

**INVESTIGATING THE INFLUENCE OF KNOWLEDGE OF HEALTH  
EDUCATION ON PHYSICAL ACTIVITY LEVELS AMONG ADOLESCENTS IN  
SECONDARY SCHOOLS IN EGOR LOCAL GOVERNMENT AREA OF EDO  
STATE**

**BY**

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**BEING A PROJECT PRESENTED TO THE DEPARTMENT OF HEALTH,  
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## CERTIFICATION

We the undersigned hereby certify that this work was carried out by Osagumwenro Agbontaen with the Matriculation Number EDU21025336 from the Department of Health, Safety and Environmental Education University of Benin, Benin City, Nigeria In partial fulfilment of the requirements for the award of Bachelor of Education (B.Ed.) Degrees in Health Education.

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## **DEDICATION**

This study is dedicated to the almighty God for His divine mercy, love, wisdom, and understanding and strength granted throughout this study.

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## **ABSTRACT**

This study investigates the influence of knowledge of health education on physical activity levels among adolescents in secondary schools within Egor Local Government Area, Edo State, Nigeria. The primary purpose is to explore whether awareness and understanding of health education contents translate into active participation in physical activities among young students, aiming to establish a link that can inform future health promotion strategies.

A descriptive survey research design was employed, utilizing a structured questionnaire to gather data from a stratified random sample of 120 students drawn from four public secondary schools. The instrument's validity was ensured through expert review for content and face validity, and its reliability was confirmed with a test-retest method yielding a coefficient of 0.82. Data were analyzed through frequency counts, percentages, and chi-square tests to examine the relationships between knowledge levels and physical activity behaviors.

The findings revealed that although students possess a moderate level of knowledge regarding health education, this does not consistently influence their physical activity behaviors due to various barriers such as environmental constraints and societal perceptions. The study recommends targeted interventions to bridge the gap between knowledge and practice, including improved recreational facilities, community engagement, and tailored health education programs that address specific cultural and environmental factors to promote lifelong active lifestyles among adolescents.

# **CHAPTER ONE**

## **INTRODUCTION**

### **Background to the Study**

Adolescence is a critical period characterized by rapid physical, cognitive, and emotional development. It is during this transitional stage from childhood to adulthood that lifelong habits, including those relating to health and physical activity, are formed. Engaging in regular physical activity during adolescence is essential not only for immediate health benefits but also for long-term well-being and prevention of chronic diseases such as obesity, type 2 diabetes, hypertension, and cardiovascular diseases (World Health Organization [WHO], 2020).

Despite the known benefits, global trends indicate a disturbing decline in physical activity levels among adolescents. According to WHO (2020), approximately 81% of adolescents aged 11–17 years were not physically active enough. This decline is attributed to various factors, including increased academic pressure, urbanization, reduced availability of recreational spaces, and the proliferation of screen-based entertainment.

In developing countries like Nigeria, the situation is equally concerning. A study by Onifade and Somoye (2019) reported that Nigerian adolescents exhibited low levels of physical activity, often falling below the recommended 60 minutes of moderate to vigorous physical activity daily. The Nigerian Federal Ministry of Health (2018)

corroborated these findings, highlighting an alarming increase in sedentary lifestyles among school-aged children and adolescents.

In response to the declining trend in physical activity, health education has been integrated into the secondary school curriculum across Nigeria. Health education aims to empower students with the knowledge and skills necessary to make informed decisions about their health, including the importance of regular physical activity. Topics covered typically include physical fitness, nutrition, personal hygiene, mental health, and disease prevention.

However, possessing knowledge about the importance of physical activity does not automatically lead to its practice. Research indicates that there is often a gap between knowledge and behavior (Ajzen, 1991). Many adolescents are aware of the benefits of exercise but fail to incorporate regular physical activity into their daily routines due to various barriers such as peer influence, parental restrictions, lack of motivation, environmental constraints, and cultural factors.

In Egor Local Government Area (LGA) of Edo State, secondary school students are exposed to health education through formal schooling. Nevertheless, anecdotal evidence and preliminary observations suggest that a significant number of adolescents remain physically inactive. Factors such as urbanization, limited recreational facilities, insecurity, and societal perceptions about physical activity, especially among females, may contribute to this trend.

Given the crucial role of adolescence in establishing lifelong health behaviors, it is pertinent to investigate whether the knowledge acquired through health education significantly influences physical activity levels among adolescents in Egor LGA. Understanding this relationship can provide valuable insights into designing effective interventions aimed at promoting active lifestyles among young people.

Thus, this study seeks to explore the impact of knowledge of health education on the physical activity levels among adolescents in secondary schools within Egor Local Government Area of Edo State.

### **Statement of the Problem**

The health benefits of regular physical activity are well-documented. According to the Centers for Disease Control and Prevention (CDC, 2021), physically active adolescents have lower body fat, stronger bones and muscles, improved cardiovascular fitness, and better mental health outcomes compared to their inactive peers. Furthermore, engaging in physical activity during adolescence lays the foundation for a healthy adulthood, reducing the risk of non-communicable diseases (NCDs) later in life.

Despite widespread awareness campaigns and the integration of health education into school curricula, studies continue to show that the majority of adolescents, including those in Nigeria, fail to meet recommended physical activity guidelines (WHO, 2020; Adegoke, 2017). This raises concerns about the effectiveness of health education in influencing actual behavior change.

In Egor LGA, various initiatives have been undertaken to promote health education in schools. However, preliminary observations indicate that many adolescents still engage in sedentary activities such as prolonged television viewing, gaming, and excessive use of mobile devices, while participation in organized sports and recreational physical activities remains low.

The key problem, therefore, is the apparent disconnect between knowledge of health education and the actual practice of physical activity among adolescents. Several critical questions arise: To what extent do adolescents internalize the knowledge provided through health education? Does this knowledge influence their decision to engage in physical activity? What other factors mediate or moderate this relationship?

Failure to address these issues could result in a continued rise in health problems among adolescents, which would translate into a greater burden on the healthcare system and reduced productivity in the future. Hence, there is an urgent need to investigate the relationship between knowledge of health education and physical activity behaviors among adolescents in Egor LGA.

### **Research Questions**

This study seeks to answer the following research questions:

1. What is the level of awareness of health education contents among adolescents in secondary schools in Egor LGA?
2. What are the levels of physical activity patterns among these adolescents?

3. Is there a relationship between knowledge of health education and physical activity levels?

### **Purpose of the Study**

The main purpose of this study is to investigate the impact of knowledge of health education on physical activity levels among adolescents in secondary schools in Egor Local Government Area of Edo State.

The specific objectives are to:

1. Assess the level of knowledge of health education among adolescents in secondary schools.
2. Determine the physical activity levels of adolescents.
3. Examine the relationship between health education knowledge and physical activity behaviors.
4. Identify barriers that hinder adolescents from engaging in physical activity despite having knowledge of its benefits.
5. Propose strategies to enhance the effectiveness of health education in promoting physical activity among adolescents.

### **Research Hypotheses**

The study will test the following null hypotheses:

- **H<sub>01</sub>**: There is no significant relationship between knowledge of health education and physical activity levels among adolescents in Egor LGA.

- **H<sub>02</sub>:** There is no significant difference in physical activity levels based on gender among adolescents.

