## UNIVERSITY OF CAPE COAST

FACTORS INFLUENCING FEMALE TEACHER-TRAINEES' PHYSICAL ACTIVITY PARTICIPATION IN KOMENDA AND OLA COLLEGES OF EDUCATION IN CENTRAL REGION, GHANA

CHARLOTTE ADOMAH DIABOR

NOBIS

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BY

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Thesis submitted to the Department of Health, Physical Education and Recreation of the Faculty of Science and Technology Education of the College of Education Studies, University of Cape Coast, in partial fulfillment of the requirements for the award of Master of Philosophy degree in Physical Education

**APRIL 2023** 

#### **DECLARATION**

### **Candidate's Declaration**

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date:

Name: Charlotte Adomah Diabor

## **Supervisors' Declaration**

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature: Date:

Name: Prof. Charles Domfeh

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#### **ABSTRACT**

The main purpose of this study was to examine the factors influencing female teacher-trainees' non-participation in physical activity and sports in Colleges of Education in the Central Region of Ghana. Descriptive survey design was adopted for the study. A sample size of 360 was selected from a population of 2,911 and simple random sampling technique was used to select participants for the study. Questionnaire was the main instrument used for data collection. Descriptive statistics (Frequency, percentages, mean and standard deviation) and inferential statistics (multiple regressions) were used in analyzing and discussing the results. The study revealed that female teacher trainees' have a strong negative attitude (M=2.78, SD=1.43) towards participation in the physical activities and sports. Female teacher-trainees' have low participation in Physical Activity (78%). Religion (59.8%), misconception (98.8%), social role (98.8%), facilities and equipment (60.1%), sport skills foundation (99.1%), Motivation (96.6%) and academic loads (98.6%) are significant factors influencing female teacher-trainees' nonparticipation in physical activities and sport in the Colleges of Education in the Central Region, Ghana. It is recommended that after school games and activities should be made fun and the games should not be male dominated. Student must be educated on the importance of physical activity and sports.

# NOBIS

# **KEYWORDS**

Colleges of Education

Engagement

Female teacher-trainees'

Non-participation Physical activity and sports Physical education

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Finally, this acknowledgement will be incomplete if I do not make mention of someone special, Mr. Mahama Adam Diabor, for his unflinching support throughout this study. I deeply appreciate all his efforts for my sake.

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## **DEDICATION**

To my husband, Mahama Adam Diabor and to my children, Dickson Iddi Diabor, Bernice Quansimah Diabor, Dillys Mariam Boreshanye Diabor, Daniela Khadijah Boresapos Diabor and Richmond Opoku



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#### **CHAPTER ONE**

#### INTRODUCTION

## **Background to the Study**

Physical activities are important in the emotional, behavioral, psychological, social, and physical growth of humans (Kouhi et al., 2011). Regular exercise can improve social relationships, identity, sense of belonging (Stevens et al., 2021), self-confidence, self-efficacy, and body image (Abarca-Sos et al., 2015; Hao et al., 2022; Kouhi et al., 2011), which are psychological predictors of overall wellbeing. Gender equity is valued and encouraged in most countries around the world, including athletics at all levels. The comparatively poor degree of female interest in athletics is a big issue all over the world (Creighton, 1992). Due to historical barriers, only a limited number of women have participated in active sports as athletes, referees and managers (Baker-Finch, 1993). To maximize attendance, girls' views toward physical education must be modified. Sporting practices have been an integral part of higher education institutions in the United States of America since the early 1800s (Mittlestaedt et al., 2006). It is an undeniable fact that engaging in sports improves one's quality of life (Morley & Williams, 2015).

The importance of sports has long been recognised, as there is a distinction between the position of sport participation and the achievement of its benefits. Despite the fact that there are so many potential incentives, participation rates are currently very low (Pharo, 2012). Quality school physical education programs offer resources for young people to cultivate the ideals, awareness, and skills they need to live physically active lives, improve self-esteem, and encourage and foster physical participation in the lives of others

(Gray et al., 2015). However, one obstacle that Physical Education professionals face is creating an atmosphere that encourages and sustains female interest in sport and physical activity (Vescio et al., 2005).

According to research, engagement in sports strengthens and promotes personality and behaviour (Eime, 2013). Sporting women who serve in various capacities in sports organizations maintain that sport and physical activity can enhance personal discipline and even become fundamental characteristics of their personal attributes (Cigliano, 2006). Training in sports and other athletic activity allows women to meet and engage with numerous individuals who bolster their esteem for others and their sense of duty (Junge et al., 2011). Participating in athletic activity has major advantages to students long after they have graduated from a school (Henchy, 2011). Most people have one or two reasons whether they chose or do not choose to participate in sports and physical exercise. Hylton (2013) notes that, the major factors influencing participation in physical activity and sports may be disposable income, high educational attainment, occupational status, social background, community, race, gender, preference, age, capacity, and impairment. Sawir et al. (2007) and Hoe (2007) in their study stated that previous authors' results tend to vary in terms of women's reasons for participating in physical activity on campus. Participation in physical activity is often linked with numerous psychological benefits, which include the enhancement of mental skills such as determination, decisionmaking, and autonomy (Kerr et al., 1996).

In the field, women develop their persistence, which makes them more purposefully to confront realistic circumstances. One of the advantages of sport involvement is the improvement of women's leadership skills, as the inherent competition of sports urges women to learn, strengthen and become successful leader (Dobosz & Beaty, 1999). The motivations for participation, according to Hoe (2007), vary and are often individual-specific. Sawir, et al. (2007), posit that participation in sports or recreational events helps to eradicate prejudice.

According to Asihel, Jones and Malcolm (2005), physical practices foster social cohesion and tolerance in a diverse community. In the long run, student participation in sports decreases isolation, improving one's chances of being involved in group life (O'Sullivan, 2006). Hoe (2007) discovered that the key factors for commitment were capacity growth and fellowship in his research. The primary motivation for participation in physical activity was a feeling of pleasure (Hoe, 2007). Eben and Brudzynski (2008) noted that the primary explanation for interest in sports in the American student population is fitness. Kirk (2010) in his study found that, there should be concern about gender, girls, and physical education because access to and daily participation in physical education is a basic human right. Friedenreich, Bryant and Courneya (2001) also found out that females who have been active through their lives as well as females, who start to be physically active, significantly reduce their risk of breast cancer. Exercise has also been proposed as a treatment for depression, which is twice as prevalent in women as in men (Faenza, 2000).

Males have traditionally been dominant in the area of physical exercise and sport throughout history, although females have been considerably less physically active (Fraser-Thomas & Beaudoin, 2004). It is a basic human right since daily physical exercise is a necessary component to a balanced lifestyle (Beutler, 2008; Biddle, Gorely & Stensel, 2004; United Nations Educational, Scientific and Cultural Organization-UNESCO, 1978). Females, as well as non-

athletes of both sexes, are often involved in physical exercise for religious, health and wellness, and aesthetic purposes. Males, as well as competitors of both sexes, cited increased physical health and body proportions as the primary reasons for their sport participation (Kovar et al., 2001). Women who engage in some kind of physical activity build a solid character and temperament that allows them to make sound decisions. Also, physical activities (P.A) sharpen their minds and are able to outwit their rivals (Kerr et al, 1996).

Individually, students' health and wellbeing have a strong impact on the reputation of the school they embody during athletic events, which contributes to the school's performance and effectiveness. In a research, Chiu (2009) examined the effects of mood, self-efficacy, and inspiration on leisure time physical exercise attendance among students at local public universities. The study's findings revealed positive associations between recreation, mood, inspiration, and self-efficacy, as well as leisure time physical activity attendance among undergraduate students. Omar et al. (2009) investigated what motivates university students to engage in athletic activities and discovered that coaches and motivating words are the most important external influences. This demonstrates that social aspects such as teamwork and verbal persuasion do play a significant role in motivating athletes. Friends, incentives, role models, and parents, on the other hand, influence female students' ability to participate in physical activity. This indicates that sociological conditions and materials influence their motives as well. Sports activity has also been beneficial in promoting students' academic and social skills (Gould & Carson, 2008; Holt et al., 2017). Participation in college athletics has been shown in studies to be helpful not only to the physical and emotional health of players, but also to the

development of adolescent social relationships. Females have historically been overlooked in many occupations, particularly opportunities for sports participation. Given the situation, it is imperative that women be given equal opportunities in a variety of professions, including participation in athletics (Crenshaw, 1989; Thornton et al., 2012).

Identifying constraints to physical activity remains a critical target of any health promotion strategy (Albert et al., 2020). Albert et al. (2020) stated that a person's perceived fitness limitations are a significant determinant of how healthy he or she becomes. As a result, recognizing those limits is the first step toward overcoming them (Jones, 2003; Nahas et al., 2003; Tai-Seale, 2003). Females, face a host of challenges when it comes to engaging in physical activity. According to Jackson and Henderson (1995), it has always been difficult for women to have money to spend on physical activity because they are dependent. Girls, on average, have less self-confidence than boys and score their success or abilities lower (Nahas et al., 2003). Competition is often related to self-confidence. The impact of parents, coaches, and other adults has varying effects on girls and boys. Adolescent females put a stronger focus on self-comparison and comments from adults than adolescent males, who base their personal assessment of physical performance on competitive results (Eime, 2013).

According to Resnick, Jenkins, Palmer, and Spellbring (2000), participation in physical activity is extremely beneficial in terms of improving physical and mental fitness, developing social characteristics, and developing various skills and strategies of sports and physical activities. Feminist philosophy of sport studies situates male and female interest in sports within

society's hegemonic masculine culture (Story & Markula 2017). Previous research has described the most important barriers to women's involvement as a lack of education, a lack of time, overcrowding, family difficulties, a lack of money and companions, and long distances to activity areas (Kara & Demirci 2010, Scott & Mowen 2010, Stanis, Schneider & Pereira, 2010). During the biannual games competition organized by Colleges of Education, it was discovered that only a few females were seen participating among the 70 females brought from the different Colleges in the Central Region, and there was a lot of crisscrossing in the competition (COESA LOC, 2020).

Females tend to engage in solo events for a number of reasons. Graber and Locke (2007) have highlighted the importance of nurturing certain factors that enable females to acquire the necessary motor skills for lifelong enjoyment and engagement in athletic events. The studies referenced by these authors suggest that a supportive environment and appropriate opportunities for skill development are critical for females who tend to participate in individual sports. One of the reasons females may gravitate towards solo sports is the sense of autonomy and personal mastery they can experience. Individual sports often allow for self-paced progression, which can be particularly appealing for those looking to set personal goals and work towards them independently (Weiss & Amorose, 2008). Furthermore, the competitive pressure and social dynamics of team sports can sometimes be intimidating or less appealing to some females. Solo sports offer an alternative where the focus is on personal improvement rather than direct competition with others, which might better align with their motivations for sport participation (Coakley, 2011).

Body image concerns can also play a role in the preference for individual sports. Solo activities like running, swimming, or gymnastics may provide a more comfortable space for females who are self-conscious about their bodies, as there is often less emphasis on uniforms and physical appearance compared to some team sports (Klomsten et al., 2005). Moreover, the social context of solo sports can be a draw, providing a quiet space for introspection or meditation, which might align with the psychological needs of some female participants who prefer less socially demanding environments (Wankel & Berger, 1990). The educational aspect is also crucial. Physical education programmes that offer a variety of activities and emphasize skill development in a non-threatening atmosphere can foster positive attitudes toward physical activity among females. When students are competent in the activities they are performing, they are more likely to participate willingly and to sustain that participation over time (Klomsten et al., 2005).

It is also worth noting that the retention of females in sports is higher when they feel competent, are supported by coaches and teachers, and when the activities are presented in a way that meets their individual needs (Eccles & Harold, 1991). To ensure that females continue to participate in physical activities, especially solo sports, it is essential that their experiences are positive, inclusive, and empowering. This means providing opportunities that are not only physically beneficial but also psychologically rewarding, supporting the development of a lifelong engagement with physical activity (Fredricks & Eccles, 2006).

To Castelli, Hillman, Buck, and Erwin (2007), there is a connection between motor competence and activity levels. Competent people are more

likely to experience innate inspiration, which leads to greater engagement and feelings of pleasure (Graber & Locke, 2007; Standage et al., 2006). Graber and Locke (2007) assert that self-determined motivation is attributed to Physical Activity commitment, preference, and frequency. OECD (2012) in a recent international study concluded that, regardless of self-determined incentive level, these variables, spontaneity, freedom, and intrinsic motivation, could be the primary solutions; teenagers had higher step counts in the free choice situation relative to the formal condition. Females are more likely to partake in an exercise while there is a mentor assisting the follow-through (OECD, 2012).

To some extent, the female student teacher-trainees participation in physical activity has not received much attention because of some factors associated with females. Many efforts were made by researchers (Addo et al., 2019; Hao et al., 2022; Stevens et al., 2021; Teixeira et al., 2012) to identify factors that account for this phenomenon in many parts of the world. These determinants on participation in sporting activities have been identified in a cultural domain such as gender roles and expectations, religious beliefs, educational values, socioeconomic status, body image and aesthetics. The researcher therefore deemed it appropriate and important to ascertain some of these variables as influencing female students' participation in sporting activities at the Komenda and Ola Colleges of Education in the Central Region of Ghana.

#### Statement of the Problem

In Ghana, the low level of participation by female students in physical activities within tertiary education settings, particularly within the Colleges of Education, has become an area of significant concern (Domfeh & Ampong,

2009). While the benefits of physical activity, encompassing both mental and physical health, are well-documented and widely promoted within these institutions (Malm et al., 2019), there remains a marked gender disparity that hinders the full realization of these benefits for female students. This discrepancy not only impedes the development of motor skills and fitness-related competencies but also undermines the broader educational experience that physical education aims to provide. Agyemang and Agyemang (2020) in their study, for instance, explored traditional gender roles and expectations which often discourage women from participating in physical activities that are deemed to be masculine or inappropriate for their gender. Amusa Goon and Toriola (2012) targeted the interventions aimed at increasing female participation, such as campaigns or female-centric sports programmes.

These studies collectively underscore the necessity for a concerted effort from educational institutions, policymakers, and communities to address the gender disparities in sports and physical education in Ghana. Only through understanding and tackling these barriers can female participation in physical activity be effectively enhanced, thereby promoting a healthier, more inclusive society (Jabeen et al., 2017. Investigations have revealed that even though there is a considerable emphasis on the importance of physical activity, female participation in sports and games is noticeably subdued in Ghana's schools and colleges, with this trend extending to teacher training institutions (Domfeh & Ampong, 2009). This issue is compounded by observations that during regional and national level sporting events, only a handful of female teacher-trainees engage in the competitions, with even lower numbers evident in daily sports

programs designed to equip future educators with practical skills in physical education (Domfeh & Ampong, 2009).

The cultural and systemic factors that may contribute to this lack of engagement are multifaceted. There is evidence suggesting that social support systems, such as encouragement from family and friends, are significant motivators for student physical activity (Tergerson & King, 2002). However, such influences may be insufficient to overcome the barriers faced by women, which might include societal norms, academic pressures, and the possibly inadequate provision for female-oriented sports programs within these colleges. The persistent gender gap is notably problematic in the context of Colleges of Education, which bear the responsibility of shaping future educators. The current situation, where female trainee teachers in the Central Region's Colleges of Education exhibit minimal participation in physical activities, even in sports traditionally considered feminine, like netball, warrants in-depth investigation (Kohl & Cook, 2013). This trend persists despite the dedicated efforts to integrate physical activities into the curriculum, highlighting a critical gap that needs to be addressed.

This research tackles a specific aspect of gender disparity, which is a global phenomenon, contextualized within the Ghanaian education system. It highlights the nuances of how gender influences participation in physical activity, an area where inequity is often observed but not well understood within this specific cultural and educational setting. The phenomenon is deeply rooted in the local cultural context. Sociocultural norms and expectations within Ghanaian society may have a distinct influence on the behavior and choices of female teacher-trainees, particularly regarding physical activity, which might

not align with the global trends or perceptions about women's participation in physical activity.

Psychological barriers such as body image concerns, fear of negative evaluation, and a lack of self-efficacy further contribute to the reluctance of female teacher-trainees to engage in physical activities (Mensah et al., 2013). These issues are compounded by institutional shortcomings, including a lack of adequate sports facilities, minimal representation of female instructors in physical education, and a curriculum that may not prioritize or encourage female participation in sports (Antwi, 2015). These deterrents not only affect the current health status of female teacher-trainees but also have long-term implications for their professional roles as physical educators. If the trend of low physical activity continues, it can lead to an inadequate preparation of these individuals to champion health and physical education in their future teaching careers, which in turn impacts the holistic development of their pupils (Agyemang et al., 2022).

The lack of female engagement in physical activities within these colleges demands scholarly investigation to identify specific influencing factors. Such an understanding is crucial to inform the design of interventions that can foster a more inclusive and supportive environment for female participation in sports and physical activities. The educational and health authorities must take cognizance of this issue and work collaboratively to institute effective strategies that can overturn this trend, ensuring that female teacher-trainees are not only physically literate but also well-equipped to cultivate the same in their future students (Appiah et al., 2018).

The aforementioned issues, including the alarming findings from the 2017/2018 COESA games which indicated a significant underrepresentation of female participation in athletics, underscore the need for an incisive look into the determinants that influence female students' participation in physical activity. It is imperative to identify the factors that discourage female involvement in physical education within these institutions to devise strategies that would not only enhance their participation but also ensure a healthy and active future generation of educators.

## **Purpose of the Study**

The purpose of this study was to examine the factors that influence female teacher-trainees in Komenda and OLA Colleges of Education's participation in physical activity.

## **Research Questions**

The following questions were posed to guide the conduct of the study:

- 1. What are the Physical Activities available to female teacher-trainees of OLA and Komenda Colleges of Education?
- 2. What is the level of female teacher-trainees participation in physical activity of Komenda and OLA Colleges of Education?
- 3. What is the knowledge level of OLA and Komenda College of education teacher-trainees on the benefits of physical activity participation?
- 4. What are the perceived constraints of female teacher-trainees of OLA and Komenda Colleges of Education from participating in Physical Activities?
- 5. What is the association between demographic factors and constraints of female teacher-trainees' participation in physical activities?

## **Significance of the Study**

It is hoped that the findings of this study could be used to educate the students of OLA and Komenda Colleges of Education to improve their attitudes towards participation in physical activities. The study will also add to existing literature in the area of female participation in physical activities. The study will again be a source of reference to other students who will decide to do further research on students' participation in physical activity in particular, women participation in physical activity and sports in general.

## **Delimitation of the Study**

The study is delimited to only Komenda College of Education and Ola College of Education students and particularly to only females. Female students in their 2<sup>nd</sup> year and third year were selected for the study and the reason for this is that, they are the students who have been in the College's long enough and have either witnessed or participated in sporting activities organized by the Colleges. These criteria specify the characteristics that people in the population must possess in order to be included in the study (Polit & Hungler, 2004). The eligibility criteria in this study were that the participants had to be:

- 1. Female students of OLA and Komenda Colleges of Education
- 2. In levels 200 and 300
- 3. Student-athletes

#### **Definition of Terms**

**Attitude:** refers to the way female students at secondary schools perceive physical education. It is the positive-negative dimensions that influence an individual commitment, interest and preference to a given stimulus

**Challenge:** refers to the factor that affects the attitude of students towards physical activity

**Participation:** refers to engaging in any activity of performance.

**Physical activity:** Body movements produced by skeletal muscles that provide a significant increase in energy consumption in addition to resting energy consumption.

**Sports/Sport:** Formal competitive physical activities engaged in by students during inter-colleges competition.

**Teacher trainee:** A person undergoing training to become a teacher in primary school.

## **Organisation of the Study**

The study was organised into five chapters. Chapter one provided an overview of the background to the study which serves as the basis for the entire study. This is followed by statement of the problem and objectives addressed as well as purpose of the study, and research questions. The chapter was concluded with the significance, delimitation, definition of terms and organization of the study. Chapter Two focused on the review of literature. It discussed theories of participation, physical activities, and sports. Empirical studies reviewed under inhibiting factors to female participation in physical activities, motivation and the COESA games

Chapter Three looked at the methodology, highlighting the research design that was utilized to execute the research. It also looked at sampling procedures, instruments for data collection, its validity and reliability, and finally, statistical tools for analysis of data. Chapter Four looked at the results stemming from the analysis of the data obtained from the field work. This was

complemented by discussion of the results making reference to studies that supported the findings of the current study. Chapter Five also focused on the summary of the study, key findings, conclusions, recommendations and suggested areas for future research.



