literature suggests that coping techniques could be related to the type of anxiety experienced (Campen & Roberts, 2001), therefore, it would be beneficial to understand how athletes cope with sport injury anxiety. Situations where there is the potential for injury can affect athletes in various ways, as demonstrated by the sub factors of sport injury anxiety (Cassidy, 2006). These different components could each elicit different coping strategies within athletes in order to understand the ways that athletes cope with sport injury anxiety, which may provide insight into how to help athletes overcome this type of anxiety (Cassidy, 2006).

Sport Participation and Symptoms of Anxiety and Depression

During the crucial developmental period of adolescence, symptoms of both anxiety and depression are widespread (Teubert & Piquart, 2011). Anxiety disorders entail excessive perceptions of fear or threat, evident, for instance, in social and generalized anxiety disorders (American Psychiatric Association, 2013). Depression refers to persistent feelings of sadness and worthlessness and includes mood disorders, such as major depressive disorder and dysthymia (American Psychiatric Association, 2013). Anxiety and depression also range in severity. For instance, whereas chronic suicidal ideation is evident among adolescents with major depressive disorder, symptoms integrated in depression measures also include features of mood disorders as well as more transient depressive states, including loneliness, pessimism about the future, and feelings of frustration. Anxiety and depression are thus commonly assessed using measures of the frequency and intensity of symptoms reported by adolescents ranging on a spectrum from subclinical to clinical (Wang, Chow, & Amemiya, 2017).

Considering organized sport as a widespread community activity, it is important to consider the extent to which sport participation may protect against symptoms of anxiety and depression. This is because sport offers a unique integration of two factors that are independently established as inversely associated with anxiety and depression symptoms: (a) physical activity (Ahn & Fedewa, 2011) and (b) social relationships and community participation (Eime et al., 2013).

Adolescents who engage in recommended levels of 60 min or more of moderate-to-vigorous activity experience fewer anxiety and depression symptoms (Plasma & Schwenk, 2000). For instance, Ahn and Fatwa (2011) conducted a meta-analysis and found that physical activity can significantly reduce depression, anxiety, psychological stress, and emotional disturbances in clinical and nonclinical samples of children and adolescents. A recent review of reviews conducted by Biddle, Ciacconi, Thomas, and Vergeer (2018) further reported that regular physical activity is a protective factor pertaining to depression and anxiety symptoms. Nevertheless, Biddle et al. (2018) reported that anxiety symptoms were rarely the focus of recent studies and that evidence was mixed regarding the magnitude of the inverse relationship between anxiety symptoms and physical activity.

A second argument for an association with mental health is that sport can support social relationships that contribute to mental health via psychosocial, behavioral, and physiological pathways laid out by Umberson and Karas Montez (2010). Perhaps most closely aligned with the theorizing of sport researchers, personal relationships within the sport community can be resources to support mental health through psychosocial processes such as social support, personal control, and social identities (Eime et al., 2013). Further aligning with the psychosocial path, sport may satisfy the need to belong and expose adolescents to group memberships that are critical for well-being

(Cruwys et al., 2013). Beyond psychosocial influences, there are behavioral mechanisms such as the responsibility that athletes feel for the mental health of themselves and others (e.g., supporting teammates; (Liddle, Deane, Batterham, & Vella, 2019). Social interactions may also generate positive and negative processes within immune, endocrine, and cardiovascular systems. As one example, social support plays a stress-buffering role by reducing cardiovascular reactivity to stress (Jewett et al., 2014) Adolescent organized sport may thus support mental health to the extent that adolescents experience positive interpersonal relationships.

Critical to the previously mentioned descriptions is the recognition that sport provides exposure to both positive and negative experiences with physical activity and social relationships. Despite the potential for sport as a preventive context, certain sport contexts may produce detrimental effects within physical, emotional, psychological, and social domains (Fraser-Thomas, Côté, & Deakin, 2005). For instance, the mental health of an adolescent athlete may be harmed by experiences with inadequate (e.g., autonomy thwarting) or even abusive relationships with coaches, parents, peers, and others in sport (Macdonald, Côté, Eys, & Deakin, 2012). Even contextual features, such as overtraining or spending a large number of hours involved in sport, may be detrimental to one's psychological well-being (Merglen, Flatz, Bélanger, Michaud, & Suris, 2014). As such, context is critical to understanding links between sport and the domain of mental health (Evans et al., 2017).

Empirical studies

Sports psychology has been studied as a field for almost 200 years. From the beginning of the sport, people have been interested in trying to figure out what mental strategies would provide the greatest results. Despite the abundance of studies in the field of

sports psychology and performance, there has been no comprehensive meta-analysis of the available data. Several research has looked at how humour might affect performance and reduce stress. For instance, Lochbaum, Stoner, Hefner, Cooper, Lane, and Terry (2022) sought to synthesize the available studies on the issue of sports psychology in order to get a more comprehensive understanding of how this field impacts athletic performance. The PRISMA statement was created for meta-analyses and was used to look through publications identified using the EBSCO host search engine that was thought to be relevant to the issue. Between 1983 and 2021, 30 meta-analyses covering 16 distinct subfields of sport psychology fulfilled the inclusion criteria. Sports psychology interventions/variables hypothesized to improve performance (such as team cohesion, confidence, and mindfulness) were found to have a moderate positive effect, while variables hypothesized to be detrimental to performance were found to have a small negative effect (e.g., cognitive anxiety, depression, ego climate). Neither the quality rating of the meta-analyses nor the research design of the primary studies included in the meta-analyses significantly affected the extent of the observed effects. As our research contributes to the growing body of evidence for sport psychology approaches, it may have important consequences for those who use these techniques in their work.

Dabney and Choudhary's (2021) pointed out that athletes are judged like celebrities. Athletes' personalities are like coping tactics that help athletes manage stress and anxiety. Trait dominance affects how people handle stress. Understanding relative dominance and coping processes may assist a coach to improve this feature. Competitive athletes must handle competition pressure. Learning about competitive anxiety symptoms boosted motivation, effort, and performance in the face of

adversity. US Visualization helps exceptional athletes concentrate, drive, and perform. Goal-setters think more. Michael Phelps, the Olympic gold medalist, understands visualization. Setting goals boosts performance compared to merely "doing your job." Expectations don't cause actions. Persistence may help attain objectives. Numerous Memory exercises, psychological characteristics, and sports performance are researched. Neuro feedback boosts brainpower. Research on problem-solving anxiety and confidence has risen. Away to relax and recharge so one feels more confident and capable of competing Athletics: Meditation and yoga may help you relax, focus, and overcome obstacles. Characters' traits impact psychological factors before, during, and after the performance. Mindfulness and contemplation have been found to increase mood, performance, and flow in many circumstances. They find contemplative places to relax. Exercise boosts cognition. Meditation improves martial arts performance. Maintaining composure and self-control are crucial. Research showed that innovative strategies reduced tension and anxiety.

Studies have looked at the potential benefits of humour training for those with mental health issues, such as depression, anxiety, and adjustment problems; one such study is Tagalidou, Distlberger, Loderer, and Anton-Rupert (2019). About 37 participants were chosen at random to participate in the research, which also included the use of a questionnaire and a month of follow-up training. Pre- and post-examinations were performed. Study results showed that outcomes linked to humour improved after training. There was no correlation between training and the secondary results. The results of the research showed that humour significantly reduced anxiety and enhanced performance.

The influence of "humour in sports coaching" was studied by Edwards and Jones (2017). A quaint and amusing pastime the major goal of this article was to examine how humour is used and expressed in the field of sports coaching. The players and coaches of the fictitious Senghenydd City Football Club were observed and interviewed over the course of a complete season for ethnographic research. Information was gathered through participant observation and ethnographic videography. Both "inclusionary putdowns" and "disciplineallumour," according to the study's findings, helped produce and sustain the established social order. The humorous effects of the group's shared knowledge at Senghenydd are discussed in a concluding reflective paragraph.

Palazzolo (2020) acknowledges that both athletes and coaches are faced with some degree of anxiety prior to the actual game. Such anxiety affects performance and remains one of the most significant elements that may affect the result of a sporting event. Because they continue to be a source of mystery, human emotions continue to pique widespread attention. It is widely agreed that a person's pleasant emotions may help them perform better, but there is less consensus on the beneficial effect of negative emotions, especially competitive anxiousness. Some people believe that anxiety is a hindrance to performance and that a nervous athlete is a weak one. Some people think of anxiety as a driving force, citing athletes who thrive only when they're under intense pressure to achieve (Palazzolo, 2020). Palazzolo (2020) pointed out that scientists have been trying to better understand the connections between anxiety (and emotions) and performance for some time, but there is still no universally accepted model for the relationship between the two. Attempts to corroborate these connections through research have yielded contradictory and difficult-to-interpret findings due to

differences in the variables assessed (anxiety, emotional states, performance) and the framework of the study (participant characteristics, significance of the sporting event) (Palazzolo, 2020). In other words, even the study by Palazzolo (2020) is not yet conclusive on this matter.

Anxiety's impact on the athletic prowess of students at Pakistan's Gomel University, Deraismail, was studied by Muhammad, Alamgir, Sami, and Salahuddin in 2017. The purpose of this research was to determine the physiological, psychological, and behavioral consequences of anxiety on players. The demographic sample was drawn from student athletes who were involved in a variety of varsity sports. Questionnaires were sent out to a sample of the community at random to collect the data for the research. Investigators used averages and percentages to examine the collected data. After reviewing the data, the researcher determined that anxiousness had a deleterious impact on the performance of the athletes. As was also shown, the process of reduction and techniques like psychotherapy, medicine, and meditation are important in conquering and confronting anxiety in sports participation.

Anza (2020) looked on how teenage sports activity relates to reports of anxiety and sadness. They found 29 distinct publications with a total of 61 effect sizes and 122,056 participants after screening 9,955 data. The authors organized the impacts into four groups, each corresponding to a different aspect of sports participation (attendance, frequency, length, and volume). While the impact size was moderate, the study showed that teenagers who participated in athletics reported considerably less symptoms than those who did not. Research attempted to discover and explain variation in effects by age and sex, and although these findings did not suggest a causal

impact, they did provide credence to the idea that adolescent engagement may provide a protective environment against anxiety and depressive symptoms.