### **Significance of the Study**

The findings of this study will be significant to various stakeholders:

- **Educational Authorities:** The results will assist curriculum developers and policymakers in assessing the effectiveness of health education programs and making necessary adjustments to enhance behavioral outcomes.
- **School Administrators:** School leaders will gain insights into the current levels of physical activity among students and the effectiveness of existing health education strategies, enabling them to design and implement supportive policies and programs.
- **Health Professionals:** Public health practitioners will benefit from understanding the gap between knowledge and practice, informing the design of targeted interventions for adolescent health promotion.
- **Parents and Guardians:** Awareness of the factors influencing adolescents' physical activity behaviors will enable parents to support and encourage active lifestyles at home.
- **Future Researchers:** The study will contribute to the growing body of knowledge on adolescent health behaviors in Nigeria and serve as a foundation for further research on related topics.

### **Scope/Delimitation of the Study**

The study focuses on adolescents aged 10–19 years enrolled in public and private secondary schools in Egor Local Government Area of Edo State. It specifically investigates their knowledge of health education and their physical activity behaviors. The study will not cover other aspects of health behavior such as dietary habits, substance use, or mental health unless they are directly related to physical activity. This study is delimited to adolescents enrolled in secondary schools within Egor Local Government Area of Edo State. It focuses specifically on their knowledge of health education as it pertains to physical activity and how this knowledge influences their engagement in physical exercise.

The study is restricted to students within the ages of 10 to 19 years, encompassing both junior and senior secondary school students. Furthermore, the research is limited to assessing physical activity levels based on self-reported measures, and does not include objective measures such as fitness testing or use of devices like pedometers or accelerometers.

The study will consider only selected public and private secondary schools within the local government area due to logistical and financial constraints. Other factors such as dietary habits, academic performance, and socio-economic status are not the primary focus unless they directly relate to physical activity behaviors.

### **Limitations of the Study**

While efforts will be made to ensure the validity and reliability of the study, the following limitations are anticipated:

- The reliance on self-reported data may introduce response bias.
- The cross-sectional nature of the study limits the ability to establish causality between variables.
- Variations in the implementation of health education across schools may affect the generalizability of findings.
- Environmental factors such as insecurity, poor infrastructure, and socio-economic disparities may influence physical activity behaviors in ways not fully captured by the study.

### **Assumptions of the Study**

The study is based on the following assumptions:

- Respondents will provide honest and accurate information.
- Health education is being delivered uniformly across all secondary schools in Egor LGA.
- Students have adequate exposure to health education topics related to physical activity.
- The instruments used for data collection are valid and reliable for the target population.

## Definition of Terms

- **Adolescents:** Individuals between the ages of 12 and 19 years undergoing the transition from childhood to adulthood.
- **Health Education:** Structured learning experiences designed to improve knowledge, attitudes, and behaviors related to health and wellness.
- **Physical Activity:** Any movement of the body that requires energy expenditure, including exercise, sports, dance, and active recreation.
- **Knowledge:** Awareness and understanding of information, concepts, and principles acquired through education or experience.
- **Sedentary Behavior:** Activities involving low levels of energy expenditure, such as sitting, lying down, and screen-based activities like watching television.
- **Secondary Schools:** Educational institutions providing schooling to students following primary education and before tertiary education, typically covering junior and senior secondary levels.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

This chapter provides a comprehensive review of existing literature relevant to the topic:

- Theoretical Framework
- Conceptual Framework
- Knowledge of health education contents among adolescents in secondary schools in Egor LGA
- Patterns of physical activity participation among the adolescents
- Relationship between health education knowledge and physical activity behaviors
- Major barriers to physical activity among adolescents despite their health education knowledge
- Strategies that can be implemented to foster physical activity participation among adolescents
- Summary of Related literature

#### **Theoretical Framework**

To understand the relationship between health education knowledge and physical activity behaviors, the study is anchored on two prominent behavior change theories:

The Health Belief Model (Becker, 1974) is a psychological model that explains and predicts health behaviors by focusing on individuals' attitudes and beliefs. The core components of the HBM include:

- **Perceived Susceptibility:** Belief about the chances of experiencing a health condition (e.g., obesity, hypertension).
- **Perceived Severity:** Belief about the seriousness of a condition and its consequences.
- **Perceived Benefits:** Belief in the efficacy of taking preventive action (e.g., exercising regularly).
- **Perceived Barriers:** Belief about the obstacles to engaging in a behavior (e.g., lack of time, cultural restrictions).
- **Cues to Action:** Internal or external triggers that prompt action.
- **Self-Efficacy:** Confidence in one's ability to successfully perform a behavior.

In this context, the model suggests that adolescents who perceive the health risks of inactivity and understand the benefits of exercise and who believe they can overcome barriers are more likely to engage in physical activity.

### **Theory of Planned Behavior (TPB)**

Proposed by Ajzen (1991), the Theory of Planned Behavior posits that human behavior is guided by three kinds of considerations:

- **Attitude toward the behavior:** Whether the person views the behavior (e.g., physical activity) positively or negatively.
- **Subjective Norms:** Perceived social pressure to perform or not perform the behavior.

- **Perceived Behavioral Control:** The perceived ease or difficulty of performing the behavior.

The theory assumes that stronger intentions to engage in a behavior result in a higher likelihood of actual performance. Health education may influence these intentions by shaping attitudes, highlighting supportive norms, and improving confidence

### **Conceptual Clarification**

This section provides an in-depth explanation of key concepts and constructs used in the study.

### **Concept of Health Education**

Health education is a fundamental component of public health that focuses on providing individuals and communities with the information, skills, and motivation necessary to make decisions that promote health and well-being. According to the World Health Organization (WHO, 2020), health education refers to “consciously constructed opportunities for learning, involving some form of communication designed to improve health literacy, including improving knowledge, and developing life skills which are conducive to individual and community health.” **Health Education** is a process designed to help individuals and communities improve their health by increasing their knowledge, influencing their attitudes, and motivating them to adopt healthy behaviors. It is not just about giving people information but about empowering them to make informed decisions regarding their health and well-being.

## **Definitions of Health Education**

### **World Health Organization (WHO, 1998):**

Health education is any combination of learning experiences designed to help individuals and communities improve their health by increasing their knowledge or influencing their attitudes.

### **Green and Kreuter (2005):**

Health education is systematically planned activities aimed at providing people with information and skills to make healthy decisions.

## **Key Elements of Health Education**

1. Provision of accurate, clear, and relevant health information
2. Development of skills to adopt healthy lifestyles
3. Promotion of positive attitudes towards health
4. Encouragement of participation in health-promoting activities
5. Empowerment of individuals and communities to take control over their health

## **Goals of Health Education**

- To promote healthy lifestyles
- To prevent diseases and health problems
- To improve the quality of life
- To reduce health risks through behavior change
- To develop health-related skills and knowledge

## **Importance of Health Education**

1. Helps individuals make informed health decisions
2. Reduces the spread of communicable and non-communicable diseases
3. Encourages early detection and proper management of health conditions
4. Promotes mental, physical, and social well-being
5. Reduces the burden on healthcare systems

## **Examples of Health Education Activities**

- Teaching about the importance of handwashing
- Campaigns promoting HIV/AIDS awareness
- School-based education on nutrition and exercise
- Community seminars on family planning
- Health talks on prevention of malaria or COVID 19

In secondary schools, health education is taught through subjects such as Physical and Health Education (PHE) and Basic Science. Its core goals include:

- Promoting awareness of health issues
- Influencing attitudes and behaviors
- Enhancing skills for healthy living
- Reducing health-risk behaviors
- Encouraging personal and community responsibility for health

The inclusion of health education in school curriculum equips adolescents with knowledge about exercise, nutrition, disease prevention, hygiene, and mental health all of which are critical during the developmental stage of adolescence.