#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### Introduction

The study aimed at investigating the factors influencing female teacher-trainees' physical activity participation in Komenda and OLA Colleges of Education in Central Region, Ghana. This chapter covers the literature review of scholarly material with the intention to establish the knowledge gap that will be filled by this study. The theoretical framework of the study provides insight into the overall insight of the underpinning theory. It also captures the concepts of the study and empirical evidence.

- 1. Theoretical Framework
  - i. Involvement Theory
- 2. Conceptual Framework
- 3. Empirical Review
  - i. Students and Physical Activity
  - ii. Female Participation in Physical Activity
  - iii. Female Dissatisfaction in Physical Activity and Education
  - iv. Extent of Participation in Sports by Females
  - v. Perceived Reasons for Sports Participation by Females
  - vi. Constraints in Physical Activity Participation by Females
    - a. Sports Skills Development
    - b. Sporting Facilities
    - c. Sport Typing and Media Stereotypes

#### **Theoretical Framework**

Girls participate in sports and fitness not just because they are healthy for them, but also because they are a lot of fun. Sports engagement benefits girls on a variety of occasions. Lindgren, Annerstedt and Dohsten (2017) investigated the effect of athletics on subsequent physical activity in adulthood. According to the findings of the study, most women believed that they would continue to be physically active later in life despite not becoming physically active as young girls. Females who partake in physical activities such as athletics, recreation, and games tend to be healthier, more optimistic, and happier than those who do not. In this study, the Involvement Theory is used to investigate factors influencing female teacher-trainees' physical activity participation in Komenda and OLA Colleges of Education in Central Region, Ghana to determine the amount of physical and psychological energy that the student devotes to success.

### **Involvement Theory**

One of the most significant and well-known ideas of student relations is Astin's (1984) Student Involvement Theory. Astin defines engagement as both participation in the classroom and participation in events outside of the classroom. Researchers can use the principle of student engagement to direct inquiries into student progress, and college administrators and teachers can use it to help them create more successful learning environments. The theory did not only explain the significant conclusions that have arisen from decades of studies on student success, but it also provides educators with a method for developing more successful learning environments. The philosophy stresses the student's constructive role in the learning process (Astin, 1984).

Astin's concept has been pivotal in shaping the advanced framework of student affairs and services, including student counseling and personnel assignments, across higher education institutions. According to Astin, the consistency and quantity of student participation in any instructional activity is directly proportional to the outcomes of student learning and progress (Bateson & Taylor, 2004). According to Astin (1984), participation is described as "the amount of physical and psychological resources that the student devotes to the academic experience" (p. 518). He went on to say that participation refers to actions, not emotions or opinions, and that it refers to what a student does. Astin characterizes female students' participation in physical activities as both the engaged and uninvolved pupil. Astin (1984) describes the uninvolved student as someone who "neglects research, spends no time on campus, avoids extracurricular events, and has infrequent interaction with faculty members and other students" (p. 518).

While Astin may have used other words to explain the growth principle, such as motivation, he preferred participation because it means more than just a psychological condition; it also denotes the interpersonal expression of the state. Astin's involvement hypothesis is based on a research study of college dropouts he conducted in 1975. The aim of this analysis was to recognize variables in the college climate that had a major impact on students' persistence in college. Astin discovered in the analysis that the reasons that led to students staying in college indicated participation, while those that contributed to students dropping out meant a lack of involvement (Astin, 1984). Astin proposes five postulates to support his presence theory.

According to Astin's Postulate One, participation refers to the expenditure of physical and psychological energies in a variety of objects. Postulate two states that interference exists on a scale independent of the object. Postulate three states that presence has both quantitative and qualitative characteristics. Postulate four states that the amount of student learning and personal growth associated with any educational curriculum is directly proportional to the quality and quantity of student participation in the programme. Finally, postulate five states that the success of any instructional policy or procedure is directly linked to its ability to maximize student participation (Astin, 1984). Astin also identified the various types of participation that college students participate in, such as place of residence, honors programmes, academic involvement, student-faculty contact, athletic involvement, and involvement in student government. Leaving home to attend college has a major effect on most college results, including participation. Living on campus encourages greater engagement with faculty, membership in student government, and interest in social fraternities or sororities. Honours programmes seem to have a favorable effect on student participation but a poor impact on social contact with peers. But for social contact with other students, academic participation seems to have a positive effect on all facets of college life.

Student-faculty relationship is more closely linked to overall college satisfaction than any other form of participation. Athletic participation benefits the academic prestige, intellectual atmosphere, student friendships, and administrative management of the university. Participation of student governance demonstrates regular contact with peers (Astin, 1984). Focusing on

Astin's theory, Kuh (2009) also made significant contributions to our understanding of student engagement with his research on the National Survey of Student Engagement (NSSE). He has studied how student engagement is related to beneficial outcomes of college. His work has shown that engagement is critical for personal development and learning, and he often cites participation in activities, such as student governance, as key to the college experience. Pascarella and Terenzini's (2005) research complements Astin's by examining how college affects students, often focusing on the impact of student-faculty interaction on student development. They also discuss the importance of student involvement in a broader scope.

According to Astin's engagement principle, the greater the student's involvement in education, the greater the amount of student learning and personal development; it often shifts focus away from subject matter and methodology and toward the student's motivation and behaviour, which is contrary to conventional pedagogical methods (Astin, 1984). While Astin's involvement theory is the most well-known for explaining student persistence and retention, other hypotheses dealing with involvement study exist. Pascarella and Terenzini (2005) provide extensive evidence supporting Astin's theory, suggesting that the student's active participation in the educational process is critical to their development. They argue that engagement is not just about time on task, but also the quality of effort and the educational purposefulness of activities (Pascarella & Terenzini, 2005).

Kuh (2009) extends Astin's ideas by detailing the National Survey of Student Engagement (NSSE), which operationalizes the concept of student engagement and examines its correlation with positive educational outcomes.

Kuh acknowledges Astin's foundational work and suggests that engagement, especially as measured by the NSSE, is strongly related to desirable learning and personal development outcomes. Tinto (1993) while not directly engaging with the sports and physical activity aspect, underscores the importance of social integration into the fabric of institutional life, complementing Astin's focus on involvement. Tinto posits that without social integration, even the best academic efforts may fail to retain students.

## Physical Activity and Astin's Theory

Recent studies have begun to explore the impact of physical activity, such as sports participation, on student engagement and college satisfaction, areas Astin illuminated in his theory. For instance, Trolian, Jach, Hanson and Pascarella (2016) found that involvement in recreational sports positively affects students' sense of belonging and retention, indirectly supporting Astin's claims about the importance of involvement in collegiate settings. Another dimension was explored by Gayles and Baker (2005), who found that athletes often benefit from their involvement in sports, which can contribute to their overall educational experience and satisfaction, aligning with Astin's involvement theory. They argue that the discipline, time management, and goal setting inherent in athletics can transfer to academic success (Gayles & Baker, 2005).

Wolf-Wendel, Williams, and Trott (2001) also connect the participation in athletics with increased student engagement, noting that student-athletes might have more interaction with faculty and a different academic experience than non-athletes. This increased interaction is a form of involvement that Astin suggested is critical to student development. However, some authors caution

about the risks of over-involvement in one area. For instance, Miller and Kerr (2002) noted that while athletic participation could enhance certain aspects of the college experience, an overemphasis on sports may lead to a form of "siloed" engagement that might not contribute to overall student development (Miller & Kerr, 2002).

Tinto's (1993) departure theory emphasizes the importance of a classroom experience that allows students and teachers to create academic synergy. Tinto assumes that students arrive at college with a certain degree of dedication to success, which increases or decreases based on how much a student becomes engaged at their institution both academically and socially (as cited in Durant, 2015). There have been studies done on the concept of participation and how it affects students' academic success. Most of the literature on participation has found that students who participate in co-curricular programmes outperform those that do not (Rahman et al., 2021).

Numerous studies have shown a correlation between academic achievement and co-curricular activity, indicating that educators should allow students to participate in interscholastic athletics, intramurals, or other co-curricular activities. Gholson and Barker (1985) discovered a connection between student interest in extracurricular activities and participation in nonacademic interests after high school and college. According to Joekel (1985) as cited in Stephens and Schaben, (2002), accomplishment in extracurricular sports is a predictor that can predict progress in life after high school. Academic inspiration and students' ability to participate psychologically in their studies are inextricably tied to school commitment and participation. Students who have high levels of school involvement are more likely to be positively engaged

with their schoolwork and to agree with the duties and expectations that come with being a student (Kenny, Bluestein, Haase, Jackson, & Perry, 2006).

Further studies into students presumed self-efficacy revealed that "students who lack trust in the abilities they possess will be less likely to partake in activities requiring the same skills or to give up when faced with difficulties" (Emerick, 2009, p.31). Getting students interested in extracurricular programs that promote learning and ability growth in a variety of ways has a direct impact on their futures. As previously stated, programs that improve the overall learning experience equate with higher retention rates and persistence to degree completion. Student participation in co-curricular activities enhances student success at higher education institutions by providing opportunities for social engagement through contact with peers (Munir & Zaheer, 2021). Students engage with students from diverse backgrounds in competitive settings such as intramural athletics, which can affect expectations and relationships (Warner & Dixon, 2013). Students understand what is appropriate in a non-classroom setting from these experiences. These engagement interactions also strengthen pre-existing relationships and help to build students' sense of autonomy (Warner & Dixon, 2013). Furthermore, students who want to participate in events outside of academia cultivate leadership roles through peer experiences.

According to Gerhardt et al. (2008), students who are more active in their programs are more likely to participate in leadership events. Students experience responsibilities and responsibility, which supplement classroom lectures. The authors further indicated that lessons that reach into the classroom have tremendous benefits to both students and institutions, and as students get more active, they are more likely to continue in leadership roles, which are

emphasized heavily at higher education institutions. Student affairs and campus recreation are two areas that have gained greater focus in recent years. According to some surveys, students view campus recreation as playing a part in campus life, while the directors of such facilities put a greater focus on the influence of campus recreation (Chen & Lou, 2002). The same study found that students see recreation centers as an added benefit to campus life and becoming engaged, but not as the main justification for preferring one college over another.

### **Conceptual Framework**

A conceptual framework is a presentation model in which the researcher describes the relationships between variables in the analysis graphically or diagrammatically. The study's methodological structure is focused on considerations obtained from the literature review. Figure 1 depicts the study's philosophical structure.

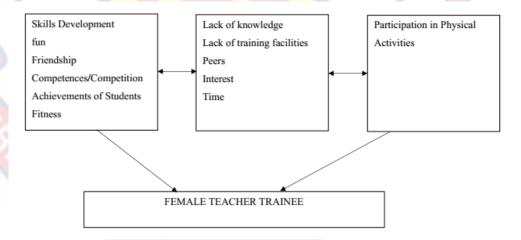


Figure 1: Conceptual framework for the study proposed by researcher

**Source:** Author's own construct (2023)

The study's methodological structure is focused on considerations obtained from the literature review. Female participation in physical activity is affected by skills development, fun, friendship, competences/competition,

achievement and fitness as seen in Figure 1. It is thought that students who lack the skills acquisition mentality are reluctant to engage in any physical exercise. Perceived motor skill competence, health-related physical wellbeing, and obesity, are significant mediating factors that can clarify some of the previously unexplained variations in physical activity. Perceived motor competence and health-related physical wellbeing will either exacerbate or boost the negative cycle of disengagement. Low-skilled students eventually view themselves as possessing no motor ability competence, so they avoid physical exercise, become less athletic, and progress farther down the downward spiral of disengagement from physical exercises, games, and athletics (Butcher & Eaton, 1989; Fisher et al., 2020).

Despite the fact that physical exercise has been shown to improve human health, many people do not meet the acceptable standards of physical activity. Interventions aiming at increasing physical activity levels, on the other hand, have had differing degrees of effectiveness. Adults should partake in 150 minutes of moderate physical exercise or 75 minutes of intense physical activity each week, or an equal mix of the two, according to World Health Organization global physical activity guidelines. Activities should be done in 10-minute increments. In the current analysis, participants were found to have fulfilled these recommendations if they accumulated 150 minutes of mild to intense physical exercise in 10-minute increments over the course of a week. Bouts of moderate to intense physical exercise is described as 10 minutes or more of 1,952 counts per minute. The lack of school resources (e.g., gyms and equipment) is often seen as an obstacle to school physical exercise programs such as PE. The presence of a school gymnasium is linked to increased weekly

physical exercise in all students. School facilities have been attributed not only to better PE-related performance, but also to overall prospects for physical exercise during the school day for both students and faculty. The availability of clean, appealing, and suitable facilities, as well as outdoor space, has all been related to increased student accumulation of physical activities.

When a person engages with his or her surroundings, he or she is affected by external influences, one of which is his or her friends, who will affect his or her decision to engage in some physical activity. Low levels of self-reported physical activity are associated with a lack of confidence in physical activity. Interest and value are central components of the more adaptive and durable sources of motivation (Deci and Ryan, 2000; Kwasnicka et al., 2013), implying that people who report no interest in physical activity have features that make them less likely to indulge in physical activity on a consistent basis. Individuals who do not engage in physical exercise have a higher BMI and a lower self-rated level of fitness. These factors are often identified as predictors of current levels of physical activity, which is consistent with previous studies indicating correlations between routine physical exercise and demographic characteristics such as male gender and self-rated fitness (Bauman et al., 2012; Oppert et al., 2006).

In crafting a conceptual framework for the study of physical activities among female teacher-trainees, the researcher considered a multifaceted landscape where dynamics of engagement interact with various personal and institutional factors.

### **Positive Influences on Physical Activity:**

Skills Development is a cornerstone of this framework, not just in the physical realm but across cognitive and emotional domains as well. The ability to coordinate, strategize, and execute plans within physical activities fosters transferable skills valuable in teaching (Siedentop & Tannehill, 2000). The concept aligns with Astin's (1984) involvement theory, suggesting that the more students engage in activities, the more they learn and develop. The role of fun in sustaining physical activity cannot be underestimated. As argued by Coakley (2015), enjoyment is a significant predictor of continued engagement in physical activities, making the integration of enjoyable elements into training a critical aspect.

**Friendship** and the social support inherent in shared physical activities can significantly impact participation (Weinberg & Gould, 2015). Relationships built through team sports or group exercises often extend beyond the realm of offering psychosocial physical activity, broader benefits. Competences/Competition offer a medium for self-improvement and benchmarking personal progress. The sense of competence developed through athletics can lead to increased intrinsic motivation (Ryan & Deci, 2000), which is crucial in maintaining an active lifestyle. The Achievements of Students in physical domains can foster a sense of accomplishment and self-efficacy, which is essential for teacher-trainees who must often inspire these qualities in their future students (Bandura, 1997).

**Fitness**, as a physical condition, enhances the ability to carry out daily tasks with vigor and alertness, without undue fatigue, and with ample energy to enjoy leisure-time pursuits and meet unforeseen emergencies (Caspersen,

Powell, & Christenson, 1985). For teacher-trainees, personal fitness can also model healthy habits for their future students.

# **Barriers to Physical Activity:**

Conversely, Lack of Knowledge about the benefits of physical activity or how to engage in it effectively can prevent teacher-trainees from participating (Hagger et al., 2002). Educational interventions are needed to bridge this gap. The Lack of Training Facilities is an environmental barrier that can hinder regular physical activity (Erickson et al., 2009). Accessible and welcoming facilities are critical to facilitating engagement among teacher-trainees. Peers have a profound impact on the propensity to engage in physical activity (Beets et al., 2010). Peer norms and behaviours can act as a strong social influence, either encouraging or deterring activity.

Interest in physical activity is subjective and varies widely; thus, providing a variety of options is essential to cater to diverse interests (Standage, Duda, & Ntoumanis, 2005). Time constraints pose a significant challenge for teacher-trainees who must balance rigorous academic demands with personal care (Zimmerman & Kitsantas, 2005). Participation in Physical Activities is the culmination of all these factors, reflecting a complex interplay between individual preferences, social influences, and institutional support (Kremer, Moran, Walker, & Craig, 2011).

In utilizing this conceptual framework, we see how each component plays a pivotal role in shaping the physical activity patterns among female teacher-trainees. By acknowledging and addressing these factors, we can better understand how to foster an environment conducive to active lifestyles, which is not only beneficial for the trainees themselves but also for the future generations they will educate and inspire.

## **Empirical Review**

Physical and athletic practices are regarded as an essential supplement to mental and science activities that lead to an individual's healthy development. Physical and sporting activities are important for improving a person's physical and mental health. Sport has always had disparities in equality, and it has been a central structural field for studying gender and its construction. According to Collins and Kay (2014), the trajectory of women's inclusion in sports is strongly related to the belief that women are less powerful than men. There are several causes for the rise in female participation, but Coakley and Pike (2014) suggest there are five key reasons for this: new opportunities, political laws and regulations mandating fair rights, the worldwide women's rights movement, the health and fitness movement, and increased media attention of women in sports. There is now much in progress to promote and improve female interest in physical activity.

According to Al-Sayeh (2007), athletic practice has been an important element in the development of an individual's integrative personality. Such an integrative personality could be developed by interventions that focus on the recovery, planning, and processing of students' habits by including them in the appropriate sporting activities to achieve high standards of sport skill success. The choice to participate or not participate in sports is determined by previous experiences and how these experiences are viewed and viewed as an achievement. Future goals in regards to sports participation are determined by

past experiences and how these experiences are interpreted and perceived as an achievement (Laker, 2002).

# **Students and Physical Activity**

The investigation into the critical question of whether or not high school students' interest in athletics leads to non-cognitive traits that promote academic success starts with physical exercise (Fahlman et al., 2006; Sailis et al., 2004; Sollerhed et al., 2005; Wilkins et al., 2003). A variety of surveys, like the National Health and Nutrition Examination Survey (NHANES), have found that today's teen students are not socially active enough. This situation is thought to lead to higher rates of teenage obesity and can have other negative consequences. According to a report during unstructured hours, "fewer than 2% of girls and 6% of boys" were physically involved on any given school day (Sailis et al., 2004, p. 615). These figures were much smaller if the school system did not have enough facilities for physical exercise. Colleges must adopt a more ecological model of student behaviour in order to provide a physical atmosphere that encourages, rather than discourages, regular physical exercise during the school day (Sailis et al., 2004).

In general, most scholars (Carlson et al., 2008; Chomitz et al., 2008; Cottrell et al., 2007; Van Dusen et al., 2011 Welk et al., 2011; Wittberg et al., 2010) believe that sustaining standards of physical education in schools is essential because it leads to students' fitness, which is usually described in physical terms alone. High blood pressure is more prevalent in students aged 8 to 17 today than it was ten years ago, and "much of the rise was attributed to changes in the children's weight" (Child Health, 2004, p. 3). Kids with high blood pressure are often more likely to die from stroke or heart disease as they

get older (Child Health, 2004). These same children are much more likely to develop adult-type diabetes, which may have serious effects in adulthood. To counteract this trend, Jenkinson and Benson (2010 advocate for preserving or even growing physical education curriculum in schools. Physical exercise time in school has been shown in studies to have a positive impact on children's welfare. Child Health (2004) in its study, for instance, tracked 10,000 children from kindergarten to first grade and discovered that for kindergarten girls who were overweight or at risk of becoming overweight, adding one hour of physical education a week as they went into first grade lowered their body mass index, despite the fact that this result was not observed in boys.

Research indicates that when physical activities are perceived as enjoyable and inherently motivating, they are more likely to draw the participation of young individuals. Specifically, engaging in physical activities can shape constructs like the Sense of Coherence, which reflects an individual's approach to managing life's stressors (Sollerhed et al., 2005). This concept encompasses three main elements: manageability, concerning an individual's strategies for handling life's challenges; comprehensibility, related to how transparent life's demands are; and meaningfulness, which addresses the motivational aspects of how an individual interprets life's aims and difficulties (Sollerhed et al., 2005). The study suggests that students who find pleasure in physical education, possess positive attitudes towards it, and achieve high academic performance in it tend to have a robust Sense of Coherence. Therefore, personal wellness and a sense of comfort within the educational environment may reliably forecast elevated Sense of Coherence levels (Sollerhed et al., 2005).

