

**PERSONAL AND ENVIRONMENTAL FACTORS AS PREDICTORS OF  
UNDERGRADUATES SPORTS PARTICIPATION IN WELLSRING UNIVERSITY**

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**UNIVERSITY OF BENIN**

**BENIN CITY**

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**A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF HUMAN KINETICS  
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## CERTIFICATION

This is to certify that this project was carried out by **Leonard Winner ABOKIRI** with matriculation number **EDU2102484** in the Department of Human Kinetics and Sports Science, Faculty of Education, University of Benin, Benin City, under the supervision of:

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**Prof. S. O. Aibueku**  
**(Project Supervisor)**

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**Dr. R.F. Ani**  
**(Project Coordinator)**

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**Dr. A. U. Oriakhi**  
**(Ag. Head of Department)**

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**Date**

## **DEDICATION**

This project work is dedicated to God Almighty the Alpha and Omega, the giver and strength of my life.

## **ACKNOWLEDGEMENT**

The researcher first appreciation goes to God Almighty who kept him safe and protected him from the beginning of this journey to the end. The researcher wishes to express his profound gratitude to his parents Mr. and Mrs. Abokiri for their financial support, care and undying love towards his academics. I appreciate everything they have done to make this dream a reality through prayers and guidance.

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**ABSTRACT**

This study was carried out to investigate the personal and environmental factors influencing gender in sports performance among undergraduates of Wellspring University. To guide this study, three research questions were raised with corresponding hypotheses that were tested at 0.05 level of significance.

The descriptive survey research design was adopted in this study. The population of this study was made up of 1714 undergraduates. The sample size of 400 undergraduates was selected using the Taro Yamane formula due to the large size of the population. The research instrument for the study was a self-constructed questionnaire. The statistical analysis was carried out using descriptive statistics of frequency and percentage for the bio-data, inferential statistics of simple multiple regression was used in testing hypotheses 1 to 3 corresponding to research questions 1 to 3. The formulated hypotheses tested were set at 0.05 level of significance.

The findings of this research based on the research questions raised and hypotheses formulated showed the following; there was a positive weak relationship between male and female students sports participation based on personal factors, which was not significant. Also, personal factors was the highest predictor of students' sports participation; there was a positive weak significant relationship between male and female students sports participation based on environmental factors; as environmental factors was the highest predictor of students sports participation; there was a positive weak significant contributions of personal and environmental factors to students sports participation; as environmental factors was the highest predictor of students sports participation. Based on the research findings, it can be concluded that there was a positive weak and insignificant relationship between male and female students sports participation based on personal factors, with personal factors being the highest predictors of students sports participation. Also, there was a positive weak and significant relationship

between male and female students sports participation based on environmental factors, with environmental factors being the highest predictors of students sports participation. Lastly, there was a positive weak significant contributions of personal and environmental factors to students' sports participation with environmental factors being the highest predictor of students' sports participation. From the findings of the study it was recommended that; the necessary and ideal environment should be created to bring out the best among undergraduates in relation to their sports participation; undergraduates irrespective of their gender should be encouraged by all and sundry to regularly participate in sports; experts such as sports psychologists and other significant others should be able to manage undergraduates psychological and personal issues effectively to make them gain full satisfaction and enjoyment while engaging in sporting events.

## CHAPTER ONE

### INTRODUCTION

#### **Background to the Study**

Participation in sports among undergraduates is a multi-dimensional behavior influenced by a range of personal (intrapersonal) and environmental (contextual, social, structural) factors. Understanding these predictors is important because engaging in sports has been shown to have numerous physical, psychological, and social benefits including improved fitness, mental health, self-esteem, social connectedness, and academic performance.

Personal factors refer to attributes intrinsic to the individual that influence the likelihood of sports participation. Key personal predictors include: Demographics (age, gender, socioeconomic status (SES), cultural background, etc). Many studies find that males tend to participate more in sports than females, and younger students are more likely to take part than older ones; Psychological variables (these include motivation (intrinsic and extrinsic), self-efficacy, attitudes, perceived competence, enjoyment, self-esteem, body image, and values. For example, intrinsic sport motivation has been strongly associated with sustained sports engagement among university students. Also, beliefs about one's skills, perceived enjoyment, and self-confidence are consistent positive predictors; Health-related and behavioral factors (physical health status or fitness levels, BMI, previous sport experience or early exposure, habitual physical activity, time constraints (e.g. due to academic workload), screen time or sedentary behaviors. For instance, studies show that poor health status or low perceived fitness reduces participation; conversely, those who believe they are fit or have had early positive experiences engage more; Academic and time-management pressures (undergraduates often face

heavy academic demands, which may compete with time available for sports. The capacity to manage time, balancing academic responsibilities and sports, is a critical personal factor. Some studies note that academic performance correlates with sports participation—either as a positive (if students see sports helping them) or negative (if sports are seen as interfering).

Environmental predictors relate to external conditions or contexts that facilitate or hinder sports participation. These include: Social support and role models (support from family, peers, instructors/coaches, and influential others (role models)) encourage participation. Emotional, financial, and moral support helps overcome barriers. For example, family support was found to have especially strong positive impact in studies of university students; Facilities, infrastructure, and accessibility (availability of sports facilities (gyms, fields), their quality and maintenance, proximity and ease of access, and whether sporting venues are safe and appropriate). If facilities are lacking, or schedules are inconvenient, participation tends to be lower. (Australian Sports Commission); Cultural, institutional, and policy environment (the extent to which sport is valued within the institution (university), existence of organized sports programs, institutional encouragement and resource allocation to sports, policies around inclusion, gender norms, cultural beliefs. Institutions with more supportive sports culture or policies tend to have higher participation. Gender norms can amplify disparities. (eduprojects.ng); Economic and logistic constraints (Costs (equipment, uniforms, membership fees, transport), time (travel times), schedule conflicts with academic or work demands. Also, the economic background of students or their families can impact whether students can afford involvement in sports; peer influences and social norms (being part of peer groups who participate in sports, social pressure or encouragement, peer interaction can promote participation. Conversely, lack of peers engaged in sports or negative norms can be barriers.

There are empirical studies specifically examining undergraduates: For example, in Benson Idahosa University in Nigeria, a study found that both personal and environmental factors significantly contribute to sports participation; environmental factors were somewhat stronger predictors in that context (iwemi.com). A recent study from Malaysia identified personal attributes (motivation, health management), social culture, academic performance, role models, facilities, and peers as key influencing factors for college students' sports participation. (eprints.ums.edu.my). In China/Malaysia comparisons, gendered differences in influencing factors have been observed: male and female undergraduates differ in what environmental and personal factors weigh more heavily (scholink.org). Also, psychological variables like intrinsic motivation and social support (from family, peers) have been shown to exert strong direct effects on undergraduates' level of sports participation.

One of the most enduring challenges in Nigeria school system is student's low performance, when it comes to sporting events. Gender differences in sports performance have long been a subject of debate, with research indicating that both personal and environmental factors play crucial roles in shaping these disparities. These factors are complex and multifaceted, including; physical fitness, anxiety, family influence, inferiority complex, biological, socio-economic level, socio-cultural, and so on.

According to Tucker and Collins (2012), one of the primary biological factors influencing sports performance is the physiological differences between males and females. Men generally have higher levels of testosterone, which contributes to increased muscle mass, bone density, and cardiovascular endurance, while women, due to higher estrogen levels, have a greater proportion of body fat and a different muscle distribution. This naturally leads to some observable differences in strength-based and endurance sports.

Physical fitness on the other hand plays a significant role in influencing gender differences in sports performance, as it encompasses key attributes like cardiovascular endurance, muscle strength, flexibility, and body composition. Wilmore and Costill (2005), explain that on average, males tend to have a greater muscle mass and cardiovascular capacity, which contributes to better performance in sports that require strength, speed, and power. These physiological advantages are largely due to hormonal differences, such as higher levels of testosterone in males, which enhances muscle hypertrophy and endurance capacity. Conversely, females typically have higher body fat percentages and lower muscle mass, which can influence performance in sports that emphasize strength and power. However, Wilmore and Costill (2005), note that females tend to perform better in sports requiring flexibility and balance, as well as some endurance-based sports where lower body mass is advantageous. Thus, the differences in physical fitness components between gender largely contribute to the performance gaps observed in various sports disciplines. However, it is important to recognize that training and conditioning can mitigate some of these differences, allowing athletes of both gender to improve their performance significantly.

Anxiety has a profound influence on sports performance, and its effects can vary by gender due to different psychological and sociocultural pressures. According to Martens et al. (1990), anxiety negatively affects sports performance by disrupting focus, increasing muscle tension, and impairing decision-making. However, men and women tend to experience and respond to anxiety differently in competitive sports. Jones and Cale (1989), found that female athletes often report higher levels of performance-related anxiety compared to their male counterparts. This is attributed to social expectations and stereotypes, which often place additional pressure on women to perform well, while maintaining societal standards of femininity. This increased

anxiety can result in diminished self-confidence, negatively impacting their sports performance. On the other hand, male athletes, though less likely to report anxiety, may experience different types of performance pressure, such as the expectation to display toughness or dominance. These gender-specific pressures contribute to distinct ways in which anxiety manifests and influences performance in both male and female athletes.

Family plays a crucial role in shaping gender differences in sports performance, particularly through the type of support, encouragement, and opportunities provided to male and female athletes. According to Fredricks and Eccles (2004), family expectations and socialization patterns often vary by gender, which can significantly impact a child's engagement in sports. Boys are generally more encouraged by family members to participate in competitive and physically demanding sports, reinforcing traditional gender roles that associate masculinity with physical strength and competitiveness. In contrast, girls may receive less encouragement or support for pursuing sports, especially those considered traditionally masculine. Fredricks and Eccles argue that this lack of family support can lead to reduced participation, fewer opportunities for skill development, and ultimately lower performance levels in female athletes compared to their male counterparts. Moreover, the presence of role models within the family, such as parents or siblings who are athletes, can also influence the extent to which both boys and girls engage with and succeed in sports, though these influences often reflect gendered expectations.