### **Concept of Physical Activity**

Physical activity refers to any bodily movement produced by skeletal muscles that requires energy expenditure. It includes structured activities like sports and unstructured forms such as walking, running, dancing, or cycling. In simple terms, physical activity involves moving your body in ways that increase energy use beyond resting levels. It plays a vital role in maintaining good health and preventing various diseases.

The World Health Organization recommends that adolescents engage in at least 60 minutes of moderate-to-vigorous physical activity daily to support normal growth and health.

### **Definitions of Physical Activity**

#### **World Health Organization (WHO, 2010):**

Physical activity is any bodily movement produced by skeletal muscles that requires energy expenditure, including activities undertaken while working, playing, carrying out household chores, traveling, and engaging in recreational pursuits.

#### **Centers for Disease Control and Prevention (CDC):**

Physical activity is any form of movement that works your muscles and uses more energy than resting

## **Types of Physical Activity**

- 1. Aerobic Activity** – Activities that increase your breathing and heart rate (e.g., walking, jogging, swimming, cycling)
- 2. Muscle-Strengthening Activity** – Activities that improve muscle strength (e.g., lifting weights, resistance exercises)
- 3. Bone-Strengthening Activity** – Activities that promote bone growth and strength (e.g., jumping, running)
- 4. Balance and Flexibility Activities** – Activities that improve balance and flexibility (e.g., stretching, yoga)

## **Examples of Physical Activity**

- Walking, running, or cycling
- Playing football, basketball, or other sports
- Dancing or aerobics
- Gardening or household chores
- Climbing stairs
- Stretching exercises

## **Importance of Physical Activity**

1. Improves cardiovascular health
2. Helps maintain healthy body weight
3. Strengthens muscles and bones
4. Enhances mental health and reduces stress

5. Prevents lifestyle diseases such as diabetes and hypertension
6. Promotes overall well-being

## **Conclusion**

Physical activity is essential for people of all ages. Whether it's through sports, daily tasks, or structured exercise, being physically active contributes significantly to physical, mental, and social health. Regular physical activity improves cardiorespiratory fitness, builds strong

## **Knowledge of Health Education contents among adolescents in Secondary schools in Egor LGA**

The level of knowledge of health education contents among adolescents refers to the extent to which students understand, incorporate, and are able to apply various health-related concepts taught in schools. Health education contents typically include topics such as personal hygiene, nutrition, physical activity, disease prevention, drug and substance abuse, mental health, first aid, environmental health, and sexual and reproductive health. These topics are designed to equip students with the information and skills they need to make informed health decisions and adopt behaviors that promote overall well-being and avoid risky behaviors that may affect their physical, mental, and social well-being. In secondary schools, especially within the context of Egor Local Government Area, the level of knowledge adolescents possess is largely dependent on several factors. These include the quality and frequency of health education lessons, availability of qualified teachers, the integration of health topics into other subjects, and

the presence of co-curricular health promotion activities such as school health clubs. In some cases, students may also acquire health information from outside sources such as parents, peers, community health workers, the media, and religious institutions.

A high level of health education knowledge enables adolescents to understand the consequences of unhealthy practices, recognize signs of illness, seek help when necessary, and engage in preventive behaviors. For example, students who understand the benefits of regular physical activity are more likely to participate in exercise and avoid sedentary lifestyles. Similarly, those with good knowledge of nutrition are more likely to make healthier food choices and maintain good dietary habits.

However, research has shown that many students, particularly in rural or under-resourced schools, may have limited knowledge of critical health topics due to poorly implemented curricula, lack of teaching materials, or irregular delivery of health education lessons. This knowledge gap can contribute to risky behaviors such as poor hygiene, substance abuse, unprotected sex, and lack of interest in physical activity — all of which can negatively affect their physical and mental development.

Therefore, assessing the level of knowledge among adolescents is essential for identifying gaps in health education delivery and for guiding the development of more effective school health programs. Understanding what students know and what they don't provides insight into how schools, parents, and health professionals can work together to improve adolescent health outcomes through targeted education and support.

## **The Patterns of Physical Activity Participation among the adolescents**

Physical activity participation among adolescents varies significantly based on factors like gender, age, socio-economic status, and even household car ownership. While some adolescents meet recommended daily activity levels, many do not, with participation often declining during teenage years.

The pattern of physical activity participation among adolescents refers to the types, frequency, duration, and intensity of physical activities in which they engage, either within or outside the school setting. Understanding these patterns is important for evaluating whether young people are meeting recommended physical activity guidelines and for identifying trends that may affect their overall health and development.

Physical activity patterns can vary based on several factors including age, gender, school environment, cultural background, and the availability of facilities and programs. In the secondary school context, adolescents typically engage in physical activities through formal physical education classes, extracurricular sports, recreational play during break time, walking or cycling to school, and community-based sporting events.

### **Types of Physical Activity Common Among Adolescents:**

- **Structured activities:** These include sports such as football, volleyball, basketball, athletics, and physical education classes.
- **Unstructured activities:** These are informal, spontaneous forms of movement such as skipping, dancing, walking, and playing with friends.

- Sedentary behavior: In contrast, many adolescents also spend a significant amount of time in sedentary activities such as watching TV, playing video games, or using mobile phones and computers.

### **Frequency and Duration:**

Health organizations such as the World Health Organization (WHO) recommend that adolescents engage in at least 60 minutes of moderate to vigorous physical activity daily. However, studies have shown that many adolescents, particularly in urban or academic-focused environments, fall short of this standard due to factors such as academic pressure, lack of interest, and inadequate recreational facilities.

### **Gender Differences:**

Patterns of physical activity often show gender disparities. Boys tend to be more active than girls and are more likely to participate in competitive sports. Girls, on the other hand, may prefer less intense or socially-oriented activities such as dance or walking. Cultural and societal norms sometimes discourage girls from active participation, especially in co-educational or public settings.

### **Influencing Factors:**

1. School Environment: Schools with organized sports programs, qualified physical education teachers, and available playgrounds or sports equipment tend to promote better physical activity patterns.
2. Parental Support: Adolescents whose parents encourage active lifestyles or participate in activities with them are more likely to be physically active.

3. Peer Influence: Peers play a significant role in motivating or discouraging activity. Group participation often increases enjoyment and commitment.
4. Technology and Screen Time: Increased screen time is associated with a decline in physical activity, contributing to sedentary lifestyles.
5. Health Education: Students who have a good understanding of the benefits of physical activity through health education are more likely to participate regularly.

**Conclusion:**

The pattern of physical activity participation among adolescents is shaped by a complex interaction of personal, environmental, and social factors. While some adolescents are highly engaged in various forms of physical activity, others may be inactive due to barriers such as lack of motivation, poor facilities, or limited knowledge. Identifying these patterns is essential for developing strategies to promote active lifestyles, improve health outcomes, and prevent lifestyle-related diseases among adolescents in secondary schools.