It is just a short step from physical education to athletic competition (Dawkins, 2006; Ferris & Finster, 2004; Jacobs et al., 2002; Parish & Williams, 2007; Quaiser-Pohl & Lehrmann, 2002; Wann & Polk, 2004; Wild et al., 2004). As previously stated, physical activity and optimistic attitudes toward engaging in physical education courses in schools have been linked to the creation of noncognitive structures such as sense of coherence. Physical inactivity during puberty, on the other hand, "has been found to be associated with a less stable lifestyle, poorer educational progression, and worse self-perceived health" (Sollerhed et al., 2005, p. 341). Even further trials have found signs of athletics' significant effects on non-cognitive influences in teenagers. According to the Carnegie Corporation's Role in Sports in Youth Development report from 1996, sport "produces many advantages" for young people, including "faith in one's athletic ability, an understanding of personal health and wellbeing, and close social relations with individuals and organizations" (National High School Activities Week-NHSAW, 2004, p. 3).

Findings from a Minnesota high school survey by National High School Activities Week (2004) highlight that an overwhelming majority, 91%, view students who engage in school functions, such as sports, as exemplars of school leadership. Such engagements in extracurriculars, sports in particular, are noted for their protective effect against adolescents' participation in dangerous activities, including substance abuse and criminal behavior (NHSAW, 2004). The data further suggests that the absence of involvement in sports correlates with a 57% increase in the likelihood of students not graduating by their senior year and a 27% higher probability of encountering legal issues, in contrast to their peers who invest one to four hours weekly in these extracurriculars

(NHSAW, 2004). Over 95% of high school principals concur that these activities are pivotal in developing essential life competencies and nurturing a sense of civic responsibility (NHSAW, 2004).

Dawkins (2006) explored how participation in school sports influences drug and tobacco use among students. The study indicated a positive link, especially noting that athletic involvement was particularly effective in curbing substance use among Black female students. This aligns with Trulson's earlier work which suggested that structured sports programs, complemented by specific coaching against deviant behavior, were effective in reducing such behaviors among boys. While Dawkins' findings do not suggest sports as a panacea for delinquency, they do highlight those sports, with their focus and positive goal-setting, can lead to a decline in substance use among athletes. Therefore, sports participation is highlighted as a beneficial preventive measure for young people. The broader implications of the research point to improved behavior and school engagement among student-athletes, who are generally less inclined to engage in high-risk activities compared to their non-athlete peers. Despite these positive associations, it is noted that most related studies tend to examine correlations rather than direct causations.

In examining the motivation for success, the concept of self-efficacy has been identified as a significant "conduit for actual achievements in various areas" (Jacobs et al., 2002, p.309). Theories of attribution and self-efficacy suggest that "youngsters perform better and opt for more challenging tasks when they believe in their capability to accomplish those tasks" (Jacobs et al., 2002, p.309). Furthermore, motivation is seen as a crucial element in keeping a youth interested in after-school activities, like sports (Jacobs et al., 2002, p.309).

Krane, Choi, Baird, Aimar, and Kauer (2004) engaged varsity athletes from various sports in focus group discussions to explore the intersection of athletic identity with conceptions of femininity, the idealized body, and expectations of muscularity. These athletes highlighted a disparity between an athletic physique and the societal ideal of a perfect body, noting the latter favors a thinner, less muscular figure akin to models or actresses. Delving into perceptions of femininity, Krane et al. encountered a recurring conflict. Their study on "Living the paradox: Female athletes negotiate femininity and muscularity" using twenty-one female college athletes in a focus group interviews about body image and perceptions of muscularity and femininity revealed that the athletes believed that societal standards of femininity, described as small, delicate, neat, and soft, clashed with the attributes associated with competitive sports (Krane et al., 2004). The participants in the study associated weightlifting and assertiveness with a breach of traditional feminine behaviours. The majority of these athletes felt compelled to forgo femininity for the sake of competitiveness, equating it with adopting masculine traits. Moreover, they indicated that while femininity was seen as socially desirable, athletic prowess often was not.

The varied outcomes from surveys assessing incentives have led researchers such as Parish and Williams (2007) to delve into the reasons behind the high dropout rates of student-athletes in high school and the factors that sustain their engagement in sports. William Glasser's "needs wheel" serves as a tool to understand the diverse motivations driving high school athletes towards sports. This model proposes that students are drawn to sports for reasons that range from seeking empowerment, recognition, and social standing, to the

simple enjoyment of the activity, or as an escape from other life pressures (Parish & Williams, 2007, p. 37). Additionally, participation in sports provides some students with a sense of community, while for others, it offers critical opportunities that help mitigate fears related to life beyond sports (Parish & Williams, 2007).

This and other studies continue the stream of research which shows sports as a buffer zone against other ills in adolescent life. Looking more carefully into non-cognitive qualities, one of the major areas where differences between males and females have been found is in spatial abilities (Quaiser-Pohl & Lehrmann, 2002).

### Female's Participation in Physical Activity

Female success in physical exercise has gone a long way in recent years, but many activities that earn significant media attention are still dominated by men. Suris and Parera (2005) investigated whether physical activity declines with age and, if so, if this decline varies by gender (gender). They investigated the relationship between physical activity and personal, family, and school influences, as well as healthier behaviours. Their results were consistent with other studies, indicating that males are more likely than females to engage in physical exercise. The study also revealed that physical exercise declines with age and that physically active youths considered themselves to be healthy and satisfied with their body image (Suris & Parera, 2005).

Similarly, Alley and Hicks (2005) examined how sex roles for some sports can affect who chooses to participate and how participants are perceived by others based on their gender. Participants were asked to write a paragraph in response to the study issue. It was discovered in their responses that "there is a

clear decrease in graded femininity and rise in masculinity for both male and female teenage goals as they moved from engaging in a 'feminine' (ballet) to a neutral (tennis) to a 'masculine' (karate) sport" (Alley & Hicks, 2005. p. 1).

### Female Dissatisfaction in Physical Activity and Education

Along with the fact that physical activity attendance decreases as children pass into the primary-secondary school process (Whitehead & Biddle, 2008), it is also recognized that the reduction is more pronounced for girls than boys well into puberty (Bauman et al., 2009; Parish & Treasure, 2003). Furthermore, it has been discovered that girls are slightly less successful than boys at all ages (Boyce, 2004, Trost et al., 2008). According to the World Health Organization (2015), there is a strong pattern of declining levels of exercise as girls age, as well as a growing discrepancy between girls' and boys' physical activity behaviors. It is also well established that teenage females have the highest rates of inactivity among all student classes (Fraser-Thomas & Beaudoin, 2004). If an initiative will improve young women's engagement and attendance rates, it is critical to consider and comprehend the reasons that influence their decision to participate in physical education.

Several studies have shown that female students are increasingly dissatisfied with their physical education activities during childhood and adolescence (Gibbons & Humbert, 2008; Humbert, 1995). Any of the common factors that contribute to young women's frustration include: public show of expertise, a lack of ability and time to train, self-consciousness, and course material and structure (Gibbons & Humbert, 2008; Olafson, 2002). The introduction of a traditional sport model program, as well as the lack of student input in selecting class events, has also led to rising discontent and

disengagement among young people in physical education classes (Gibbons & Humbert, 2008; Olafson, 2002; Yungblut et al., 2012). Furthermore, it is unsurprising that female students do not participate in physical education as it is no longer needed (Gibbons & Humbert, 2008; Kolbe et al., 2001).

In Saskatchewan, for instance, Warnock (2016) state that once physical education is no longer a compulsory part of the curriculum, there is a significant drop in the number of female students who choose to continue with it. Similarly, Gibbons and Humbert (2008) indicated that tenth grade female students in British Columbia characterized their physical education encounters as dull and tedious, and that they decided to drop out as soon as they could. However, research suggests that female students' frustration with physical activity begins long before their high school years (Biscomb et al., 2000; Gibbons et al., 1999; Olafson, 2002). This frustration is often attributed to the essence of their past encounters in elementary physical education courses (Fenton et al, 1999; Gibbons & Humbert, 2008; Olafson, 2002).

Researchers have also discovered that physical exercise behaviours for a healthy lifestyle must be developed early in life (Sallis & McKenzie, 1991) and that early, supportive physical activity interactions can improve the likelihood of sustaining a physically active lifestyle (Weiss & Caprio, 2005). Finding importance in physical education activities will influence young women's interest in physical education opportunities in the future (Alderman et al., 2006; Gibbons & Humbert, 2008). As a result, physical education classes can play an important role in exposing students to positive physical activity experiences. It is also recognized that students who value physical fitness are more likely to become lifetime movers (Alderman, et al., 2006). Female

students' participation in physical education may be extended by providing supportive physical education opportunities, growing maturity in skillful movements, and building morale.

### **Extent of Participation in Physical Activities**

A variety of inherent and extrinsic motivators influence whether or not people participate in physical activity. There are three things to consider: self-esteem, attraction to the practice, and encouragement from significant others (Weiss & Caprio, 2005). Participation in sports is influenced by Perceived Motor Competence (PMC). The decision is based on Fundamental Movement Skills (FMS) mastery, social approval, and previous interaction performance (Fox & Riddoch, 2000). As a product of communicating and engaging with significant ones, one's self-perception may be strong or low (Gallahue, & Donnelly, 2003).

Significant others, according to Weiss and Caprio (2005), include parents, teachers (for sports), and peers. Children's intrinsic inspiration for successful athletic activity stems from a positive self-perception (Weiss & Caprio, 2005). Mastery of fundamental skills, as well as encouragement from significant others, are needed for intrinsic motivation. Stewart, Nicholson, Smith, and Westerbeek (2004) stresses the importance of strong peer relationships in engagement in active sports. Farid (2003) investigated intense game activity restrictions among University Putra Malaysia students and discovered that the key impediments were lack of curiosity (intrapersonal), lack of time (structural), and feeling insecure (intrapersonal).

According to Nortey (2009), the key reasons youths did not engage in sports were a lack of knowledge about where to train (intrapersonal),

overcrowded services (structural), physical inability to participate (intrapersonal), and cost of transportation (structural). According to Ibrahim (2004), the main causes for non-participation in sports are shortage of time and interest in one's work. Other questions raised in Ibrahim's (2004) study's focus group studies included an emphasis on strict laws, training drills, competitiveness, and winning.

The World Health Organization has established guidelines recommending adults aged 18-64 to engage in at least 150 minutes of moderateintensity aerobic physical activity throughout the week (WHO, 2010). However, Guthold et al. (2020) found that global adherence to these guidelines is low, with significant variations based on geographic region, gender, and socioeconomic status. This points to a discrepancy between health recommendations and actual behaviour. Stalsberg and Pedersen (2010) assert that socioeconomic status (SES) is a strong predictor of physical activity levels. Higher SES is typically associated with increased participation, likely due to greater access to resources and facilities. Age is another determinant; with studies indicating a decline in physical activity as people age (Barnett et al., 2012). Furthermore, research by Trost et al. (2002) highlights a consistent gender gap in physical activity levels, with men generally being more active than women.

Cultural norms and values significantly impact participation in physical activities. Eyler et al. (2002) demonstrate that cultural support for exercise can lead to increased activity levels, while cultures that prioritize other activities may have lower levels of participation. The built environment, including the availability of parks and recreational facilities, also plays a crucial role (Sallis,

Cerin, & Kerr, 2016). Numerous intervention strategies have been employed to increase physical activity. Community-based programs have had varying levels of success, suggesting the need for targeted interventions (Heath et al., 2012). School-based interventions appear to have a significant positive effect, particularly when they include curriculum modifications (Dobbins et al., 2009).

The literature points to challenges in measuring physical activity accurately. Self-reported data is often used but may be subject to bias. Objective measures such as accelerometry provide more accurate data but are not always feasible due to cost and participant burden (Prince et al., 2008). This review indicates that participation in physical activities is influenced by a complex interplay of factors. While interventions exist to promote physical activity, their effectiveness varies, and further research is necessary to tailor these interventions to specific populations. Future research should also aim to develop more accurate and accessible methods for measuring physical activity levels.

### **Perceived Reasons for Sports Participation**

The association between athletic involvement and academic success is underscored by several factors:

- Engaging in athletics may foster a greater interest in academic endeavors and school engagement.
- ii. The requirement to meet academic standards for sports participation propels student-athletes to strive for academic excellence.
- iii. The confidence derived from sports achievements can enhance selfesteem, which may carry over to academic pursuits.

iv. The support and attention from coaches, educators, and parents often directed at student-athletes can boost their academic performance (Snyder, 1994).

Reflecting on these key influences, we observe that they echo findings from previous studies, reinforcing their validity and forming a robust underpinning for this investigation. These central themes were previously scrutinized in the study by Snyder and Spreitzer (1990), who assessed nearly 12,000 high school senior boys from over a thousand schools, considering factors such as social status, family interactions, and cognitive development. Before their analysis, Snyder and Spreitzer (1990) recognized existing literature indicating that student-athletes often meet or surpass their non-athletic counterparts academically. Propelled by this observation, Snyder and Spreitzer sought to determine the underlying reasons for this academic excellence among athletes. Although Snyder and Spreitzer's study affirmed that athletes generally perform well academically, it could not definitively attribute this success to the six factors they examined. Nevertheless, their research lays a foundational role for this current study to delve deeper into these factors.

### **Constraints in Physical Activity Participation**

According to Wicker, Hallmann, and Breuer (2012), Hallmann, Wicker, Breuer and Schönherr. (2011), and Downward, Dawson, and Dejonghe (2009) microlevel factors are individual factors that are closely related to the individual person. Wicker et al., (2012) describe the micro-level variables in detail. Microlevel factors are classified into two categories: demand-specific factors such as age, gender, and migration history, and household-economic factors such as human resources, wages, and time (Wicker et al., 2012; Hallmann et al.,

2011; Downward et al., 2009). Demand-specific considerations, or more specifically demographic indicators, can also affect physical activity attendance (Breuer et al., 2010; Downward & Riordan, 2007; Hallmann et al., 2011).

Men are significantly more active than women, according to empirical evidence, indicating that gender may be a barrier to physical activity participation (Berger et al., 2008; Breuer et al., 2011; Breuer & Wicker, 2008; Downward, 2007; Downward & Rasciute, 2011; Eberth & Smith, 2010; Haug et al., 2008; Hovemann & Wicker, 2009; Humphreys & Ruseski, 2006; Robertson & Emerson, 2010; Seabra et al., 2007; Taks & Scheerder, 2006; Van Tuyckom et al., 2010). Different social, cultural, and biological influences influence men and women's decisions to participate in physical activities, as well as the extent at which they do so. Women face greater barriers to participation in sports due to a lack of infrastructure, commuting, and time constraints (Downward et al., 2014).

Humphreys and Ruseski (2007) argue that further childcare provision may aid in increasing female involvement. Such social or cultural factors, as well as disparities in family roles, are consistent with country realities (Humphreys & Ruseski, 2007). The biggest constraints are having children and keeping the house clean (Downward, 2007; Eberth & Smith, 2010; Hovemann & Wicker, 2009; Wicker, et al., 2009). Families, on the other hand, could be able to limit the intensity of male involvement (Downward & Rasciute, 2015). Wicker et al. (2012) found no major impact of age on sports activity. Dixon (2009) found that women spent less time than men on recreational and athletic events, while men participate more often and in more sports at all levels of life, implying a strong gender disparity in this regard.

Whaley and Ebbeck (1997) propose that barriers to physical activity must be understood within a socio-psychological framework, encompassing both internal psychological and external social factors. Thus, the primary issues of diminished enthusiasm and fatigue cited by women as obstacles to exercise might stem more from personal psychological factors than from social ones. This indicates that for female participants, the principal deterrents to engaging in physical activities could be rooted internally, not externally as influenced by the environment or societal pressures. Additionally, prior studies have recognized the competing demands of other leisure activities as an impediment to physical activity (Tergerson & King 2002). In this vein, the women in the current study pointed to the requirement of attending to alternative leisure pursuits as a central barrier to exercising. This underlines the role of health promoters in convincing students about the merits of physical activity and in devising exercise programs that cater to the students' own interests, potentially aiding them in choosing to invest their leisure time in beneficial physical activities.

Lack of awareness, interest, and opportunity were also described as important obstacles for women by Henderson and Hickerson (2007). Lim et al. (2011) in a study posit that women are influenced by their capacity to grasp laws and norms. Higher education and wages were associated with more physically active Brazilian women aged 20 to 40 years (Balbinotto et al., 2012). Downward and Rasciute (2015) also noted that women appear to engage in less intensive exercise even though they have the time. Girls showed statistically greater declines in physical activity during puberty than boys (Lubans et al., 2007; Zimmermann-Sloutkis et al., 2010). Slater and Tiggemann (2010) discovered

multiple gender-specific factors that prevent teenage girls from engaging in physical exercise in a study undertaken in South Australia. Reasons ranged from a lack of time, a lack of competence, concerns over personal attractiveness, decreased motivation and boredom, relationships with teammates and bullying, and the incompatibility of some sports with femininity.

Eime et al. (2013) hypothesized that school was a major contributor to adolescents' increased involvement in physical activity, especially as they progressed into high school. Adolescents, on the other hand, dramatically decrease attendance between years 10 and 11, as well as turning toward more non-organized and non-competitive modes and individual pursuits of physical activity. Eime et al. (2015) found important and interrelated patterns of improvement in intrapersonal, behavioral, and environmental determinants of girls' involvement in PA over the teenage age. Intrapersonal shortcomings are related to presumed ability and a lack of energy and time; interpersonal considerations include assistance from family and friends; and environmental challenges are related to opportunities, wealth, and access.

In comparison, a survey of sports activity in the EU found that women in Denmark and the Netherlands are slightly more competitive than men (Hovemann & Wicker, 2009). Similarly, women were discovered to be more active than men (Humphreys & Ruseski, 2006, 2007; Lera-López & Rapn-Gárate, 2011). According to Breuer and Wicker (2009), different conclusions can be obtained based on the type of analysis used. Cross-sectional research supports decreases in participation levels with rising age, while longitudinal studies suggest that cohort factors, rather than age, are to blame for those

declines. Except for the oldest cohort, all of the women in Breuer and Wicker's (2009) sample showed rising rates of sport participation.

Furthermore, Lim et al. (2011) discovered that physical exercise attendance for both males and females decreases when they enter adulthood in the Netherlands, Republic of Korea, and the United States. As a result, gender analysis, like other demand-specific considerations, plays an important role in the theoretical multi-level paradigm of physical activity attendance. Previous observational research has demonstrated that the younger generation is more athletic than the older generation, and thus sporting activity declines with age (Berger et al., 2008; Breuer & Wicker, 2008).

One major reason for this constraint on sport demand is that when a person gets older, he or she experiences more health issues related to biological and physical disabilities, which has a negative impact on sports activity or time spent in it (Downward & Rascuite, 2011; Downward, 2007; Eberth & Smith, 2010; Humphreys & Ruseski, 2011). Changes in the form of sport played as one gets older have also been observed. In reality, walking has a good relationship with age (Humphreys & Ruseski, 2007; Lera-Lopez & Rapun-Garate, 2011). According to Klein (2009), increasing age up to 50 years is correlated with increasing physical activity. On a related note, Garcia, Lera-Lopez and Suarez (2011) found that as age increases, the likelihood of doing sports declines before the age of 33, where the relationship reverses. Furthermore, elderly women engage in less physical exercises than elderly men (Hinrichs et al., 2010).

Lera-López and Rapn-Gárate (2011) discovered a statistically important and optimistic association between age and level of sport participation. As a result, the level of sport attendance increases with age, revealing older people's

expanded understanding of the advantages already mentioned and desire to stay involved in sustainable modes of physical activity. Over all, older people have more time to partake in those healthier activities. Hallmann and Breuer (2014) discovered that older adults participate in athletics as well. Nonetheless, the likelihood of people participating in sports decreases by 0.3 percent for each additional year of age (Humphreys & Ruseski, 2006).

Concerning household-economic variables and socio-economic variables, according to Chad, Reeder, Harrison, Ashworth, Shephard, Schultz, Bruner, Fisher and Lawson (2005), Eberth and Smith (2010), and Humphreys and Ruseski (2006), people with a greater degree of human capital or educational experience are more aware of the favorable effects of sports and thus more likely to partake in them. Other findings in particular European countries affirm the positive effect of a strong educational experience on sport participation (Breuer et al., 2011; Breuer & Wicker, 2008; Downward & Rasciute, 2011; Fridberg, 2010; Hovemann & Wicker, 2009; Humphreys & Ruseski, 2007; Ifedi, 2008; Wicker et al., 2009).