An inferiority complex can significantly affect sports performance, often impacting athlete's confidence and ability to perform under pressure. Adler (1956), who introduced the concept of inferiority complex, explains that individuals who feel inadequate or inferior may struggle to reach their full potential due to self-doubt and anxiety. This is particularly relevant in sports

where confidence and mental resilience are key to performance. Regarding gender, Gill (1992), argues that societal expectations and stereotypes often exacerbate feelings of inferiority in female athletes. Women may experience an inferiority complex due to societal pressures that downplay their abilities in sports traditionally dominated by men. This can lead to lower self-esteem, reduced motivation, and a higher likelihood of underperformance in competitive environments. For male athletes, an inferiority complex may arise when they perceive themselves as not meeting the traditional standards of masculinity, such as strength or aggression in sports. This can lead to overcompensation or anxiety, negatively affecting performance.

Furthermore, Socio-economic status significantly influences gender differences in sports performance by shaping access to resources, training opportunities, and facilities. Coakley (2009), argues that individuals from higher socio-economic backgrounds often have greater access to sports programs, quality coaching, and advanced training equipment, which can enhance their sports performance. This influence is particularly pronounced in women's sports where socio-economic barriers are more prevalent. Families with higher income can afford to support their daughters' participation in sports through private coaching, travel for competitions and proper athletic gear-factors that are often less accessible to those from lower-income backgrounds. For lower socio-economic groups, the cost of participation, equipment, and the need to prioritize work or education over sports often leads to lower female participation rates. Coakley also notes that male athletes, even from lower socio-economic backgrounds, tends to have more community support and sponsorship opportunities in certain sports compared to females, who may face additional cultural and societal pressures that limit their participation in athletics.

Socio-cultural factors play a crucial role in shaping gender differences in sports performance by influencing societal norms, values, and expectations related to gender roles. Messner (2002), argues that traditional gender roles and stereotypes often dictate which sports are considered appropriate for men and women, thereby impacting participation and performance. For instance, men are generally encouraged to engage in competitive, aggressive, and physically demanding sports like football or wrestling, while women are often steered toward sports that emphasize grace and aesthetics, such as gymnastics or figure skating. These socio-cultural norms also affect the level of support and recognition that male and female athletes receive. Messner highlights that male sports typically receive more media attention, financial backing, and social validation, which contributes to better performance outcomes for men. In contrast, women often face structural barriers, such as fewer resources, limited media exposure, and cultural biases, which can hinder their sports performance. In many societies, women may also encounter additional socio-cultural pressures related to body image and femininity, which can affect their self-esteem and motivation in sports. These socio-cultural dynamics, combined with structural inequalities, contribute to the persistent gender disparities in sports participation and performance.

### **Statement of the Problem**

Even with the major progress made towards gender equality, there are still variations in sports performance between males and females. These variations are caused by several personal and environmental factors as well as biological differences. Some of these factors include; physical fitness, anxiety, family influence, inferiority complex, biological, socio-economic level, socio-cultural variables. Therefore understanding these factors is crucial to promoting gender equality in sports participation.

## **Research Questions**

This following research questions were raised to guide the study;

1. Is there a relationship between male and female students sport participation based on personal factors (physical fitness, anxiety, family influence, inferiority complex, biological).
2. Is there a relationship between male and female students sport participation based on environmental factors (socio-economic status, socio-cultural).
3. What are the contributions of personal and environmental factors to students sports participation?

## **Hypotheses**

Ho<sub>1</sub>: There is no significant relationship between male and female students sport participation based on personal factors.

Ho<sub>2</sub>: There is no significant relationship between male and female students sports participation based on environmental factors.

Ho<sub>3</sub>: There is no significant contribution of personal and environmental factors to students sports participation.

## **Purpose of the Study**

The purpose of the study was to investigate the personal and environmental factors as predictors of undergraduates sports participation in wellspring university. Specifically, the objectives of the study are:

- i. To describe the personal factors influencing male and female students sport participation.
- ii. To identify the environmental factors influencing male and female students sport participation.
- iii. To establish the contributions of personal and environmental factors to students sports participation.

### **Significance of the Study**

This study has significance for various stakeholders, including students, parents school management, and sport coaches. The findings of the study will contribute to a deeper understanding of the factors that affect gender disparities in sports performance and suggest actionable steps to improve inclusivity and performance.

To the students, this study will them understand how personal factors like; physical fitness, anxiety, and inferiority complex influence their sports performance. By identifying barriers to participation, the study can encourage students especially females, to actively engage in sports, leading to improved health and social interaction. Knowledge gained from the study can motivate students to address personal and environmental challenges, enabling them to improve their skills and excel in sports.

To parents, this study will enable them gain insights into how their involvement, encouragement, or attitudes toward sports can significantly influence their children's participation and performance. The findings will encourage parents to create a supportive environment, irrespective of gender, ensuring that both male and female children have equal

opportunities to pursue sports. The study will guide parents in balancing academics and sports for their children, recognizing the value of sports in physical and mental development.

To the school management, this study will provide evidence-based insights to help school management develop policies that promote gender equity in sports participation and resource allocation. The findings can guide the management in investing in facilities, training programs, and support systems that cater equally for male and female athletes. By fostering an inclusive sports culture, the university can enhance its reputation as an institution that values diversity and supports the holistic development of its students.

To the coaches, this study will help coaches design training programs that consider gender-specific needs and address the unique challenges faced by male and female athletes. Understanding the impact of socio-cultural and psychological factors will allow coaches to adopt more empathetic and effective coaching strategies. Coaches will be better equipped to create an inclusive sporting environment, motivating both male and female students to participate actively and excel in their respective sports.

The significance of this study is far-reaching, offering valuable insights and practical recommendations for students, parents, school management, and coaches. By addressing the personal and environmental factors that influence gender in sports performance, the study aims to foster a more inclusive and equitable sporting environment at Wellspring University, ultimately contributing to the overall development and well-being of the students.

### **Scope and Delimitation of the Study**

The study focused on both personal factors (physical fitness, anxiety, family influence, inferiority complex, biological) and environmental factors (socio-economic level, socio-cultural)

that influence gender differences in sports performance. The study was delimited to undergraduates at Wellspring University; both male and female students from various faculties was considered in the study.

### **Definition of Terms**

The following factors were operationally defined as used in this study:

**Personal Factors:** Attributes specific to the individual, such as biological and psychological characteristics, that influence sports performance. In the context of this study the physical factors x-rayed were gender, physical fitness, anxiety, family influence, and so on.

**Environmental Factors:** External influences, including socio-economic status, family background, and access to training facilities that affect sports participation and performance.

**Gender:** The socially constructed roles and characteristics associated with being male or female. For the study, it relates to male and female students used for the study.

**Sports Participation:** The ability of an individual to perform in sports activities, often measured by physical fitness, endurance and skill levels.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

The review of related literature will be discussed under the following sub-headings;

- Theoretical Framework
- Personal factors influencing Gender in sports performance
- Environmental factors influencing Gender in sports performance
- Summary of Reviewed Related Literature

#### **Theoretical Framework**

Several theories provide insight into gender differences in sports performance. One of the most relevant theories is Social Role Theory, developed by Eagly and Wood (2013), which states that gender roles are formed by social expectations and norms. According to this theory, the differences in how males and females engage in sports stem from the distinct roles society assigns to them, where males are encouraged to engage in competitive, physically demanding activities, while females are often steered towards activities that align with traditional feminine traits like grace and aesthetics.

Another Relevant theory is Bandura's Social Learning Theory. Bandura (1977) emphasized the role of observational learning in shaping behavior. In the context of sports, boys and girls learn gender-appropriate behavior through their environment, including family, media, and school. Boys, observing male athletes being celebrated for their physical prowess, are more likely to develop a positive attitude toward sports, while girls influenced by stereotypes, may hesitate to pursue sports that do not align with traditional gender norms.

The Biopsychosocial Model, introduced by Engel (1977), suggests that biological, psychological and social factors all interact to shape an individual's behavior and performance in sports. Biological differences (e.g, self-confidence, inferiority complex, anxiety) and social influences (e.g, family, cultural expectations) all interact to impact sports performance. This model is relevant because it acknowledges the complexity of gendered sports performance, recognizing that no single factor operates in isolation.

The Expectancy-Value Theory, developed by Eccles and Wigfield (2002), focuses on how an individual's expectations for success and the value they place on an activity influence their motivation to participate. According to this theory, Gender differences in sports performance may be due to the different values placed on sports participation by males and females, influenced by societal expectations. Boys may be socialized to see sports as more valuable and essential to their identity, while girls may face competing expectations, leading to lower participation or performance.

Cognitive Evaluation Theory Part of Self-Determination Theory by Deci and Ryan (1985), Cognitive Evaluation Theory explains how intrinsic motivation is influenced by external factors like; rewards, feedback and societal pressures. This theory is relevant to gender in sports because male and female athletes often receive different types of feedback and encouragement based on gender norms, Males may be encouraged to take sports more seriously and are rewarded for aggressive, competitive behavior while females may be praised for effort or participation without the same performance expectations. These differences can affect intrinsic motivation, impacting performance and persistence in sports.

Gender Schema Theory Proposed by Sandra Bem (1981), Gender Schema Theory posits that individuals internalize societal expectations about gender roles, which shape their behavior and

attitudes from a young age. In the context of sports, this theory suggests that both boys and girls develop schemas, or cognitive frameworks, about what sports are appropriate for their gender. Boys may gravitate toward contact sports like football or basketball, while girls may feel more comfortable in sports considered more “feminine,” such as gymnastics or figure skating. These schemas can limit participation and performance, especially for women in traditionally male-dominated sports.

Achievement Goal Theory developed by Nicholls (1984), emphasizes that individuals’ goals (task-oriented vs ego-oriented) influence their behavior and performance in achievement settings such as sports. Task-oriented individuals focus on self-improvement and mastery, while ego-oriented individuals focus on outperforming others. Gender differences in sports performance may be influenced by these goal orientations, with males often socialized toward ego-oriented goals, fostering a competitive drive, and females often encouraged to focus on task-oriented goals, emphasizing effort and cooperation rather than competition. These goal orientations can lead to different outcomes in terms of performance and persistence in sports.