Research conducted by Parnabas, Parnabas, and Parnabas (2015) looked at the impact of cognitive anxiety on football players' athletic abilities. They pointed out that, psychologists in the field of sports have long held the view that competitors who experience high levels of cognitive worry during competition are at a significant disadvantage. A 27-item version of the Competitive State Anxiety Inventory-2 and the Psychological Performance Inventory were administered to participants at the time of an intercollegiate athletics competition and the result of cognitive anxiety was shown to be significantly lower among the top and national football players. The study found that cognitive anxiety was negatively correlated with football players' athletic performance. The results of this study may be used by sports psychologists, sports counselors, and coaches to help college and high school athletes manage their cognitive anxiety.

Bali (2015) pointed out that even though athletes and coaches seldom give much thought to mental preparation, there is a clear association between psychological training and Olympic achievement. Many professionals in athletics have been quoted as claiming that mental training is even more important than a physical practice. Legendary golfer Arnold Palmer once said that 90 percent of the game takes place in one's brain (Bali, 2015). "The total time spent by the golfer actually swinging and striking the ball across those 72 holes is roughly seven minutes and thirty seconds, leaving 15 hours, 52 minutes, and thirty seconds of 'thinking time' (Bali, 2015).

When looking at the topics covered, discussed, and debated at international conferences and seminars on sports psychology, it is important to note that anxiety and aggression as linked to the genre of emotions account for more than 70% of those addressed. They appear in many settings, creating a sort of continuity that is still on the rise. It is generally known that they're bad for people's health in general and for athletes' performance. Unmet needs may lead to stress, which can lead to worry, which can lead to tension (Bali, 2015). Psychosomatic illnesses have been linked to the long-term consequences of stress, which may be felt, seen, and evaluated on several dimensions (both mental and physical) (Bali, 2015).

Tomalski (2013) investigated how athletes cope with sport injury anxiety by determining the relationship between sport injury anxiety and different coping strategies. Collegiate athletes completed a demographic survey, the Sport Injury Anxiety Scale. The relationships between the SAIS and B-COPE were assessed using Pearson correlation. It was hypothesized that overall levels of SIA would be positively associated with avoidance coping strategies and inversely related to approach coping strategies. Results partially supported the hypotheses, showing that overall levels of SIA were positively related to self-distraction and self-blame, which are avoidance coping strategies. Follow-up correlational analyses were conducted and significant inverse relationships were found among avoidance coping strategies and sub factors of sport injury anxiety and well as positive relationships among approach coping strategies and sub factors of sport injury anxiety. Additional exploratory analyses using MANOVAs were conducted, however no significant differences were found in SIA or coping strategies in regards to level of injury risk or restriction. Females were found ii to have higher levels of to have higher levels of overall sport injury anxiety as compared to men and tended to use more self-distraction as a coping strategy than

men. Perceived likelihood of future injury was also found to be significantly correlated with sport injury anxiety as well as avoidance coping.

Perlini, Anemone, and Lind (2000) scientifically investigate the effects of humor on test anxiety and performance. This study tested a hypothesis that linked test anxiety to poor performance by analyzing how the presence of humour in test items affected the strength of this link. Subjects originally filled out anxiety, coping humour, and humour assessment forms. A total of 34 females and 26 males took a test with no humour, little humour (15% of questions), or moderate comedy (30% of questions). Both low-stakes (in the form of a quick quiz) and high-stakes (in the form of an examination) versions of these tests were given. Extremely test-anxious respondents did not do better in either outcome-value condition when they were exposed to humour more often. These findings add to those that have cast doubt on the hypothesis that humorous items act as a moderating factor between anxiety and performance. Supportive data suggest that variations in the use of humor as a coping mechanism substantially influence test results.

Raglin (2002) this review suggests the inverted-U theory is unsupported. According to studies, athletes' ideal pre-competition anxiety reactions vary, contradicting the inverted-U concept. Quiet treatments may hurt athletes who function best under stress. These results suggest that theoretical models that account for individual variations should replace task-based or group-based theories of anxiety and performance. Successful and failed performers also show temporal variations in anxiety, fear reactions, and cardiorespiratory measurements. This may indicate a difference in anxiety regulation. Pre-competition anxiety consistency may also impact performance

rather than the absolute amount. Athletes may use anxiety-induced attentional shifts to cope.

Conclusions

The chapter has essentially reviewed essential theories that constitute the framework on which the hypotheses for this study were formulated. Also, from this chapter the items that were used to develop the questionnaire for this study was generated. All the key concepts for this study were defined and delineated in then this chapter. The next chapter essentially presents the methodology adopted for this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research philosophy

Every study is built around one research philosophy or another. Bryman (2012) defined research philosophy as belief system that a researcher adopts to guide his or her research decision. It is how reality is perceived by the researcher (Al Zefeiti & Mohamad, 2015). Research philosophy, in Saunders et al (2012)'s view, review the meaning of knowledge and how this knowledge can be achieved. Researchers make their choices in line with their experience and belief system. Those choices about which data to used, which method a study should adopt the nature of data as well as how the data would be analyzed are all the decisions made by the researcher to guide the study; and these decisions play essential roles in determining the result of a study. Saunders *et al.* (2012) identified three research philosophies: the epistemology – which specifically attempt to define what truth really means. The ontology –is a branch of philosophy with the goal to describe what reality is; and the axiology – with the goal of describing values. Several schools of thoughts are derived from these philosophies such as the realism, the positivism, pragmatism, and the interpretivism which all describe guides researchers' view of the world or about a phenomenon. This study is built around pragmatism which has been described by Saunders et al (2012) as practicality-that is, the emphasis is whatever works better. For this school of thought, there is no absolute truth or perfect way of doing thing. As a result, at any point, whatever method of data collection, analysis, among others that works better in a given situation should be adopted without restricting the study to just one method. This is important because there is no perfect method. For this school of thought there is no wrong or right approach to study. Selecting and combining different approaches

in one study will bring a more comprehensive result meant to reach the research objectives is the gist of this school of thought (Saunders & Bezzina, 2015; Podsakoff *et al.*, 2012; May, 2011). For this study, research may have multiple realities. It is therefore not surprising that several researchers may investigate the same topic, but come out with different results. The topic the effects of humor and anxiety performance in sports in secondary schools in Nigeria might have been investigated by some other researchers, but their specific objectives, approach, nature of data, data collected; analysis and interpretation in line with the researchers' philosophies, experience and worldview may differ. The differences in approach bring about the differences in the result of the study. This shows that multiple reality and research should be judged based on its findings and not based on the outcome from other researchers. The researcher adopted the pragmatic school of thought because it enables the researcher to engage in an in-depth study adopting mixed method which is peculiar with this school of thought. The choice of pragmatism for this study is based on the leverage the method offers to researcher to choose whichever method, techniques as well as procedures that will help the researcher meet the study objectives (UK Essays, 2018; Creswell, 2013).

3.2 Research Approach

In Saunders *et al* (2012)'s view, three research approaches abound: - deduction, induction and abduction. While abduction approach shares the features of both deduction and induction approaches, the deductive approach begins its study by formulating hypothesis that will be tested at the end of the study to determine whether a new theory will be formed or otherwise. The hypothesis will either be accepted or rejected. On the other hand, inductive approach sets its objectives, assembles data, answers the research questions, collects data and analyzes. From the outcome of the

analysis, the researcher may propose a theory or hypothesis or otherwise. Based on the fact that this study adopts a mixed study design, it also adopts abduction approach which combines the feature the aforementioned two approaches. First, there are sets of hypotheses proposed to guide the study. The end result of the study will determine whether new theory will be formulated or not.

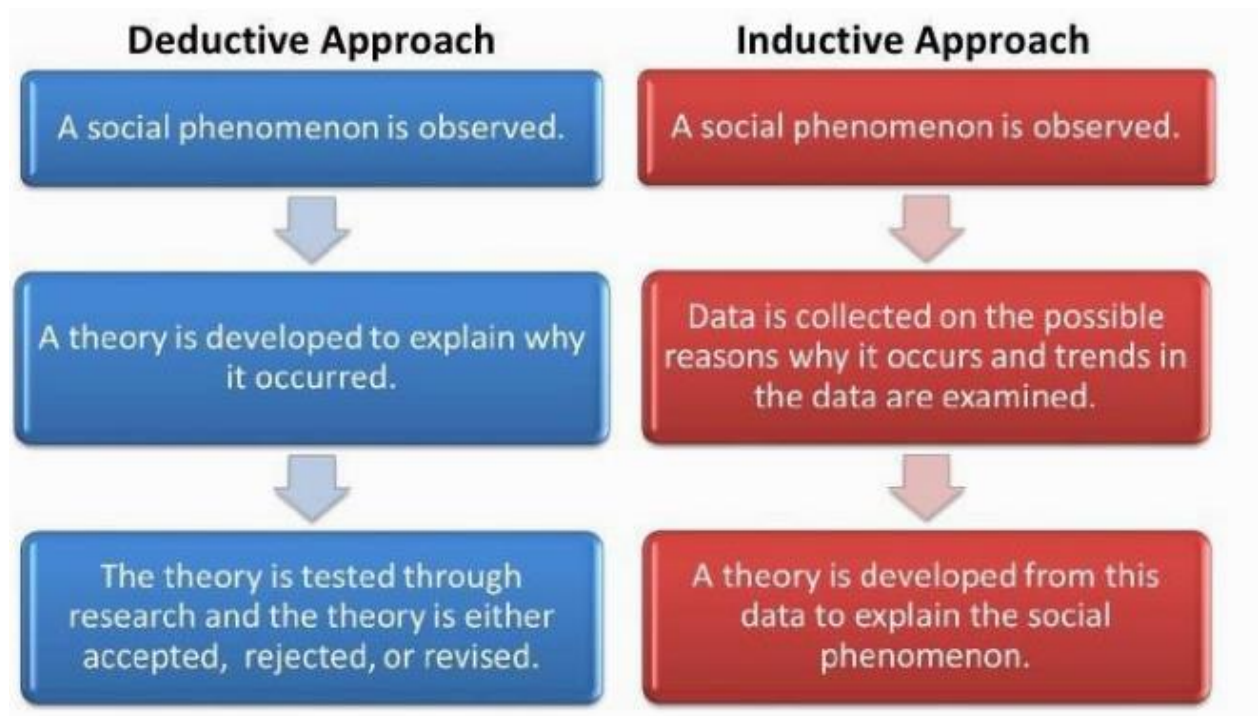


Figure 3.2: Research Approaches; Farooq (2019)

Restatement of research questions

1. What are the levels of anxiety secondary school students have in sports?
 - a. Is there any significant difference between girls' and boys' anxiety scores before the intervention?
 - b. Is there any significance difference between girls' and boys' anxiety scores after the intervention?
2. What are the factors that cause anxiety in sports performance in secondary school students in Nigeria?