Human capital influences the productivity of a person's household output. A higher educational degree is understandably associated with higher wages and greater interest in athletics (Hallmann et al., 2011). According to Downward and Rasciute (2015), higher education levels play a larger role for females. Hallmann and Breuer (2014) have provocative observations into the potential effects of education on sports frequency. Their findings suggest a strong detrimental impact, most likely as a function of the heightened time constraints imposed on individuals at higher levels of schooling. Income is another important economic factor. Higher pay appears to promote athletic

engagement in observational research (Breuer & Wicker, 2008; Breuer et al., 2011; Downward & Rasciute, 2010; Eberth & Smith, 2010; Humphreys & Ruseski, 2007; Lera-López and Rapn-Gárate, 2007).

Men and women alike are discouraged from participating in sports because of a lack of funds (Eberth & Smith, 2010). According to Lera-López and Rapn-Gárate (2011), once individuals agree to engagement, such an element (funds) is no longer important in determining frequency thresholds. According to Lera-López and Rapn-Gárate (2011), professions or occupational statuses such as self-employed, boss, clerical worker, unemployed, and entrepreneur are all unfavorable predictors of sport participation. Sports activity frequency, on the other hand, is neither affected (Gratton and Taylor, 2000) nor negatively influenced by status (Downward & Riordan, 2007; Garcia et al., 2011; Humphreys & Ruseski, 2011).

Any athletic events can be very costly. People with smaller incomes should not participate in moderately to highly costly activities such as tennis (Taks, Renson, & Vanreusel, 1994). Increased interest in athletics is associated with a higher level of wages, resulting in greater access to sport (Humphreys & Ruseski, 2009; Berger et al., 2008; Ifedi, 2008; Downward, 2007). It is therefore important to understand consumer behavior in regards to sport spending that certain athletic equipment and services must be used in order to participate in sport. Sport spending analysis is limited in scope, and adequate methodologies are lacking. Men tend to spend more money on sports than women (Lera-López & Rapn-Gárate, 2011).

Higher levels of education are associated with higher levels of sports spending (Lera-López & RapnGárate, 2011). Increased wealth has a statistically

meaningful effect on sport intake (Lera-López & Rapn-Gárate, 2011). According to Garcia, Lera-Lopez and Suarez (2011), the relative appetite for physical exercise decreases with higher hourly wages due to the improved potential cost of time spent on some recreational activity. Males emphasize this influence further. Breuer, Hallmann, Wicker and Feiler (2010) emphasised that consumer expenditure on sports is mostly determined by gender, education, and income level (spending declines for females but increases with education and income). Similarly, Thibaut, Bruno, Ledoux, Demertzi and Laureys (2014) discovered that family wealth, education of the head of the household, sports attendance of the parents during their childhood, sports club attendance, and duration of sports activity affected household spending conduct.

Time is a third important element. Two factors affect the amount of time required for sports participation: career and household size (Ruseski, Humphreys, Hallmann, K. et al., 2011) In other terms, it is calculated by subtracting time expended on conflicting demands such as working and caring for children and relatives. Studies by Breuer (2006) and Downward (2007) confirm that as time for work and treatment reduces, so does time for sports activity. Individuals who are pressed for time are more likely to engage in less intensive or extended tasks (Hallmann et al., 2011). People who are retired are more likely to partake in athletics than those who are working (Eberth & Smith, 2010). Working time, on the other hand, has a favorable influence on sport attendance, according to studies by Hallmann and Breuer (2014), Wicker et al. (2009), and Wicker et al. (2012), with the most likely incentive contributing to a reward effect levied on sport in exchange for strong working loads.

According to Downward (2007) and Humphreys and Ruseski (2007), household size is adversely correlated with sport activity. The inclusion of more parents and children in the home reduces female sport participation (Downward et al., 2014; Eberth & Smith, 2010). Married adults have little time to engage in alternative athletic exercises (Humphreys & Ruseski, 2006). Except for Wicker et al. (2012), time spent caring for children and families was found to have a negative impact on sport attendance (Downward, 2007; Eberth & Smith, 2010; Hovemann & Wicker, 2009; Humphreys & Ruseski, 2006; Klein, 2009; Wicker et al., 2009).

Job, household, sports, and recreation obligations require people to make constant competing choices about the distribution of time and money, which is a central component of this system. Employment will reduce sports activity, likely due to time replacement (Breuer & Wicker, 2008; Downward, 2007; Eberth & Smith, 2010; Hovemann & Wicker, 2009; Lera-López & Rapn-Gárate, 2011). When people want to allocate time and resources to the different tasks they partake in on a regular basis, they often make some trade-offs. The time of the year and the days of the week also play a role. Weekends, as well as the spring and summer seasons, boost the likelihood of participating in athletics (Garcia et al., 2011).

Anoyke, Pokhrel, and Fox-Rushby (2014) examined the national data from England to explore the influence of time and financial resources on physical activity engagement. Their research found a linkage between decreased participation in physical activities and the high costs related to travel, parking, services, childcare, and fees for accompanying family members per instance of activity. The study suggested that in order to counteract this trend, positive

financial incentive measures could be effective, such as offering subsidies for membership costs.

## **Sports Skill Development**

Cited by Nkrumah (2016), Wesson, Wiggins-James, Thompson, and Hartigan (2005) characterized motor ability as the effortless performance of physical actions and responses, or as a way to describe an action geared toward achieving a specific goal or result. This proficiency is rooted in natural, hereditary attributes that orchestrate elements like collaboration, equilibrium, vigor, and swift response. Physical activities are universally acknowledged as advantageous for children of every age. Involvement in team sports can offer an enjoyable avenue for increasing children's physical activity levels. Nevertheless, it is essential for these sporting activities to be aligned with a child's developmental stage. If children are prematurely pushed into sports that are too advanced for their development, it could lead to disenchantment and early withdrawal from the sport. Annually, it's estimated that 35% of youths participating in organized sports will discontinue by age 15, and by their teenage years, a striking 75% will have ceased participation in such organized sports activities (Harris, 2000).

Wesson and colleagues (2005) put forth that innate capabilities associated with proficiency are enduring and entrenched traits inherent to an individual. Such talents are intrinsic; however, refining them necessitates practice or attempts at a sport to enable the execution of coordinated movements. Thus, physical training is indispensable for mastering and executing movement skills. Echoing this perspective, Thompson, Hudson, and Bowers (2002) contend that insufficient engagement in physical activities can

lead to syndromes stemming from hypoactivity in children, a condition delineated by Bar-Or in Thompson (1995) as a level of activity beneath that of their peers with similar cultural and socioeconomic backgrounds. Fleishman (2005) further categorizes proficiency skills to include attributes like physical fitness, various forms of strength, static, dynamic, explosive trunk, alongside endurance, agility, balance, and stamina. He adds, "It is crucial to recognize that while everyone has these skills to some degree, they are not evenly or similarly distributed among us." Therefore, lacking the necessary levels of specific skills for a particular sport can lead to failure and ineptitude in that specific domain.

Flieshman (2005) emphasizes the importance of matching individual abilities to an appropriate sport. Wesson et al. (2005) highlight that the lack of required skills for one activity does not preclude a person from excelling in a different sport that demands a different set of skills. This suggests that two individuals with distinct levels of inherent abilities might not achieve the same level of success in physical activities. Wesson et al. (2005) also recognize various psychological and socio-cultural factors that can influence the level of success in sports, including motivation, early successes, support received, expectations of coaches and parents, personal interest, practice opportunities, availability of equipment, and personality traits.

The issue of low sports participation among females at the university level has been linked to their previous experiences. Thus, the role of physical education during the formative years in elementary and secondary school is crucial for the future involvement of young females in sports, as posited by Asteri (1995). Studies by Ahmed (2011) and Perry (2007) have shown that many predominantly black schools in South Africa suffer from a dearth of

physical education resources, with a notable shortage of facilities and specialized teachers. This results in physical education classes being infrequent or, in some cases, non-existent.

Ahmed (2011) criticized the inadequate engagement of school teachers in physical education, with some preferring to observe from a distance rather than actively teaching. As a consequence, students often miss out on meaningful physical education experiences. In Ghana, the standard school curriculum does not allocate sufficient time for physical education, which is essential for skill development. Consequently, many elementary schools lack physical education programs, and high school teachers often struggle to find time for such lessons.

### **Sporting Facilities**

The significance of sporting engagement for deaf students is paramount, necessitating the provision of adequate sports facilities in institutions tailored for deaf education. Thornton's (2016) study in England demonstrated that standard secondary schools provided resources for an average of 25.6 different sports, while special schools provided for 17.6, with football being the most prevalent offering in 98% of the surveyed schools. The research by Woods Tannehill, Quinlan, Moyna and Walsh (2010) pointed out that the lack of necessary sports equipment in educational institutions can dampen students' eagerness to participate in sports. An Egyptian study by Demir, Ulusoy and Ulusoy (2003) involving 48 football players from an official club devised a scale to measure the players' enthusiasm for the game, finding that incentives, recognition, social connections, fitness, and health considerations played a role in motivating players.

In Kenya, the Ministry of Education implemented a Special Needs Education (SNE) policy in 2009, underscoring the value of structured education for students with special needs and advocating for the inclusion and financial support of these students in co-curricular activities to foster social integration. This policy aimed to allocate resources to adapt materials and equipment for co-curricular activities, focusing on the interplay between the availability of sports facilities, attendance, and motivation. Mwangi's (2009) research within Nairobi County revealed that the use of specific instructional methods and resources in physical education could heighten the interest of children with hearing disabilities in sports.

The study underscored the necessity of establishing individual safety guidelines during physical activities. Mwangi recommended that educators should be cognizant of the reluctance among students with disabilities to engage in physical activities due to apprehensions about matching the pace of their non-disabled peers, emphasizing the need for tailored instruction and encouragement.

### **Sport Typing and Media Stereotypes**

Media portrayals reinforce sex-based stereotypes through adherence to entrenched gender schemas, with the underrepresentation of female athletes perpetuating societal gender schemas. This phenomenon is further compounded when media coverage does extend to female athletes, often prioritizing their femininity over their athletic prowess (Fink & Kensicki, 2002). Investigations by the NCAA have revealed a differential evaluative lens, where women's aesthetic qualities are foregrounded, whereas men's athletic competencies are emphasized (Billings et al., 2002). Perceptions mediated by such coverage tend

to distort reality, casting female athletes as younger, more slender, and taller than they are, as observed by Martin and Martin (1995).

The delineation of sporting events into categories of gender congruity or non-congruity not only shapes social discourse but also influences public expectations regarding the appearance of athletes and the degree of their media visibility. Billings et al. (2002) noted that commentary on female athletes often extends beyond their physical appearance to the perceived gender appropriateness of the sport. Pederson (2003) found that media representation of female athletes is contingent upon the gender conformity of the sport, with increased visibility for those in "gender-appropriate" sports.

Furthermore, Hardin and Greer's (2009) study among college students indicates persistent sex-typing of sports, with a clear distinction between sports deemed feminine, such as volleyball and gymnastics, and those considered masculine, like basketball and soccer. Koivula (2001) further stratifies sports along gender lines, associating masculine sports with attributes of risk and physicality and feminine sports with aesthetics and technical prowess.

The representation of "gender-appropriate" versus "gender-inappropriate" sports is starkly evident in media imagery. Vincent (2003) found that female athletes in "gender-appropriate" sports were often posed in ways that accentuated femininity in photographic portrayals during the 1996 Olympic Games. Conversely, Duke and Greer (2008) noted that female athletes in masculine sports are often depicted with visual stereotypes that highlight strength and muscularity, potentially to counter the perceived incongruity.

The depiction of female athletes in media has historically involved the reinforcement of femininity through poses and aesthetic enhancement with

makeup and clothing, as analyzed by Duncan (1990) in the context of the 1984 and 1988 Olympic Games. Kane and Snyder (1989) argued that these stereotypes serve to constrain the scope of sports deemed appropriate for female participation.

Schmalz (2008) illuminated how sex stereotypes can deter children from engaging in sports perceived as incongruent with their gender due to fear of social stigma. The media's role in perpetuating these stereotypes cannot be understated, with an underrepresentation of female athleticism and an undue emphasis on femininity over athletic capability, contributing to a distrust in the credibility of female athletes (Crossman, Vincent, & Speed, 2007; Fink & Kensicki, 2002; Salwen & Wood, 1994).

Female athletes are portrayed in the media in ways that emphasize their personal lives, physical presence, and other non-athletic subjects, implying that their athleticism is unimportant or uninteresting (Jollimore, 2002). Female competitors are often portrayed in televised athletics as cooperating rather than competing (Daddario, 1994). Readers and listeners shape their expectations of female athletes based on what they see in the media and in culture (Greendorfer & Rubinson, 1997). Female athletes were seen in leisure/recreational sports, were depicted in social (not competitive) practices, and were underrepresented relative to men in point-of-purchase advertisements (Cuneen & Claussen, 1999).

The impact of physical presence on gender stereotypes in the workplace, in public photographs, in police cases, and elsewhere has been examined. Men who believed they resembled traditional male schematic appearances, for example, believed they were more likely to earn compensatory occupational

incentives than men who believed they did not resemble schematic appearances (Alter & Ceta, 2005). In a sample of sexual assault complaints, supervisors classified more attractive complainants as making more credible charges than less attractive complainants (Madera et al., 2007). Another research found that women who presented unfavorable facts were viewed less favorable than men (Swim et al., 1989). Differences of mood have also been discovered in media studies focused on gender diagram appearance. Chang and Hitchon (2004) discovered that people wanted a more feminine female nominee to have more positive campaign advertisements. It has been shown that visual representations of women in gender schematic positions improve viewer appeal (Rosenspan, 1998).

Reichert and Fosu (2005) identified that the portrayal of physically attractive female models on the covers of magazines engenders sexual interest and curiosity among both male and female audiences. Furthermore, Maddox (2008) reported that the juxtaposition of media-promulgated body ideals against one's self-image can prompt cognitive engagement through comparative analysis. Chang and Chieng (2006) noted an associative link between the identity of television viewers and the characters represented in commercials, with consumers displaying higher identification with advertisements that featured models whose appearance aligned with their perceived gender attributes.

Within the context of media consumption, Trampe, Stapel, and Siero (2007) discerned that only when confronted with images of similarly or more attractive models did women who viewed themselves as attractive experience body dissatisfaction. Moreover, the gender congruence between athletes and

viewers has been shown to modulate viewer engagement; Angelini (2008) found that both male and female youths found men's sports broadcasts to be more stimulating than those of women's sports, although broadcasts showcasing female athletes challenging traditional gender norms elicited feelings of hope and excitement among female viewers.

These findings suggest that female spectators might feel more empowered and invested when witnessing female athletes succeed in traditionally male-dominated sports. In contrast, female athletes who embody glamour and femininity may be more appealing to a male audience, which is predominantly the target demographic for many sports events (Messner, 2007). However, there is a contention that challenging gender stereotypes may be more advantageous for female than male athletes, as the latter embodying feminine traits may alienate a male audience (Ricciardelli & McCabe, 2007). The allure of beauty and sexuality in sports serves as a powerful draw, with aesthetically appealing female athletes often capturing greater public interest, and charismatic celebrities are deemed to be effective promoters, potentially increasing ticket sales for sports events (Cunningham et al, 2008).

The comparison of performance in team sports between genders remains complex due to the normative segregation of competitions by sex, with mixed events like equestrian being the exception in venues such as the Olympic Games. Nonetheless, when performance is quantifiable through objective metrics such as time or distance, men typically surpass women, as exemplified by gender differences in world records for speed and endurance-based sports (Tatem, Guerra, Atkinson, & Hay, 2004). However, it is noteworthy that men

do not always dominate in disciplines that necessitate precision, calmness, or finesse.

# **Chapter Summary**

The majority of the peer-reviewed articles in the literature focused solely on the availability of opportunities in sport activities for females (Muhammad et al., 2011; Quick et al., 2010; Stewart & Ellis, 2013). The aim of this study was to investigate the factors that affect female students' involvement in physical activity at Komenda College of Education and OLA College of Education in the Central Region of Ghana in order to develop a comprehensive understanding of sports among the selected Colleges of Education. Other findings similar to this research demonstrate a number of variables that influence female participation in athletics, based on the learning institution's atmosphere and the resources available (Farid, 2003; Fox & Riddoch, 2000). Similarly, the aim of this research was to discover the reasons that motivate people to participate in sports. Another explanation for undertaking the current research was that there have been very few studies focused on student interest in sports in the Ghanaian sense. As a result, any report that does not include local partners at the grassroots level is deemed insufficient (Polat, 2011). This study seeks to bridge the current divide by exploring student participation in order to make a meaningful addition to the existing body of academic information that can be used as a potential guide for related studies.

#### CHAPTER THREE

#### **RESEARCH METHODS**

#### Introduction

The purpose of the study was to investigate the factors influencing female teacher-trainees' physical activity participation in Komenda and OLA Colleges of Education in Central Region of Ghana. The chapter dealt with the following: research design, area of study, population, sampling procedure, data collection instruments, data collection procedure and data processing and analysis.

#### **Research Design**

This study on factors influencing female teacher-trainees' physical activity participation in Komenda and OLA Colleges of Education in Central Region of Ghana used a descriptive quantitative survey design. As Orodho (2009) points out, descriptive experiments are not only limited to fact checking, but may also result in the formulation of critical rules of science and the resolution of major problems. In this case, quantitative polling may assist the researcher in obtaining the opinion of a representative group of the subject population in order to infer the overall population's interpretation. According to Creswell (1994), quantitative approaches offer responses with a far stronger foundation than common sense or experience. Quantitative approaches are concerned with measurements and the assignment of numerical events in accordance with the rules defined by Kombo and Tromp (2006).

A researcher may opt for a descriptive quantitative survey design to study female teacher-trainee participation in physical activity for several reasons. This method allows for the collection of quantifiable information that can be used to statistically describe the characteristics of a large population of female teacher-trainees without influencing their environment (Creswell & Creswell, 2017). Firstly, a descriptive quantitative survey is useful in obtaining specific information about the prevalence of physical activity among this group (Fink, 2003). By employing a structured questionnaire, the researcher can gather data on how often, for how long, and what types of physical activities are most common among the participants (Babbie, 2016). Secondly, surveys are particularly effective in identifying patterns and relationships. For instance, they can be used to discern potential correlations between physical activity levels and variables such as age, academic workload, or access to facilities (Cohen, Manion, & Morrison, 2013).

Another advantage of a descriptive survey is its efficiency and ability to reach a broad audience quickly and economically, which is especially important when the researcher has limited resources (Mertler & Reinhart, 2016). Given the potentially large population of female teacher-trainees, a survey can collect a vast amount of data within a relatively short timeframe (Dörnyei, 2007). Moreover, using a survey design allows for anonymity, which can encourage more honest and candid responses about personal habits and preferences related to physical activity, a factor that is crucial when the subject matter may be sensitive for some participants (Fowler, 2013).

In terms of the analytical power, the quantitative nature of the data collected through surveys facilitates the use of statistical methods to make inferences about the population (Trochim & Donnelly, 2006). This can include the use of descriptive statistics to provide an overview of the data, as well as

more complex analyses to test hypotheses about the factors influencing participation in physical activity (Creswell & Creswell, 2017).

A descriptive quantitative survey design is a strategic choice for a researcher aiming to map out the landscape of physical activity among female teacher-trainees, providing a clear, quantitative picture that can form the basis for further study or intervention programs.

#### **Population**

The chosen population for the study comprised female athletes from two educational institutions who actively participated in physical activities ranging from intra-school contests to national-level sports competitions. A population is a collection of people, objects, or things from which measurements are taken (Kasonde-Ng'andu, 2013). According to Scheaffer, Mendenhall III, Ott and Gerow (2012), the population is the group of concern to the researcher, while the reference population is the group to which the study's findings should preferably be generalized. Selecting this group provides a comprehensive understanding of the dynamics and factors influencing female participation in physical activities within an educational context. This population is substantial, consisting of 244 participants from OLA College of Education and 116 from Komenda College of Education, totalling 360 students.

The justification for choosing this particular population hinges on several factors:

1. **Relevance to the Research Question**: These female athletes represent a relevant cross-section for exploring questions related to physical activity participation because their experiences reflect both casual and competitive engagement in sports (Kasonde-Ng'andu, 2013).

- 2. **Specificity of the Group**: The population is well-defined, and its members are easily identifiable, which helps in accurately targeting the survey and collecting data that is pertinent to the research objectives (Scheaffer, Mendenhall III, Ott & Gerow, 2012).
- 3. Diversity of Experience: Including participants from both institutions who compete at various levels ensures a diversity of experiences, which enriches the data and provides a more nuanced understanding of the factors that encourage or hinder physical activity among female teachertrainees.
- 4. Generalizability: This population is sizable enough to allow for generalizable conclusions within the context of teacher training colleges. Their experiences can shed light on larger trends and inform policies or programs to promote physical activity (Scheaffer et al., 2012).
- 5. Accessibility: The group is readily accessible, making it logistically feasible to carry out the study. This accessibility also ensures a higher likelihood of a robust response rate, which is crucial for the validity of survey-based research.