### **Personal Factors Influencing Gender in Sports Performance**

Personal factors such as physical fitness, anxiety, family, inferiority complex and biological factors play a significant role in shaping gender in sports performance. These factors would be explained in details below.

#### ***Physical Fitness***

Physical Fitness is a key determinant of sports performance, and it plays a crucial role in the differences observed between male and female athletes. Physical fitness encompasses several components including cardiovascular endurance, muscle strength, flexibility, body composition,

and coordination, all of which affect an athlete's performance in various sports. These components often vary between men and women due to biological and physiological differences, as well as the influence of environmental and societal factors.

- *Cardiovascular Endurance*

Cardiovascular endurance is essential for many sports, especially those that require prolonged physical activity such as; running, cycling, or swimming. According to Wilmore and Costill (2005), men generally have higher cardiovascular endurance than women due to higher levels of hemoglobin, which enhances oxygen transport in the blood. This allows male athletes to sustain high-intensity exercise for longer periods compared to female athletes. However, Bishop et al. (2000), note that with proper training, women can significantly improve their cardiovascular endurance and reduce the performance gap between genders. While men tend to have a natural advantage in endurance sports due to their larger heart size and greater stroke volume, trained female athletes have demonstrated high levels of endurance in long-distance running and triathlons, sometimes even outperforming their male counterparts in ultra-endurance events.

- *Muscle Strength and Power*

Muscle strength is one of the most notable areas where gender differences in sports performance are observed. Men, on average possess more muscle mass than women due to higher testosterone levels, which promotes muscle growth (hypertrophy). Wilmore and Costill (2005), point out that men typically have a greater proportion of fast-twitch muscle fibers, which are responsible for explosive power and speed, making them more suited to sports like sprinting, weightlifting, and football.

Women, on the other hand, tend to have a higher proportion of slow-twitch muscle fibers, which support endurance activities but may limit their performance in sports requiring bursts of

strength and power. According to Ebben et al. (1999), while men typically outperform women in strength-based sports, female athletes can narrow the gap through targeted strength training. Strength conditioning has been shown to increase muscle mass and strength in women, allowing them to excel in sports such as; gymnastics, rowing, and soccer, though they may still lag behind men in absolute terms.

- *Flexibility*

Flexibility is a component of physical fitness where women often have an advantage over men. Komi (2003), explains that women tend to have more flexible joints and ligaments, which can be attributed to both biological and hormonal factors, such as higher estrogen levels that promote joint laxity. This greater flexibility is advantageous in sports like; gymnastics, dance, and figure skating, where range of motion and fluidity of movement are crucial.

However, Sands et al. (1996), emphasize that while flexibility benefits certain sports, it may not significantly enhance performance in others. In sports requiring strength and power, excessive flexibility can sometimes reduce stability and strength. As a result, the advantage that women possess in flexibility does not always translate to overall sports performance across all disciplines.

- *Body Composition*

Body Composition, including the ratio of lean muscle to fat, plays a critical role in sports performance. Men typically have lower body fat percentage and higher muscle mass than women, which provides them with a natural advantage in strength, speed, and power sports. Wilmore and Costill (2005), highlight that men's lower body fat percentage reduces drag in sports like swimming and enhances speed in running. Additionally, their higher muscle mass contributes to greater strength in weightlifting, sprinting, and other high-intensity sports.

On the other hand, Women generally have higher body fat percentages due to hormonal differences, particularly related to estrogen. This can impact performance in sports requiring strength and speed. However, body composition is not solely disadvantageous to women; in some endurance sports like long-distance swimming, higher body fat may serve as energy reserve and improve buoyancy, offering an advantage under certain conditions, as noted by Burke and Deakin (2015),.

- *Coordination and Agility*

Coordination and Agility are important for success in sports like soccer, basketball, and tennis. These attributes are influenced by both neuromuscular control and balance. Sherwood and Reilly (1999), suggest that men and women do not show significant differences in coordination and agility once properly trained, although societal factors may influence how these skills are developed. Traditionally, boys are more encouraged to participate in sports requiring agility and coordination, which can give them an early advantage in developing these skills.

Nevertheless, with appropriate training, female athletes have shown exceptional agility and coordination in sports such as tennis and volleyball. Hargreaves (1994), emphasizes that while there are some biological differences in motor skills between genders, many of these can be mitigated through training and practice.

### *Anxiety*

Anxiety is a psychological factor that significantly affects sports performance, and its impact can vary between genders due to physiological, psychological, and social factors. In competitive sports, anxiety may arise from the pressure to perform, fear of failure, or social expectations, and it often manifests differently in male and female athletes. The relationship between anxiety and

gender in sports has been extensively studied, revealing that both men and women experience anxiety, but it's on their performance can differ.

### *1. General Impact of Anxiety on Sports Performance*

Anxiety, particularly competitive anxiety, can either enhance or impair performance depending on its intensity and the athlete's ability to cope with it. Martens et al. (1990), introduced the Multidimensional Anxiety Theory, which differentiates between cognitive anxiety (worry, negative thoughts) and somatic anxiety (physical symptoms like sweating or increased heart rate). According to this theory, cognitive anxiety generally has a more detrimental effect on performance but excessive levels impair it. The degree to which athletes experience anxiety and its influence on performance is shaped by both personal and environmental factors, including gender.

### *2. Gender Differences in Anxiety Levels*

Research has consistently shown that women tend to report higher levels of anxiety than men, particularly in competitive sports environments. According to Jones, Swain, and Hardy (1993), women are more likely to experience cognitive anxiety, characterized by worry and self-doubt, which can negatively impact their performance. This heightened anxiety may stem from societal expectations, self-imposed pressure to perform, or fear of judgement. Female athletes often feel pressure to conform to traditional gender roles, which can exacerbate anxiety in competitive situations.

Scanlan et al. (1989) found that male athletes tend to exhibit lower levels of cognitive anxiety compared to females. One explanation for this is that men are typically socialized to embrace competitive situations, viewing anxiety as part of the challenge of sports. This socialization

process may help them develop coping mechanisms that reduce the negative impact of anxiety on performance. Conversely, women, due to societal expectations of modesty and less aggressive competition, may interpret anxiety as a sign of weakness, further hindering their performance.

### 3. *Somatic Anxiety and Gender*

Somatic anxiety refers to the physical symptoms of anxiety, such as increased heart rate, sweating, and muscle tension. Weinberg and Gould (2014), explain that both male and female athletes experience somatic anxiety, but the intensity and interpretation of these symptoms may differ. Men may be more likely to interpret somatic symptoms positively, seeing them as signs of readiness or excitement before competition. For example, feeling a racing heart or heightened adrenaline might be perceived as a sign of being prepared to perform at their best.

On the other hand, women may be more likely to interpret somatic anxiety negatively, associating these symptoms with fear or impending failure. Krane and Williams (1994), found that female athletes often report feeling overwhelmed by somatic symptoms, which can detract from their focus and performance. This difference in perception of somatic anxiety symptoms contributes to the gender gap in how anxiety affects sports performance.

### 4. *Self-Confidence and Anxiety*

Self-confidence plays a crucial role in moderating the effects of anxiety on sports performance, and there are significant gender differences in self-confidence levels among athletes. According to Vealey (1986), male athletes tend to report higher levels of self-confidence than their female counterparts. This higher self-confidence allows men to buffer the negative effects of anxiety, as they are more likely to believe in their ability to perform well despite feeling anxious.

In contrast, female athletes often struggle with lower self-confidence, making them more vulnerable to the negative impacts of anxiety. Jones and Cale (1989), found that women are more likely to attribute their successes to external factors (e.g., luck), and their failures to internal factors (e.g., lack of ability), which can undermine their confidence in competitive situations. This lower self-confidence, coupled with higher levels of cognitive and somatic anxiety, can significantly hinder their sports performance.

#### 5. *Social and Environmental Influences on Anxiety*

The social environment, including gender stereotypes and expectations, also plays a critical role in influencing anxiety levels in male and female athletes. Hargreaves (1994), notes that women in sports often face additional pressures, such as expectations to maintain a certain appearance, adhere to traditional femininity, or prove their competence in male-dominated sports. These pressures can lead to heightened anxiety, particularly in sports where female athletes feel they are being judged more critically.

Additionally, female athletes may face more intense scrutiny regarding their performance, which can increase performance anxiety. Scanlan et al. (1989), found that female athletes often report higher levels of social anxiety, which includes fear of negative evaluation by others, such as; coaches, teammates or spectators. This fear of judgement can impair their focus and decision-making during competitions, leading to poorer performance outcomes.

Men, while also experiencing performance pressure, are generally more encouraged to display aggression, competitiveness and dominance in sports, which can reduce their vulnerability to anxiety. However, men who compete in sports traditionally perceived as feminine (e.g. gymnastics, figure skating) may experience heightened anxiety due to role conflict or fear of being perceived as less masculine.

## 6. *Coping Strategies and Gender*

The ability to cope with anxiety is another important factor that influences sport performance. According to Nicholls et al. (2009), male and female athletes often use different coping strategies to manage anxiety. Men are more likely to use problem-focused coping strategies, such as actively preparing for competition or using mental techniques like visualization to reduce anxiety. These strategies can help reduce the negative impact of anxiety on performance.

Women, on the other hand, tend to use emotion-focused coping strategies, such as seeking social support or trying to manage their emotional responses to stress. While these strategies can be effective in some contexts, they may not be as useful in competitive sports situations where direct action is needed to reduce anxiety. Nicholls et al. (2009), argue that these gendered differences in coping strategies may contribute to the observed differences in anxiety levels and its effects on performance.

## 7. *Impact on Performance in Different Sports*

The influence of anxiety on gendered sports performance also varies depending on the type of sport. For instance, in individual sports (e.g., tennis, track and field), where the focus is solely on the athlete's performance, the effects of anxiety can be more pronounced. Female athletes in individual sports may experience heightened anxiety due to the direct and visible nature of failure or success.

### ***Family***

Family plays a crucial role in shaping an individual's sport involvement and performance, with its influence often intersecting with gender norms and expectations. From early childhood, family attitudes, values, and behaviors can either encourage or hinder sports participation. The

way in which families support or discourage sports participation often varies between girls and boys due to traditional gender roles, cultural beliefs, and socio-economic factors.