3. What are the available coping methods of the effects that anxiety has on the sports performance of secondary school students in Nigeria?
4. To what extent does humor suppress anxiety among secondary school athletes in Nigeria?
5. To what extent could humor be adopted in managing students' anxiety in secondary school sports activities?
 - a. Is there any significant difference between the means of anxiety scores before and after the intervention?
 - b. Do the girls or boys benefit significantly more than their counterparts?
6. What is the mediating effect of humor in the relationship between anxiety and sport performance in secondary schools' students?
7. To what extent would humor affects the learning of basic sport skills in secondary school students in Nigeria?
 - a. Is there a significant difference between the means of basketball performance skills scores between girls and boys before and after the intervention?
 - b. Do the girls or boys benefit significantly more than their counterparts?

The above questions form the framework on which the present study is built upon

3.3 Research Design

The study is a mixed method research design where research questionnaires and designed questions are used to collect the data needed to help researcher make better and informed decisions. The research was meant to determine the cause-and-effect of the relationship on the impact of humor on anxiety and sport performance in Secondary Schools. It can be represented by a set of symbols (Campbell & Stanley, 2003, p. 13): Pretest (O1); Treatment (X), and Posttest (O2). The members of each group were randomly selected; while "O" represents observation. Pretest was

administered prior the introduction of humor (treatments) which achieved through cheerleaders, jokes, funny dressing, etc. Then posttest was carried out and the results compared.

In this study, the dependent variables were sports anxiety and sport performance. The independent variable which also constitutes the treatment was humor. Sports anxiety was measured using an already developed and tested questionnaire by Ronald Smith et al., (2006). The sport anxiety questionnaire has three constructs: worried, Concentration disruption, and somatic trait anxiety. Likewise, standardized instrument was adopted in testing sport performance using Sport performance Scales by Nahum (2016) comprises about 12 items; Basketball performance scale was also adopted from Voltmer and Watts (2004) while humor measuring scales was adopted in measuring humor. All these questions were standardized. In extent, measure other aspects of the study; a self-made questionnaire was developed by the researcher.

3.4 Population and Sampling

The study population comprises all the 799 public secondary schools in Lagos State, Nigeria including the major actors therein namely the Principals, Teachers and Students. In this study, only students will take part in the study. A stratified random sampling was adopted where names of the schools were written in pieces of paper and folded and put into a bold and mixed. Any school picked from the dip was the school selected to be used. The result led to selecting educational district IV. The district comprises 305 number of public senior secondary schools and total of 254,771 number of senior secondary school students. A fish bowl random sampling technique was adopted in selecting the students, that is, one from every fifty (50). From each of these 6 schools 70 students were selected. This led to a total sample of 420 studentss for the study. The sampling frame for this section is as presented in the table below:

Educational District IV (Using Random sampling technique)

Purpose	A	B	C	D	E	F	Total
Schools							
Students	70	70	70	70	70	70	420
for Questionnaire							

Table 3.1: Sampling frame for the study

3.5 Time Horizon

Saunders et al. (2016) define a researcher's temporal horizon as the duration of their intended study of a certain group. The duration of a study is a variable that may be adjusted by the researcher based on the objectives of the study and the specifics of the inquiry. Depending on the goals of the study, researchers might choose to study a certain moment in time or track a phenomenon over a longer span of time (Melnikovas, 2018). Differentiating longitudinal studies from cross-sectional studies is the period of time that has passed since the research began (Melnikovas, 2018). For this study, researchers used a cross-sectional approach. The data are collected simultaneously in a cross-sectional study. A single study over the course of many weeks or months might be conducted to address a research question. This study takes a more holistic approach than the longitudinal studies by including all possible factors. For instance, the study's respondents' pre- and post-exposure behaviors to novel technologies may be of interest. For the researcher attempting to predict how an emerging technology would affect a company, this would be a helpful piece of information. This kind of study is neither a cross-sectional survey nor a frozen-in-time observation. Longitudinally, over the period of several years. The data were gathered at various intervals, which explains the discrepancy. Particularly useful for understanding how a phenomenon changes over time, longitudinal studies are conducted to follow the phenomenon over an extended period. For example, this is the situation if the research question requires

repeated measurements of the dependent variable. Because of this, cross-sectional research is preferable than a longitudinal study for this particular enquiry.

3.6 Data Collection Tools

The study will adopt both anxiety test and performance test instruments.

The instrument for data collection was a self-made questionnaire. The questionnaire was designed to obtain relevant information from the respondents in line with the research questions and objectives of this study. It was structured following the modified five-point Likert type questionnaire. The questionnaire constitutes of four sections A, B, C and D. Section A consists of the personal information of the respondents including their age, gender, participant category, knowledge of basketball and attitude toward humor and anxiety. Section B is divided five sub-sections, each testing an aspect of the research objective and research questions.

Section C adapted items from already standardized questionnaire on sport anxiety test developed by Ronald Smith et al., (2006). The questionnaire also adopted the five-point Likert scale of Strongly Agree (AD) Agree (A) Strongly Disagree (SD) Disagree (D) and Undecided (UN). This questionnaire tests the participants' anxiety level prior or during sports. Section D creates room for open-ended question which allow the participant to express themselves from their personal experience on the subject matter.

3.5. Validity and Reliability

To ascertain whether or not the instrument measures what it proposed to measure, a face and content validity was carried out on the questionnaire designed. The researcher built a table of specification around the items in the instrument to determine if the items covered all aspects of the research questions and objectives. Same questionnaire was given to three psychology and physical education teachers to assess the contents

validity. Their suggestions for improvement, modification, rephrase or outright deleting of certain items in the questionnaire was adopted accordingly before distributing it for the pilot study.

Both the anxiety test and performance test instruments will be subjected to pilot study.

To carry out a pilot study, the questionnaire was given to 30 respondents, all students who were not participants in the main study but share similar characteristics with the study participants. The answered questionnaire was retrieved and a Split-half reliability method was adopted to test the internal consistency of the questionnaire. To achieve this, the entire retrieved questionnaire was numbered and the researcher separated odd number from even numbers. Each side comprises 15 questionnaires and the researcher compared the responses from each half to determine if the items in the questionnaire showed consistency.

Each construct of the questionnaire was subjected to principal components analysis with scales ranging between -1.0 and 1.0. This implies that the nearer the value is to one, the better and acceptable the construct is. The benchmark for acceptance was ± 0.60 and above. Also, Cronbach's Alpha was also adopted in testing the inner consistency of the items. Golafshani, (2003) revealed that the benchmark for acceptance cut across 0.60 to 0.70 below which the items were removed from the set.

3.6 Procedure for Data Collection

How basketball skills were measured.

The researcher obtained permission from the school authority selected for the study. With permission granted, the researcher personally administered the questionnaires to the six schools selected during school days. Each of the school was visited in one day. After distributing the questionnaire to those who consented to take part in the study,

the researcher waited to retrieve the distributed questionnaire the same day upon completion. Two weeks were allotted for data collection after which the researcher collated the data for analysis.

3.7 Data Analysis

The process of data analysis is quite methodological. First, you have to locate the information you need; for instance, it meant conducting an online survey. Steps in data extraction, cleaning, preparing, combining, and analysis (Islam, 2020). When analyzing massive volumes of data, the time it takes to do each of these steps by hand might add up quickly. It might be challenging to hone down on the exact bits of information you seek among the avalanche of data accessible online. So, in order to have complete command over the kind of replies to be studied within the framework of this research, a structured, closed-ended questionnaire is utilized. The modified 12-step approach to quantitative data analysis proposed by Samuel's (2020) is used to examine the data collected for this study.

Data analysis requires clear goals and objectives. The analysis in this study is structured in a way that makes it easy to understand and debate in relation to the study's stated goals and objectives and related research topics.

The second step is to collect information that is pertinent to the study's aims and queries. After settling on the goals/question, the following step is to figure out where and how to gather the data that will help answer the question. A structured questionnaire and an online survey were utilised to compile the data for this investigation. The survey was completed entirely through the internet by the participants.

Third, construct a raw data spreadsheet: Here, the acquired information must first be shown in a spreadsheet, with the various types of data in the columns and the individual occurrences in the rows. The information obtained from an online survey is often somewhat messy, therefore this is essential (Samuel, 2020).

Using descriptive analysis, the fourth step is to get insight into the data: Descriptive analysis is the first kind of analysis done in this research. Tables, charts, and summary statistics may all be derived from raw data using descriptive analysis. Instead, than focusing on one factor at a time, it may be more fruitful to compare and contrast many factors, as suggested by Samuel (2020). Variables in the data were compared in light of the study's objectives and hypotheses. The scope of this analysis is limited to what is strictly essential. Consequently, the selection of the chart and tables is based on their ability to respond to the research question.

Step 5: Informally interpret and report the results. At this point, it is sufficient to provide a short overview of the data and to explain how the descriptive statistics answer the research objectives. Samuel (2020) advised avoiding the use of statistical terminology like "significant" without testing and recommending the inclusion of charts, tables, and explanatory language wherever feasible. After descriptive analysis is complete, all further work is statistical analysis.

Step 6: Decide whether to do a group or individual analysis of the data collecting variables. The Likert five-point scale was used in the questionnaires for this analysis. Research might be simplified and perhaps improved by focusing on the scale values rather than the item data (which are often ordinal). Samuel (2020) recommended that researchers verify the validity and reliability of questionnaire scales before using them

in their studies. It is important to verify the validity of the questionnaire scales before using them.

Step 7: Recognize the Statistical Layout. The primary goals of statistical analysis are to compare and contrast groups and to investigate possible relationships between factors (sometimes referred to as a correlation or an association) (Islam, 2020). That the same people are being measured again raises another worry. Parametric and nonparametric tests, to round things out, are the two most typical varieties. Parametric tests provide better sensitivity but need verifying assumptions before they can be applied in reality (Häggström, 2017). To ensure the accuracy of the data, sophisticated statistical procedures are required. At this point, the researcher chooses an approach to analysis.