**Relationship Between Health Education Knowledge and Physical Activity Behaviors**

The relationship between health education knowledge and physical activity behaviors is a critical area of focus in adolescent health promotion. Health education equips individuals with the information, skills, and attitudes necessary to make informed decisions about their well-being. Among adolescents, knowledge gained through health education can significantly influence how they view, adopt, and maintain physical activity behaviors.

Health education covers key topics such as the importance of regular physical activity, the physical and mental benefits of exercise, recommended activity levels, and ways to integrate activity into daily life. When adolescents are well-informed through structured health education programs, they are more likely to recognize the value of physical activity and become motivated to engage in it regularly. On the other hand, a lack of knowledge may lead to low participation in physical activity, sedentary lifestyles, and the development of negative health outcomes such as obesity, cardiovascular problems, and reduced academic performance.

Studies have shown that students with a higher level of health knowledge are more likely to:

- Participate in physical education classes and school sports
- Engage in recreational or leisure-time physical activities
- Meet the recommended daily physical activity guidelines
- Understand the risks associated with physical inactivity
- Choose active forms of transportation (e.g., walking or cycling to school)
- Reduce time spent in sedentary behaviors such as screen time

Furthermore, health education influences not just knowledge, but also attitude and self-efficacy. Adolescents who believe in their ability to be active and who understand *why* physical activity matters are more likely to form positive habits. This relationship is supported by behavioral theories such as the Health Belief Model and the Social

Cognitive Theory, which suggest that knowledge, perceived benefits, and personal confidence contribute to behavior change.

However, the relationship between knowledge and behavior is not always direct. Other factors such as peer influence, access to sports facilities, family support, socio-economic status, and cultural norms can either support or hinder the application of knowledge. For example, a student may know the benefits of physical activity but may not engage in it due to a lack of safe spaces to exercise or discouragement from family.

In the context of secondary schools in Egor Local Government Area, this relationship is particularly important to explore. The extent to which adolescents apply health education knowledge in their daily physical activity choices can help determine the effectiveness of health education programs in the schools. It can also inform policymakers and educators about the need for improved health curriculum delivery, better school facilities, and community involvement in promoting physical activity.

**Conclusion:**

There is a strong and positive relationship between adolescents' knowledge of health education and their physical activity behaviors. While knowledge alone does not guarantee action, it plays a foundational role in shaping attitudes, building motivation, and encouraging healthy habits. Understanding this relationship is essential for designing effective school-based interventions that promote long-term physical and mental well-being among young people.

## **Major Barriers to Physical Activity Among Adolescents Despite Their Health Education Knowledge**

While health education plays a crucial role in raising awareness about the benefits of physical activity, many adolescents still face significant barriers that prevent them from engaging in regular exercise. These barriers may be personal, social, environmental, or institutional in nature. Understanding these obstacles is essential for designing realistic interventions that go beyond just providing information and actually support behavior change.

### **1. Lack of Time**

Academic demands such as homework, examinations, and after-school lessons often limit the amount of free time adolescents have for physical activity. Many students prioritize academic success over exercise, especially in exam-focused school systems. This leads to reduced participation in recreational or organized sports.

### **2. Limited Access to Facilities and Equipment**

In many schools, particularly in under-resourced areas like some parts of Egor Local Government Area, there is a shortage of sports facilities, open spaces, playgrounds, and equipment. Without safe and accessible environments for physical activity, adolescents may find it difficult or even impossible to apply what they've learned about exercise and fitness.

### **3. Peer Influence and Social Norms**

Some adolescents may feel discouraged from participating in physical activities due to peer pressure or fear of being teased. Girls in particular may be less likely to engage in sports due to gender stereotypes or concerns about body image, appearance, or societal expectations.

### **4. Lack of Motivation and Low Self-Efficacy**

Even when adolescents understand the benefits of physical activity, they may lack the internal drive or confidence to engage in it. Some may not see immediate results, which leads to discouragement. Others may feel they are not "good enough" at sports or physical tasks, which lowers their willingness to participate.

### **5. Parental and Family Influence**

In households where physical activity is not valued or supported, adolescents may not be encouraged to engage in exercise. Some parents may prioritize academics over sports, discourage outdoor play, or fail to model active behavior themselves.

### **6. Safety Concerns and Environmental Barriers**

Insecurity, poor road conditions, and lack of street lighting can discourage adolescents from walking, cycling, or playing outdoors, especially in the evenings. Fear of injury or harassment also limits girls' participation in outdoor activities in some communities.

### **7. Sedentary Lifestyles and Screen Time**

The rise of technology has led to increased time spent on smartphones, video games, television, and computers. Many adolescents prefer passive entertainment over physical

activity, creating a pattern of sedentary behavior that becomes difficult to break, even with health education.

### **8. Health Issues and Physical Limitations**

Some students may have medical conditions, disabilities, or injuries that restrict their ability to engage in vigorous physical activity. Without proper support or adapted programs, they may feel excluded or reluctant to participate.

### **9. Cultural and Religious Restrictions**

In some communities, cultural or religious beliefs may limit the kind of physical activities that are acceptable, especially for girls. Dress codes, gender segregation, or restrictions on physical expression may act as barriers despite awareness of health benefits.

### **Conclusion:**

Although health education increases awareness and understanding of the importance of physical activity, many adolescents are unable to translate this knowledge into consistent behavior due to various barriers. These challenges highlight the need for a more supportive environment, one that includes parental involvement, adequate facilities, positive peer influence, and policies that promote active living. Addressing these barriers is critical to improving physical activity levels among adolescents and ensuring that health education results in meaningful, lasting behavioral change.

## **Strategies That Can Be Implemented to Foster Physical Activity Participation Among Adolescents**

Promoting physical activity among adolescents requires more than just providing health education; it demands the creation of supportive environments, policies, and programs that make it easier, safer, and more appealing for young people to be physically active. The following strategies can be implemented at various levels: school, family, community, and policy to encourage and sustain regular physical activity participation among adolescents.

### **1. Integration of Physical Activity into the School Curriculum**

Schools play a central role in promoting active lifestyles. By integrating regular and compulsory physical education (PHE) classes into the curriculum, schools can ensure that all students engage in structured exercise. These sessions should be well-supervised, fun, and inclusive, catering to different skill levels and interests.

### **2. Provision of Facilities and Equipment**

Availability of safe, accessible, and well-maintained sports facilities, fields, gymnasiums, and open spaces is essential. Schools and communities should invest in equipment such as balls, nets, cones, jump ropes, and exercise mats that encourage participation in a variety of activities.

### **3. Training and Deployment of Qualified Health and PHE Teachers**

Qualified health educators and physical education instructors are crucial in delivering engaging and effective physical activity programs. Teachers should also be trained to

motivate students, create inclusive programs, and adapt activities for students with special needs or physical limitations.

#### **4. Encouraging Extra-Curricular Sports and Activity Clubs**

Organizing after-school sports teams, fitness clubs, and inter-house competitions can increase participation, build team spirit, and make physical activity enjoyable. These activities also allow students to explore different forms of exercise outside the regular school setting.

#### **5. Promoting Active Transportation**

Encouraging students to walk or cycle to school rather than being driven can contribute significantly to their daily physical activity. To support this, safe routes, pedestrian crossings, and bike racks should be made available.