### *1. Early Socialization and Gender Roles*

Families are the primary agents of socialization, and they play a key role in shaping a child's attitudes towards physical activity and sports. According to Coakley (2009), parents often consciously or unconsciously reinforce traditional gender roles by encouraging boys to participate in competitive and physically demanding sports, such as; football, basketball, or wrestling, while girls are directed toward sports perceived as more "feminine," such as gymnastics, figure skating, or dance. This early socialization process can have long-lasting effects on sports performance and engagement.

Fredricks and Eccles (2005), explored the influence of parents on children's sports participation and found that boys generally receive more encouragement to pursue competitive sports, while girls are often encouraged to participate in recreational or aesthetic activities. This gendered support can lead to a higher level of participation and performance in sports among boys compared to girls. Boys may also receive more praise for athletic achievements, which builds self-esteem and motivation, while girls may receive less recognition, reducing their confidence and commitment to sports.

### *2. Parental Support and Involvement*

Parental support both emotional and financial, is critical in nurturing athletic talent and ensuring sustained participation in sports. Greendorfer (1993), found that boys are more likely to receive active encouragement from their fathers, who often take a vested interest in their sons' sport activities. The paternal involvement includes attending games, coaching and providing the

necessary resources for success in competitive sports. As a result, boys may experience higher levels of motivation and support, which can positively impact their sports performance.

In contrast, girls may experience less direct involvement from their fathers in sports, which can result in lower levels of confidence and fewer opportunities to develop their skills. Brustad (1996), noted that fathers were generally more involved in their sons' sports participation than their daughters', perpetuating gender differences in performance. However, mothers tend to be more involved in their daughters' sports activities, providing emotional support but less emphasis on competitive achievement, which can influence girls' experiences in sports differently.

Parental expectations also play a significant role in shaping sports participation and performance. Eccles and Harold (1991), found that parents often have higher expectations for boys in terms of sports success, while girls are encouraged to focus on academic or social achievements. These expectations can impact the way children view their own abilities and potentials in sports, leading to higher performance levels in boys and reduced engagement in girls.

### 3. *Siblings Influence*

Siblings can also have a significant impact on sports performance, particularly in reinforcing or challenging traditional gender norms. According to Horn and Horn (2007), siblings often serves as role models, especially for younger children. Boys with older brothers who are active in sports are more likely to engage in sports themselves, and they often compete with their siblings to improve their performance. The competitive nature of sibling's relationships can drive boys to enhance their skills and succeed in sports.

For girls having older brothers involved in sports can either encourage participation by providing exposure to sports activities or discourage it if the family focuses more on the male siblings' sports achievements. Chalabaev et al. (2013), noted that in many families, sports are considered a masculine activity, and girls with brothers who are active in sports may feel less pressure or encouragement to excel in athletic pursuits. Conversely, girls with athletic sisters may feel more supported in pursuing sports, as they have a female role model breaking traditional gender expectations.

#### 4. *Cultural and Gender norms within the Family*

Cultural beliefs and norms within the family also shape the way boys and girls are encouraged or discouraged from participating in sports. In more traditional cultures, where gender roles are strictly defined, sports are often viewed as a male-dominated domain. Chalabaev et al. (2013), explored how cultural expectations regarding femininity and masculinity influence parental attitudes toward sports. In families where traditional roles are emphasized, boys are encouraged to be physically active and competitive, while girls are directed toward more passive or socially acceptable activities, such as dance or non-competitive sports.

This can lead to disparities in performance, as girls who are not actively encouraged to pursue sports may lack the skills, training, and confidence needed to excel. Hargreaves (1994), pointed out that in some cultures, female athleticism is viewed as inappropriate or unfeminine, which discourages girls from participating in sports or reaching their full potential. In contrast, families that challenge traditional gender roles and encourage both boys and girls equally in sports tend to see less disparity in sports performance between genders.

## ***Inferiority Complex***

An inferiority complex can significantly affect an individual's sport performance, particularly in the context of gender differences. This psychological condition, characterized by a persistent feeling of inadequacy or the belief that one is less competent than others, can impact motivation, self-esteem, and overall athletic performance. Gender-related societal expectations and stereotypes often exacerbate the development of inferiority complexes in sports, as males and females face different pressures to conform to specific norms.

### *1. Understanding Inferiority Complex and its Impact*

The term “inferiority complex” was first introduced by Alfred Adler (1956), in his theory of individual psychology. According to Adler, an inferiority complex arises when individuals feel deficient or inadequate compared to others, which can lead to feelings of low self-worth and an inability to perform one's best. In the sports context, this complex manifests when athletes believe they are not as skilled or capable as their peers, which affects their confidence and, ultimately, their performance.

For both male and female athletes, this sense of inferiority may be shaped by personal experiences in sports, but gender-related socialization processes and stereotypes play a significant role in how the complex develops and manifests.

### *2. Gender Differences in Inferiority Complex*

While both men and women can experience an inferiority complex, the factors that contribute to these feelings often differ between the genders due to societal norms and expectations. Gill (1992), highlights that women in sports often face more obstacles than men in terms of societal acceptance and recognition, which can contribute to feelings of inferiority. For example, women participating in traditionally male-dominated sports (e.g., football, rugby) may feel they need to

prove their competence more than their male counterparts, resulting in a greater sense of inadequacy when faced with challenges or setbacks.

Schmalz and Kerstetter (2006), found that gender role stereotypes contribute to women feeling less capable or worthy in sports, particularly in those perceived as “masculine.” This can lead to a cycle where female athletes internalize these societal messages, leading them to believe they are inherently less suited for certain sports, which, in turn, diminishes their performance. For instance, women may compare themselves to male athletes, perceiving a gap in ability and reinforcing feelings of inferiority, even in sports where they perform well.

On the other hand, men can also experience inferiority complexes, particularly in sports that emphasize physical dominance, strength, and aggression. Messner (1990), notes that male athletes are often judged by their ability to adhere to hyper-masculine ideals, which creates pressure to perform at high levels constantly. Male athletes who feel they do not meet these standards, particularly in competitive sports, may develop feelings of inadequacy and inferiority, leading to poorer performance.

### 3. *Self-Perception and Performance Anxiety*

An inferiority complex is closely linked to negative self-perception, which can undermine sports performance. According to Harter (1982), self-perception in athletes is shaped by their experiences and feedback from coaches, peers and spectators. Female athletes, in particular, often face more criticism and scrutiny regarding their appearance and performance, leading to a negative self-image. This poor self-perception can make female athletes more susceptible to an inferiority complex, particularly when competing in high-pressure environments.

Vealey (1986), notes that self-confidence is a critical determinant of sports performance, and athletes with an inferiority complex tend to lack the confidence needed to perform optimally.

This lack of confidence is especially detrimental for female athletes, who may already struggle with societal expectations that undermine their belief in their abilities. As a result, they may hesitate to take risks or assert themselves in competition, leading to suboptimal performance.

For male athletes, an inferiority complex often results from comparing their abilities to other male athletes, particularly in highly competitive sports environments. Bandura's (1997), theory of self-efficacy suggests that athletes who believe they are less capable than their peers are less likely to succeed because they enter competition altogether, both of which negatively affect performance.

#### 4. *Impact on Skill Development and Training*

Athletes with an inferiority complex are less likely to engage in the rigorous training and skill development necessary for sports success. Dweck (2006), proposed that the concept of "fixed" versus "growth" mindsets, where athletes with a fixed mindset believe that their abilities are innate and unchangeable. Athletes with an inferiority complex often adopt a fixed mindset, believing that they lack the talent or ability to improve, which reduces their motivation to train hard or learn new skills. This is particularly true for female athletes, who may internalize the belief that they are naturally less athletic than men.

Horn (2002), found that athletes with higher levels of perceived competence are more likely to engage in deliberate practice and skill improvement. In contrast, those with an inferiority complex may avoid challenging situations where failure seems inevitable, which hampers their development. For women, this often means shying away from leadership roles on teams or competitive opportunities where they might be compared to male athletes, further limiting their sports performance.

## 5. *Social Comparison and Gender Stereotyping*

Social comparison is another factor that contributes to the development of an inferiority complex in sports. Festinger's (1954), social comparison theory suggests that individuals evaluate their own abilities by comparing themselves to others. In sports, this comparison often occurs between male and female athletes, particularly in co-ed environments or when media coverage emphasizes male athletic superiority. Women who engage in upward social comparison with male athletes may feel inferior, even in situations where they perform well relative to other women.

Eccles (1991) argued that gender stereotyping in sports reinforces the belief that men are naturally more athletic than women, which can contribute to feelings of inferiority among female athletes. Media portrayals of male athletes as stronger, faster, or more skilled than female athletes exacerbate these feelings, making women feel less capable even when they have the talent to succeed. This social comparison process undermines women's confidence and diminishes their sports performance over time.

Men, too, are subject to comparison, particularly in sports that emphasize physical prowess. Male athletes who fall short of the dominant masculine ideal may experience an inferiority complex that affects their performance. Connell (1995), points out that sports are often used as a way to affirm masculinity, and men who cannot live up to these expectations may feel emasculated, further reinforcing their sense of inferiority and reducing their competitive drive.

## 6. *Coping Mechanisms and Performance Outcomes*

Athletes with an inferiority complex often develop maladaptive coping mechanisms that further hinder their sports performance. Nicholls et al. (2009), found that athletes with low self-esteem and high anxiety levels are more likely to avoid situations where they might fail or be

judged harshly. This avoidance behavior is particularly common among female athletes who internalize societal messages about their inferiority in sports, leading them to withdraw from competitive situations or avoid pushing themselves in training.

Men with an inferiority complex may cope by adopting overly aggressive behaviors or engaging in risk-taking to compensate for their feelings of inadequacy. Kerr (1997), suggests that this overcompensation can lead to burnout or injury, as male athletes push themselves too hard in an attempt to prove their worth. These coping strategies often result in inconsistent or erratic performance, further reinforcing the athlete's sense of inferiority.