Eighth, start high-level descriptive statistics and double-check your test's assumptions: Parametric statistical testing requires that the distribution being examined be normal. The results of a histogram fit to a normal distribution support this. The Shapiro-Wilk model is used to characterize the norm (Halsey, 2019). Levene's test may be used to determine whether or not t-samples, variances, linear correlation, and regression are equal from a variety of perspectives (Häggström, 2017). Confidence intervals provide a means of bridging the gap between data analysis and statistical testing in an effort to reduce uncertainty.

The ninth procedure involves a statistical test of the null hypothesis: Statistical tests were performed on the hypotheses here. Chi-square analysis will be used to examine the hypotheses in this research. They are crucial for figuring out what factors influence what others. It has been decided to use SPSS's variable view for all analyses. The

probability value (or significance value) indicates how probable it is that the sample was really collected, and the confidence range was set at 95%. (Samuel, 2020).

The tenth step is to conduct the right test and analyze the results. The analysis's conclusion will be used to guide the interpretation. Thus, it will serve as the foundation for accepting or rejecting the hypotheses.

Eleventh, summarize your findings: It is necessary to disclose findings once they have been interpreted. Judging a null hypothesis requires providing crucial probability statistics, comparing them with the significance threshold, and returning to the original study subject (Häggström, 2017; Halsey, 2019). You shouldn't copy and paste your program's output into the Results section; instead, place that kind of material in an appendix. The researcher may also need to compare and contrast their findings with those of others in the literature.

Twelve, re-evaluate the information with the use of metacognition: Large, unstructured data sets are typical in applied statistics, necessitating several methods of analysis (Islam, 2020). In light of this, if the analysis is not producing the desired results, it is possible to make changes, such as conducting a new analysis using a different analytical tool or approach, or revising the research questions and assumptions.

All data collected were subjected to the quantitative analysis, using frequencies, percentages mean and standard deviation where applicable. Regressions, ANOVA were also adopted in data analysis, especially in checking the differences between the performances of boys versus girls. The study is two-semester research starting from spring semester 2020/2021 to fall semester 2021/2022.

3.8 Summary on the Methodology

The table below provides a summary of the research methodology adopted in this study

SN	Process	Method
1	Research Philosophy	Pragmatisms
2	Research Approach	Abduction
3	Research Method	Mixed Method Research
4	Research Strategy	Physical distribution of questionnaire
5	Research Time Horizon	Two-semester research beginning 2020/2021 through 2021/2022
6	Data Collection Methods	Questionnaire: closed-ended questionnaire adapted from pre-existing standardized questionnaire for similar study
7	Sample size	412 comprises students only
8	Data Analysis: Questionnaire (closed section)	Descriptive (frequency, percentage, charts and tables) Regression, ANOVA and correlation

Table 3. 2: Summary of research methodology

3.9 Ethical considerations

Fleming (2018) speaks on research ethical issues in details in his essay. The report talks on the ethical difficulties of doing research from the "inside," such as the inherent power dynamic and the requirement for constant communication with study participants. Ethical foundations for research involving human subjects need additional thought, however. Since humans are often used in scientific investigations, permission from a human research ethics board is essential. Before beginning to collect data from human participants, approval from a human research ethics committee is required. Such committees cannot give their stamp of approval to research that has already begun (with three exceptions: if the data was collected for non-research purposes and is now proposed to be used for research; if the data was gathered through a "chance encounter;" and if the data was already publicly available,

for example, already published). The following are examples of ethical issues discussed:

What are the limits of what we may expect morally?

Due to rising public expectations for transparency and accountability, academics' private, professional, and research-related conduct are under more scrutiny (Zegwaard, Campbell, and Pretti, 2017). To collect data from human participants for research purposes without first obtaining informed consent is to violate the Staff Code of Conduct at many universities (typically couched within the requirement of adherence to institutional regulations, which will include the Human Research Ethics regulation). Denzin and Lincoln's (2011) and Berg and Lune's (2017) work, as well as many other pieces of literature, address the ethics of certain research approaches and might serve as a starting point for researchers interested in building an ethical research methodology. The study was approved by the relevant ethics board, so the researcher knew it was safe to conduct.

Guaranteeing that all relevant details are shared before requesting approval

Informed consent is a cornerstone of moral philosophy (Denzin and Lincoln, 2011). The terms "informed" and "consent" are both crucial parts of the word "informed consent," and both should be given due consideration. Before consenting to participate, participants should be informed of the kind of the questions they will be asked, the intended use of their data, and the possible outcomes. By signing a written informed consent form, participants acknowledge that they have been made aware of their rights to access their data and their right to withdraw from the study at any time. By the process of gaining informed permission, the researcher and the subjects reach an understanding. Participants need to know (1) who the researchers are, (2) what the

study's purpose is, (3) what data will be gathered from them, (4) how that data will be obtained, and (5) how much of their time will be required.

What form the risks will take and how they'll be distributed.

In order to gain participants' trust, researchers often employ concise, well-written information sheets that are both participant-specific and devoid of academic jargon. Active rather than passive consent (i.e., a "opt in" rather than a "opt out"; the latter remains highly contentious), information on the right to withdraw at any time without reason (including withdrawing data already provided), assurances that participant identity will be kept confidential, clarity of ownership of the data (participants own their raw data, researchers own the analysis data), and transparency about the purpose of the research are all essential components of ethical research.

The Confidentiality, Anonymity, and Safety Problem

More than just their names, the participants' anonymity must be safeguarded. When people's identities are hidden, they are safer from violence. The words "anonymous" and "confidential" are often used interchangeably despite their distinct meanings. Participants' identities must be concealed from the researchers if they are to remain anonymous. In this particular case, anonymity must be maintained at any costs. Researchers, bystanders, participants, and host institutions all need to feel safe throughout the design phase of a study. Material damage, lost productivity, mental anguish, and public disgrace are just some of the possible outcomes. Every effort must be made to minimise, isolate, and decrease the risks, and all participants must be made aware of them.

Interactional difficulties arising from competing priorities

Disagreement over findings is more likely when many scientists are involved in research. Researchers who anticipate a conflict of interest owing to existing links or past conduct should disclose the nature and extent of the conflict in great detail within an application for ethical clearance so that the committee may advise them on how to minimise the likelihood of bias. Eliminating a power differential is the only sustainable way to end a dispute. The researcher likely waited until she had clearance from the appropriate ethical review board since it is common practise for professors to have other responsibilities outside of the classroom.

As the data were collected and analysed according to the procedure and without any intervention from the researcher's prejudice or other agendas, the conclusions of this study may be believed. After being given the opportunity to amend their minds, all of the participants ultimately agreed to take part. The participants' names were kept secret during the whole research process (Bryman and Bell, 2015). All used sources are properly cited in this research.

Finally, the researcher received a letter for permission to carry on with the study from the ethics committee which is attached at the appendix of this study. Data for the study was collected as proposed and analysed objectively without any personal influence from the researcher. All work consulted during this study was duly referenced. The similarity index is within the limit allowed by the school.

Conclusion

The researcher's methodology for gathering data for this study was outlined, including the selection of a representative sample, the selection of an appropriate measuring tool, the testing of that tool's validity and reliability, the data collection process itself, and the analysis strategy that would be employed. The next chapter shall focus on the presentation of the data collected, the analysis therein and discussion of findings.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1. Presentation of Data

Table 4.1: Respondents' Age classified by their gender in percentage (N=411)

Gender and Age	Male		Female		Total % from both Gender
	F	(%)	F	(%)	
Less than 10 years	8	2.00	12	2.9	4.9
10 but less than 15 years	133	32.3	140	34.1	66.4
15 but less than 20 years	45	11.00	49	11.9	22.9
20 years and above	12	2.9	12	2.9	5.8
Total	198	48.2	213	51.7	100.0

Source: Field survey, 2021

Table 4.1 presents the respondents' age as classified by their gender. This shows that the students who took part in the study comprise both male (48.2%) and female (51.8%) respectively. Their ages varied between less than 10years. Majority of the participants were from the age group 10 but less than 15years (66.4%) followed by those from within the age group 15 but less than 20 years (23.9%). About 5.8% of the respondents were within the age group 20 years and above and 4.9% of the participants were less than 10years.

Do you have basketball team in your school?

Table 4.2: Schools with basketball team

Basketball team	Frequency	Percentage
Yes	404	98.3
No	7	1.7
Total	411	100

Field survey 2021

The table indicated that, of all the participants in the study, 98.3% have basketball team in their respective schools with exception of 1.7% who indicated that their school does not have basketball team. Base on this response, about 1.7% are not suitable in the study since their school does not even have a basketball team, a basic criterion for participation in the study. This shows that about 98.3% of the respondents have basketball team in their schools and thus suitable for this study.

ITEM	Not at all	Somewhat	Moderately So	Very much so
Worried				
I have self-doubts	50	61	100	200
I am concerned that I may not do as well in competition as I could	7	49	173	182
Thoughts of doing poorly interfere with my concentration during	3	19	78	311
I'm concerned about choking under pressure	67	97	99	148
I'm concerned about performing poorly	44	45	99	223
I'm worried about reaching my goal	39	43	98	231
I'm concerned that others will be disappointed in my performance	17	19	97	278
Mean	32.43	47.57	106.29	224.714
Standard deviation	23.92	26.726	30.42	55.748
Concentration disruption				
During competition, I find myself thinking about unrelated things	34	11	109	257
My mind wanders during sport competition	33	14	90	274
While performing, I often do not pay attention to what's going on	45	18	119	229
I have lapses of concentration during competition because of nervousness	58	7	87	259
I'm concerned I won't be able to concentrate	29	24	87	271
Mean	39.8	14.8	98.4	258.0
Standard deviation	11.8	6.50	14.7	17.80
Somatic trait anxiety				
I feel nervous	23	32	91	265
My body feels tense	23	19	32	337
I feel tense in my stomach	33	49	93	236
My heart races	7	33	88	283
I feel my stomach sinking	28	88	97	198
I sometimes find myself trembling before or during a competitive event	47	44	89	231
My body feels tight	21	47	88	255
My stomach gets upset before or during a competitive event	34	71	109	197
My heart pounds before competition	33	54	110	214
Mean	27.7	48.6	88.6	256.2
Standard deviation	11.1	20.9	22.8	44.9

RQ1: What are levels of anxiety secondary school students have in basketball?