The selected population is ideal for addressing the study's aims due to its relevance, specificity, experience diversity, generalizability of findings, and accessibility for data collection. The study was conducted in two different colleges of education. The section discusses the demographic characteristics of the respondents. These are age, religious affiliation, year group at college and type of college. The results are presented in Table 1

**Table 1: Demographic Characteristics of Respondent** 

Demographic variable	Frequency	Percentage
Age		
18 - 24	197	54.7
25-29	143	39.7
30-34	20	5.6
Religious Affiliation		
Christianity	295	81.9
Islam	61	16.9
Traditional	3	0.8
Non-Religious	1	0.3
Type of college		
Mixed	116	32.2
Girls O <mark>nly</mark>	244	67.8
Year group at college		
Year 1	3	0.8
Year 2	17	4.7
Year 3	334	92.8
Year 4	6	1.7

Source: Field survey, Diabor (2022)

Table 1 presents the demographic characteristics the respondents. It could be observed that majority of the students were between the ages of 18-24. This is represented by 197 which constitute 54.7%. This is followed by students between 25-29 which constituted 134 representing 39.7% of the total respondents. Table 1 further shows that 295 of the students representing 81.9%

were Christians with less 20% representing other religious affiliations like Islam and Traditional religion. It is also observed that while majority of the female students were from single sex school (Girls Only), most of them were equally in their third year (Year 3). This is represented by 67% and 92% respectively.

#### **Sampling Procedures**

According to Malhotra and Birks (2007), a sample is a subset of the population chosen for inclusion in a survey. According to Sekaran (2003), it is also a subset of the population since it has certain representatives who were chosen from the population. In this study, the researcher decided to assess the whole population and therefore the census sampling technique was used for the study. A census sampling technique can be the most appropriate and rigorous method for a research study aiming to thoroughly understand physical activity participation among female teacher-trainees. A census sampling involves collecting data from every member of the population, which provides a complete picture of the population's characteristics. In this case, it would allow the researcher to capture the full spectrum of physical activity levels, types, and the associated factors among all female teacher-trainees in the selected institutions (Babbie, 2016). Unlike sample-based surveys, a census does not involve sampling error because it does not rely on a subset of the population. This increases the accuracy of the data and ensures that the findings are truly representative of the entire population (Lohr, 2009).

As every individual is included, the findings of a census are generalizable to the entire population from which the data was collected. This is particularly important in educational settings where policy decisions based on the study could impact all trainees (Fowler, 2013). A census allows the

researcher to drill down to a level of detail that would not be possible with a sample, making it possible to identify even small variations or subgroups within the population that may have different levels of participation or barriers to physical activity (Creswell & Creswell, 2017).

By including every female teacher-trainee, the census ensures that all voices are heard, and no group is marginalized or underrepresented. This is particularly relevant in educational research where equal representation can highlight diverse needs and challenges (Cohen, Manion, & Morrison, 2013). If the population size is manageable, which is often the case in more contained environments like teacher training colleges, a census is feasible and can be executed with relatively limited resources compared to large-scale surveys (Dörnyei, 2007). Results from a census provide a benchmark for future studies. Longitudinal data can be collected using the same technique to track changes over time, which is valuable for evaluating the impact of interventions (Trochim & Donnelly, 2006).

The accessible population comprised of the female teacher-trainees' of level 200 and 300 only because the level 100 students were newer in the school and had not participated in any sporting activity in the school (OLA and Komenda Sports Sections, 2022). Sampling, according to Fowler (2009) is the process of selecting a subset of the population that is most representative of the whole population, hence the study's sample size was 360 students.

Larger sample sizes are needed for definitive analysis, such as descriptive surveys, according to Malhotra and Birks (2007). Furthermore, big numbers are needed when data is to be gathered dealing with a large range of variables and also several questions are posed in a survey. According to

Creswell (2014), the most common method for calculating the sample size in a descriptive analysis is to decide the accuracy of estimation needed and then calculate the sample size required to ensure it.

**Table 2: Distribution of Sample for the Study** 

Name of School	Type of school	No. of Students
		Sampled
Ola College of Education	Female only School	244
Komenda College of Education	Mixed School	116
TOTAL	<i>y</i> -	360

Source: Field Data (2022)

#### **Data Collection Instrument**

The survey questionnaire was used to collect data in order to determine the factors that influence female students' participation in physical activities. Questionnaires are effective data collection tools, but only if the researcher understands what is needed and how to quantify the dependent and independent variables of interest. The researcher used the questionnaire-style instrument because it allows her gain the exact answer she was looking for from the participants. The researcher created a closed-ended questionnaire for this report, soliciting details that addressed the study's basic objectives. According to Gray (2004), a near ended questionnaire is one that gives participants pre-determined answers to select from a series of numbers that indicate strengths of feeling or mood.

The advantage of using a questionnaire as a data collection instrument is that it is less expensive, takes less time, and provides assurance of non-interview bias as opposed to other types of data collection instruments.

According to Mouton (1996), data collection through a survey methodology using a questionnaire enables the researcher to obtain knowledge from diverse demographic categories which can be easily administered. Since I was dealing with a broad sampling group of 360 people, a questionnaire was considered necessary. The questionnaire was a simple way to analyze content, and it allowed participants to answer correctly.

The questionnaire was split into two parts. The first part, which is section A contained four items included questions about respondents' demographic information such as age, religious affiliation, type of college and year group at the College. These items helped in tracing the institutions of respondents as well as some important information needed for the study. The second part contained Sections B, C and D. Section B was based on the type of activities the students had performed within a period of 6 months. The respondents were to choose responses applicable to statements given by ticking in the appropriate column.

Section C contained items adopted and modified from the International Physical Activity Questionnaire (IPAQ). The short form of the IPAQ was used. the short form of the IPAQ offers a concise yet comprehensive assessment of physical activity, which is less burdensome for respondents. Given that teacher-trainees often have demanding schedules, a questionnaire that requires minimal time to complete increases the likelihood of higher response rates and more complete data collection. This aspect is particularly important when studying populations with limited time to spare for research participation (Hagströmer et al., 2006).

Additionally, the short form of the IPAQ is designed to categorize physical activity into three distinct levels: low, moderate, and high. This simplicity facilitates a straightforward understanding of the activity patterns among the female teacher-trainees, providing clear, actionable insights into their physical activity levels which can be critical for developing targeted interventions or programs (Craig et al., 2003).

The short form is also renowned for its ease of administration and interpretation. Without the need for extensive training or complex scoring procedures, the short form can be quickly implemented and the results easily processed. This is advantageous for researchers who may be operating under time constraints or resource limitations (IPAQ Research Committee, 2005). The section consisted of four items which sought for the participants' level of participation in physical activity within a week. In item 1, respondents were given options to choose their responses from, (None, 1day, 2days, 3days, 4days, 5days and more days) whiles respondents provided a response for item 3-5 which demanded for time spent on participating in physical activity.

Section D was presented in a five-point Likert scale, 4=Strongly Agree (SA), 3=Agree (A), 2=Disagree (D) and 1=Strongly Disagree (SD). The Likert scale made it very easy to analyze statistically (Tuckman, 1994). The respondents were to choose responses applicable to statements given by ticking in the appropriate column. The items in the questionnaire were based on contributing factors influencing female teacher-trainees' participation in physical activity in Komenda and OLA Colleges of Education and the benefits derived from it. Section E focused on a dichotomy set of question where the

respondents were to tick the appropriate answer. These questions were adopted from the IPAQ short form questionnaire

## Validity and Reliability of Instrument

The legitimacy of an instrument, according to Sekaran (2003), is related to the degree to which it really tests what it is intended to measure. According to Siniscalo and Auriat (2005), an instrument has material value when a jury of judges or experts on a subject agrees that the assertions in the instrument do correspond to what they are intended to calculate. To establish validity, the items formulated for the questionnaire were scrutinized to ensure that they were based on the content of the literature. Again, the content and face validity of the instrument was checked by experts in the Department of Health, Physical Education and Recreation of the College of Education Studies, University of Cape Coast who are well knowledgeable about participation in sports and physical activities to ensure that they were devoid of ambiguities.

Before the actual study, a pilot test of the instrument was conducted to check the validity and reliability. The instrument was pilot tested at Holy Child College of Education, Takoradi, a female College of Education in the Western Region of Ghana in order to ensure that items were worded correctly and were understandable to respondents. This was done to sharpen and fine tune it by correcting possible weaknesses, inadequacies and ambiguities that could characterised the items. These participants were used because I considered them as having similar characteristics with respondents that were sampled for the actual study.

According to Sekaran (2003), reliability is the accuracy and stability of a measurement device independent of the stability of test takers. According to

Stangor (2004), the reliability of a measurement instrument is the degree to which the instrument is error-free, thereby measuring accuracy over time and variables of interest. As a consequence, it is the degree to which an instrument yields the same effects following repeated testing over time. The collected data was processed using IBM SPSS version 21. I used Cronbach coefficient alpha to determine the reliability coefficient of the instrument. The questionnaire yielded an internal consistency reliability coefficient of 0.80. This was considered to be acceptable and reliable, since according to researchers (Bonett, 2010; Cronbach & Shavelson, 2004; Fraenkel & Wallen, 2012), the reliability coefficient should be at least 0.70 and preferably higher.

#### **Data Collection Procedure**

Since the study involved human beings, ethical procedures were followed in the data collection. The data collection began from 18<sup>th</sup> March, 2020 to 31<sup>st</sup> March, 2020. In all, two weeks were used to collect the data. The first week was used to collect the data from OLA Girls College of Education, whereas in the second week the data was collected at Komenda College of Education. Before the data collection, an introductory letter was obtained from the Department of Health, Physical Education and Recreation (HPER) of University of Cape Coast to the selected Colleges of Education. Clearance was also obtained from UCC's Institutional Review Board (IRB) on 9<sup>th</sup> July, 2021 with ID number UCCIRB/CES/2021/36 to conduct the survey. I personally took these letters to the principals of the selected Colleges. I was then introduced to the Vice Principal academics who then introduced me to the physical education tutors of the colleges. I explained to them the reason for carrying out the research and if they could permit me to use their students for

the study. They gave me permission and dates that I could administer the questionnaires.

The questionnaire was administered by me with the help of two research assistants from each of the selected Colleges. The two research assistants assisted me to arrange the classroom and the distribution of the questionnaires. The sampled participants were arranged in a classroom and they were briefed on the reason for carrying out the research work and also solicited from them the need to respond to the items on the questionnaire. The questionnaires were given to them and they were given ample time to respond to them. The completed questionnaires were collected from the respondents. In all, 360 questionnaires were distributed to the respondents and all were retrieved which represents 100%. After the collection, the questionnaire were numbered one after the other and coded to allow easy entry of the items into the computer.

#### **Data Processing and Analysis**

According to Dane (2011), study evidence can only become meaningful after it has been organized, compiled, and conclusions clarified in order to ascertain its important sources, statistical associations, sequence, and patterns. The statistical software used for data processing and analysis was the Statistical Package for Social Sciences (SPSS) version 21. The process of data screening was employed to address questionnaires that were not fully completed, ensuring the data was appropriately organized and ready for subsequent statistical evaluation. The analyses and discussion were done according to research question, using descriptive statistics (frequency, percentages, mean and

standard deviation). Section A of the questionnaire comprised background data of the participants and this was analysed using frequency and percentages.

To measure participants' attitudes towards participation in physical activities in research question one, their level of interest, Frequency of Participation, Enjoyment, Perceived Benefits, Motivation, Perceived Competence, Attitude Toward Physical Education, Commitment, Social Influence and Health Orientation were taken into consideration. Research question one was thus analyzed and discussed using mean and standard deviation. The responses to these items can be quantified using Likert-scale ratings (e.g., 1-5, where 1 represents 'strongly disagree' and 5 represents 'strongly agree' or a similar scale) to provide a numeric value that represents the participants' attitudes. The mean (average score) and standard deviation (a measure of variability) of these responses would then be calculated to analyze and discuss the overall attitude of the group towards physical activity. A mean of 1.74 and above indicates a positive attitude while a mean of 1.10 and below indicates negative perception towards participation in physical activities.

Research question two which sought to determine the level of participation in physical activity was analysed using frequency counts and percentages. To measure the level of participation in physical activity, the following items were used: Activity Log, Frequency of Activity, Duration of Activity Sessions, Intensity of Activity, Variety of Activities, Consistency of Participation, and Attendance at Physical Activity Sessions.

These items typically included options for the respondents to indicate their level of participation, which could then be tallied into frequency counts (e.g., the number of individuals participating in physical activity daily, weekly, etc.) and converted into percentages of the total sample.

Research questions three and four which sought to examine the knowledge level and perceived constraints in physical activities was interpreted and discussed using descriptive statistics. Knowledge Level in Physical Activities, using Multiple-Choice Questions, True or False Statements, Likert Scale Statements; Perceived Constraints in Physical Activities like Checklist of Barriers, Open-Ended Questions, Ranking Scale Questions were used to measure the two research questions. The responses to these items were analyzed using descriptive statistics, which include mean, median, mode, frequencies, percentages, and measures of variability (such as standard deviation). The mean was used to summarize the central tendency of knowledge levels or the prevalence of certain barriers, while standard deviation could provide insight into the variability of knowledge levels across the sample. Frequencies and percentages were helpful to determine the most common constraints reported by participants. This provided a clear picture of the general knowledge about and perceived constraints to physical activity among the study participants, allowing for an in-depth discussion of these factors in the research.

Research question five was analysed and discussed using multiple linear regression. To measure the variables involved in research question five the multiple linear regression was used. These items were considered: the Dependent Variable (DV) which is the outcome what the question sought to predict, Independent Variables (IVs), the factors that were deemed to influence the DV and Scaling (IPAQ short form questionnaire. The results were presented using Tables in the chapter four.

The aim of using descriptive statistics as a research method is to explain the phenomena of interest (Dane, 2011; Sekaran, 2003). Furthermore, descriptive statistics entails the translation of new data into a process that contains information that explains factors of a specific scenario, and is accomplished by the ordering and manipulating of raw data gathered (Sekaran 2003).

#### **Ethical Considerations**

It is imperative and appropriate for any researcher to consider ethical problems governing science. This is due to the fact that in order to develop a sound ethical practice, social researchers must train themselves in terms of all ethical considerations in the design of a study (Neuman, 2006). The respondents' privacy was protected in this study by first obtaining their permission, as one of the tenets of social science involves voluntary involvement of respondents. In this respect, the researcher clarified the study's goals as well as its importance in increasing respondents' voluntary engagement.

There is a widespread concern that subjecting respondents to questionnaire items could cause physical and emotional damage. As a result, statements in the questionnaire were formulated in such a manner that respondents had a range of choices and free will to choose objects that were important to them. Anonymity and secrecy were also guaranteed to respondents. The researcher would expose his identity to study participants in order to dispel any suspicions or deceptions about the study. To prevent scientific fraud in science, known as plagiarism, the thesis strictly adhered to the established norms of scientific behavior. The researcher made certain that the inventions,

works, and publications that were included were properly acknowledged and cited.

# **Chapter Summary**

This chapter focused on the process and study design that used a quantitative approach. It addressed in depth methods of data collection and interpretation, as well as stressed statistical techniques, without failing to note the reason for using those tools in drawing the study's conclusion. Furthermore, the researcher addressed the ethical questions that bind the thesis.

#### **CHAPTER FOUR**

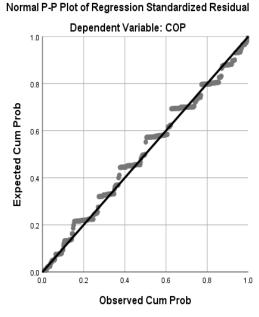
#### **RESULTS AND DISCUSSION**

#### Introduction

This chapter discusses the findings of the study on the factors influencing female teacher-trainees' physical activity participation in Komenda and OLA Colleges of Education in Central Region of Ghana. The chapter demonstrates how the research methods discussed in chapter three are applied in relation to the focus of the study and reports the results. The chapter also discusses the findings and compare them with the literature (both the theoretical and empirical literature). The results are presented in tables and other charts. These results are presented according to the research question. However, before the results are presented according to the research questions, the background information of the respondents is discussed

# **Normality and Linearity Diagnostic Test**

The normality and linearity assumptions are fundamental to standard regression. According to Pallant (2007) standard normal probability plots also called 'Normal Q-Q Plot' provides standard basis for testing these assumptions. The Normal Q-Q plot or graph is generated concurrent when the regression output is produced. Pallant (2007) states that an observation of reasonable straight normal probability plot is an indication of normality and linearity. Where these assumptions are not met, the standard multiple regression will not give reliable results. The results of The Normal Q-Q plot is reported in Figure 2.



Cases weighted by Lack of necessary sport equipment at the college

Figure 2: The Normal Q-Q plot

It can be observed from Figure 2 that the line passes through a number of points suggesting a reasonable straight line. This demonstrates that the normality and linearity in the study variables as assumed by regression have been met.

### **Multicollinearity Diagnostic Analysis**

The study also presents the results for the test of the multicollinearity. This assumption is tested using tolerance and variance inflation factor (VIF). Where the correlation coefficients between independent variables or predictors are 0.9 and above, there is strong case of multicollinearity. Studies have shown that there are instances where multicollinearity problems are not identified through the correlation matrix. Therefore, the present study supports the matrix with the Tolerance and VIF. The tolerance measures how much of the variation in a given predictor is not explained by the other predictors included in the model.

The decision rule follows that if this value is less than .10, then there is multicollinearity problem. This indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity. In order words, to avoid any multicollinearity problem the predictors included in the model should be at least .10 Similarly, the VIF values above 10 also indicate multicollinearity. Variance inflation factor is the inverse or reciprocal of the Tolerance value.

**Table 3: Collinearity Analysis** 

Model	Tolerance	VIF
1 (Constant)		
Age of Respondents	.970	1.031
Religious Affiliation	.960	1.042
Type of College	.946	1.057
Year Gr <mark>oup at College</mark>	.985	1.015

Source: Field survey, Diabor (2022)

To test for multicollinearity, the Tolerance and VIF is also tested as could be seen from Table 3. The model as could be observed from Table 3 gives emphatic proves that there is no multicollinearity problem. All the variables had Tolerance values of more than 0.01. Similarly, the VIF values are less than 10. Thus, no VIF value was equal or above the 10 thresholds. It is therefore conclusive that there is no multicollinearity problem as all the three methods have yielded similar conclusion

Research question 1: What are the physical activities available to female teacher-trainees of OLA and Komenda Colleges of Education?

The first research question sought to investigate the physical activities available for female students within the study setting. In this investigation, the



**Table 4: Type of Physical Activity Undertaken by Respondents** 

1 - 1	-	11/		Response		
Statement	N	NO	1-2	3-4	5-6	7times or more
Skipping	360	126(35.0)	90 (25.0)	75 (20.8)	31 (8.6)	38 (10.6)
Playing Handball	360	264(73.3)	36 (10.0)	23 (6.4)	21(5.8)	16 (4.4)
Walking for exercise	360	75(20.8)	57 (15.8)	52 (14.4)	62(17.2)	114 (31.7)
Bicycling	360	217(60.3)	51(14.2)	37(10.3)	18(5.0)	37 (10.3)
Jogging or running	360	139(38.6)	70(19.4)	64(17.8)	42(11.7)	45 (12.5)
Aerobics	360	195(5 <mark>4.2</mark> )	70(19.4)	42(11.7)	24(6.7)	27 (7.5)
Swimming	360	156(43.3)	95(26.4)	46(12.8)	32(8.9)	30 (8.3)
Dancing	360	61(16.9)	61(16.9)	63(17.5)	64(17.8)	110 (30.6)
Playing football/soccer	360	236(65.6)	40(11.1)	22(6.1)	28(7.8)	34 (9.4)
Ampe	360	239(66.4)	46(12.8)	29(8.1)	20(5.6)	26 (7.2)
Playing volleyball	360	228(63.3)	43(11.9)	31(8.6)	33(9.2)	25 (6.9)
Push-ups/sit-ups	360	193(53.6)	46(12.8)	53(14.7)	25(6.9)	43 (11.9)
Playing basketball	360	264(73.3)	34(9.4)	26(7.2)	19(5.3)	17 (4.7)
Athletics	360	259(71.9)	41(11.4)	27(7.5)	14(3.9)	19 (5.3)
Table Tennis	360	303(84.2)	21(5.8)	17(4.7)	15(4.2)	4 (1.1)
Netball	360	273(49.5)	39(10.8)	19(5.3)	24(6.7)	5 (1.4)

Source: Field survey, Diabor (2022), Data presented as frequencies and percentage (%)

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Moderate activities such as skipping, walking, bicycling, jogging or running, swimming, dancing, cycling, dancing, ampe or aerobics was reported by the respondents to be performed two times or more per week. Participants further thought that they were more active in comparison to peers and friends. Commonly, they reflected the same levels of physical activities in holidays, in comparison to school days and they perform enough exercise to keep them healthy. Regarding the type of sports and exercise practiced during college, most of the participants indicated that they practiced one type of activity to keep healthy and also perform roles during games period.