## **Biological Factors**

Biological factors play a fundamental role in shaping differences in sports performance between men and women. These factors are deeply rooted in the physiological and anatomical differences between genders, which are influenced by genetics, hormones, muscle composition, and other biological processes. While social, cultural, and psychological factors contribute to gender differences in sports, biological distinctions often explain why men and women tend to excel in different areas of physical performance.

### *1. Hormonal Differences*

One of the most significant biological factors influencing gender differences in sports performance is the variation in hormone levels between men and women. Testosterone and estrogen, the primary sex hormones, affect muscle mass, bone density, fat distribution, and energy levels, all of which contribute to physical performance.

Testosterone, which is present in much higher levels in men, plays a critical role in increasing muscle mass, strength, and endurance. According to Bhasin et al. (2001), testosterone directly influences muscle hypertrophy (growth) by promoting protein synthesis and enhancing muscle

recovery after exercise. This gives men a natural advantage in sports that require strength, power, and speed. In contrast, women have lower levels of testosterone directly influences muscle hypertrophy (growth) by promoting protein synthesis and enhancing muscle recovery after exercise. This gives men a natural advantage in sports that require strength, power, and speed. In contrast, women have lower levels of testosterone, which limits their ability to develop the same level of muscle mass and strength, although they can still achieve high levels of fitness through training.

On the other hand, estrogen, the primary female hormone, influences body fat distribution and flexibility, which can provide advantages in certain sports such as gymnastics, dance, or long-distance running. Constantini and Warren (1995), note that estrogen also helps protect women from bone-related injuries, such as stress fractures, by promoting bone density, although this protection may diminish after menopause when estrogen levels drop.

## 2. *Muscle Composition and strength*

Men and women differ in muscle composition, which significantly impacts sports performance. Miller et al. (1993), explain that men generally have a higher proportion of fast-twitch fibers, which are better suited for short bursts of power and speed. These fibers are critical in activities like sprinting, weightlifting, and explosive sports such as basketball or football. In contrast, women tend to have a higher proportion of slow-twitch muscle fibers, which are more efficient for endurance activities, such as long-distance running and swimming. Slow-twitch fibers are more resistant to fatigue, allowing female athletes to excel in sports that require sustained energy output over longer periods.

In terms of absolute strength, Staron et al. (2000), found that men generally possess 30-40% greater muscle mass than women, which translates into superior performance in strength-based

sports like weightlifting, wrestling, or boxing. However, when strength is measured relative to body size or lean body mass, the gender gap narrows significantly. This suggests that while men have an advantage in absolute terms, women are highly competitive when strength is assessed proportionally to body weight.

### 3. *Cardiovascular Capacity*

Another critical biological factor influencing gender differences in sports performance is cardiovascular capacity, which refers to the heart's ability to deliver oxygen to muscles during sustained physical activity. Kenney et al. (2015), highlight that men tend to have a larger hearts and lungs, which contribute to higher cardiac output and a greater ability to transport oxygen to working muscles. This gives men an advantage in sports that require aerobic endurance, such as; long-distance running, cycling, and swimming.

Men also have higher hemoglobin levels, which increases the oxygen-carrying capacity of their blood. Hemoglobin is a protein in red blood cells that binds to oxygen and transport it to muscles. Sutton and Casey (1975), found that men's hemoglobin levels are 10-15% higher than women's, which enhances their endurance performance in aerobic activities. Women's lower hemoglobin levels can lead to earlier fatigue in endurance sports, although female athletes can improve their aerobic capacity through training adaptations.

Despite these differences, Loftin et al. (2007), noted that highly trained female athletes often close the gap in cardiovascular performance by maximizing their oxygen utilization efficiency ( $VO_2$  max), which refers to the maximum amount of oxygen a person can use during intense exercise. Although men typically have a higher  $VO_2$  max due to their larger body size and muscle mass, women with strong aerobic conditioning can compete at elite levels in endurance sports.

#### 4. *Body Composition and Fat Distribution*

Body composition, including fat distribution, is another biological factor that influences gender differences in sports performance. Women naturally have a higher percentage of body fat than men, primarily due to reproductive physiology and hormonal differences. Heyward and Wagner (2004), observed that women generally have 10-12% more body fat than men, which can affect performance in certain sports. For instance, the additional fat can be a disadvantage in sports where low body fat is necessary for optimal speed and agility, such as; sprinting or gymnastics.

However, fat distribution can also be beneficial in specific contexts. Wilmore and Costill (2004), explain that body fat serves as an energy reserve during prolonged physical activity, which can help female athletes excel in endurance sports such as; marathon running, where energy conservation is critical. Moreover, the distribution of fat in women typically around the hips and thighs can make them more flexible, aiding performance in sports like gymnastics, diving, or figure skating.

#### 5. *Neuromuscular Coordination*

Neuromuscular coordination, or the ability of the nervous system to coordinate muscle actions efficiently, also differs between men and women. Noble (1996), notes that men tend to have faster reaction times and greater neuromuscular power, which helps them in sports that require quick reflexes and explosive movements, such as sprinting, football or basketball.

However, women often excel in sports that require fine motor skills and precise control, such as gymnastics or figure skating. Thomas and French (1985) found that women tend to have better balance, flexibility, and fine motor coordination than men, which allows them to perform

complex movements with greater precision. These differences are not absolute but are shaped by both biological and cultural factors.

#### 6. *Injury Susceptibility*

Injury susceptibility varies between men and women due to biological differences, particularly in joint structure and biomechanics. Women are more prone to certain injuries, such as anterior cruciate ligament (ACL) tears, due to differences in hip structure, ligament laxity, and neuromuscular control. Harmon and Ireland (2000) found that women are two to eight times more likely than men to suffer ACL injuries, especially in sports that involve jumping, pivoting, and sudden changes of direction, such as basketball or soccer.

Women's wider hips and different biomechanics, combined with hormonal fluctuations that affect ligament stability, increase the risk of knee injuries. These differences are important when considering gender-specific training and injury prevention programs to help female athletes reduce their risk of injury and improve performance.

#### 7. *Genetic Factors*

Genetic predispositions also play a role in determining sports performance and are influenced by gender. Epstein (2013), emphasizes that certain genetic traits, such as the presence of the ACTN3 gene, are associated with elite-level performance in power and sprinting events. This gene is more commonly found in men and linked to the development of fast-twitch muscle fibers, which are critical for explosive strength and speed.

Although, both men and women can possess advantageous genetic traits for sports performance, men are more likely to express genes that enhance muscle growth, strength, and power due to their higher testosterone levels. Women, however, may carry genetic variations that

favor endurance and flexibility, giving them an edge in sports that require sustained energy output and adaptability.

Overall, all these personal factors show while men might have a better sports performance than women and vice versa.

## **Environmental Factors Influencing Gender in Sports Performance**

Environmental factors such as; socio-economic status and socio-cultural factors influence gender in sports performance. These factors are explained in details below:

### ***Socio-Economic Status***

Socio-economic status (SES) is a critical factor that shapes an individual's opportunities and experiences in sports. SES encompasses a range of elements, including income level, education, occupation, and access to resources, which collectively influence both men's and women's participation and performance in sports. The effects of SES on sports performance are often intertwined with gender, as socio-economic disparities can have different impacts on male and female athletes.

- ***Access to Resources and Facilities***

Socio-economic status significantly affects access to sports facilities, coaching, and equipment, which are essential for developing skills and improving performance. Athletes from higher socio-economic backgrounds are more likely to have access to well-funded sports programs, high-quality coaching, and advanced training facilities. According to Bailey et al. (2013), access to sports resources is one of the most critical determinant of athletic success, as it allows athletes to receive consistent high-quality training from an early age.

Gender disparities in access to resources are also influenced by SES. In lower socio-economic communities, sports programs for girls are often underfunded or nonexistent compared to those for boys. Coakley (2009), notes that boys are more likely to benefit from organized sports programs in impoverished areas, while girls may face limited opportunities due to a lack of investment in female sports. This results in a gender gap in skill development and sports participation, with boys having more opportunities to excel at higher levels.

- *Parental Support and Involvement*

Parental support plays a crucial role in nurturing sports talent, and this support is often tied to socio-economic status. Parents from higher SES backgrounds are more likely to have the financial means and time to invest in their children's sports activities. They can afford to enroll their children in private sport clubs, pay for professional coaching, and provide transportation to competitions. Fredricks and Eccles (2005), found that parents from higher SES background are more likely to be involved in their children's sports activities, which positively influences their participation and performance.

For girls, parental support is particularly significant in overcoming traditional gender norms that discourage female participation in sports. In families with higher socio-economic status, parents are more likely to challenge stereotypes and encourage their daughters to pursue sports. However, in lower SES families, the focus may be securing economic stability, with sports often being seen as a luxury or an activity primarily for boys. Messner and Sabo (1990), argue that girls from lower-income families are less likely to receive the same level of encouragement as boys, which limits their sports involvement and success.

- *Education and Sports Opportunities*

Education is closely linked to socio-economic status, and it influences access to organized sports through school-based programs. Schools in wealthier areas often offer better sports facilities, a wider range of sports programs, and more opportunities for both boys and girls to participate in extracurricular activities. Eime et al. (2015), explain that educational institutions play a vital role in providing sports opportunities for female athletes, as school sports programs can help mitigate gender disparities in sports participation.

In contrast, schools in lower-income areas may lack the funding necessary to provide sports programs, and those that do not exist may prioritize boys' sports over girls'. This creates a situation where boys from low SES backgrounds often may still have access to sports through school or community programs, but girls may face additional barriers due to limited opportunities. As a result, female athletes from lower socio-economic backgrounds often struggle to compete with their male counterparts or with females from wealthier backgrounds who have had more access to sports training and competitions.

- *Financial Barriers and Participation Costs*

Financial constraints are a significant barrier to sports participation, particularly for women and girls. Sports activities often require substantial financial investment, including the cost of equipment, uniforms, travel, and competition fees. Families with lower incomes may not be able to afford these expenses, leading to a reduced participation in organized sports. Stempel (2005), highlights that financial barriers disproportionately affect female athletes because girls' sports are often less prioritized in terms of funding and scholarships compared to boys' sports particularly in lower-income communities.