**Table 4.2: The level of anxiety secondary school students has in basketball
Field survey, 2021**

The Table above presents the respondents level of anxiety which was measured using means and standard deviation. Three dimensions of anxiety including ‘worried’, ‘Concentration disruption’ and somatic trait anxiety. The instrument was adopted from Smith, Smoll, and Schutz (2010) sport anxiety scales. In terms of “worry”, the study indicated that those who are not worried at before sports have a mean score 32.43 with a standard deviation of 23.9; those who are somewhat worried had a mean score 47.57 and a standard deviation 26.73; why those who were moderately worried had a mean of 106.29 with a standard deviation of 30.42. Finally, those who are very worried made up a mean score of 224.714 and a standard deviation of 55.748. This shows that although some players are not usually tense prior basketball, a larger number of players are very worried. The reasons for their worried varied significantly; some have self-doubt, some are anxious because of the competition, some think too much, among others.

Another type of anxiety is ‘concentration disruption.’ This set of players occasionally loses concentration due to anxiety. The result of this study indicated that those who are not affected at all by this type of anxiety has a mean and standard deviation score of 39.8 and 11.8 respectively; those who are somewhat affected by this type of anxiety made up a mean and standard deviation of 14.8 and 6.5 respectively. Those who are moderately so affected by this type of anxiety constitute a mean score and standard deviation of 98.4 and 14.7 respectively; whereas those who are greatly affected have a mean of 258.0 and 17.8 respectively. This shows that part of the anxiety experience by players prior or during basketball march include concentration disruption.

Finally, the respondents were tested of Somatic trait anxiety. The result of this study revealed a mean and standard deviation of 27.7 and 11.1 respectively to constitute those who are not affected or exhibit this type of anxiety prior sport. Those who are somewhat affected have a means of 48.6 with a standard deviation of 23.9; those who were moderately exhibit this behavior to constitute a mean of 88.6 with a standard deviation of 22.8. Finally, those who are very much so affected had a mean score of 256.2 and a standard deviation of 44.9.

This result concludes that majority of the participants in this study exhibit anxiety such as worried, concentration disruption and somatic trait anxiety. Although there are some who are not affected at all; the fact remains that majority of the players are greatly affected by this anxiety.

Table 4.4

ANOVA Table

			Sum of		Mean		
			Squares	Df	Square	F	Sig.
Anxiety worried* Gender*HMS	Between Groups	(Combined)	7.984	3	2.661	1.872	.134
	Within Groups		578.527	407	1.421		
	Total		586.511	410			
Anxietyworried2 * Gender*HMS	Between Groups	(Combined)	2.478	3	.826	.568	.636
	Within Groups		591.615	407	1.454		
	Total		594.092	410			
Anxietyworried3 * Gender	Between Groups	(Combined)	8.303	3	2.768	2.030	.109
	Within Groups		554.840	407	1.363		
	Total		563.144	410			
Anxietyworried4 * Gender	Between Groups	(Combined)	8.650	3	2.883	2.094	.100
	Within Groups		560.333	407	1.377		
	Total		568.983	410			
Anxietyworried5 * Gender	Between Groups	(Combined)	2.873	3	.958	.693	.557
	Within Groups		562.548	407	1.382		
	Total		565.421	410			
Anxietyworried6 * Gender	Between Groups	(Combined)	.942	3	.314	.251	.861
	Within Groups		508.873	407	1.250		
	Total		509.815	410			
Anxietyworried7 * Gender	Between Groups	(Combined)	2.704	3	.901	.594	.619
	Within Groups		617.856	407	1.518		
	Total		620.560	410			
Anxietyconcentrationdisruption1 * Gender	Between Groups	(Combined)	6.138	3	2.046	1.500	.214
	Within Groups		555.176	407	1.364		
	Total		561.314	410			
Anxietyconcentrationdisruption1 * Gender	Between Groups	(Combined)	5.211	3	1.737	1.462	.224
	Within Groups		483.465	407	1.188		
	Total		488.676	410			
Anxietyconcentrationdisruption1 * Gender	Between Groups	(Combined)	2.430	3	.810	.555	.645
	Within Groups		594.451	407	1.461		
	Total		596.881	410			
Anxietyconcentrationdisruption1 * Gender	Between Groups	(Combined)	4.675	3	1.558	1.071	.361
	Within Groups		592.288	407	1.455		
	Total		596.964	410			
Anxietyconcentrationdisruption1 * Gender	Between Groups	(Combined)	3.284	3	1.095	.853	.466
	Within Groups		522.633	407	1.284		
	Total		525.917	410			
Anxietyconcentrationdisruption1 * Gender	Between Groups	(Combined)	1.968	3	.656	.479	.697
	Within Groups		557.652	407	1.370		
	Total		559.620	410			

AnxietySAT1 * Gender	Between Groups	(Combined)	7.225	3	2.408	1.657	.176
	Within Groups		591.626	407	1.454		
	Total		598.852	410			
AnxietySAT2 * Gender	Between Groups	(Combined)	.727	3	.242	.184	.908
	Within Groups		537.365	407	1.320		
	Total		538.092	410			
AnxietySAT3 * Gender	Between Groups	(Combined)	1.357	3	.452	.349	.790
	Within Groups		527.957	407	1.297		
	Total		529.314	410			
AnxietySAT4 * Gender	Between Groups	(Combined)	17.295	3	5.765	4.480	.004
	Within Groups		523.742	407	1.287		
	Total		541.036	410			
AnxietySAT5 * Gender	Between Groups	(Combined)	1.822	3	.607	.443	.722
	Within Groups		557.818	407	1.371		
	Total		559.640	410			
AnxietySAT6 * Gender	Between Groups	(Combined)	1.385	3	.462	.347	.791
	Within Groups		540.985	407	1.329		
	Total		542.370	410			
AnxietySAT7 * Gender	Between Groups	(Combined)	4.311	3	1.437	1.045	.372
	Within Groups		559.636	407	1.375		
	Total		563.946	410			
AnxietySAT8 * Gender	Between Groups	(Combined)	1.345	3	.448	.331	.803
	Within Groups		550.947	407	1.354		
	Total		552.292	410			
AnxietySAT9 * Gender	Between Groups	(Combined)	2.106	3	.702	.512	.675
	Within Groups		558.454	407	1.372		
	Total		560.560	410			

Is there any significant difference between girls' and boys' anxiety scores before the intervention?

SPSS output, 2021

The study also investigated whether the anxiety levels of all three dimensions of anxiety is affected by the gender of the participants. The ANOVA table above shows that the P-values of all the items in the table with exception of one (**AnxietySAT4 * Gender**) whose p-value is lower than the significant value; the rest of the items in the table has a p-value greater than 0.05 which is the level of significant. This shows that

there is no significant difference between girls and boys anxiety scores before the intervention.

B. Is there any significance difference between girls' and boys' anxiety scores after the intervention?

			Sum of		Mean		
			Squares	Df	Square	F	Sig.
worried * Gender	Between	(Combined)	8.95	3	2.678	1.872	.384
	Groups						
	Within Groups		577.561	407	1.921		
	Total		586.511	410			
Concentration- disruption * Gender	Between	(Combined)	4.477	3	.826	.868	.836
	Groups						
	Within Groups		589.615	407	1.454		
	Total		594.092	410			
Som-T-A * Gender	Between	(Combined)	28.304	3	2.668	2.130	.509
	Groups						
	Within Groups		534.840	407	1.363		
	Total		563.144	410			

SPSS output, 2021

Again, the study investigated whether or not there is a significant difference between girls' and boys' anxiety scores after the intervention, and the result indicated that there was none as the p-values (0.384; 0.836; and 0.509) respectively are much greater than the significant level 0.05. We conclude therefore that there is no significant difference between boys' and girls' anxiety scores after the intervention.

2. What are the factors that cause anxiety in sports performance in secondary school students in Nigeria?

Table 4.6: Respondents opinion on the factors that cause anxiety in sports performance in secondary school students in Nigeria

ITEM	strongly agreed/agree	U N	Disagree Strongly Disagree	Percentage in agreement	Mean In agreement	Decision
Competition	370	18	16	91.6	4.58	Accept
Too much expectations on the player	367	19	18	90.8	4.54	Accept
The fear of losing	355	40	9	87.9	4.39	Accept
The urge to win	388	2	14	96.0	4.80	Accept
The announcement of the result	390	4	10	96.5	4.83	Accept
Average				92.56	4.628	Accept

Field survey, 2021

The second research question identified the factors that cause anxiety in sports performance in secondary schools' students in Nigeria. As indicated in table 4.4 above, all the items in the table had above 87% agreement to the statement as the respondents supports that competition (91.6%); too much expectations on the athletes (90.8%); the fear of losing (87.9%); the urge to win (96.0%), and the announcement of the result (96.5%) are some of the factors that causes anxiety in sports performance in secondary school in Nigeria. This result confirms the result of some earlier studies such as Hasanah and Refanthira (2019); Muhammad, Alamgir, Sami & Salahuddin, (2017); Kanniyar (2015); Georgakaki & Karakasidou, (2017) and Zhang, Woodman and Roberts (2018) respectively who found the aforementioned factors as causes of sports anxiety and should therefore be eliminated at all cost.

3. What are the available coping methods of the effects that anxiety has on the sports performance of secondary school students in Nigeria?

Table 4.7: Respondents opinion on the available coping methods of the effects that anxiety has on the sports performance of secondary school students in Nigeria

ITEM	strongly agreed/agree	U N	Disagre e Strongl y Disagre e	Percentag e in agreement	Mean In agreemen t	Decisio n
Tension reduces when it is just a friendly match	382	2	20	95.5	4.72	Accept
Anxiety reduces when we are on the winning side	377	7	20	94.3	4.66	Accept
Anxiety reduces when the cheerleader s sing while we play	377	23	4	94.3	4.66	Accept
Anxiety reduces when we are not compelled to practice too much	368	16	20	92.0	4.55	Accept
Our anxiety reduces when we get the support of our audience instead of being pressured	380	1	23	94.1	4.76	Accept
Average				94.04	4.67	Accept

Field Survey, 2021

The table above presents the respondents opinion on the available coping methods of the effects that anxiety has on the sports performance of secondary school students in Nigeria. With an average of 94.04% and a mean score of 4.67, all the items in the table

were accepted. This implies that the following are methods that could be adopted in coping with the effect of anxiety on sports performance: making the sport more friendly than competition, being on the winning side reduces anxiety; engaging the services of cheerleaders to make the environment more entertaining, not being forced to practice beyond the limit one can carry also reduces anxiety. Finally, the study indicated that anxiety reduces when the athletes get the support of their audience instead of being pressured. The result confirms the study by Horwitz, (2017) and Edwards and Jones (2017) respectively, who shared similar findings.