It can be seen in Table 4 that the most common type of physical exercise done within 7 times or more within the 6-month period was walking for exercise (31.7%), followed by dancing (30.6), swimming (26.4%), skipping (25.0%) jogging or running (19.4%) and bicycling (14.2%). It can be further stated that majority of the participants have low participation in physical activities and sports in their colleges. This finding is therefore consistent with the study conducted by Al-Hazzaa, (2004) in Saudi Arabia which showed that the prevalence of physical inactivity levels ranged between 43% and 99% among adults. Obesity, asthma, diabetes, back pain, impaired joint function, and psychosocial issues have been linked to physical inactivity, posing a significant challenge to community development.

As much as 303(84.2%) students indicated that they do not participate in table tennis because it is a contact sports and they being girls will bring scars to their bodies. On this same variable, 236(65.6) students made strong argument that they do not like playing football/soccer. Similarly, 264(73.3) students indicated that although handball is a soft game, it comes with physical contact

and it will inure to their physical bodies. Only 4.4% (16 out of 360) reported experiencing benefits seven times or more. Most respondents seem to find some level of benefit in playing handball.

About 35% of respondents (126 out of 360) reported no benefits from skipping. On the other hand, 10.6% (38 out of 360) reported experiencing benefits seven times or more. Skipping seems to have a polarized response, with a substantial number of people either seeing significant benefits or none at all. Playing football/soccer, ampe, playing volleyball, push-ups/sit-ups, playing basketball, athletics, hockey, and netball activities generally have a higher percentage of respondents reporting benefits. For most of them, a significant portion of respondents experienced benefits seven times or more. Table tennis and Netball appear to have fewer perceived benefits overall compared to other activities. It is important to note that individual preferences and experiences vary widely, and these results reflect the subjective opinions of the respondents. Additionally, the level of benefits reported may depend on various factors such as frequency, intensity, and duration of the activity, as well as individual fitness levels and goals.

The results from Table 4 demonstrate a diverse range of perceptions regarding the benefits associated with various physical activities among the surveyed participants. There is significant variation in how individuals perceive the benefits of different physical activities. Some activities, such as table tennis and netball, had a higher proportion of participants reporting limited benefits, while others, like playing handball and athletics, were associated with more positive perceptions. Certain activities, including skipping, jogging or running, and dancing, elicited polarized responses, with a notable number of participants

either reporting substantial benefits or none at all. This suggests that these activities may have more individualized effects.

The findings highlight the importance of recognizing the individual nature of physical activity benefits. The effectiveness of an activity in promoting health and well-being can vary widely from person to person. To make informed decisions about physical activity, individuals should consider their personal goals and preferences, as well as the potential benefits associated with different activities.

Table 5: Percentage Ranking of Types of Physical Activities Available

Type of physical activity	Frequency	Percentage
Dancing	360	83.0
Walking for exercise	360	79.2
Skipping	360	65.0
Jogging or running	360	61.4
Swimming	360	56.7
Push-ups/sit-ups	360	46.4
Aerobics	360	45.8
Bicycling	360	39.7
Playing volleyball	360	36.7
Playing football/soccer	360	34.4
Ampe	360	33.6
Athletics	360	28.1
Playing basketball	360	26.7
Playing handball	360	26.7
Netball	360	24.2
Table tennis	360	15.8

Source: Field survey, Diabor (2022)

Table 5 shows that dancing and walking are the most popular activities among respondents. These activities generally require less specialized

equipment and facilities compared to sports like basketball or swimming. This could indicate higher accessibility to these forms of exercise (Bennie et al., 2020).

Different activities in the list target different components of physical fitness: aerobic capacity, muscular strength, flexibility, and so on. For example, push-ups and sit-ups focus more on muscular strength and endurance, whereas jogging or running targets cardiovascular fitness. A balanced exercise regimen often includes a variety of these activities to promote overall fitness (Garber et al., 2011). Gender can also be a factor in the popularity of specific activities. For instance, netball is more commonly played by women, whereas football/soccer is often more popular among men (Eime et al., 2013). The information could be valuable for public health initiatives. For example, if walking and dancing are popular, then community events or campaigns can be planned around them to encourage more people to take part (Heath et al., 2012)

Table 6: Descriptive Statistics on Physical Activities Available to Students

Physical Activity	N	Mean	Std. Dev	Decision
Dancing	359	3.28	1.477	High participation
Walking for Exercise	360	3.23	1.544	High participation
Jogging or Running	360	2.40	1.415	High participation
Push Ups/Sit-Ups	360	2.11	1.425	High participation
Aerobics	360	1.98	1.434	High participation
Bicycling	360	1.91	1.352	High participation
Playing Volleyball	360	1.84	1.301	Low participation
Playing Football/Soccer	360	1.84	1.363	Low participation
Ampe	360	1.74	1.247	Low participation

Athletics	360	1.59	1.123	Low participation
Playing Basketball	360	1.59	1.129	Low participation
Playing Handball	360	1.58	1.122	Low participation
Netball	360	1.47	.961	Low participation
Swimming	360	2.18	1.693	High participation
Bicycling	360	1.91	1.352	High participation

Source: Field survey, Diabor (2022)

Table 6 revealed that fifteen different set of physical activities were available to the female students in the two colleges. These were, dancing, walking for Exercise, jogging or running, swimming, pushups/sit-ups, aerobics bicycling, playing volleyball, playing football/soccer, ampe athletics, playing basketball, playing handball, netball and table tennis. However, Table 6 shows the extent to which student are involved in these physical activities on a Likert scale of 1-5. It could be observed from the results presented in Table 6 that using the highest mean, physical activities that students were mostly involved were dancing, walking for exercise, jogging or running, swimming, pushups/sit-ups, aerobics, bicycling, playing volleyball and playing football/soccer. All these physical activities had a mean value of 1.74 - 3.28.

Using the proposition of Bonett (2010) and Fraenkel and Wallen (2012), a mean value of 1.74 to 5.0 signifies high level of involvement while a mean value of 1 -1.73 illustrates low level of involvement. Judging from this proposition, it could be indicated that physical activities like athletics, playing basketball, playing handball, netball and hockey received low level of attention from the female student. This is because the mean values of these physical activities (athletics, playing basketball, playing handball, netball and hockey)

are within the mean range of 1-1.73. similarly, it is observed from Table 4 that the value of variance of all the listed physical activities are non-zero which indicate that they are positive. A comparison between the variance and standard deviation show that both have lower values (1-2.1). This gives an indication that data collected for the analysis of available physical activity and student involvement are evenly distributed.

The findings on availability of physical activities and female students' involvement in them has empirical antecedents. The findings are consistent with a study conducted by Suris and Parera (2005) which investigated whether physical activity declines with age and, if so, if this decline varies by gender (gender). Suris and Parera (2005) investigated the relationship between physical activity and personal, family, and school influences, as well as healthier behaviours. The results by the two authors were consistent with other studies, indicating that females are more likely to engage in physical exercise.

# Research Question 2: What is the level of OLA and Komenda female students' participation in physical activities?

The second research question sought to investigate the level of students' participation in physical activities. With this level of participation, the researcher was concerned about the rate or frequency at which students participated in physical activities. The level of female students' physical activity and sports participation in Komenda and OLA Colleges of Education was assessed using the World Health Organization's International Physical Activity Questionnaire (IPAQ) short form. This questionnaire evaluated the frequency and duration of physical activities the students undertake including the number of days that they did a physical activity, moderate-intensity, and vigorous-

intensity PA, lasting at least 30 minutes to 2hours within the last 6 months. Participants were instructed to consider all PA, whether on campus, at home, or during leisure time.

The classification of PA participation was determined using algorithms provided in the short-form scoring protocol, developed by the IPAQ group (WHO, 2005). Three categories were used in this study:

- Low: This category included individuals who either reported no activity
  or reported some activity but did not meet the criteria for the moderate
  or high categories (WHO, 2005).
- 2. Moderate: Participants falling into this category met any of the following standards: engaging in a combination of any physical activity, moderate, or vigorous-intensity activities for five or more days per week, achieving a minimum of at least 600 Metabolic Equivalent Task (MET)-minutes per week (WHO, 2005).
- 3. **High**: Those categorized as 'High' in physical activity met any of the following criteria: engaging in a combination of physical activities, moderate, or vigorous-intensity activities for seven or more days per week, accumulating at least 3000 MET-minutes per week (WHO, 2005).

Participants in the 'High' category were considered to meet the Public Health Recommendations (PHR) for physical activity, indicating that they had reached the health-enhancing PA threshold (WHO, 2005). The results are presented in Table 7.

Table 7- Level of Physical Activity Participation of Female Teachertrainees

Level of participation	Frequency	Percent
Moderate	271	75.3
Low	89	24.7
Total	360	100

Source: Field survey, Diabor (2022)

The findings presented in Table 7 reveal a concerning trend among the 360 respondents. The respondents in the study reached a high level of physical activity, with 75.3% (n = 271) participating at a moderate level and a low level of participation of 24.7% (n = 89). This indicates that the majority of the respondents in participating in physical activity in the Central Region, especially in the OLA and Komenda Colleges of Education are not sufficiently engaged in physical activity according to the WHO recommendations.

These findings align with research conducted in Saudi Arabia (Al-Hazzaa, 2004; Dumith, Hallal, Reis, & Kohl, 2011), which also reported high levels of physical inactivity among adults, ranging from 43% to 99%. Similarly, a Brazilian survey employing the IPAQ short-form instrument found a physical inactivity prevalence of 41.1% among adults aged 20 years and above (Hallal et al., 2003). In contrast, the current study's revelation of a complete absence of individuals achieving the WHO's recommended high-intensity level is particularly alarming and disheartening (Low = 24.7%, Moderate = 75.3%).

These findings are consistent with international studies conducted in cultures sharing lifestyle patterns similar to Ghana (Al-Nozha et al., 2007; Al-Nuaim et al., 2012), which have also reported high levels of inactivity among female students (Varela-Mato, Cancela, Ayan, Martín, & Molina, 2012). The observed similarities can be attributed to the growing prevalence of sedentary

routines, a decline in active lifestyles, and an increasing risk of unhealthy weight gain in daily life. This global trend of physical inactivity is well-documented, as supported by Al-Nakeeb et al. (2012). It is important to recognize that physical inactivity is associated with various health issues, including obesity, hypertension, diabetes, back pain, poor joint mobility, and psychosocial problems. These issues pose a significant threat to societal well-being and development (Kiess, Galler & Reich, 2001). Consequently, there is a clear need for public policies that promote active living and discourage sedentary habits to address this critical public health challenge.

Another reason for the low participation level could be a reflection of ineffective teaching of physical activities in the colleges. Although physical activities are required in all colleges, the requirement is not enforced at the school level (DuBose et al., 2008). Physical Education as a subject is looked down upon where other subjects take precedence over it (MacPhail, & Halbert, 2010). PE periods were frequently sacrificed for examinable school subjects (Ocansey et al., 2014). However, Gerber and Pühse (2009) indicated that many schools are not conducting PE though it appears on the school curriculum. Similarly, students' participation in PE drops significantly in the second cycle school (McPhail, & Halbert, 2005).

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**Table 8: Level of Physical Activity** 

Level of Physical Activity	N	Mean	Std. Dev
In the last 6 months, how will you rate the	360	4.24	1.142
number of days you did physical activity			
How long does the physical activity last	360	2.78	.927
How will you rate the length of time you did	360	2.69	.922
the physical activity in question last 3 days?			
How will you rate the duration of time spent	360	2.82	1.025
during Saturday on physical activity			
How will you rate the duration of time spent	360	1.94	.975
during Sunday on physical activity			

Source: Field survey, Diabor (2022)

From Table 8, it could be observed that the students had frequently engaged themselves in physical activities within time of data collection The mean value of 4.28 on how students have engaged in physical education over last six months was very high. Furthermore, the duration and frequency of physical activity engagement by the students were determined to be significant factors. This was represented by mean values of 2.78 and 2.69 respectively. However, the findings show slight disparity between duration of time spent between Saturdays and Sundays. While the duration of time spent for physical activity on Saturday had a mean value of 2.82, that of Sunday had a mean value of 1.94. This is not surprising since students in these colleges have more time for extracurricular activities on Saturdays than on Sundays.

These figures can be aligned with findings from previous research.

According to Dishman et al. (2005), regular physical activity is often influenced

by personal, social, and environmental factors, and the level of activity tends to fluctuate based on these variables The moderate levels of activity indicated by the means in the table could be linked to factors such as academic schedules, availability of facilities, social support, or personal motivation, which have been noted as influential by Sallis and Owen (1999) in their Social-Ecological Model of Health Behaviour.

It is important to note that while the means provide a central tendency of the data, the standard deviations suggest there is variability in the responses, reflecting the different experiences or behaviours among the student population. When considering the impact of physical activity on health, it is critical to consider not just the average level of activity, but also the range of activity levels across the population, as pointed out by Trost et al. (2002) who emphasized the need to look at both the mean and distribution of physical activity in population studies.

In summary, the data suggests a moderate level of participation in physical activities among the female students from OLA and Komenda, with some variability across individuals and a tendency for lower activity levels on Sundays. Understanding these patterns could be essential for designing interventions and programs to encourage more consistent physical activity among students, a key factor in promoting overall health and well-being.

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Table 9: Number of Days Respondents did Physical Activity in the last 6months

Days	Frequency	%
0 days	6	1.7
1 Day	14	3.9
2 Days	76	21.1
3 Days	102	28.3
4-5 Days	115	31.9
More Days	47	13.1
Total	360	100

**Source:** Field survey, Diabor (2022)

Participation in physical activity and training time decreases over time due to a variety of factors, including age. Respondents were asked the number of days they do physical activity and Table 9 indicates that at most between 4-5 days they have an activity. This is due to the fact that this happens when there is going to be sporting activities. However, 6 (28.3%) stated that they do an activity for three days in the week while 6 (1.1) said they do not do any activity because of various reasons which include studies and religion.

**Table 10: How Long does Physical Activity Last** 

Duration	Frequency	%
0 minute	5	1.4
1-30 Minutes	169	46.9
31-60 Minutes	106	29.4
1-2 Hours	61	16.9
More than two hours	19	5.3
Total	360	100

**Source:** Field survey, Diabor (2022)

From Table 10, it is indicative to state that majority of the participants lasted between 1-30 minutes in any given physical activity. This, therefore

translates to the fact that although they participate in physical activities, the number of minutes dedicated to practice is less. Majority, 169 (46.9%) of the participants indicated that physical activities last between 1-30 minutes, while 106 (29.4%) said it lasts 31-60minutes. This can be attributed to the extra efforts made by the student to keep in shape until it is time for the college's sports festival.

**Table 11: Duration Spent During Saturdays on Physical Activity** 

Duration	Frequency	%
0 minute	14	3.9
1-30 Minutes	157	43.6
31-60 Minutes	97	26.9
1-2 Hours	64	17.8
More than two hours	18	7.8
Total	190	100

**Source:** Field survey, Diabor (2020)

Because of the large proportion of the total hours spent on physical activities, the school's teaching must be a major contributor to its physical activity, because students spend so many hours at school. However, it is not clear just how much the total contribution or contribution to and from school, physical education, recesses, time spent at school, and prior or post-school activities is made by every segment of school transportation. From Table 11, it is shown that 157 (43.6%) of the participants engage in physical activities during Saturdays. Participation in physical activities is low amongst the two colleges based on the premise that even at the weekend, that there are no classes and there should be enough time for physical activities, less that one hour is dedicated to any activity. Only 28(7.8%) of the participants said their engage in an activity for more than 2hours.

**Table 12: Duration Spent during Sundays on Physical Activity** 

Duration	Frequency	%	
0 minute	138	38.3	
1-30 Minutes	144	40.0	
31-60 Minutes	49	13.6	
1-2 Hours	21	5.8	
More than two hours	8	2.2	
Total	360	100	

**Source:** Field survey, Diabor (2022)

Vigorous or moderate intensity Physical activity, including maintenance of healthy body composition, is important for normal growth and development, and decreases the probability that risk factors may develop for chronic diseases later in life. At least 60 minutes of vigorous or medium intensity physical activity per day are currently recommended for adolescents with vigorous physical activity on at least 3 days. However, Table 12 data states that the student participants perform on Sundays for close to 30 minutes (40.0%) of physical activity while only 8(2.2%) does it continuously for over two hours. The data show that relatively few students achieve a daily dose in physical activity of vigorous or moderate intensity of at least 60 minutes 49 (13.6 %). Few meet the currently recommended level of physical activity of vigorous or moderate intensity.

Physical activity plays a pivotal role in fostering general health and well-being, and it is associated with a reduced risk of developing several chronic conditions, including cardiovascular diseases, obesity, and type 2 diabetes (Warburton, Nicol, & Bredin, 2006). Despite the recognized benefits, many people fail to meet the recommended guidelines for physical activity (Troiano

et al., 2008). While much research exists on physical activity patterns during weekdays, less focus has been directed toward weekend activity.

The study found that about 60% of the respondents failed to meet the recommended 150 minutes of moderate-to-vigorous physical activity (MVPA) during the weekends. Moreover, a 35% reduction in MVPA was observed from weekdays to weekends, consistent with previous research on diminished weekend physical activity (O'Donovan et al., 2010; Tucker et al., 2011). The findings also revealed significant age and gender disparities in weekend physical activity. Additionally, females were less likely than males to engage in physical activity during weekends, aligning with prior research (Vandelanotte et al., 2015). Various elements may be contributing to the decreased levels of physical activity observed during weekends. Weekend routines often differ substantially from weekday schedules, influencing the structured time available for engaging in physical activity (Tucker & Gilliland, 2007). Weekends may also involve social or family commitments that could deter sustained physical activity (Allender et al., 2006). The reduced levels of physical activity during weekends suggest an essential domain for targeted public health initiatives. Programs should be designed to tackle the unique barriers that individuals encounter during weekends, encouraging more balanced physical activity throughout the week. The noticeable decline in physical activity levels on Saturdays and Sundays underscores the need for public health strategies aimed specifically at boosting weekend physical activity.

Research Question 3: What is the knowledge level of OLA and Komenda College of education students on the benefits of physical activity participation?

The third research question sought to answer the question of student knowledge on the benefits of engaging or participating in physical activities. From the involvement theory, the presumption is that when right and accurate knowledge on benefits of physical activities is known, students would be more interested in participating in physical activities Astin (1984). The results on the knowledge about physical activity is presented in Table 13.

**Table 13: Descriptive Statistics on Female Teacher-trainees Knowledge about Physical Activities** 

Knowledge in Physical Activity	N	Mean	Std. Dev
Regular physical activity shortens one's life	360	0.91	1.164
span			
Regular physical activity affects ones eye	360	0.85	1.126
colour			
Regular physical activity is not a major part of	360	0.83	1.069
leisure time			
Regular physical activity does not increase the	360	3.59	.995
risk of anxiety			
Regular physical activity does not increase the	360	3.60	1.168
risk of premature death			
Participation in physical activity can help	360	3.60	.961
increase self-esteem			
Activities offered on my campus are	360	3.61	1.011
interesting			
It reduces my chances of relying on medication	360	3.64	1.029
Regular physical activity converts fat to	360	3.66	.854
muscle			

Regular physical activity is a key to sleeping	360	3.75	.896
better			
Participation in physical activity can help	360	3.88	.887
reduce stress			
It keeps me active and makes me feel good	360	3.89	.885
about myself			
Regular physical activity can help improve	360	4.64	.927
health			
Participation in physical activity enhances	360	4.73	.786
muscle performance			
Regular physical activity can prevent heart	360	4.82	.610
diseases			

Source: Field survey, Diabor (2022)

From Table 13, it could be observed that the female students have fairly positive information and accurate knowledge on the benefits of participating in physical activities. The table provided offers insights into the knowledge level of female teacher-trainees at OLA and Komenda College of Education regarding the benefits of physical activity participation. It presents a range of statements about physical activity with corresponding mean scores and standard deviations, reflecting the students' agreement or disagreement with these statements.