For women, financial barriers can persist at a higher levels of sports performance. Professional female athletes often earn significantly less than their male counterparts, which limits their ability to invest in advanced training, travel for competitions, or secure sponsorships. Cooky and Messner (2018), note that the pay gap between male and female athletes is exacerbated by socio-economic disparities, as women from lower-income backgrounds may not have the financial resources to pursue sports at an elite level, even if they have the talent.

- *Social and Cultural Expectations*

Socio-economic status influences social and cultural expectations related to gender and sports participation. In many lower-income communities, traditional gender roles may be more entrenched, with sports being viewed as a male domain. Hargreaves (1994), argues that in societies where socio-economic hardships are prevalent, the focus on survival and economic contribution often reinforces traditional gender norms, limiting girls' and women's participation in sports and a perception that athletic pursuits are not as important for females.

In higher SES communities, there may be more support for gender equality in sports, as families and institutions are more likely to challenge traditional gender norms. Sabo and Veliz (2008), found that girls from wealthier families are more likely to participate in sports because they are encouraged to pursue a range of extracurricular activities, including athletics, which are seen as important for personal development and success. This socio-economic support can result in higher levels of female sports participation and performance in affluent communities compared to lower-income areas, where girls face more social and cultural barriers.

- *Career Opportunities and Sponsorships*

At the elite level, socio-economic factors influence career opportunities and sponsorship availability for athletes. Female athletes often struggle to secure sponsorships and financial

backing compared to their male counterparts, which is partly due to socio-economic inequalities in how men's and women's sports are marketed and perceived. Fink (2016), notes that men's sports receive the vast majority of media coverage and sponsorship deals, which limits the earning potential for female athletes. This disparity is more pronounced for female athletes from lower socio-economic backgrounds, who may not have access to the networks and resources needed to secure sponsorships

The financial rewards of sports careers can also deter female athletes from low-income families from pursuing sports professionally. For men, sports can often represent a viable path to upward mobility, particularly in sports like basketball, football, or boxing, where high-paying professional leagues exist. However, women's sports tend to offer fewer financial rewards, making it less attractive for women from lower SES backgrounds to pursue a career in sports, particularly when compared to other opportunities that offer more stable income.

- *Impact on Training and Development*

The ability to access specialized training and coaching is often determined by socio-economic status. Athletes from wealthier backgrounds have the financial means to hire personal trainers, attend sports camps, and participate in elite training programs, all of which enhance their performance. Côté et al. (2009), found that early access to high-quality coaching and development programs is a key predictor of success in sports, as athletes who receive specialized training from a young age are more likely to excel.

Gender disparities in training opportunities are also influenced by SES. Boys are more likely to receive specialized coaching and development support, even in lower-income communities, while girls may have to rely on general or less competitive sports programs. Deaner et al. (2015), suggest that the availability of gender-specific sports training programs is often linked to socio-

economic factors, with higher SES communities offering more opportunities for girls to receive the same level of training as boys. In lower SES communities, the lack of investment in girls' sports leads to fewer opportunities for skill development and competitive success.

### ***Socio-Cultural Factors***

Socio-cultural factors play a crucial role in shaping gender differences in sports participation and performance. These factors include societal norms, cultural beliefs, values, and attitudes toward gender roles, all of which influence how men and women engage in sports. Socio-cultural influences are often intertwined with historical, institutional, and social practices that either support or hinder the development of athletes based on gender.

#### *1. Gender Roles and Stereotypes*

One of the most significant socio-cultural factors affecting gender differences in sports performance is the existence of traditional gender roles and stereotypes. Historically, sports have been perceived as a male-dominated activity, with physical strength, competitiveness, and aggression being viewed as masculine traits. Connell (1987), explains that traditional gender roles often emphasize physical prowess as a masculine attribute, leading to the association of sports with male participation, while women are expected to exhibit qualities like grace, nurturing, and passivity, which are less connected to competitive sports.

These gender roles discourage women from participating in sports that are seen as "masculine," such as football, rugby, or weightlifting, and encourage their participation in sports that are perceived as more "feminine," such as gymnastics, figure skating, or synchronized swimming. Hargreaves (1994), highlights that such stereotypes can limit women's involvement in competitive sports and lead to fewer opportunities for women to perform at the same level as men, especially in sports that require strength and aggression.

In many societies, girls are socialized from an early age to conform to these gender roles, which reduces their exposure to and interest in sports. Boys, on the other hand, are often encouraged to participate in sports as a way to assert their masculinity and gain social approval. This socialization process leads to a gender gap in sports participation and performance, as boys are given more opportunities to develop physical skills and excel in sports, while girls may face social pressures to prioritize other activities.

## 2. *Cultural Attitudes Toward Female Athletes*

Cultural attitudes toward female athletes can either promote or hinder women's participation and performance in sports. In many cultures, there is still resistance to women competing in sports at the same level as men. Messner (2002), points out that women who participate in sports, particularly in male-dominated fields, often face social scrutiny, with their athletic abilities being questioned or undervalued. Female athletes are sometimes seen as deviating from traditional femininity, leading to negative perceptions that can discourage women from pursuing sports careers.

These cultural attitudes are reinforced by media portrayals of male and female athletes. Kane and Maxwell (2011), found that media coverage often focuses on the physical appearance or personal lives of female athletes rather than their athletic achievements, reinforcing the notion that women's value in sports is tied to their appearance rather than their abilities. This type of coverage can undermine the legitimacy of women's sports and contribute to lower levels of investment, sponsorship, and media attention compared to men's sports, which in turn affects performance opportunities.

In some cultures, women's participation in sports is restricted due to religious or traditional beliefs. For example, in certain conservative societies, women may be discouraged or even

prohibited from participating in sports that require public display of their bodies or physical competition against men. Pfister (2006), explains that in such cultures, sports may be viewed as incompatible with traditional gender norms, which further marginalizes women in the sporting arena and limits their access to training and competition.

### 3. *Access to Sports Opportunities*

The opportunities available for men and women to participate in sports are often shaped by socio-cultural norms and institutional practices. Historically, men's sports have been prioritized in terms of funding, facilities, and media coverage, which has led to a significant gap in resources and opportunities between male and female athletes. Coakley (2009), notes that many sports institutions continue to allocate more resources to men's sports, including access to better training facilities, coaching, and competition opportunities, which in turn affects performance levels

For women, socio-cultural factors have led to fewer opportunities to participate in organized sports, particularly in traditionally male-dominated fields. Sabo and Veliz (2008), argue that while progress has been made in increasing opportunities for women through policies like *Title IX* in the United States, disparities still exist in many countries where women's sports receive less support and investment. This lack of support can prevent women from reaching the same levels of performance as men due to limited access to the same level of coaching, competition, and facilities.

In addition, sports programs in schools and communities often prioritize boys' sports, particularly in cultures where sports are viewed as a way to assert masculinity. Scraton and Flintoff (2002), point out that sports programs for girls are often underfunded or limited in scope compared to those for boys, leading to fewer opportunities for girls to develop their athletic skills.

This disparity in access to sports opportunities contributes to the gender gap in sports performance, as boys are given more opportunities to excel and compete at higher levels.

#### 4. *Media Representation and Sports Marketing*

The media plays a critical role in shaping societal attitudes toward gender and sports performance. The underrepresentation of female athletes in sports media and the differential portrayal of male and female athletes contribute to gender disparities in sports. Fink (2015), argues that the lack of media coverage of women's sports reinforces the perception that men's sports are more important or valuable, which in turn affects the visibility and marketability of female athletes.

When female athletes are featured in the media, they are often sexualized or portrayed in ways that emphasize their appearance over their athletic abilities. Daniels (2009), found that female athletes are more likely to be depicted in passive or sexualized poses in sports media, which contrasts with the active and powerful portrayals of male athletes. This type of media representation reinforces gender stereotypes and undermines the legitimacy of women's sports, contributing to lower levels of sponsorship, fan support, and financial investment in women's athletics.

The commercial success of male-dominated sports, such as football, basketball, and cricket, is often driven by media coverage and marketing efforts that promote male athletes as role models and celebrities. In contrast, female athletes may struggle to gain the same level of recognition, even when they achieve comparable levels of success. Cooky, Messner, and Musto (2015), explain that this disparity in media representation affects the public's perception of female athletes and their sports, leading to fewer opportunities for women to secure sponsorships and financial backing, which in turn affects their ability to train and compete at elite levels.

## 5. *Socialization and Peer Influence*

The process of socialization, or the way individuals learn societal norms and behaviors, is a key factor in shaping gender differences in sports performance. From a young age, children are socialized into gender roles that influence their interest and participation in sports. Boys are often encouraged to engage in competitive and physically demanding activities, while girls may be steered toward more passive or artistic activities. Messner and Sabo (1990), argue that peer influence plays a significant role in reinforcing these gender norms, as boys who excel in sports are often rewarded with social status, while girls may face social pressure to conform to traditional feminine roles.

Peer influence is particularly strong during adolescence, a critical period for sports development. Eccles and Harold (1991), found that boys are more likely to receive encouragement from peers to participate in sports, while girls may experience peer pressure to avoid sports, particularly those perceived as masculine. This socialization process contributes to the gender gap in sports participation and performance, as boys are more likely to engage in regular physical activity and develop their athletic skills, while girls may opt out of sports due to social pressures.

## 6. *Institutional Support and Gender Equality Policies*

Institutional support for gender equality in sports varies widely across different cultures and societies. In some countries, gender equality policies have been implemented to promote equal opportunities for men and women in sports. For example, *Title IX* in the United States has played a significant role in increasing opportunities for women in sports by requiring schools and colleges to provide equal funding and support for male and female athletes. Brake (2010), notes

that Title IX has led to a dramatic increase in female participation in sports at the high school and collegiate levels, contributing to improved performance and representation of female athletes.

However, in many parts of the world, institutional support for gender equality in sports is lacking, and women continue to face significant barriers to participation. Fasting and Sand (2009), explain that in countries where gender equality policies are not enforced, women often receive less institutional support in terms of funding, coaching, and access to competition. This lack of institutional support hinders the development of female athletes and perpetuates gender disparities in sports performance.