#### **6. Parental Involvement and Support**

Parents can greatly influence their children's physical activity levels by being role models, encouraging outdoor play, limiting screen time, and participating in physical activities with their children. Schools can also organize parent-student fitness events or workshops on the importance of active living.

#### **7. Health Education and Awareness Campaigns**

Continuous health education through classroom instruction, school health clubs, peer education, seminars, posters, and assemblies can reinforce the benefits of physical activity and correct common misconceptions. Campaigns should target not just students but also teachers and parents.

## **8. Reducing Screen Time and Sedentary Behavior**

Programs that promote digital balance, such as “no-screen zones” or “active breaks” during school hours, help students reduce sedentary time and redirect their energy toward movement-based activities.

## **9. Use of Technology to Promote Activity**

Mobile apps, fitness trackers, and online challenges (e.g., step-count competitions) can motivate adolescents who enjoy using technology. Schools can integrate such tools into physical education programs to make activity fun and goal-oriented.

## **10. Community Engagement and Partnerships**

Schools should collaborate with community centers, sports organizations, health agencies, and NGOs to provide adolescents with broader access to sports events, recreational programs, and fitness mentorship. Community campaigns can promote safe and inclusive spaces for all youth.

## **11. Policy and Government Support**

Government policies that support school health programs, physical education funding, infrastructure development, and youth empowerment can drive sustainable change. National health policies should recognize physical activity as a public health priority.

### **Conclusion:**

Fostering physical activity participation among adolescents requires a multi-level and collaborative approach. By combining school-based programs with community support, parental involvement, and health education, stakeholders can create an environment that

encourages lifelong active habits. These strategies must be practical, inclusive, and sustained to make a real difference in the physical and mental well-being of young people.

### **Summary of Literature Reviewed**

This chapter reviewed relevant literature on health education, physical activity, and adolescent behavior. It highlighted:

- The significance of health education in promoting awareness and shaping healthy habits
- The critical benefits of regular physical activity in adolescence
- Theories explaining behavior change, particularly the Health Belief Model and Theory of Planned Behavior
- Empirical findings indicating that while knowledge is necessary, other factors strongly influence physical activity engagement
- A literature gap on studies specific to Egor LGA and how local adolescents apply health education knowledge to their lifestyle

This review provides the basis for the present study and supports the formulation of research questions and hypotheses to explore the stated objectives.

## **CHAPTER THREE**

### **METHODOLOGY**

This Chapter presents the detailed methodology that will be adopted in carrying out this research. It provides a comprehensive description of the following topics:

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

#### **Research Design**

This study adopted a descriptive survey design. The design was considered most appropriate because it allows the researcher to collect data from a relatively large population in order to describe and interpret existing conditions, opinions, or relationships (Nworgu, 2015). It enabled the researcher to gather information directly from adolescents in secondary schools concerning their knowledge of health education and how this knowledge influences their level of participation in physical activities within the school environment. The choice of this design is justified based on the objective of the study, which is to investigate the extent to which knowledge of health

education influences physical activity behaviors among adolescents in secondary schools. The design allows for the collection of data at a particular point in time, making it possible to draw inferences and make generalizations about the larger adolescent population in Egor Local Government Area of Edo State. Additionally the design permits the use of both quantitative and qualitative approaches when necessary, thereby enhancing the depth and richness of the data obtained.

### **Population of the Study**

The population of this study comprised all adolescents enrolled in public junior and senior secondary schools in Egor Local Government Area of Edo State. Information obtained from the Egor Local Government Council Secretariat at Uselu and the Egor Local Government Education Authority at Uselu-Ugboko confirmed that there are thirteen (13) public secondary schools within the local government area, each having both junior and senior sections. The total estimated enrolment for the junior secondary schools is 8,500 students, while the senior secondary sections are estimated at 5,950 students, giving a combined adolescent population of approximately 14,450 students.

**Table. Estimated Enrolment of Public Secondary Schools in Egor LGA, Edo State**

<b>S/ N</b>	<b>Name of School</b>	<b>Type</b>	<b>Location/ Area</b>	<b>Junior Enrolment</b>	<b>Senior Enrolment</b>	<b>Total Enrolment</b>
1	Asoro Secondary School	Public	Uselu	1 703	1 192	2 895
2	Edo Boys Secondary School	Public	Useh	445	312	757
3	Egor Secondary School	Public	Egor	792	554	1 346
4	Evbareke Secondary School	Public	Evbareke	762	533	1 295
5	Evbuotubu Secondary School	Public	Evbuotubu	709	496	1 205
6	Eweka Secondary School	Public	Eweka	187	131	318
7	Iyoba Girls Secondary School	Public	Useh	468	328	796
8	Ohonre Secondary School	Public	Ohonre	117	82	199
9	Okhokhugbo Secondary School	Public	Okhokhugbo	168	118	286
10	Useh Secondary School	Public	Useh	457	320	777
11	Uselu Secondary School	Public	Uselu	582	407	989
12	Uwelu Secondary School	Public	Uwelu	327	229	556
13	Benin Technical College	Public	Ugbowo	1 783	1 248	3 031
	<b>Total</b>			<b>8 500</b>	<b>5 950</b>	<b>14 450</b>

### **Sample and Sampling Technique**

A sample of 120 students was selected from four (4) public secondary schools within the local government area. The schools were selected through simple random sampling to ensure equal representation and fairness. The schools selected were:

1. Uselu Secondary School
2. Iyoba Girls Secondary School
3. Eweka Secondary School
4. Benin Technical College

From each school, 30 students were randomly chosen across both junior and senior classes (JSS and SSS), ensuring proportional representation of gender and class levels. This gave a total of 120 respondents. The use of random sampling helped minimize bias and allowed every student an equal chance of being included in the study.

### **Research Instrument**

The primary instrument used for data collection was a structured questionnaire titled: “Influence of Knowledge of Health Education on Physical Activity Levels among Adolescents Questionnaire (IKHEPALQ)”.

The questionnaire was divided into four (3) sections:

Section A: Demographic Information (age, gender, class level, type of school, and residential location)

Section B: Knowledge of Health Education (10 items)

Section C: Physical Activity Patterns and Behaviors (10 items) ITEMS in Sections B was structured in a multiple-choice format and ITEMS in Section C was structured in a Yes/No format to suit the supervisor's recommendation, making responses clear and easy to analyze.

### **Validity of the Instrument**

The instrument was subjected to **face** and content validation by two experts from the Department of Health, Safety and Environmental Education, University of Benin. Their observations ensured that the items aligned with the study objectives and was clear, unambiguous and relevant to the topic. Minor adjustments, their comments and suggestions were incorporated before administration. This process ensured the instrument measured what it was designed to measure (Ogunleye 2021).

### **Reliability of the Instrument**

Reliability was established using the **test-retest** technique. Twenty students from a public school outside the sample area completed the questionnaire twice at a two-week interval. A reliability coefficient of 0.82 (Pearson's Product Moment Correlation Coefficient (r)) was obtained, indicating the instrument's high level of internal consistency

### **Method of Data Collection**

After securing an official introduction letter from the Department of Health, Safety and Environmental Education, University of Benin, the researcher visited the selected schools

in person. Principals were briefed on the study objectives, and participants were assured of confidentiality and anonymity. The researcher personally administered the questionnaires with the help of trained research assistants. The purpose of this study was explained to them, and participation was involuntary. Questionnaires were distributed and retrieved on the same day to achieve a high return rate.