4. To what extent does humor suppress anxiety among secondary school athletes in Nigeria?

Table 4.8: The extent to which humor suppresses anxiety among secondary school athletes in Nigeria

ITEM	strongly agreed/ agree	UN	Disagree Strongly Disagree	Percentage in agreement	Mean In agreement	Decision
I forget my fears when the environment is humorous	377	20	7	94.3	4.66	Accept
When I laugh, my heart calm down and make me see things clearly	368	12	24	92.0	4.55	Accept
Humor makes basketball a game that it is and not competition	380	4	20	94.1	4.76	Accept
Humor makes us cooperate as team with the zeal to outshine others	382	11	11	95.5	4.72	Accept
Average				94.04	4.67	Accept

Field Survey, 2021

The result presented in Table 4.8 above indicates the respondents' opinion on the extent to which humor suppresses anxiety among secondary school athletes in Nigeria. The result indicated on the table above shows that people tend to forget their fears when the environment is humorous; laughing helps to calm the heart and make it easier to see things clearly. The study further revealed that humor makes basketball a game that it is and not competition as well as allows athletes to cooperate as team with the zeal to outshine others. This result implies that humor is inevitable in sports and thus need to be included to minimize tension. This result supports the proposition made by Tagalidou, Distlberger, Loderer and Anton-Rupert (2019) respectively. Their study revealed that humor plays essential roles in controlling anxiety and improving performance. In same vein, the result confirms that of Edwards and Jones (2017)'s study who found out that humor in sport coaching plays essential roles in enhancing performance.

5. To what extent could humor be adopted in managing students' anxiety in secondary school sports activities?

- a. **Is there any significant difference between the means of anxiety scores before and after the intervention?**

Table 4.9 ANOVA Table

Source	DF	Sum of Square (SS)	Mean Square (MS)	F Statistic (df₁,df₂)	P-value
Anxiety*performance before intervention	1	58033.1329	58033.1329	4.6229 (1,10)	0.05705
Anxiety*performance after intervention	1	8.2216	8.2216	0.0006549 (1,10)	0.08801
Error	10	125533.4148	12553.3415		
Total	12	183574.7692	15297.8974		

SSPS Output, 2021

The ANOVA table above indicates P-value = 0.05705 and 0.029801 respectively. In the first case, the p value is above 0.05 and thus, indicates that anxiety affect performance prior intervention. When the intervention was introduced, the p-value is 0.8801 which is greater than the significant level; indicating that anxiety did not affect performance after the intervention.

A Do the girls or boys benefit significantly more than their counterparts?

Table 4.10: ANOVA Table

Source	DF	Sum of Square (SS)	Mean Square (MS)	F Statistic (df ₁ ,df ₂)	P-value
Intervention*Gender1	1	24347.9185	24347.9185	1.6114 (1,24)	0.2165
Intervention*Gender2	1	396.5845	396.5845	0.02625 (1,24)	0.8727
Error	24	362644.0155	15110.1673		
Total	26	387388.5185	14899.5584		

SSPS Output, 2021

The difference between the averages of all groups is not big enough to be statistically significant. A non-significance result cannot prove that H_0 is correct, only that the null assumption cannot be rejected. The p-value equals 0.2165, $p(x \leq 1.6114) = 0.7835$). It means that the chance of type I error, rejecting a correct H_0 , is too high: 0.2165 (21.65%). High P-value supports null hypothesis (H_0). The p-value = 0.8727, ($p(x \leq 0.02625) = 0.1273$) indicating that the chance of type I error, rejecting a correct H_0 , is too high: 0.8727 (87.27%).

5. What is the mediating effect of humor in the relationship between anxiety and sport performance in secondary schools' students?

Table 4.11: The effect of anxiety on Sport performance as mediated by humor

Constructs	Path From	Path To	Standardized path coefficient	Significant level	R ²
γ path					
Control Variables					.037
Demographic	Age	Sport performance	.028	$p > .04$	
	Gender	Sport performance	.073	$p < .010$	
Main effects					.562
Anxiety	Anxiety-Worried	Sport performance	-.367	$p < .01$	
	Anxiety-concentration-disruption	Sport performance	-1.384	$p < .010$	
	Anxiety-somatic-trait-anxiety	Sport performance	-.430	$p > .02$	
Humor	Humor1	Sport performance	.024	$p > .01$	
	Humor2	Sport performance	.151	$p < .01$	
	Humor3	Sport performance	.036	$p > .001$	
	Humor4	Sport performance	.075	$p > .010$	
Anxiety*Humor		Sport performance	.763	$p < .01$	
Anxiety * humor*Sport performance		Sport performance	1.624	$p < .01$	

Field survey 2021

Table 4.11 above shows that path coefficient of the relationship between anxiety and sport performance as mediated by humor. As shown in the table, demographic data such as gender and age served as the control variables, there are also the independent variables such as anxiety, and the mediating variable which is humor. As indicated in the table, the interactions between the control variable, the independent variables and the mediating variable accounted for 59.97% of the variance in sport performance ($R^2 = 0.599$). The study showed that the control variables, age of the respondents ($\gamma = .028$, $p < .04$) as well as gender ($\gamma = 0.073$, $p < .010$)

Have significant positive relationship with Sport performance.

On the main effect variables, the study revealed a significant positive relationship with all the variables in humour and sport performance as indicated the table; while the variables in anxiety had negative effect on sport performance. This implies that anxiety has significant negative relationship with sport performance. This implies that the higher the level of anxiety, the lower the performance of the respondents in sport. By this result, it is clear that anxiety does not promote good performance in sport and therefore should be eliminated as much as possible.

On the other hand, humor indicated significant positive relationship with sport performance as showed in the table above. This implies that the more the humor the greater the performance.

Finally, in the relationship between anxiety and performance, humor plays a mediating role which result in positive sport performance ($\gamma = 0.763$; $p < .01$). The relationship is accepted. In same vein, the relationship between sport performance and anxiety is mediating by level of interest. The result indicated a significant positive relationship ($\gamma = 1.624$; $p < .01$). This implies that the higher the humor, the more likely the respondents overcome their anxiety.

6. To what extent would humor affects the learning of basic sport skills in secondary school students in Nigeria?

Table 4.12: The respondents' opinions on the extent to which anxiety affects the learning of basic sport skills in secondary school students in Nigeria

ITEM	strongly agreed/agree	UN	Disagree Strongly Disagree	Percentage in agreement	Mean In agreement
Anxiety takes away the fun of the game	382	8	14	95.5	4.72
Anxiety increases tension that affects athletes' sense of judgment	377	9	18	94.3	4.66
It makes athletes clumsy	377	20	7	94.3	4.66
The anxiousness to get it right only increases chances of mistakes	368	12	24	92.0	4.55

Athletes becomes too competitive leading to foul plays	380	4	20	94.1	4.76
Average				94.0	4.67

Field survey, 2021

The final research question was formulated to investigate the respondents' opinions in the extent to which performance anxiety could affect the learning of basic sport skills in secondary school students in Nigeria. With an average of 94.0% and average mean of 4.67, the result from this study revealed that: Anxiety takes away the fun of the game; increases tension that affects athletes' sense of judgment; makes athletes clumsy; leads to anxiousness to get it right only increases chances of mistakes; and finally, athletes become too competitive leading to foul plays. **Is there a significant difference between the means of basketball performance skills scores between girls and boys before and after the intervention?**

Source	Degrees of Freedom (DF)	Sum of Squares (SS)	Mean Square (MS)	F-Stat	P-Value
Between Groups	1	7905.3333	7905.3333	0.9186	0.3604
Within Groups	10	86060.3333	8606.0333		
Total	11	93965.6666			

SPSS output

P-value is higher than the significant value of 0.05. This implies supporting the null hypothesis. The difference between the averages of all groups is not big enough to be statistically significant. The p-value equals 0.3604, ($p(x \leq 0.9186) = 0.7835$). It means that the chance of type I error, rejecting a correct H_0 , is too high. This shows that there is no significant difference between the means of basketball performance skills scores between girls and boys before and after the intervention. This could mean that both boys and girls react alike to both humor and anxiety.

a. Do the girls or boys benefit significantly more than their counterparts?

Source	DF	Sum of Square (SS)	Mean Square (MS)	F Statistic (df ₁ ,df ₂)	P-value
Intervention*Gender1	1	24347.9185	24347.9185	1.6114 (1,24)	0.2165
Intervention*Gender2	1	396.5845	396.5845	0.02625 (1,24)	0.8727
Error	24	362644.0155	15110.1673		
Total	26	387388.5185	14899.5584		

The difference between the averages of all groups is not big enough to be statistically significant. A non-significance result cannot prove that H_0 is correct, only that the null assumption cannot be rejected. The p-value equals 0.2165, ($p(x \leq 1.6114) = 0.7835$). It means that the chance of type I error, rejecting a correct H_0 , is too high: 0.2165 (21.65%). High P-value supports null hypothesis (H_0). The p-value = 0.8727, ($p(x \leq 0.02625) = 0.1273$) indicating that the chance of type I error, rejecting a correct H_0 , is too high: 0.8727 (87.27%).

CHAPTER FIVE

Discussion

Guided by seven research questions, the study made use of questionnaire to elicit response from the respondents. This section reviewed the findings from the analysis of data collected as well as compared the result with existing literature. The first research questions investigated the level of anxiety that secondary school students has in sports, especially basketball. Three dimensions of anxiety including ‘worried’, ‘Concentration disruption’ and somatic trait anxiety. Based on the outcome of this study, Majority of the respondents indicated very high level of worry, concentration disruption and somatic trait anxiety as indicated in their high mean score (224.714; 256.2; and 256.2), compare with those who does not exhibit anxiety (32.43; 39.8, and 88.6) respectively. Based on this result, the study conclude that anxiety interfere with secondary school students’ sports performance. The result supports previous studies such as Hasanah and Refanthira (2019); Muhammad et al, (2017); Kanniyar (2015); Georgakaki and Karakasidou, (2017) and Zhang, Woodman and Roberts (2018) respectively.