### **Summary of Reviewed Related Literature**

The influence of gender in sports performance has been widely studied, with several factors contributing to disparities between male and female athletes. Key themes from the literature include; Personal factors (anxiety, physical fitness, inferiority complex, family, and biological factors) and Environmental factors (socio-economic, and socio-cultural factors,) each shaping how men and women participate and perform in sports.

The literature highlights that while Personal factors account for some differences in sports performance between genders, socio-economic, and socio-cultural factors play a larger role in perpetuating gender disparities in sports. The interplay of these factors results in fewer opportunities for women to develop their athletic potential, leading to an ongoing gender gap in sports participation and performance. Addressing these barriers through policy changes, resource allocation, and shifting cultural norms is essential to promoting gender equality in sports.

## **CHAPTER THREE**

### **METHODOLOGY**

This chapter deals with the method and procedure used in this study. It was discussed under the following sub-headings:

- Design of the Study
- Population of the Study
- Sample and Sampling techniques
- Research Instrument
- Validity of the Instrument
- Reliability of the Instrument
- Method of Data Collection
- Method of Data Analysis

#### **Design of the Study**

This study adopted a descriptive survey research design. This design is appropriate for the study as the study is aimed at determining the relationship between personal and environmental factors that influence gender in sports participation. This correlational survey design allows the researcher to observe and analyze natural occurring differences in sports participation across gender without any form of manipulation.

#### **Population of the Study**

The population for this study consists of all undergraduate students of Wellspring University who participate in sport activities, both male and female. The population is estimated to include students across different colleges who engage in different levels and types of sports, either recreational or competitive. The colleges include: College of Health Sciences; College of

Science and Computing; College of Social and Management Sciences; College of Pure and Applied Sciences. In all of these four colleges, the undergraduate students population numbers One Thousand, Seven Hundred and Fourteen (1,714).

### **Sample and Sampling Techniques**

Due to the large sample size, the Taro Yamane formula was used in the derivation of the sample size, thus:

The Taro Yamane formula is given as:

$$n = N/(1+N(e)^2)$$

where:

n = the sample size

N = the finite population

e = level of significance (or limit of tolerable error), usually 0.01 or 0.05

1 = unite (a constant value)

$$n = N/(1+N(e)^2)$$

$$n = 6900/(1+6900*(0.05)^2)$$

$$n = 6900/6901*0.0025$$

$$n = 6900/17.2525$$

$$n = 399.9 = 400.$$

Thus, the sample size for the study is 400.

### **Research Instrument**

The test instrument for the study was a self- structured questionnaire. The questionnaire contained close-ended questions based on a modified four-point Likert scale (Strongly Agree, Agree, Disagree, Strongly Disagree) to access the various personal and environmental factors

affecting gender in sports participation. The questionnaire was divided into sections; A, B and C. Section A contained demographic data viz; gender, age, level of study, type of sport, while Section B contained personal factors influencing gender sports participation and Section C contained items on environmental factors influencing gender in sports participation (see Appendix I).

### **Validity of the Instrument**

This instrument was validated by researcher's supervisor and two experts from the Department of Human Kinetics and Sports Science. Their suggestions, critiques and corrections formed the final draft of the research instrument.

### **Reliability of the Instrument**

In this study, the structured questionnaire used to gather data on the personal and environmental factors influencing gender in sports performance will undergo a reliability test to ensure that it consistently provides accurate results. Hence, a pilot test was conducted on a small sample of undergraduates once from a university other than Wellspring University, who share similar characteristics with the target population. This sample consisted of 20 students, whose responses was analysed using Cronbach alpha statistics to determine the internal consistency of the instrument. A correlation coefficient of 0.89 (see Appendix III) was obtained showing that the instrument was reliable.

### **Method of Data Collection**

The data was collected using a Google form online. The Google form was sent to different class groups of students in Wellspring University and their responses was retrieved online via the Google form.

## **Method of Data Analysis**

The data collected will be analyzed using descriptive and inferential statistics. Descriptive statistics of frequencies and percentages was used to analyse the demographic characteristics of the respondents. Thereafter, simple multiple regression statistics were used in testing the formulated hypothesis as corresponds with raised research questions. The hypotheses were tested at 0.05 level of significance.

## CHAPTER FOUR

### PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

In this chapter the results of data analysis was presented showing tables and interpretation, thereafter the discussion of findings was done.

#### Presentation of Results

**Research Question 1:** Is there a relationship between male and female students sport participation based on personal factors (physical fitness, anxiety, family influence, inferiority complex, biological).

**Hypothesis 1:** There is no significant relationship between male and female students sports participation based on personal factors.

**Table 1:** Simple Linear Regression Statistics on relationship between male and female students sports participation based on personal factors.

**Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df 1	df 2	Sig. F Change
.099 <sup>a</sup>	.010	.005	.41872	.010	1.973	2	397	.140

Data in table 1 revealed that with r-value of .099, there is a positive weak relationship between male and female students sports participation based on personal factors. The R Square value of 0.010 (1.0%) shows that both gender and personal variables predict 1.0% of the variance of students sports participation.

**Anova<sup>b</sup> (students sports participation)**

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>	<b>Decision</b>
Regression	.692	2	.346			
Residual	69.605	397	.175	1.973	.140 <sup>b</sup>	Ho is accepted
<b>Total</b>	<b>70.297</b>	<b>399</b>				

The data in the ANOVA table in relation to table 1 showed the F value is 1.973. The p-value is 0.140 which is greater than 0.05 level of significance, thus the null hypothesis is accepted which means that there is no significant relationship between male and female students sports participation based on personal factors.

**Coefficients (students sports participation)**

<b>Model</b>	<b>Standardized Coefficients</b>		
	<b>Beta</b>	<b>t</b>	<b>Sig.</b>
(Constant)		6.282	.000
Personal factors	.091	1.800	.073
Gender	.031	.608	.544

The data from the coefficients table in relation to students sports participation showed that personal factors was the highest predictor ( $\beta = .091$ ) of students sports participation.

**Research Question 2:** Is there a relationship between male and female students sports participation based on environmental factors (socio-economic status, socio-cultural)

**Hypothesis 2:** There is no significant relationship between male and female students sports participation based on environmental factors

**Table 2:** Simple Linear Regression Statistics on relationship between male and female students sports participation based on environmental factors.

<b>Model Summary</b>								
<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>	<b>R Square Change</b>	<b>F Change</b>	<b>df 1</b>	<b>df 2</b>	<b>Sig. F Change</b>
.186 <sup>a</sup>	.035	.030	.41347	.035	7.102	2	397	.001

Data in table 2 revealed that with r-value of .186, there is a positive weak relationship between male and female students sports participation based on environmental factors. The R Square value of 0.035 (3.5%) shows that both gender and environmental variables predict 3.5% of the variance of students sports participation.

**Anova<sup>b</sup> (students sports participation)**

	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>	<b>Decision</b>
Regression	2.428	2	1.214	7.102	.001 <sup>b</sup>	Ho is rejected
Residual	67.869	397	.171			
<b>Total</b>	<b>70.297</b>	<b>399</b>				

The data in the ANOVA table in relation to table 2 showed the F value is 7.102. The p-value is 0.001 which is less than 0.05 level of significance, thus the null hypothesis is rejected which means that there is a significant relationship between male and female students sports participation based on environmental factors.

### Coefficients (students sports participation)

Model	Standardized Coefficients		
	Beta	t	Sig.
(Constant)		4.662	.000
Gender	.018	.368	.713
Environmental factors	.183	3.672	.000

The data from the coefficients table in relation to students sports participation showed that environmental factors was the highest predictor ( $\beta = .183$ ) of students sports participation.

**Research Question 3:** What are the contributions of personal and environmental factors to students sports participation?

**Hypothesis 3:** There is no significant contribution of personal and environmental factors to students sports participation.

**Table 3:** Simple Linear Regression Statistics on contribution of personal and environmental factors to students sports participation.

Model Summary								
R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df 1	df 2	Sig. F Change
.190 <sup>a</sup>	.036	.031	.41314	.036	7.427	2	397	.001

Data in table 3 revealed that with r-value of .190, there is a positive weak relationship in the contributions of personal and environmental factors to students sports participation. The R Square value of 0.036 (3.6%) shows that both personal and environmental variables predict 3.6% of the variance of students sports participation.

**Anova<sup>b</sup> (students sports participation)**

	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>	<b>Decision</b>
Regression	2.535	2	1.268	7.427	.001 <sup>b</sup>	Ho is rejected
Residual	67.762	397	.171			
<b>Total</b>	<b>70.297</b>	<b>399</b>				

The data in the ANOVA table in relation to table 3 showed the F value is 7.427. The p-value is 0.001 which is less than 0.05 level of significance, thus the null hypothesis is rejected which means that there is a significant contribution of personal and environmental factors to students sports participation.

**Coefficients (students sports participation)**

<b>Model</b>	<b>Standardized Coefficients</b>		
	<b>Beta</b>	<b>t</b>	<b>Sig.</b>
(Constant)		4.917	.000
Environmental factors	.225	3.343	.001
personal factors	-.059	-.873	.383

The data from the coefficients table in relation to contributions of personal and environmental factors to students sports participation showed that environmental factors was the highest predictor ( $\beta = .225$ ) of students sports participation.

### **Discussion of Findings**

The findings of research question 1 with corresponding hypothesis 1 showed that there was a positive weak relationship between male and female students sports participation based on personal factors, which was not significant. Also, personal factors was the highest predictor of students' sports participation. Following this, Wilmore and Costil (2005) emphasized that there exist differences in physical fitness components between gender largely contribute to the performance gaps observed in various sports disciplines. However, it is important to recognize that training and conditioning can mitigate some of these differences, allowing athletes of both gender to improve their performance significantly. Additionally, Tucker and Collins (2012) opined that one of the primary biological factors influencing sports performance is the physiological differences between males and females; as men generally have higher levels of testosterone contributing to their increased muscle mass, bone density, and cardiovascular endurance, while women, due to higher estrogen levels, have a greater proportion of body fat and a different muscle distribution. This naturally leads to some observable differences in strength-based and endurance sports.