### **Method of Data Analysis**

The data analysis method utilized for this study involved performing a frequency count and calculate simple percentages.

## CHAPTER FOUR

### PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

**RQ1: what is the level of knowledge of health education contents among adolescents in secondary schools in Egor LGA**

**Table 1: Level of Knowledge of Health Education on Physical Activity Levels among Adolescents in Secondary Schools**

S/N	ITEMS	CORRECT (F%)	INCORRECT (F%)	TOTAL (F%)
1.	Health education mainly focuses on: Nutrition, physical fitness and healthy living	63(53%)	57(47%)	120(100%)
2.	Health education teaches students how to live: Healthy Lives	116(97%)	4(3%)	120(100%)
3.	Regular physical activity is considered : Part of education	116(97%)	4(3%)	120(100%)
4.	Health education helps to : Prevent diseases Promote fitness Improve wellbeing	67(56%)	53(44%)	120(100%)
5.	Health education teaches me to care for: My body and mind	95(79%)	25(21%)	120(100%)

6.	My teachers often discuss physical fitness in class: Always	72(60%)	48(40%)	120(100%)
7.	Personal hygiene and nutrition topics are taught in school: Yes	112(93%)	8(7%)	120(100%)
8.	Exercise helps to: Build strong bones Improve muscles Reduce illness risk	68(7%)	52(43%)	120(100%)
9.	Health education encourages participation in physical activities: Strongly agree	69(58%)	51(42%)	120(100%)
10.	A healthy lifestyle includes: Good diet and exercise	113(94%)	7(6%)	120(100%)

63 students (53%) answered correctly while 57 students (47%) selected incorrect options, indicating that just slightly above half of the respondents understood the concept tested, showing a need for improved clarity in this area of health education.

116 respondents (97%) answered correctly and only 4 (3%) answered incorrectly, showing extremely high awareness of this health education concept among the adolescents and reflecting that almost all respondents understand that health education teaches students to live healthily.

116 (97%) correct and 4 (3%) incorrect, further demonstrating that the students have a very strong understanding of regular physical activity as a part of health education.

67 students (56%) selected the correct answer while 53 (44%) did not, suggesting moderate understanding of the specific benefit addressed in this item and showing they understand that health education prevents diseases, promotes fitness and improves overall wellbeing

95 respondents (79%) were correct and 25 (21%) incorrect, reflecting strong understanding of how health education contributes to overall wellbeing and identified that health education teaches care for both the body and mind, emphasizing the holistic approach of health education

72 students (60%) were correct while 48 (40%) were incorrect, meaning that the majority recall teachers discussing physical fitness in class indicating consistent classroom emphasis on exercise, although a considerable proportion do not.

112 respondents (93%) answered correctly and only 8 (7%) answered incorrectly, indicating excellent understanding of hygiene and nutrition concepts and showing students awareness of health topics.

68 respondents (57%) answered correctly and 52 (43%) were incorrect, showing moderate knowledge of the combined benefits of physical activity.

69 (58%) were correct and 51 (42%) incorrect, reflecting fair understanding of how health education encourages active living.

113 students (94%) were correct and 7 (6%) incorrect, showing high awareness that healthy living requires both diet and exercise, confirming understanding of key components of health

The data indicates that adolescents have a high level of knowledge of health education on physical activity

**RQ2: What is the level of physical activity pattern among adolescents in Egor LGA?**

**Table 2: Physical Activity Patterns and Behaviors**

S/N	ITEMS	Yes (%)	NO (%)	Total (%)	Remark
11.	I participate in exercise at least three times a week	94(78%)	26(22%)	120(100%)	Good
12.	I take part in sports like football, athletics or volleyball	76(63%)	44(37%)	120(100%)	Good
13.	I prefer walking/cycling for short distances	95(79%)	25(21%)	120(100%)	Good
14.	I take part in school physical education classes	102(85%)	15(15%)	120(100%)	Good
15.	I do physical activities at home or outside school	90(75%)	30(25%)	120(100%)	Good
16.	I spend at least 60 minutes daily on physical activity	61(51%)	59(49%)	120(100%)	Good
17.	My school provides enough time for sports activities	101(84%)	19(16%)	120(100%)	Good
18.	I enjoyed being physically active with friends	109(91%)	11(9%)	120(100%)	Good
19.	I feel energetic after physical activity	108(90%)	12(10%)	120(100%)	Good
20.	Physical activity improves my concentration in school	90(75%)	30(25%)	120(100%)	Good

94 students (78%) participate in exercise at least three times weekly while 26 (22%) do not, indicating strong engagement in maintaining regular physical activity habits.

76 students (63%) engage in school sports and 44 (37%) do not, indicating moderate involvement in structured activities

95 respondents (79%) walk or cycle short distances, showing that active transportation is common among the students that is reflecting preference for informal and self-directed forms of exercise.

102 respondents (85%) participate in physical education classes while 18 (15%) do not, indicating strong engagement In school-based activities.

90 (75%) engage in activity outside school while 30 (25%) do not, indicating that many students remain active beyond school hours.

61 respondents (51%) meet the 60-minute daily activity recommendation while 59 (49%) do not, showing almost equal split between those meeting and not meeting guidelines and showing that about half meet the recommended duration for daily exercise

101 (84%) believe the school gives enough time for sports while 19 (16%) disagree, indicating a generally supportive school environment.

109 students (91%) enjoy exercising with friends while Students 11 (9%) do not, highlighting the social motivation for adolescents participation in physical activity

108 students (90%) feel energetic after activity while 12 Students (10%) do not, showing positive immediate effects on physical well-being on most adolescents.

90 students (75%) say activity improves concentration while 30 students (25%) do not, indicating that many students recognize the cognitive and mental benefits of physical activity.

The data indicates that the students have a high level of physical activity which is good.

Hypothesis 1: There is no significant relationship between knowledge of health education and physical activity levels among adolescents in Egor

	N	Mean	R	Sig	Decision
Knowledge of physical Education	120	1.7			
Physical Activity level	120	59.78	0.62	0.01	Rejected

There is significant relationship between knowledge of health education and physical activity levels among adolescents in Egor

### **Discussion of Findings**

The discussion of findings is organized according to the research questions raised.

The findings of the study revealed that adolescents demonstrated a high level of knowledge of health education, as most respondents were able to correctly identify the purpose of health education, the importance of personal hygiene, and the benefits of regular physical activity. This aligns with the findings of Adeyemo & Oyedele, 2019 who opined that this high level of awareness reflects the effectiveness of school-based instruction, which appears to be equipping learners with essential information needed to make healthy decisions. Many adolescents showed a clear understanding of concepts

such as disease prevention, nutrition, and healthy lifestyle habits, suggesting that health messages delivered in classrooms are being internalised. The fact that only a few items recorded moderate scores implies that knowledge gaps were minimal and not widespread. Such strong knowledge acquisition is consistent with studies showing that increased exposure to structured health education significantly enhances adolescents' ability to understand and apply health-related information in their daily lives.