Again, the study investigated whether or not there is a significant difference between girls’ and boys’ anxiety scores after the intervention, and the result indicated that there was none as the p-values (0.384; 0.836; and 0.509) respectively are much greater than the significant level 0.05. We conclude therefore that there is no significant difference between boys’ and girls’ anxiety scores after the intervention.

Again, the response received from the questionnaire regarding the factors that cause anxiety in sports performance in secondary school’s students supports that of previous studies such as: Hasanah and Refanthira (2019); Muhammad et al, (2017); Kanniyar

(2015); Georgakaki and Karakasidou, (2017) and Zhang, Woodman and Roberts (2018) respectively.

The third objective was meant to investigate the coping methods of the effects that anxiety has on sports performance of secondary school students in Nigeria. The result from revealed coping methods such as: friendly match, less competitive, being on the winning side reduces anxiety; engaging the services of cheerleaders to make the environment more entertaining, not being forced to practice beyond the limit one can carry also reduces anxiety. Others are: eating snacks to calm down, listening to music, engaging in conversation with friends to calm their nerve, some give themselves pep talks to ease their tension, some take soft drink, some just breathe in and out continuously to calm down while some get calm into the game without having to do anything. However, both results acknowledged that the cheerleaders dance, and some audience singing helps them to calm down. This result supports existing studies such as Horwitz, (2017) and Edwards and Jones (2017) respectively, who shared similar findings.

The fourth research question investigated the extent to which humor suppresses anxiety among secondary school athletes in Nigeria. The result supports existing literature such as Tagalidou, Distlberger, Loderer and Anton-Rupert (2019) respectively and Edwards and Jones (2017)'s study found out that humor in sports coaching plays essential role in enhancing sports performance.

For research question five, the result, to a large extent indicated that humor enhances students' performance in secondary school sports activities, and as such agreed with Tagalidou et al., (2019) and Edwards and Jones (2017) respectively who share similar result.

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Finally, the result of this study indicated that anxiety affects their ability to learn basic sport skills as it takes away the fun in the game, increases tension that affects athletes' sense of judgment; makes athletes clumsy; leads to anxiousness and anxiety which only increases chances of mistakes and foul plays. Both results therefore agreed with only slight differences or additions to complement one another. The overall result therefore concludes that humor plays significant role dissipating anxiety and enhancing overall students' performance in sport. The result from both studies supported some existing literature that found humor as essential in calming tension and anxiety such as: Mei-Yao et al (2017); Morgan and Joe (2012); and Nancy (2012) respectively.

CHAPTER SIX

Conclusion and Recommendations

6.1 Introduction

The final chapter of this study summarizes the study as well as draws conclusions from the findings of the study. It also made recommendations, suggestions for further studies as well as discusses the implication of the present study to theory and practices.

6.2 Summary

The work is summarized into chapters. The first chapter is the introduction of the whole work with the statement of problem and significance of the study included. Furthermore, it has the aims and objectives of the study and the research questions and limitations of the study. The second chapter is the literature review where related literature to the study is made. Here, information gotten was on conceptual, empirical and theoretical and it was based on the key words from the research topic. Furthermore, the third chapter conveyed the research methodology where the research philosophy and approach are vividly explained, research design and questions to be asked were also explained. Additionally, population and sample, data collection tools were clearly explained here. Also, the reliability and validity of the instruments including the procedure for data collection and analysis were vividly explained. The forth chapter dealt with data presentation and analysis. The data gotten from the field was presented and the analysis was done using SPSS and ANOVA respectively to get to the result of the work. In the fifth chapter, the discussion of the work was made and the result of findings were clearly presented. Finally, chapter six contained the summery, conclusion and recommendations of the work.

6.3: Conclusions

Drawing inference from the result of this study, the researcher concluded that humor has significant mediating role to play, especially in dissipating anxiety that is usually triggered by competition, fear of failure, anxiousness to win, too many expectations from fans and clients, among others. With humor, the athletes' tensions are eased which in return improves their overall performance in sports, especially in secondary school. This is important because at secondary, individual students began making serious decisions on their future careers. Giving them the right training and coaching will enable them overcome their fears and anxiety for better performance.

6.4. Recommendations

Based on the aforementioned findings on this study and the conclusion drawn, the researcher made the following recommendations:

- The students should be made aware of the possibility of anxiety and how to cope with it should such arise in the future to better enhance their performance
- The coaches/teachers should recognize the role of humor in dissipating anxiety and thus invest on inviting clowns who could help in ensuring that the atmosphere for the sport is calm and relaxing.
- Athletes should be given pep talks prior to a sport and be encouraged to have fun playing instead of strict mandate to win the game
- Fans, coaches, and teachers should endeavor to encourage rather than pressure the athletes as pressure will only affect their performance negatively

6.5 Implication to Theories

The study supports the premise proposed by the theories identified in this study. For instance, the Relief theory which proposed that humor reduces tension or stress (Lynch, 2002). The result of this study has clearly supported this propositions that,

humor provides a relief of tension. All the built of anxiety athletes suffer prior playing could be release through laughter. Gould and Diefenbach (2002) also approved that relief humor could be applied in sports, especially when faced with the anxiety associated with competition. This study therefore supports that humor is importance in sport to relieve tension among participants and lighten the heavy atmosphere that becloud not only the athletes but also the spectators and fans.

6.6 Implication to Practice

The study is an eye opener to institutions, especially secondary schools sport masters and teachers who are in the habit of pressuring athletes to practice beyond their limits in order to win the trophy for the school to retrace their steps and try creating a tension free atmosphere for better performance. The study has made several recommendations and suggestions on how best to introduce humor and tension-free atmosphere, which, when put into practice will improve the athletes' performance.

6.7 Suggestions for Future study

The present study was limited on students, the study therefore suggests that a further study be carried out on same topic but using other participants like teachers, sport masters, coach, etc. This group of people will offer in-depth and valuable information on the subject under investigation. Also, the study was limited to basketball, including other sports such as race, football, badminton, among others will give wider range of information.

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Appendix 1

Permission by Ronald E Smith

----- Forwarded message -----

From: **Ronald E. Smith** <resmith@uw.edu>

Date: Fri, Dec 25, 2020, 9:13 PM

Subject: Re: PERMISSION TO USE SPORTS ANXIETY SCALE-2.

To: Philip Chall <challdakwo0003@gmail.com>

Dear Philip,

Permission is granted.

The mean score for the scale is around 42, with an SD of about 8 in various samples. Thus a score of 15 would indicate very low anxiety and a score of 50 would be high anxiety.

Best wishes,

Ronald E. Smith, Ph.D.
Professor Emeritus, Psychology
University of Washington
Seattle, WA 98195-1525
resmith@uw.edu

=====

Appendix 2

Questionnaire

THE EFFECTS OF HUMOR AND ANXIETY PERFORMANCE IN SPORTS IN SECONDARY SCHOOLS IN NIGERIA

Dear Sir/Ma,

I am carrying out a study on the effects of humor and anxiety performance in sports in secondary schools in Nigeria. The questionnaire is purely for academic purpose, it will not be used for any other purpose not otherwise stated. All information will be kept confidential.

SECTION A: DEMOGRAPHIC INFORMATION

Tick (✓) as applicable

1. Sex:
 - a. Male ()
 - b. Female ()
2. Age Group:
 - a) Less than 10 years ()
 - b) 10 but less than 15 years ()
 - c) 15 but less than 20 years ()
 - d) 20 years and above ()
3. Do you have basketball team in your school?
 - a). Yes b). No

SECTION B: Tick against the option that best describe your level of agreement of the statement

B. Anxiety test measure

variables	Not At All	Somewhat	Moderately So	Very Much So
Worried	1	2	3	4
I have self-doubts				

I am concerned that I may not do as well in competition as I could				
Thoughts of doing poorly interfere with my concentration during				
I'm concerned about choking under pressure				
I'm concerned about performing poorly				
I'm worried about reaching my goal				
I'm concerned that others will be disappointed in my performance				
Concentration disruption				
During competition, I find myself thinking about unrelated things				
My mind wanders during sport competition				
While performing, I often do not pay attention to what's going on				
I have lapses of concentration during competition because of nervousness				
I'm concerned I won't be able to concentrate				
Somatic trait anxiety				
I feel nervous				
My body feels tense				
I feel tense in my stomach				
My heart races				
I feel my stomach sinking				
I sometimes find myself trembling before or during a competitive event				
My body feels tight				
My stomach gets upset before or during a competitive event				
My heart pounds before competition				

Section C: Sport performance Scales

variables	Not At All satisfied	Somewhat satisfied	Moderately So satisfied	Very Much So satisfied
The extent to which I can rate my satisfaction of my sporting performance this week				
The extent of satisfaction with my contribution to the success of the team this week				
The extent to which my capabilities truly reflected in this week sport activities				

The extent to which I contribute to improving the performance of the players around me this week				
The extent to which I am satisfy with my functioning during the challenging moments this week				
The extent to which I think my coach is satisfied with my performance this week				

D: Basketball performance scale

variables	Not At All	Somewh at	Moderately So	Very Much So
I am satisfied with the number of inside shots made successfully this week				
I am satisfied with my total point score this week				
I have minimal number of outside shots made				
I am satisfied with the pressure defense made this week				
I made considerable amount of steals, /recoveries/interceptions made this week				
I am good at reading defender				
I am good at setting screen				
I am good at creating space				
I have great dribbling skills				
I have wonderful shorting skills				
I am quick in making decision				

E=Humour Measuring scales

variables	Not At All	Somewh at	Moderately So	Very Much So
Humour helps me scope with anxiety				
Humour helps me feel at ease				
Wit and humour help me masters difficult situation				
I can ease tense situation by saying or listening to something funny				

Another instrument

S/N	ITEM	SA	A	UN	D	SD
RQ3	What are the available coping methods of the effects that anxiety has on the sports performance of secondary school students in Nigeria?					

1	Tension reduces when it is just a friendly match					
2	Anxiety reduces when we are on the winning side					
3	Anxiety reduces when the cheerleaders sing while we play					
4	Anxiety reduces when we are not compelling to practice too much					
5	Our anxiety reduces when we get the support of our audience instead of being pressure					

-
- **R.Q.4: To what extent does humor suppresses anxiety among secondary school athletes in Nigeria?**
- Strongly Agree (SA), Agree (A), Undecided (UN), Disagree (D) and Strongly Disagree (SD).