The findings of research question 2 in relation to hypothesis 2 revealed that there was a positive weak significant relationship between male and female students sports participation based on environmental factors; as environmental factors was the highest predictor of students sports participation. This aligns with the documentation of Côté et al. (2009) who found that early access to high-quality coaching and development programs is a key predictor of success in

sports, as athletes who receive specialized training from a young age are more likely to excel. In addition, Deaner et al (2015) suggested that the availability of gender-specific sports training programmes is often linked to socio-economic factors, as higher SES communities would offer opportunities for girls to receive same level of training as boys, however, the reverse is the case for lower SES communities.

The findings of research question 3 as corresponds to hypothesis 3 revealed that there was a positive weak significant contributions of personal and environmental factors to students sports participation; as environmental factors was the highest predictor of students sports participation. Aligning with this finding, it has been noted that sports programs in schools and communities often prioritize boys' sports, particularly in cultures where sports are viewed as a way to assert masculinity. Corroborating this, Scraton and Flintoff (2002), pointed out that sports programs for girls are often underfunded or limited in scope compared to those for boys, leading to fewer opportunities for girls to develop their athletic skills. This disparity in access to sports opportunities contributes to the gender gap in sports performance, as boys are given more opportunities to excel and compete at higher levels. It becomes clear from literature that personal and environmental factors tend to favour the male gender over their female counterparts.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter encapsulates the summary, conclusion as well as the necessary recommendations.

#### **Summary**

This study investigated the personal and environmental factors influencing gender sports participation among undergraduates in Wellspring University. It sought to determine the personal factors (physical fitness, anxiety, family influence, and inferiority complex, biological) and environmental factors (socio-economic level, socio-cultural) that influence gender differences in sports performance. To guide the study, three (3) research questions were raised with corresponding hypotheses that were tested at 0.05 level of significance.

The study adopted a descriptive survey research design. The population of the study was made up of all undergraduates of the Wellspring University, totaling 6900. A sample size of 400 undergraduates was selected from the population using the Taro Yamane formula due to the large size of the population. The research instrument for the study was a self-constructed questionnaire. The statistical analysis was carried out using descriptive statistics of frequency and percentage for their bio-data, inferential statistics of simple multiple regression was used in testing hypothesis 1 to 3 corresponding to research questions 1 to 3. The formulated hypotheses tested were set at 0.05 Alpha level.

The findings of this research based on the research questions raised and hypotheses formulated showed the following:

- there was a positive weak relationship between male and female students sports participation based on personal factors, which was not significant. Also, personal factors was the highest predictor of students' sports participation.
- there was a positive weak significant relationship between male and female students sports participation based on environmental factors; as environmental factors was the highest predictor of students sports participation.
- there was a positive weak significant contributions of personal and environmental factors to students sports participation; as environmental factors was the highest predictor of students sports participation.

## **Conclusion**

Based on the research findings, it can be concluded that there was a positive weak and insignificant relationship between male and female students sports participation based on personal factors, with personal factors being the highest predictors of students sports participation. Also, there was a positive weak and significant relationship between male and female students sports participation based on environmental factors, with environmental factors being the highest predictors of students sports participation. Lastly, there was a positive weak significant contributions of personal and environmental factors to students sports participation with environmental factors being the highest predictor of students sports participation.

## **Recommendations**

From the findings of this study, the following recommendations were put forth:

1. The necessary and ideal environment should be created to bring out the best among undergraduates in relation to their sports participation.

2. Undergraduates irrespective of their gender should be encouraged by all and sundry to regularly participate in sports.
3. Experts such as sports psychologists and other significant others should be able to manage undergraduates psychological and personal issues effectively to make them gain full satisfaction and enjoyment while engaging in sporting events.

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## APPENDICES

### APPENDIX I

#### DEPARTMENT OF HUMAN KINETICS AND SPORTS SCIENCE

#### FACULTY OF EDUCATION

#### UNIVERSITY OF BENIN, BENIN CITY

### QUESTIONNAIRE ON THE PERSONAL AND ENVIRONMENTAL FACTORS INFLUENCING GENDER IN SPORTS PARTICIPATION

Dear respondents, kindly provide the following information with all honesty. Your responses are anonymous and will be treated confidentially. It will not be revealed to third parties and will only be used for the purpose of this research.

#### SECTION A: DEMOGRAPHIC DATA

- **Gender:** Male ( ) Female ( ).
- **Age:** Under 18 ( ) 18-21 ( ) 22-25 ( ) 26 and above ( ).
- **Level of study:** 100L ( ) 200L ( ) 300L ( ) 400L ( ) 500L ( ).
- **Type of Sport:** Football ( ) Basketball ( ) Volleyball ( ) Handball ( ) Swimming ( ) Athletics ( ) Others ( Please specify) \_\_\_\_\_

#### SECTION B: PERSONAL FACTORS INFLUENCING GENDER SPORTS PARTICIPATION

**Instruction:** Please Tick any of the responses that correspond with your opinion in the appropriate box below.

**Key:** A = Agree, SA = Strongly Agree ,D = Disagree, SD = Strongly Disagree

S/N	Personal Factors influencing Gender sports participation	SA	A	SD	D
1	Physical fitness affects gender differences in sports performance, with males often perceived to have an advantage.				
2	Anxiety Impacts female athletes more significantly discouraging Participation in competitive sports.				
3	Inferiority complex affects female athletes confidence in competing against males in co-gender sports.				
4	Women are more likely than men to compare their performance to the others which can affect their				

	participation in sports.				
5	Female athletes are more motivated to participate when they see female role models excelling in sports.				
6	Academic pressure impacts male and female participants differently females prioritizing academics more often.				

**SECTION C: ENVIRONMENTAL FACTORS INFLUENCING GENDER IN SPORTS PARTICIPATION**

S/N	Environmental factors influencing Gender in sports participation	SA	A	SD	D
1.	Socio- economic status of families affects female access to sports facilities more than males.				
2	Adequate sports facilities and resources reduce gender disparities in sports participation.				
3	Gender stereotypes discourage females from engaging traditionally male dominated sports				
4	Cultural norms and traditions limit female participation in sports compared to males.				
5	Negative attitudes from coaches and teammates discourage female athletes more than male athletes.				

**Thank you for your Participation!**

## APPENDIX II

### DATA ANALYSIS RESULTS

```

GET
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DATASET NAME DataSet1 WINDOW=FRONT.
GET
  FILE='C:\Users\user\Documents\Leonard analysis.sav'.
DATASET NAME DataSet2 WINDOW=FRONT.
COMPUTE personal_factors=Item1 + Item2 + Item3 + Item4 + Item5 + Item6 + gender.
EXECUTE.
COMPUTE environmental_factors=Item7 + Item8 + Item9 + Item10 + Item11 + SES.
EXECUTE.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT sports_participation
  /METHOD=ENTER personal_factors gender.

```

### Regression

[DataSet2] C:\Users\user\Documents\Leonard analysis.sav

**Descriptive Statistics**

	Mean	Std. Deviation	N
sports_participation	1.2275	.41974	400
personal_factors	21.5100	3.19773	400
Gender	1.4125	.49290	400

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	gender, personal factors <sup>b</sup>		Enter

a. Dependent Variable: sports\_participation

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.099 <sup>a</sup>	.010	.005	.41872	.010	1.973	2	397	.140

a. Predictors: (Constant), gender, personal\_factors

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.692	2	.346	1.973	.140 <sup>b</sup>
	Residual	69.605	397	.175		
	Total	70.297	399			

a. Dependent Variable: sports\_participation

b. Predictors: (Constant), gender, personal\_factors

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.935	.149		6.282	.000
	personal_factors	.012	.007	.091	1.800	.073
	gender	.026	.043	.031	.608	.544

a. Dependent Variable: sports\_participation

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT sports_participation
  /METHOD=ENTER gender environmental_factors.
```

## Regression

**Descriptive Statistics**

	Mean	Std. Deviation	N
sports_participation	1.2275	.41974	400
Gender	1.4125	.49290	400
environmental_factors	18.3925	2.72065	400

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	environmental_factors, gender <sup>b</sup>		Enter

a. Dependent Variable: sports\_participation

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.186 <sup>a</sup>	.035	.030	.41347	.035	7.102	2	397	.001

a. Predictors: (Constant), environmental\_factors, gender

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.428	2	1.214	7.102	.001 <sup>b</sup>
	Residual	67.869	397	.171		
	Total	70.297	399			

a. Dependent Variable: sports\_participation

b. Predictors: (Constant), environmental\_factors, gender

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.687	.147		4.662	.000
	Gender	.016	.042	.018	.368	.713
	environmental factors	.028	.008	.183	3.672	.000

a. Dependent Variable: sports\_participation

```

REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT sports_participation
  /METHOD=ENTER environmental_factors personal_factors.

```

## Regression

**Descriptive Statistics**

	Mean	Std. Deviation	N
sports_participation	1.2275	.41974	400
environmental_factors	18.3925	2.72065	400
personal_factors	21.5100	3.19773	400



**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	personal_factors, environmental_factors <sup>b</sup>		Enter

a. Dependent Variable: sports\_participation

b. All requested variables entered.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.190 <sup>a</sup>	.036	.031	.41314	.036	7.427	2	397	.001

a. Predictors: (Constant), personal\_factors, environmental\_factors

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.535	2	1.268	7.427	.001 <sup>b</sup>
	Residual	67.762	397	.171		
	Total	70.297	399			

a. Dependent Variable: sports\_participation

b. Predictors: (Constant), personal\_factors, environmental\_factors

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.755	.154		4.917	.000
	environmental_factors	.035	.010	.225	3.343	.001
	personal_factors	-.008	.009	-.059	-.873	.383

a. Dependent Variable: sports\_participation

## APPENDIX III

### RELIABILITY STATISTICS

RELIABILITY

```
/VARIABLES=Item1 Item2 Item3 Item4 Item5 Item6 Item7 Item8 Item9 Item10  
Item11 Item12 Item13 Item14 Item15  
/SCALE('ALL VARIABLES') ALL  
/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE  
/SUMMARY=TOTAL.
```

### Reliability

#### Scale: ALL VARIABLES

**Case Processing Summary**

		N	%
Cases	Valid	400	100.0
	Excluded <sup>a</sup>	0	.0
	Total	400	100.0

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	N of Items
.893	15