With respect to physical activity patterns, the results showed that adolescents were generally active and participated in a wide variety of movement-based activities such as routine exercise, school-organised sports, walking short distances, and exercising with friends. Their participation in physical education classes further strengthened their activity levels by providing structured opportunities for movement during the school day. Although not every respondent met the recommended sixty minutes of daily moderate-to-vigorous activity, the overall engagement level remained high, reflecting a positive culture of physical activity within the school environment and among peer groups. This aligned with the findings of Ojo & Adedeji, 2020 who has shown that young people who participate in both formal and informal physical activity tend to experience better physical fitness, resilience, and emotional stability compared to their less active peers, which aligns with the pattern observed in this study. These findings also suggest that adolescents are increasingly aware of the role of physical activity in maintaining good health, improving mood, and enhancing academic performance.

Furthermore, the study established a statistically significant relationship between adolescents' knowledge of health education and their level of physical activity. This finding reinforces the findings of Okafor & Eze, 2021 who opined that health literacy plays an important role in shaping behaviour, as individuals who understand the benefits of active living tend to make more intentional efforts to incorporate physical activity into their routines. Similar studies have affirmed that adolescents with higher health knowledge often demonstrate stronger motivation to adopt and maintain healthy behaviours, underscoring the central role of education in promoting lifestyle habits that support overall wellbeing.

## CHAPTER FIVE

### SUMMARY, CONCLUSION, AND RECOMMENDATIONS

This chapter dwells on the summary of the study, conclusion and recommendations

#### SUMMARY

The purpose of this study is to investigate the influence of knowledge of health education on physical activity levels among adolescents in secondary schools in Egor Local Government Area. The study seeks to; investigate the influence of knowledge of health education on physical activity among adolescents in secondary schools. Further, in this research work, three(3) research questions were raised to guide this study.

A descriptive survey design was adopted to carry out this study. The stratified random sampling technique was used. 30 students were selected from each of the four public secondary schools, making a total of 120 respondents. The sample comprised students from JSS1 to SS3, representing both junior and senior secondary levels.

The research instrument used was a structured questionnaire used to obtain data from the sample population based on the attribute of interest; Content validity. instrument included items on knowledge of health education (Section B) and physical activity patterns (Section C). The data were presented in tables and analyzed using frequencies and percentages(Correct and incorrect)=to facilitate understanding of the responses. Hypothesis were also tested to explore the relationship between students' knowledge of health education and their physical activity levels using the chi-square test To ensure the validity of the instrument, it was reviewed by the project supervisor and two other

lecturers in the Department of Health, Safety, and Environmental Education. This review confirmed that the questionnaire accurately measured the intended variables and that the results were reliable for analysis.

## **Findings**

Based on the analysis of data collected from the respondents, the findings of the studies revealed that;

### **i. Knowledge of Health Education:**

The analysis of responses in Section B revealed that adolescents possessed a high level of knowledge of health education.

### **2. Physical Activity Patterns:**

Findings from Section C showed that the adolescents exhibited high physical activity patterns. Many respondents reported engaging in exercise, participating in school sports, attending physical education classes, walking short distances, and exercising with friends.

### **3. Relationship Between Knowledge and Physical Activity:**

The Chi-square test revealed a statistically significant association between knowledge of health education and physical activity levels.

## **Conclusion**

Based on the findings of the study, it is concluded that adolescents in Egor Local Government Area possess a high level of knowledge of health education and generally demonstrate high physical activity patterns. The study further established that knowledge of health education significantly influences adolescents' physical activity behaviours.

This implies that when students understand the benefits of physical activity and the principles of healthy living, they are more willing to participate in exercises, sports and activities that promote their health and wellbeing. Strengthening health education in schools will therefore contribute greatly to the development of healthy lifestyle behaviours among adolescents. Although many students participate in physical activities, not all meet the recommended daily duration of exercise. Schools play a vital role in promoting physical activity by providing opportunities, encouragement, and facilities that support student engagement.

### **Recommendations**

Based on the findings and conclusion drawn from this study, the following recommendations are made:

i. **Strengthen Health Education Curriculum:**

The Ministry of Education and school authorities should ensure that health education continues to receive adequate instructional time. The curriculum should be regularly reviewed to include modern health issues such as lifestyle diseases, mental health, safety education, and the long-term benefits of regular physical activity.

ii. **Improve Classroom Delivery of Health Education:**

Teachers should adopt more practical and interactive teaching strategies such as demonstrations, group discussions, role play, and activity-based lessons. This will help students better understand and apply health knowledge in their daily lives.

iii. Provide and Maintain Adequate Sports Facilities:

Government and school management should improve the availability and condition of sports facilities such as playgrounds, fields, courts, and sports equipment. Functional facilities encourage participation and support regular physical activity among students.

iv. Increase Opportunities for Regular Physical Activity:

Schools should organize structured programmes such as morning drills, fitness clubs, inter-school competitions, aerobics sessions, and weekly sports activities. These initiatives will motivate students to be physically active consistently.

v. Encourage Parental and Community Support:

Parents should support their children's participation in physical activity by encouraging exercise at home, reducing excessive screen time, and providing basic sportswear. Community leaders can also promote safe spaces for exercise within the neighbourhood.

vi. Organize Awareness Campaigns:

Awareness programmes should be conducted within schools and communities to educate adolescents on the importance of daily physical activity. Posters, seminars, health talks and peer training can be used to promote active living.

vii. Collaborate with Health Professionals and NGOs:

Schools should partner with health educators, nurses, fitness trainers and NGOs to provide expert guidance, practical demonstrations, and wellness programmes that reinforce health education concepts.

viii. Support Students with Low Activity Levels:

Teachers and guidance counsellors should identify students who rarely participate in physical activity and provide special encouragement, counselling and motivation to help them overcome barriers such as shyness, low confidence or fear of injury.

ix. Encourage Further Studies:

More research should be conducted to explore additional factors such as home environment, peer influence, socio-economic background, and school environment that may also influence adolescents' physical activity patterns.

## REFERENCES

- Ajibola, A. M., & Akintunde, P. G. (2021). Health education knowledge and physical activity behaviour among secondary school students in southwest Nigeria. *African Journal of Physical Activity & Health Sciences*, 27(2), 112–126.
- Akanni, O. A., & Odunuga, O. O. (2020). Predictors of physical activity among Nigerian adolescents: Implications for health education. *Journal of Public Health in Africa*, 11(1), 45–53.
- Aluko, O. O., & Adebayo, A. M. (2022). Health literacy and healthy lifestyle behaviours among secondary school students in Nigeria. *BMC Public Health*, 22, 1885.
- American College of Sports Medicine. (2020). *ACSM's guidelines for exercise testing and prescription* (11th ed.). Lippincott Williams & Wilkins.
- Asare, M. (2015). Physical activity and health among adolescents: A review. *Journal of Child & Adolescent Behavior*, 3(6), 1–6.
- Bandura, A. (2004). Health promotion by social cognitive means. *Health Education & Behavior*, 31(2), 143–164.
- Biddle, S. J., & Asare, M. (2011). Physical activity and mental health in children and adolescents: A review of reviews. *British Journal of Sports Medicine*, 45(11), 886–895.
- Centers for Disease Control and Prevention. (2020). *Youth physical activity guidelines*. CDC.
- De Leeuw, R., de Bruijn, G.-J., & de Weert, E. (2019). Understanding adolescents' physical activity: The role of health knowledge and motivation. *Health Education Research*, 34(3), 241–252.
- Eke, C. N., & Eke, A. O. (2021). Health education intervention and improvement in adolescent health behaviour in Nigerian secondary schools. *Nigerian School Health Journal*, 33(2), 85–94.
- Ewuosa, I. S., & Oseghale, E. (2023). Physical inactivity among adolescents in Edo State: A school-based study. *Nigerian Journal of Health Promotion*, 15(1), 55–67.
- Federal Ministry of Health Nigeria. (2022). *National adolescent health policy implementation report*. Abuja: FMOH.