S/N	ITEM	SA	A	UN	D	SD
RQ4	To what extent does humor suppress anxiety among secondary school athletes in Nigeria?					
1	I forget my fears when the environment is humorous					
2	When I laugh, my heart calm down and make me see things clearly					
3	Humor makes basketball a game that it is and not competition					
4	Humor makes us cooperate as team with the zeal to outshine others					

- **RQ5: To what extent could humor be adopted in enhancing students' performance in secondary school sports activities?**
- Strongly Agree (SA), Agree (A), Undecided (UN), Disagree (D) and Strongly Disagree (SD).

S/N	ITEM	SA	A	UN	D	SD
RQ5	To what extent could humor be adopted in enhancing students' performance in secondary school sports activities?					
1	To a large extent, humor could be adopted in basketball team					

2	There should be cheerleaders' team to cheer up the athletes					
3	Coaches should make the environment more humorous than competitive					
4	All athletes should be treated equally					
5	Fans should be singing and cheering for their team					

-
- **R.Q.6: What is the mediating effect of humor in the relationship between anxiety and sport performance in secondary schools' students?**
- Strongly Agree (SA), Agree (A), Undecided (UN), Disagree (D) and Strongly Disagree (SD).

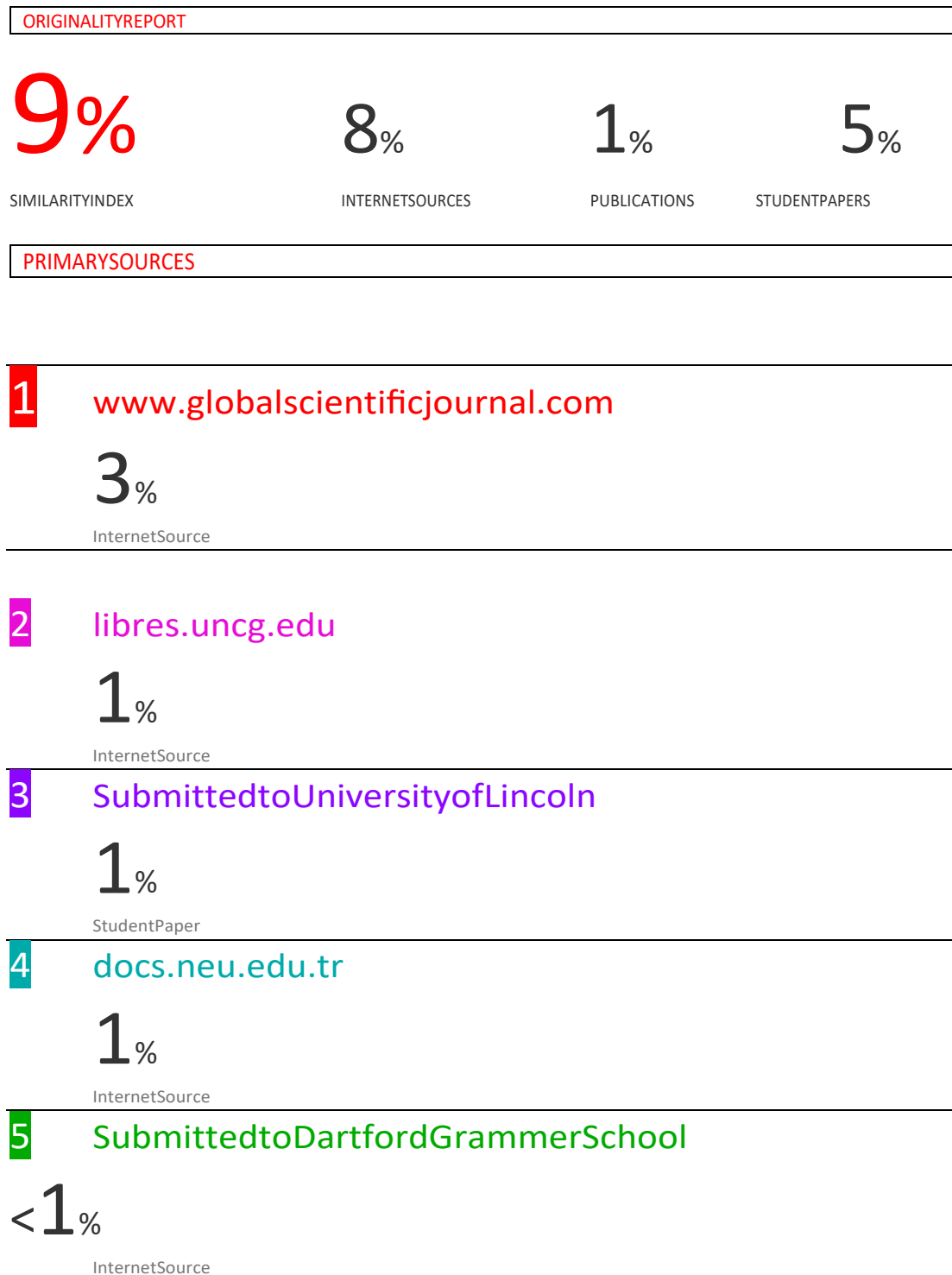
S/N	ITEM	SA	A	UN	D	SD
RQ6						
	It reliefs tension and creates positive environment					
	Adding humor to basketball will reduce anxiety, stress, and boredom associated with monotonous practices in basketball.					
	Humor is an important counterbalance to the seriousness that is associated with basketball practices					
	Humor removes the tension and tediousness associated with the entire basketball practice					

- **R.Q.7: To what extent would performance anxiety affect the learning of basic sport skills in secondary school students in Nigeria?**
- Strongly Agree (SA), Agree (A), Undecided (UN), Disagree (D) and Strongly Disagree (SD).

S/N	ITEM	SA	A	UN	D	SD
RQ7	To what extent would performance anxiety affect the learning of basketball skills in secondary schools in Nigeria?					
1	Anxiety takes away the fun of the game					
2	Anxiety increases tension that affects athletes' sense of judgment					
3	It makes athletes clumsy					
4	The anxiousness to get it right only increases chances of mistakes					
5	Athletes becomes too competitive leading to foul plays					

Appendix 3

Thesis Assessment Result



6 SubmittedtoUniversitiKebangsaanMalaysia

<1%

StudentPaper

7 SubmittedtoSheffieldHallamUniversity

<1%

StudentPaper

8 SubmittedtoChesterCollegeofHigherEducation

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<1%

CURRICULUM VITAE

PERSONAL DATA

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L.G.A: BARKIN LADI
STATE OF ORIGIN: PLATEAU
NATIONALITY: NIGERIAN
MARITAL STATUS: MARRIED
CONTACT: COLLEGE OF EDUCATION GINDIRI
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Near East University, Lefkosa North Cyprus (PhD in-view) 2017
University of Nigeria Nsukka (M.Ed. Sports Sociology) 2005-2012
Ahmadu Bello University, Zaria (B.Sc. ed Physical and Health Education) 1986 – 1989
College of Education, Akwanga (N.C.E) Nigerian Certificate in Education) 1982 – 1985
Boys Secondary School, Gindiri (G.C.E) General Certificate in Education) 1977 – 1982
Ekan Primary School, Foron (FSLC) First School Leaving Certificate) 1971 - 1977

WORKING EXPERIENCE WITH POSITIONS HELD

1. N.Y.S.C Pope John Paul 2 Seminary Okpoma, Ogoja. Cross River State. Games Master - Zang Secondary Commercial School Bukuru Games Master - 1990/1991
2. Government Secondary School, Buji, Games Master, Vice Principal / Director of Studies 1991 - 1997
3. Government College Gindiri, Games master - 1997 - 2000
4. College of Education, Gindiri Deputy Director Continuing Education Programs 2012 - 2016,
5. Coordinator Part Time Programs Jos center; - 2008 - 2011,
6. Sports Director of College of Education, Gindiri. - 2011 - 2015

PUBLICATIONS

Journals

- Corruption as a hindrance to the successful implementation of the Universal Basic Education (UBE) in Nigeria.
- A critical review of the different phases in the teaching of Physical and Health Education
- Funding and management of Resources for Educational Advancement in Nigeria
- Resources for Educational Advancement in Nigeria
- Intra - mural Sports program; a functional and Utility-Oriented tool for educational development in Nigeria
- Curbing corruption in Nigeria through functional and utility - oriented tertiary education towards ensuring a sustainable utility oriented environment in Nigeria for development
- Functional and utility oriented education for the attainment of peak performance among coaches and athletes through information communication technology in Nigeria
- Approaches to health education promotion in Nigeria schools
- Application of methods in health education teaching in school settings.
- An investigation of computer usage of students of higher institutions in Plateau.
- Achieving the transformation agenda of good health and well-being in Nigeria through science education: The need for value re-orientation in Plateau state.

Government Secondary School, Buji, 1991-1997	Game master, Vice Principal / Director of Studies	
Government College Gindiri,	Game master	1997-2000
College of Education, Gindiri 2012—2016	Deputy Director Continuing Education programs	
Coordinator Part Time Programs Jos Centre		2008—2011
Sports Director of College of Education, Gindiri		2011—2015

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- A critical review of the different phases in the in the teaching of physical and health Education.
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- Functional and utility oriented education for the attainment of peak performance among coaches and athletes through information communication technology in Nigeria.
- Approaches to health education promotion in Nigeria Schools.
- Application of methods in Health Education teaching in school settings.
- An investigation of computer usage of students of higher institution in Plateau.
- Achieving the transformation agenda of good health and well –being in Nigeria through science education : the need for value re-orientation in Plateau State
- An evaluation of the implementation of integrated science curriculum in selected public secondary schools in Plateau State.
- Exercise and physical fitness; means for enhancing employee's productivity. A journal of educational studies of the college of education Gindiri.
- Humour; A panacea to work stress management
- Content analysis of Guidance and Psychology –Sport and related articles
- Conflicts in communication in the family.

WORKSHOPS

- COACHING; A Strategic Tool For effective Leadership
- Research methodology Capacity building workshop on medical and health sciences.

PROFESSIONAL ASSOCIATIONS

- i. Teachers Registration Council of Nigeria.
- ii. Citizenship and Leadership Training Centre
- iii. Science Teachers Association
- iv. Barkin Ladi Football Association (BFA) Member.

CONFERENCES

- The role of science and technology: Approaches to health promotion in Nigerian schools.
- The universal basic education: Challenges of the 21st century.

BOOKS AUTHORED

- A hand book of Physical and Health education teachers and students. Vol. 1

REFEREES

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