At a glance, the highest mean scores (above 4.0) correspond to widely recognized benefits of regular physical activity, such as improving overall health, enhancing muscle performance, and preventing heart diseases. These high mean scores with relatively low standard deviations suggest a common high level of knowledge or belief among the students about these benefits. The statement regarding the prevention of heart diseases has the highest mean (4.82) and the lowest standard deviation (0.610), indicating strong agreement and little

variation in responses, which mirrors the consensus in scientific literature about the cardioprotective effects of physical activity (Warburton, Nicol, & Bredin, 2006).

Mid-range mean scores (around 3.5 to 3.9) reflect acknowledgment of physical activity's role in reducing stress, improving self-esteem, and contributing to better sleep and less reliance on medication. These findings are in line with the existing literature which supports the psychological and sleep benefits of physical activity (Rebar et al., 2015). Interestingly, the lowest mean scores (below 1.0) are associated with misconceptions about physical activity, such as the belief that it shortens one's lifespan or affects eye colour, or that it should not be a major part of leisure time. These misconceptions are correctly identified by the respondents as false, which demonstrates a rejection of these unfounded claims.

The standard deviations for these misconceptions are higher, indicating a greater variance in responses, which could be due to differing levels of education or exposure to information about physical activity. This suggests that while there is a general awareness of the fallacy of these statements, there may still be a subset of individuals who hold these incorrect beliefs, which could be a target for educational interventions (Kilpatrick, Hebert, & Bartholomew, 2005). The data indicates a high level of knowledge among the female teacher-trainees about the significant benefits of physical activity, along with some misconceptions. This knowledge is crucial as it has been shown that awareness and education about the benefits of physical activity can influence individuals' intentions and behaviour towards engaging in physical activity (Hagger, Chatzisarantis, & Biddle, 2002).

Educational institutions like OLA and Komenda College of Education play a vital role in furthering this knowledge to encourage physical activity, which is essential for the physical and mental well-being of students. Efforts to clarify any misconceptions and reinforce accurate information could contribute to more informed decisions and behaviours regarding physical activity among these future educators.

**Table 14: Benefits of Physical Activity** 

	- 7	~~3	Response			
Statement	N	SA	A	UD	D	SD
Participation in regular physical activity helps in weight control	360	212(58.9)	136 (37.8)		7 (1.9)	5 (1.4)
Regular physical activity can prevent heart diseases	360	188(52.2)	160 (44.4)		7 (1.9)	5(1.4)
Regular physical activity converts fat to muscle	360	123(34.2)	134 (37.2)		91 (25.3)	12(3.3)
Regular physical activity doesn't increase the risk of premature death	360	90(25.0)	117(32.5)	82(22.8)	51(14.2)	20(5.6)
Regular physical activity affects ones eye colour.	360	21(5.8)	23(6.4)	63(17.5)	134(37.2)	119(33.1)
Regular physical activity can help improve health.	360	150(41.7)	149(41.4)	37(10.3)	17(4.7)	7(1.9)
Participation in physical activity can help increase self-esteem	360	80(22.2)	151(41.9)	99(27.5)	19(5.3)	11(3.1)
Regular physical activity shortens one's life span	360	16(4.4)	35(9.7)	61(16.9)	103(28.6)	145(40.3)
Regular physical activity doesn't increase the risk of anxiety	360	43(11.9)	135(37.5)	129(35.8)	34(9.4)	19(5.3)
Participation in physical activity can help reduce stress	360	137(38.1)	143(39.7)	62(17.2)	15(4.2)	3(0.8)
Regular physical activity is not a major part of leisure time	360	42(11.7)	86(23.9)	155(43.1)	47(13.1)	30(8.3)
Participation in physical activity enhances muscle performance	360	132(36.7)	172(47.8)	46(12.8)	7(1.9)	3(0.8)
Regular physical activity is a key to sleeping better	360	116(32.2)	177(49.2)	40(11.1)	22(6.1)	5(1.4)
It reduces my chances of relying on medication	360	110(30.6)	111(30.8)	102(28.3)	30(8.3)	7(1.9)
Activities offered on my campus are interesting	360	90(25.0)	160(44.4)	66(18.3)	34(9.4)	10(2.8)
It keeps me active and makes me feel good about myself	360	151(41.9)	125(34.7)	68(18.9)	15(4.2)	1(0.3)

Source: Field survey, Diabor (2022), Data presented as frequencies and percentage (%)



Data in Table 14 supported the assumption that there are benefits associated with physical activities. Statistical data provided show that not all respondents agreed entirely to the various statements on benefits of physical activity. The high levels of agreement (83.1%) combined of those who "strongly agree" and "agree") align with a broad scientific consensus asserting that regular physical activity significantly contributes to improved general health, including physical and mental well-being (Warburton, Nicol, & Bredin, 2006). These benefits range from reducing the risks of chronic diseases like cardiovascular diseases and diabetes to enhancing psychological health (Penedo & Dahn, 2005).

The data also shows that 10.3% of the respondents were undecided, and 6.6% either disagreed or strongly disagreed. These figures prompt a need for further investigation. A possible explanation for the undecided or disagreeing responses might be rooted in past unsuccessful attempts at physical activity leading to negative or neutral outcomes (Teixeira et al., 2012). Cultural perceptions, lack of awareness, or misinformation could also influence these numbers (Allender et al., 2006). Given that a considerable percentage (16.9% combined of those who are "undecided," "disagree," or "strongly disagree") were not in complete agreement, there is a need for targeted educational interventions. Such initiatives could aim to inform the public about the scientifically backed benefits of physical activity and address any misconceptions or barriers that might exist (Kahn et al., 2002).

With 134(37.2%) respondents agreeing that regular physical activity converts fat to muscle, 3.3% of them strongly disagreeing with this assertion. On the contrary, 111(30.8%) agreed that physical activities reduce their chances of

relying on medication, which is very true because if one does a lot of exercise, the potential of taking in medications is minimal as the body is always healthy. Furthermore, 40.3% rather remained strongly disagreeing with the notion that regular physical activity shortens one's life span because they felt this is not right as to the fact that, one would remain healthy most of the time and the life span of the individual will be longer than the person who does not do any physical activity.

With 37.2% of respondents agreeing that regular physical activity converts fat to muscle, this data point exposes a prevalent misconception. While exercise can help in reducing body fat and building muscle, it is physiologically inaccurate to state that fat is "converted" into muscle (Stark et al., 2013). These are two distinct types of tissues with different functions and metabolic pathways. Targeted educational interventions may be useful to correct this misunderstanding (Buckworth et al., 2013). The finding that 30.8% of respondents agreed that regular physical activities could reduce reliance on medication is consistent with existing scientific literature. Physical activity has been shown to mitigate the symptoms of chronic conditions, such as diabetes, hypertension, and mental health disorders, potentially reducing the need for medication (Pedersen & Saltin, 2015).

Interestingly, 40.3% of respondents strongly disagreed with the notion that regular physical activity could shorten one's lifespan. This aligns well with the scientific consensus, which overwhelmingly suggests that regular exercise is associated with longevity and a reduced risk of premature mortality (Lee et al., 2012). The varying levels of agreement and disagreement among respondents point to the need for more targeted educational and public health initiatives. Clearing up

misconceptions and providing evidence-based information could be a critical step towards promoting physical activity as a pillar of health and well-being (Heath et al., 2012).

The observations in this study align with the research conducted by Coakley (2003), Hoffman (1992), and Stevenson (1991), who have noted the pivotal role of religion and spirituality in the domain of sports sociology, particularly in shaping athletes' lives. Extending this argument, Mohler (2010) posits that sports have gained increasing prominence within evangelical Christian communities. According to Mohler, sports serve a dual function for Christians: they offer a valuable platform for expressing Christian witness, while also carrying the risk of becoming a form of idolatry.

In contrast, Al-Munajjid (2011) elucidates that Islamic teachings endorse sports as a means of enhancing physical well-being and providing leisure activities. Activities like swimming, shooting, horse riding, sword fighting, and wrestling are particularly encouraged. Al-Munajjid specifies that in the Islamic context, the permissibility of sports is contingent upon the objective of promoting relaxation and good health. This demonstrates a notable divergence between Islamic and Christian perspectives in terms of how sports are integrated into religious and cultural practices.

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Research Question 4: What are the perceived constraints of female teachertrainees of OLA and Komenda Colleges of Education from participating in Physical Activities?

In the fourth research question, perceived constraints of female students within the study setting from participating in physical activities, the results are presented in Table 15. The results in Table 15 shows that from the perspective of the female students' various constraints prevent them from engaging in physical activities. The topmost constraint on the list was fear of being injured followed by lack of time and academic workload. These constraints on a scale of 1-5 had a mean score of 3.82, 3.52 and 3.22 respectively. Some of the other constraints found were distance from facilities, lack of fundamental skills and working for money after school. The findings show that lack of enjoyment recorded the least constraint of all the constraints that prevent students from engaging in physical activities.

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**Table 15: Constraints of Female Students and Physical Activity Participation** 

Constraints	N	Mean	Std. Dev
Fear of injury	360	3.82	0.469
Lack of time	360	3.52	0.469
High academic work/load	360	3.22	0.495
Equipment that I need is too expensive	360	2.49	0.501
Physical activities are too stressful	360	2.48	0.500
Lack of necessary sport equipment at the	360	2.48	0.499
college			
High cost of participating in some physical	360	2.48	0.494
activities			
Distance from facilities	360	2.47	0.494
Inappropriate behaviour of coaches	360	2.46	0.470
Working for money after school	360	1.98	0.467
Discouragement by other teachers	360	1.95	0.455
No family support	360	1.95	0.444
Lack of fundamental skills	360	1.95	0.443
Inadequate coaching services in the physical	360	1.91	0.441
activity			
I am taking medication	360	1.86	0.405
No friends/peer support	360	1.80	0.403
Lack of enjoyment	360	1.81	1.137

Source: Field survey, Diabor (2022)

The most significant perceived constraint is the "Fear of injury," with a high mean score of 3.82, suggesting that concern over potential physical harm is a major deterrent to participating in physical activity. This finding is consistent with previous research that has indicated that the fear of injury is a common barrier to engaging in physical activity, especially among those who are not regular exercisers (Allender, Cowburn, & Foster, 2006).

"Lack of time" and "High academic workload" also emerge as notable barriers, with mean scores of 3.52 and 3.22 respectively. These constraints are reflective of a broader trend where academic and professional obligations compete with physical activity for time, which has been identified as a common barrier for young adults in educational settings (Trost, Owen, Bauman, Sallis, & Brown, 2002).

Constraints related to resources, such as "Equipment too expensive," "Lack of necessary sport equipment at the college," and "High cost of participating in some physical activities," although lower in mean scores (around 2.48), point to economic factors as a significant consideration. This aligns with findings that economic barriers can affect physical activity levels, especially in populations with limited financial resources (Humphreys & Ruseski, 2007).

Interestingly, the lowest perceived constraints relate to social factors such as "No family support," "Discouragement by other teachers," and "No friends/peer support," with mean scores around 1.95. These suggest that while social support is acknowledged as a facilitator for engaging in physical activity, its absence is not seen as a major barrier by the respondents. However, social support has been

highlighted as an important factor in physical activity engagement, indicating a possible discrepancy between perceived and actual barriers (Beets, Cardinal, & Alderman, 2010).

Finally, "Lack of enjoyment" has a comparatively low mean score but a high standard deviation. This suggests varied experiences and perceptions regarding the enjoyment of physical activities, which is recognized as a critical motivator for engaging in exercise (Ryan, Frederick, Lepes, Rubio, & Sheldon, 1997). To enhance participation rates among these students, interventions might focus on addressing the highest-rated constraints, such as fear of injury, through safety education and risk management, and managing time and workload barriers through schedule modifications and time management training. Additionally, reducing economic barriers with subsidized access to necessary equipment and facilities, as well as fostering a supportive community, could alleviate several of the constraints identified (Dishman et al., 2005). These findings underscore the complex interplay of individual, economic, and social factors that can act as barriers to physical activity. Addressing these constraints requires multi-faceted strategies that consider the diverse needs and circumstances of female teacher-trainees.

#### **Influence** of motivation on female engagement in sports and physical activities

Based on survey data from 360 respondents, 98.0% agreed that increased motivation would lead more female teacher trainees to participate in college sports. Additionally, 97.2% felt that parental encouragement would boost female participation. Nearly all, 99.1%, recognized the importance of maintaining fitness levels as a motivator for female participation. The psychological concept of

motivation serves as an internal driving force affecting our behaviour, decisions, and interpersonal interactions (Karageorghis, 1999; Lenskyi, 1994). Previous research has identified various forms of motivation among female athletes, including competitiveness, skill improvement, and social fulfillment (Beaudoin, 2006; Hodge & Zaharopoulos, 1992; Guillet et al., 2006).

Incentives also play a role in motivation, with 91.2% of respondents agreeing that tangible rewards would increase female participation. Conversely, derogatory comments from educators act as demotivators, with 98.0% indicating this as a barrier. Overall, 96.7% strongly agreed that motivation, both intrinsic and extrinsic, significantly influences female teacher trainees' level of participation in sports and physical activities. Traditionally, sport psychology focused largely on male athletes but has gradually shifted towards understanding the psychological elements in women's sports participation (Beaudoin, 2006; Guillet et al., 2006; Callow & Hardy, 2001; Pates et al., 2003). In universities, external motivators are predominantly used, but these can sometimes hamper intrinsic motivation (Wesson et al., 2005; Harackiewicz, 1998; Deci & Ryan, 1994; Green & Hardman, 2005; Santrock, 2000).

Motivation for female participation varies individually and can be influenced by personality, lifestyle, and individual goals. Factors such as team spirit, skill development, social interaction, and personal well-being serve as motivators (Kraus, 2001; Hamafyelto & Badego, 2002; Senate Committee Inquiry, 2005; Cox et al., 2005).

Table 16: Motivation as a Factor that Influences Female Teacher-trainees' Level of Participation in Physical Activity

Motivation	Stron	igly Agre	ee A	Agree	Un	decide	d Di	isagree	Strong! Disagro	-
	No.	%	No.	%	No.	%	No	o. %	No.	%
Females would have played sports for their colleges if	1			$\mathcal{A}$						
they were motivated enough.	304	86.60	40	11.39	3	0.9	4	1.14	0	0
Females would have participated in Colleges of Education sports if they have had encouragement from the parents	ir	Y.								
	171	48.71	170	48.43	0	0	4	1.14	6	1.7
Females participate in physical activity and sport because	ts									
they want to maintain their fitness level	21	5.96	327	93.14	0	0	1	0.3	2	0.6
Females would have participated in sports and physica activity at the Colleges if they were given incentives	l 319	90.88	1	0.3	5	1.4	16	4.55	10	2.84
Females don't play sports because of derogative remark some tutors make about females sports persons.	135	38.44	209	59.52	1	0.3	2	0.6	4	1.1

Source: Field survey, Diabor (2022)

Furthermore, psychological and physiological factors play a crucial role in athletic performance (Grange & Kerr, 2010; Schilling & Hayashi, 2001; Crespo, 2002). However, some socio-cultural factors may inhibit participation. For instance, a study found that many parents, across diverse ethnic groups, discourage their daughters from participating due to academic priorities (Erkut et al., 1996). Socio-economic status also impacts sports participation, with individuals from higher socio-economic backgrounds displaying a more positive disposition towards sports and recreation (Adeyanju & Alla, 2006; Burrow & Bammel, 1992; Cox et al., 2005).

Motivation, both internal and external, serves as a significant determinant in the level of sports and physical activity engagement among female teacher trainees. A multiplicity of factors including parental support, societal norms, and personal goals contribute to these motivational landscapes. Given these findings, targeted motivational strategies could significantly enhance female participation in sports and physical activities.

# The influence of academic commitments on the participation of females in physical activities and sports

Table 17 presents data on how academic responsibilities impact the involvement of female teacher trainees in physical activities and sports. A staggering 349 respondents, accounting for 99.4%, either strongly agreed or agreed that the complexity of courses offered at educational colleges discourages women from participating in physical activities and sports. Only a single respondent, or 0.3%, was undecided, while another single respondent disagreed or strongly

disagreed with the statement. These findings resonate with the research of Bean and Bradley (1986), who reported that course difficulty had a slight negative impact on semester GPA. Similarly, Pike (1991) found that challenging courses had a negative effect on cumulative GPA.

Furthermore, 326 respondents, making up 98.6%, either strongly agreed or agreed that the volume of credit hours per semester hampers female participation in physical activities and sports at educational colleges. One respondent was undecided, and four respondents, representing 1.1%, disagreed or strongly disagreed. Previous studies, such as those by Ahmed, Abo-Laban, and Ahmed-Shami (1980), indicate that students who take fewer than 12 credits tend to have lower semester GPAs, while those with more than 17 credits usually have higher GPAs. Volkwein and Lorang (1996) found that the number of credit hours in the first semester tends to predict the load in subsequent semesters.

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Table 17: Academic Loads as a Factor that Influence Female Teacher-trainees' Participation in Physical Activity and sports

Academic loads	Strongly Agree				Undecided Disagree			•	Strongly Disagree	
	No.	%	No.	%	No.	%	No.	%	No.	%
The courses registered for at the colleges of education				$\sim$						
are too difficult discouraging females from participating										
n physical activity and sports.	2	0.56	347	98.9	1	0.3	0	0	1	0.3
The number of credit hours per semester prevents										
female in the colleges of education from taking part in										
physical activity and sports.	16	4.55	330	94.01	1	0.3	2	0.6	2	0.6
The assignments are too loaded leaving no time for										
females who want to participate in physical activity and										
sports.	321	91.45	30	8.54	0	0	0	0	0	0
Most females miss a lot of lectures because they play										
sports for the colleges making them perform poorly										
academically.	49	13.95	300	85.46	0	0	0	0	2	0.6

Source: Field survey, Diabor (2022)

Additionally, all 351 respondents (100%) strongly agreed or agreed that an overload of assignments leaves little time for physical activities and sports. Moreover, 349 respondents (99.4%) strongly agreed or agreed, while only 2 respondents (0.6%) disagreed, that active involvement in college sports often leads to missed classes and poorer academic performance. Previous research supports the positive impact of physical activities on academic performance; for example, Sallis et al. (1999) found that increased physical activity improved academic performance for many children.

In summary, nearly all respondents (an average of 99.3%) strongly agreed or agreed that academic obligations significantly influence the level of engagement of female teacher trainees in physical activities and sports. This is consistent with the findings of Sabo et al. (1992), who reported that girls who participate in sports are more likely to excel academically. Recent studies also suggest that physical activity improves cognitive and memory functions (Ploughman, 2008) and enhances academic outcomes (Fox et al., 2010).

Research Question 5: What is the association of demographic factors in relations with constraints of female teacher-trainees' participation in physical activities?

The last research question dealt with the relationship between demographic characteristics of females and constraints preventing female students from participation in physical activities. Due to the need for association or relationship, regression analysis was employed. With the standard regression, the level of constructs for demographic variables (age, religion, group year, and type of college)

can concurrently be entered and analysed against the dependent variable-which in this case is constraint of female students from engaging in physical activities (Leech, Barrett & Morgan, 2005). Prior to running multiple regression, certain statistical assumptions should be met. Examples of these assumptions are normality, linearity and multicolinearity. The assumptions of the regression have been tested with good results. After testing the assumptions and appropriateness or otherwise of the regression approach with satisfiable results, the study then moves to estimate the relationship between student demographic characteristics and constraints of physical activities The results are presented in Table 18

Table 18: Relationship between Demographic Variables and Constraints of Physical Activities

Model	Unstan	dardized	Standardized		
	Coefficients		Coefficients	t	Sig.
	В	Std. Error	Beta	/ (	7
1 (Constant)	1.755	.096		18.306	.000
Age of Respondents	.015	.013	.001	1.035	.972
Religious Affiliation	079	.018	184	-2.325	.000
Type of College	.061	.017	.150	3.499	.001
Year Group at	044	.028	065	-1.853	.121
College					

Source: Field survey, Diabor (2022)

It can be seen from the Table 18 that there two betas, namely Unstandard Beta and Standard Beta. These two betas play unique role in examining the relationship between the demographic variables or characteristics of students and constraints of participating in physical activities. The Unstandard Beta measures the degree to which one independent variable predicts movement in the dependent variables having adjusted for the contribution of the joint effect. Thus, it is the normal coefficient used in interpreting regression results.