- Hallal, P. C., et al. (2012). Global physical activity levels: Surveillance progress, pitfalls, and prospects. *The Lancet*, 380(9838), 247–257.
- Ighodaro, J. A., & Omorogbe, E. E. (2020). Knowledge of health education as a correlate of physical activity among adolescents in Edo State. *Journal of Educational Research and Development*, 14(2), 166–176.
- Janssen, I., & LeBlanc, A. G. (2010). Systematic review of physical activity and health in school-aged children and youth. *International Journal of Behavioral Nutrition & Physical Activity*, 7(1), 40.
- Mugwisi, T., & Chirimuuta, C. (2021). Health education knowledge and its influence on physical activity in African adolescents. *African Health Sciences*, 21(3), 1191–1200.
- Nwankwo, B. O., & Ekele, M. O. (2019). Health knowledge and exercise participation among Nigerian adolescents. *International Journal of Health Education*, 24(1), 29–40.
- Ogunjimi, L. O., & Fajobi, A. (2018). Health education and physical fitness awareness among Nigerian youth. *Nigerian Journal of Health & Physical Education*, 10(1), 44–53.
- Olayinka, A. I., & Adeyemo, R. (2021). Determinants of physical activity among senior secondary school students in Lagos State. *Journal of Physical Activity & Health Promotion*, 5(1), 72–81.
- Oloso, S. E., & Adekola, A. (2022). Health knowledge and lifestyle choices among teenagers in Nigerian secondary schools. *African Journal of Health Education*, 21(2), 100–114.
- Onyeneho, N. G., & Igwe, I. (2020). Barriers to physical activity among Nigerian adolescents. *BMC Public Health*, 20, 1095.
- Participation, S., & Health, A. (2019). The role of schools in promoting adolescent physical activity. *School Health Journal*, 44(4), 250–260.
- Powell, K. E., et al. (2011). Physical activity and health: An epidemiologic review. *Medicine & Science in Sports & Exercise*, 43(2), 250–265.
- Salami, A. M. (2021). Influence of health instruction on fitness behavior among Nigerian students. *Nigerian Educational Research Journal*, 19(3), 133–146.

- Sallis, J. F., & Owen, N. (2015). *Ecological models of health behavior*. In K. Glanz et al. (Eds.), *Health behavior and health education* (pp. 43–64). Jossey-Bass.
- Smith, J., & Bocarro, J. (2019). Adolescent health education and physical activity engagement: A systematic review. *Health Promotion International, 34*(5), 1230–1242.
- Tremblay, M. S., et al. (2016). Global matrix on physical activity for children and youth. *Journal of Physical Activity and Health, 13*(11), S149–S156.
- Udeh, C. O., & Ede, M. O. (2023). Knowledge of health risks and physical activity levels among secondary school adolescents in Nigeria. *Journal of Adolescent Health Research, 17*(2), 77–90.
- UNESCO. (2021). *Physical education and school health intervention guidelines*. UNESCO Publishing.
- World Health Organization. (2020). *Global guidelines on physical activity and sedentary behaviour*. WHO

**UNIVERSITY OF BENIN**  
**FACULTY OF EDUCATION**  
**DEPARTMENT OF HEALTH, SAFETY AND ENVIRONMENTAL EDUCATION**  
**QUESTIONNAIRE ON THE INFLUENCE OF KNOWLEDGE OF HEALTH**  
**EDUCATION ON PHYSICAL ACTIVITY LEVELS AMONG ADOLESCENTS IN**  
**SECONDARY SCHOOLS IN EGOR LOCAL GOVERNMENT AREA**

**Dear Respondent,**

I, **Agbontaen Osagumwenro**, a student of the Department of Health, Safety and Environmental Education, University of Benin, am conducting a research study on the above topic: *“Investigating the Influence of Knowledge of Health Education on Physical Activity Levels among Adolescents in Secondary Schools in Egor Local Government Area of Edo State.”* The purpose of this questionnaire is to gather information on students’ knowledge of health education and how it influences their physical activity levels. Your honest responses will provide valuable insights that will help improve health education and physical activity promotion among students in Edo State. Please note that all information provided will be treated with strict confidentiality and used only for academic purposes.

Thank you for your cooperation.

**SECTION A: Demographic Information (Please tick ✓)**

1. **Age:** [ ] 10–13 [ ] 14–16 [ ] 17–19 [ ] 19 and above
2. **Gender:** [ ] Male [ ] Female
3. **Class Level:** [ ] JSS1 [ ] JSS2 [ ] JSS3 [ ] SS1 [ ] SS2 [ ] SS3
4. **School Type:** [ ] Public
5. **Residential Location:** [ ] Urban [ ] Rural

**SECTION B: Knowledge of Health Education (Multiple Choice – Choose one answer)**

1. Health education mainly focuses on:
  - a) Nutrition
  - b) Physical fitness
  - c) Healthy living
  - d) All of the above

2. Health education teaches students how to live:
  - a) Carelessly
  - b) Healthy lives
  - c) Social lives only
  - d) None of the above
3. Regular physical activity is considered:
  - a) Part of health education
  - b) Not part of health education
  - c) Only for athletes
  - d) Not necessary
4. Health education helps to:
  - a) Prevent diseases
  - b) Promote fitness
  - c) Improve wellbeing
  - d) All of the above
5. Health education teaches me to care for:
  - a) My body only
  - b) My mind only
  - c) My body and mind
  - d) None
6. My teachers often discuss physical fitness in class:
  - a) Always
  - b) Sometimes
  - c) Rarely
  - d) Never
7. Personal hygiene and nutrition topics are taught in school:
  - a) Yes
  - b) No
  - c) Not sure
  - d) Never noticed
8. Exercise helps to:
  - a) Build strong bones
  - b) Improve muscles
  - c) Reduce illness risk
  - d) All of the above
9. Health education encourages participation in physical activities:
  - a) Strongly agree
  - b) Agree
  - c) Disagree
  - d) Strongly disagree
10. A healthy lifestyle includes:

- a) Good diet only
- b) Exercise only
- c) Good diet and exercise
- d) None

**SECTION C: Physical Activity Patterns and Behaviours (*Tick Yes or No*)**

<b>S/N</b>	<b>Items</b>	<b>Yes</b>	<b>No</b>
11	I participate in exercise at least three times a week.		
12	I take part in sports like football, athletics or volleyball.		
13	I prefer walking/cycling for short distances.		
14	I take part in school physical education classes.		
15	I do physical activities at home or outside school.		
16	I spend at least 60 minutes daily on physical activity.		
17	My school provides enough time for sports activities.		
18	I enjoy being physically active with friends.		
19	I feel energetic after physical activity.		
20	Physical activity improves my concentration in school.		