The Standard Beta measures the extent of the independent own unique contribution to explaining the dependent variable. The t-stat explaining the significance of the independent variable, normally the t-stat is expected to be closer to 2 or more to witness significance p-value. The p-value (sign.) is the basis for indicating if there is relationship or otherwise. Using the unstandard beta, the coefficient of age is 0.015. This is positive. However, the corresponding p-value is 0.972 which is insignificant. The implication is that age of student has not consequential influence on students' participation in physical activities. Similarly, the coefficient of year group at college is -.044. This is negative coefficient. The corresponding p-value is 0. 121 which is also insignificant. This also implies that a student level or year at the school has no relationship with their involvement in physical activities.

On the other hand, the coefficient of religious affiliation was found to be - 0.79 which is negative. The corresponding P-value was 0.000 which is significant at 1%. The implication is that there is a negative significant relationship between a student religious affiliation and their participation in physical activities. This implies that a percentage increase in students' affiliation to their religion will result in 0.79-point decrease in their involvement in physical activities. In the case of

school type, the results show a positive significant relationship between type of college and students' involvement in physical activities. The coefficient was 0.61. The corresponding P-value was 0.001. The implication is that whether one attends same sex school or mixed schools does not play significant role in their involvement in physical activities.

The results have relationship with previous research findings. For instance, the results are inconsistent with previous study by Wicker et al. (2012) which found no major impact of age on sports activity. Dixon (2009) also found that women spent less time than men on recreational and athletic events, while men participate more often and in more sports at all levels of life, implying a strong gender disparity in this regard. Therefore, his findings are consistent with this study. Furthermore, previous research findings illustrate that one major reason for this constraint on sport demand is that when a person gets older, he or she experiences more health issues related to biological and physical disabilities, which has a negative impact on sports activity or time spent in it (Downward et al., 2011; Downward, 2007; Eberth & Smith, 2010; Humphreys & Ruseski, 2011). Other found that changes in the form of sport played as one gets older have also been observed. In reality, walking has a good relationship with age (Humphreys & Ruseski, 2007; Lera-Lopez & Rapun-Garate, 2011). However, the findings from the current study showed that age has no impact on female student desire to participate in physical activities.

Additionally previous research indicates that one's level of education has a significant impact on their participation in physical activities. Concerning

household-economic variables and socio-economic variables, according to Chad et al. (2005), Eberth and Smith (2010), and Humphreys and Ruseski (2006), people with a greater degree of human capital or educational experience are more aware of the favorable effects of sports and thus more likely to partake in them. Other findings in particular European countries affirm the positive effect of a strong educational experience on sport participation (Breuer et al., 2011; Breuer & Wicker, 2008; Downward & Rasciute, 2011; Fridberg, 2010; Hovemann & Wicker, 2009; Humphreys & Ruseski, 2007; Ifedi, 2008; Scheerder et al., 2006; Scheerder & Vos, 2011; Wicker et al., 2009).

However, the results on this study revealed that student educational level has no influence on female teacher-trainees participation in physical activity. Most of the student were found to be in their third year of a four-year programme. This means they have attained a measure of educational experience. However, the result shows this educational experience has no impact on their participation in physical education.

#### **Chapter Summary**

The chapter has analysed the data and discussed the data from the perspective of existing theoretical and empirical literature. Various techniques including descriptive analysis and regression was employed in the data analysis. To check the validity of the data, various diagnostics like normality, linearity and multicollinearity analysis was employed. The next chapter deals with the summary, conclusion and recommendation of the study.

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

This chapter deals with the summary, conclusions and recommendations from the findings in this study. This section provides the summary of the whole thesis including the key findings which emerged from the study. The conclusions which are drawn from the findings are captured. Some recommendations were made and also further studies were suggested.

#### **Summary**

The overall focus of the study was to examine the factors that influence female teacher-trainees physical activity participation in Komenda and Ola Colleges of Education in the Central Region of Ghana. To achieve the overall purpose, five research questions were formulated. The first research question was: What are the Physical Activities available to female teacher-trainees of OLA and Komenda Colleges of Education? The second one was: What is the level of female teacher-trainees participation in physical activity of Komenda and OLA Colleges of Education? The third research was: What is the knowledge level of OLA and Komenda College of education teacher-trainees on the benefits of physical activity participation? The fourth one was What are the perceived constraints of female teacher-trainees of OLA and Komenda Colleges of Education from participating in Physical Activities? and lastly, what is the association of demographic factors in relations with constraints of female teacher-trainees' participation in physical activities?

Guided by Austin's Student Involvement Theory (1984), some of the key concepts examined in the study were: students and physical activity, female's participation in physical activity, female dissatisfaction in physical activity and education, extent of participation in sports, perceived reasons for sports participation and constraints in physical activity participation. The study used descriptive survey design to conduct the investigation, quantitative research approach was employed to support the design. The study focused on female teacher-trainees who are athletes in OLA and Komenda Colleges of Education. The total target population was 360. Questionnaire was used as the data collection instrument. The data collected were analysed via Statistical Product and Service Solutions version 21 for the purpose of generating the relevant statistics and analysing the data.

## **Key Findings**

- 1. Female teacher-trainees are likely to be influenced by their understanding of the benefits associated with physical activity. If they recognize that regular participation can improve health, enhance muscle performance, and prevent heart diseases, as suggested by the high mean scores in the knowledge table, they may be more motivated to engage in physical activity.
- 2. Factors such as fear of injury, lack of time, and academic workload are significant constraints that negatively impact the participation levels of these trainees. These findings are consistent with global trends where time and injury concerns are major barriers to physical activity.

- 3. The cost of equipment and participation fees for certain physical activities emerged as barriers. This is particularly important in regions with economic challenges where even marginal costs can be prohibitive.
- 4. Societal expectations and gender roles may also play a part in influencing participation. If physical activities are perceived as masculine or not aligning with gender norms, female trainees may feel less inclined or even discouraged from participating.
- 5. The presence of suitable facilities and equipment at the educational institutions, or the lack thereof, can significantly influence activity levels.
- 6. The inclusion of physical activities within the curriculum and availability of diverse extracurricular sports can enhance participation.
- 7. Peer and Social Support: Social support from peers, family, and teachers can be a facilitating factor for participation. When such support is lacking, as indicated by lower mean scores, it may not be seen as a barrier, yet its presence is known to encourage regular physical activity.

#### **Conclusions**

- 1. Awareness of Benefits: The data indicates a clear link between the knowledge of the benefits of physical activity and the willingness to participate among female teacher-trainees. Their awareness of the positive impact on health, muscle performance, and cardiovascular prevention correlates with increased motivation to engage in physical activities.
- 2. **Constraints to Participation:** Notable constraints impacting physical activity participation include fear of injury, time scarcity, and academic

- responsibilities. These factors align with broader trends and highlight significant barriers that need to be addressed to improve participation rates.
- 3. **Economic Factors:** The financial implications of engaging in physical activity, such as the cost of equipment and fees, pose significant hurdles, particularly in economically challenged regions. These costs are deterrents to regular participation and require consideration in planning interventions.
- 4. **Sociocultural Influences:** Societal norms and gender roles have a profound impact on physical activity participation. The perception of physical activities as masculine or incompatible with female gender roles can discourage participation among female teacher-trainees.
- 5. **Institutional Resources:** The availability and quality of physical activity facilities and equipment at educational institutions are critical factors that affect participation levels.
- 6. Curricular and Extracurricular Opportunities: Integrating physical activities into the curriculum and offering a variety of sports and recreational options outside of class hours are effective strategies for enhancing physical activity engagement.
- 7. **Role of Social Support:** Social support networks, including peers, family, and faculty, play a pivotal role in encouraging physical activity. The absence of this support is not necessarily viewed as a barrier, but its presence significantly promotes active participation.

# Recommendations

Based on the conclusions drawn, the following recommendations are proposed:

- 1. **Educational Campaigns:** Develop and implement educational campaigns that highlight the benefits of physical activity, specifically targeting areas where knowledge is lacking to enhance motivation.
- 2. **Time Management Training:** Offer workshops on time management to help teacher-trainees balance academic duties with physical activity, addressing the constraint of limited time.
- 3. **Subsidization and Funding:** Explore opportunities for subsidization of costs associated with physical activity or fundraising to alleviate the financial burden on students.
- 4. **Sociocultural Sensitivity Programmes:** Conduct sensitivity training and workshops that challenge traditional gender norms related to physical activity, aiming to foster a more inclusive environment.
- 5. **Enhancement of Facilities:** Invest in the development and maintenance of physical activity facilities and equipment at educational institutions to remove environmental barriers to participation.
- 6. **Curricular Integration:** Integrate physical activity more deeply into the educational curriculum and ensure a broad range of extracurricular physical activities are available and accessible to all students.
- 7. **Building Support Networks:** Establish and promote peer support groups and mentorship programs that include family and faculty engagement to foster a supportive environment for physical activity.

## **Suggestion for Future Research**

The study found that religious affiliation had negative impact on physical activities. Therefore, if student, based on religion are not interested in physical activity, they should not be forced. With the conclusion drawn, the recommendation is spelt in the suggestion for further studies. This is because the study found that type of school has influence on physical activity participation. A further study is required to reveal which of the schools (single or mixed sex schools) has the most influence on the participation of physical activities.

It is recommended that future study investigate how the extent of involvement in physical activities influence academic performance. Future studies should also look at which types of schools (single or mixed sex schools) has the most influence on the participation of physical activities.

NOBIS

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#### **APPENDICES**

### APPENDIX A

#### UNIVERSITY OF CAPE COAST

### **COLLEGE OF EDUCATIONAL STUDIES**

### FACULTY OF SCIENCE AND TECHNOLOGY EDUCATION

TOPIC: FACTORS INFLUENCING FEMALE STUDNTS' PHYSICAL

### ACTIVITY PARTICIPATION IN KOMENDA AND OLA COLLEGES OF

EDUCATION, CENTRAL REGION, GHANA.

### **OUESTIONNAIRE FOR PARTICIPANTS**

### Dear Participant,

This questionnaire has been designed to gather information for a research work being undertaken on the topic above. You have been selected as one of the participants. The information you provide will not be made known to any other person or institution. Please kindly respond to the items/statements in this questionnaire by filling in the spaces provided.

Please do not write your name or the name of your school on any part of the questionnaire. I look forward to your participation and appreciate your effort in this important exercise.

### **Consent to Participate in Research:**

I understand that any information I share will remain confidential and that when the results of the research are published or discussed in conferences, no information will be included that would reveal my identity. I am 18 years of age or older. By agreeing to continue with the survey and submit a response to the researcher in question, I am giving consent to participate in this study.

I consent to participate in this survey:	<b>Yes</b>	$\square_{N_0}$	

### SECTION A: DEMOGRAPHIC DATA

Instruction: Please, place a tick (  $\checkmark$ ) in the appropriate columns to indicate your response.

1. Age: 18-24 ( ); 25-2	29 ( )	; 30-34	( ); 35	and ab	oove ( )	
2. Religious Affiliation:	Christ	ianity (	); Isla	.m ( )	; Traditiona	nl ( ); Non-
Religious ( )						
3. Type of College: Mix	xed ( )	; Fem	ales onl	y ( )		
4. Year group at College	e: Year	1 ( );	Year	2 ( );	Year 3 (	)
5. Which group of parti	cipant	are you	: Sports	Partici	pant();	Non-Sports
Participant ( );						
SECTION B						
1. Have you done any	of the	e follo	wing ac	tivities	in the pa	st 6 months
including the weeken	ds? If y	yes, hov	w many	times?	(Mark only	one box per
row). Tick as many a	ctivitie	s as app	licable.			
ACTIVITY	NO	1-2	3-4	5-6	7times or	more
Skipping	( )	( )	( )	( )	( )	
Playing Handball	( )	( )	( )	( )	( )	
Walking for exercise	( )	( )	( )	( )	( )	
Bicycling	( )	( )	( )	( )	( )	
Jogging or running	( )	( )	( )	( )	( )	
Aerobics	( )	( )	( )	( )	( )	
Swimming	( )	( )	( )	( )	( )	
Dancing	( )	( )	( )	( )	( )	
Playing football/soccer	( )	( )	( )	( )	( )	
Ampe	( )	( )	( )	( )	( )	
Playing volleyball	( )	( )	( )	( )	( )	
Push-ups/sit-ups	( )	( )	( )	( )	( )	
Playing basketball	( )	( )	( )	( )	( )	
Athletics	( )	( )	( )	( )	( )	
Hockey	( )	( )	( )	( )	( )	
Netball	( )	( )	( )	( )	( )	

### SECTION C: LEVEL OF PHYSICAL ACTIVITY PARTICIPATION

2. In the last 6 months, how many days did you do physical activity?

a.	0 days ( )
b.	1 day ( )
c.	2 days ( )
d.	3 days ( )
e.	4-5 days ( )
f.	More days (please specify)
3.	How long does your participation in Physical Activity last?
a.	0 minute
b.	1-30minutes
c.	31-60minutes
d.	1-2hours
e.	More than 2hours
4.	How long did the physical activity in question 4 last?
a.	0 minute
b.	1-30minutes
c.	31-60minutes
d.	1-2hours
e.	More than 2hours
5.	What is the duration of time spent during Saturday on physical activity?
a.	0 minute
b.	1-30minutes
c.	31-60minutes
d.	1-2hours
e.	More than 2hours
6.	What is the duration of time spent during Sunday on physical activity?
a.	0 minute
b.	1-30minutes
c.	31-60minutes

- d. 1-2hours
- e. More than 2hours

# SECTION D: BENEFITS OF PHYSICAL ACTIVITY

BE	NEFITS	Strongly	Agree	Undecided	Disagree	Strongly
		Agree	Agree	-	Disagree	Disagree
7.	Participation				-5/	
	in regular	- 3		~~		
	physical		7/6	[ [		
	activity	- 2	97			
	helps in	6	6			
	weight					
	control					
8.	Regular					7
	physical		_ ~			J
	activity can					/
$\overline{}$	prevent		5			
\	heart					
7	diseases	1				
9.	Regular	7				
	physical				7	
	activity					
	converts fat					
	to muscle			_		
10.	Regular					
	physical					
	activity	NO	B16	3		
	doesn't	.,,	-16			
	increase the					
	risk of					

	premature					
	death					
11.	Regular					
	physical					
	activity					
	affects ones			_		
	eye colour				-	
12.	Regular					
	physical		7/6	1		
	activity can	- 2	46			
	help	17	8			
	improve					
	health					
13.	Participation					7
	in physical		_ ~			J
	activity can	_0				/
	help		6			
\	increase			5 P		
V	self-esteem	1 2				
14.	Regular	1			7	
	physical				7	
	activity					
	shortens					
	one's life					
V.	span					
15.	Regular					
	physical	Mo	(B) (1	5		
	activity	INTO	1-11			
	doesn't			7 - 7		
	increase the					

	risk of					
	anxiety					
16.	Participation					
	in physical					
	activity can					
	help reduce					
	stress				-	
17.	Regular					
	physical	-	7/6	[ ]		
	activity is	- 2	97			
	not a major	É	7			
	part of					
	leisure time					
18.	Participation					7
	in physical		_ ¬			J
	activity					/
	enhances		60			
/	muscle	112				
1	performance	W.7	0 -			
19.	Regular					
	physical				7	$\mathbf{x}$
	activity is a				_	(2)
	key to					
	sleeping					
	better					
20.	It reduces					
	my chances	NO	BIS	3		
	of relying		-11			
	on					
	medication					

21. Activities					
offered on					
my campus					
are					
interesting					
22. It keeps me				1	
active and					
makes me		4			
feel good		2/5	1		
about	- 2				
myself	6				

# SECTION E: BARRIERS TO PHYSICAL ACTIVITY

Which of the following is a barrier to you engaging in physical activity? Please tick the barriers applicable to you and leave those not applicable

Barrier	Tick	
23. Lack of enjoyment	( )	
24. No family support	( )	
25. Lack of time	( )	
26. No friends/peer support	( )	
27. High academic work/load	( )	
28. Lack of fundamental skills		
29. Fear of injury	( )	
30. Discouragement by other teachers	( )	
31. Distance from facilities	( )	
32. Working for money after school	( )	
33. Equipment that I need is too expensive	e ( )	
34. High cost of participating in some phy	ysical activities ( )	
35. Inappropriate behaviour of coaches	( )	
36. Inadequate coaching services in the pl	hysical activity ( )	
37. Physical activities are too stressful	( )	

- 38. Lack of necessary sport equipment at the college ( )
- 39. I am taking medication ( )



### APPENDIX B

### INTRODUCTORY LETTER

### UNIVERSITY OF CAPE COAST

### COLLEGE OF EDUCATION STUDIES FACULTY OF SCIENCE AND TECHNOLOGY EDUCATION DEPARTMENT OF HEALTH, PHYSICAL EDUCATION & RECREATION

TELEPHONE: +233 - (0)206610931 / (0)543021384 / (0)268392819 9<sup>t</sup>

TELEX: 2552, UCC, GH.

Our Ref: ET/PSE/19/0004/3



EMAIL: hper@ucc.edu.gh

Cables & Telegrams: UNIVERSITY, CAPE COAST

13th August, 2020.

The Chairman Institutional Review Board University of Cape Coast Cape Coast

#### INTRODUCTORY LETTER: CHARLOTTE ADOMAH DIABOR (ET/PSE/19/0004)

The above-named person is a student of the Department of Health, Physical Education and Recreation of the University of Cape Coast. She is pursuing a Master of Philosophy degree in Health Education. In partial fulfilment of the requirements for the programme, she is conducting a research for her thesis titled "Factors Influencing Female Students' Participation in Physical Activities in Komenda and Ola Colleges of Education."

She has defended her thesis proposal and has passed. I therefore kindly request that she is granted ethical clearance to enable her conduct the research.

Counting on your usual co-operation.

Thank you.

### APPENDIX C

### INTRODUCTORY LETTER

#### UNIVERSITY OF CAPE COAST

### COLLEGE OF EDUCATION STUDIES FACULTY OF SCIENCE AND TECHNOLOGY EDUCATION DEPARTMENT OF HEALTH, PHYSICAL EDUCATION & RECREATION

TELEPHONE: +233 - (0)206610931 / (0)543021384 / (0)268392819

TELEX: 2552, UCC, GH.

Our Ref: ET/PSE/19/0004/4



EMAIL: hper@ucc.edu.gh

Cables & Telegrams: UNIVERSITY, CAPE COAST

13th August, 2020.

The Chairman Institutional Review Board University of Cape Coast Cape Coast

### INTRODUCTORY LETTER: CHARLOTTE ADOMAH DIABOR (ET/PSE/19/0004)

The bearer of this letter, Charlotte Adomah Diabor, is an MPhil student of the above-named department. I support her application for ethical clearance from your outfit. She is conducting a research on the topic "Factors Influencing Female Students' Participation in Physical Activities in Komenda and Ola Colleges of Education." As part of the requirements for obtaining a Master of Philosophy degree in Physical Education at the University of Cape Coast.

I am the Principal Supervisor of her work and she has satisfied the conditions for data collection. I shall be grateful if she is given the necessary assistance.

Counting on your usual co-operation.

Thank you.

Dr. Charles Domfeh

PRINCIPAL SUPERVISOR

cdomfeh@ucc.edu.gh

### APPENDIX D

### ETHICAL CLEARANCE

# UNIVERSITY OF CAPE COAST

# INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508878309 E-MAIL: irb@ucc.edu.gh OUR REF: UCC/RB/A/2016/1022 YOUR REF: OMB NO: 0990-0279 IORG #: IORG0009096



9<sup>TH</sup> JULY, 2021

Ms. Charlotte Adomah Diabor Department of Health, Physical Education and Recreation University of Cape Coast

Dear Ms. Diabor,

#### ETHICAL CLEARANCE - ID (UCCIRB/CES/2021/36)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research titled Factors Influencing Female Students' Physical Activity Participation in Komenda and Ola Colleges of Education in the Central Region. This approval is valid from 9th July, 2021 to 8th July, 2022. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

CARAMO.

Samuel Asiedu Owusu, PhD UCCIRB Administrator

ADMINISTRATOR INSTITUTIONAL REVIEW BOARD UNIVERSITY OF CAPE COAST