NIU Journal of Social Sciences Copyright©2024
Nexus International University ISSN: *2413-9580*; 10(2): 135–158

The Assessment of Knowledge of Health Promotion Activities on Selected Secondary Schools Students

ELOHO LOICE, FASUA
Global Wealth University, Lome, Togo

Abstract. This study examines knowledge of health promotion activities on the students' well-being in selected schools, using structured questionnaire to gather data from selected secondary schools. In achieving this, it employed simple ordinary least square regression technique. The findings of this study revealed knowledge of health promotion activities exhibited a significant positive effect on the students' well-being in boys' schools in Owo, Ondo State; Knowledge of health promotion activities showed a significant positive effect on the students' well-being in girls' schools in Owo, Ondo State and knowledge of health promotion activities displayed a significant positive effect on the students' well-being in coeducational schools in Owo, Ondo State. The study concluded that knowledge of health promotion activities displayed a significant positive effect on the students' well-being of selected schools in Ondo state. The study recommends that schools should incorporate structured health promotion activities and programs into their regular curricula. This could include lessons on nutrition, physical fitness, mental health awareness, and hygiene practices.

Keywords: Health Promotion Activities; Physical Well-being; Mental Well-being

1. Background to the study

Health knowledge is a fundamental and enduring concept that plays a crucial role in promoting and maintaining well-being. It encompasses the acquisition, comprehension, and practical application of health information to support a healthy lifestyle. Health knowledge is indispensable across the entire spectrum of healthcare, spanning from proactive wellness and health maintenance to the realms of disease prevention, early detection, and diagnosis, informed decision-making and effective self-care. At its core, health knowledge involves the effective communication and interpretation of health-related information. It empowers individuals to not only comprehend health messages but also to apply this knowledge in real-life situations, making informed choices about their health. This holistic understanding of health knowledge is essential for individuals to navigate the complexities of healthcare, engage in preventive practices, and actively participate in their own well-being (Hamilton-Ekeke et al., 2020).

In the context of sustainable development, education emerges as a pivotal force that enhances skills, values, and attitudes, enabling individuals to lead healthy and fulfilling lives (WHO, 2021). The intrinsic link between health and education becomes apparent in the impact poor health can have on school attendance and academic performance (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2021). Schools serve as crucial environments where students not only acquire knowledge across various educational domains but also cultivate habits for healthy living throughout their lifetimes. Beyond academic pursuits, schools are increasingly recognized as essential settings for promoting long-term educational attainment and supporting the health and well-being of students, their parents or caregivers, and the local community. This interconnected perspective underscores the integral role of education in fostering both individual and community health (WHO, 2021). Schools play a crucial role in disseminating health messages through their curricula, as highlighted by Oparaeke and Bello in 2012. Beyond academic instruction, schools serve as vital environments for promoting health knowledge, particularly among adolescents. Given that many risk behaviours are established during this stage of life,

schools are strategically positioned to foster a robust and sensible level of health literacy among students, especially those in secondary schools, as emphasized by Hamilton-Ekeke et al. in 2020.

1.1 Statement of the Research Problem

A comprehensive assessment and description of the global landscape of factors influencing school health conditions, including the environment, services, and education, is relatively limited. Descriptive literature on school health programs is largely inadequate, primarily focusing on interventions directed at individual problems. The available literature also exhibits significant geographical disparities, with more information concentrated on Europe, the USA, and Canada compared to other regions and countries worldwide. However, existing literature in Nigeria highlights a prevalent challenge in Nigeria, where a substantial portion of the population exhibits low literacy skills, leading to difficulties in comprehending medical advice (Hamilton-Ekeke et al., 2020). Recognizing the urgency of addressing this issue, Flecha et al. (2011) emphasize the importance of implementing health promotion and intervention strategies within secondary schools, utilizing methods that focus on enhancing health knowledge. Despite efforts to integrate health literacy programs into schools, studies indicate that students often rely more on external sources, such as the media, friends, parents, coaches, and doctors, rather than the health information acquired within the educational system (Hamilton-Ekeke et al., 2020). Notably, formal health literacy initiatives in schools may falter due to a lack of consideration for the needs of teachers and family members.

The global concern arises from the observed disparity between preferred learning methods and the current educational approaches for health knowledge. While efforts have been undertaken to positively impact adolescents through health knowledge promotion in secondary schools, there remains a substantial need to explore and comprehend how to effectively support health knowledge across various developmental stages, including middle childhood and pre-adolescence (Owoyemi, 2018). Closing this gap is imperative for establishing a more comprehensive and impactful framework to promote health knowledge and cultivate positive attitudes toward health among the youth. Notably, the researcher acknowledges a limited focus on recent research and literature dedicated to assessing the knowledge of health promotion activities among selected secondary school students in Ondo State, Nigeria. This knowledge gap prompts the current study, motivated by the necessity to investigate the assessment of knowledge regarding health promotion activities among students in the Owo local government area. The aim is to contribute valuable insights that can inform more targeted and effective health promotion initiatives within the secondary school context.

1.2 Aim and Objectives

The aim of this study is to investigate the assessment of knowledge of health promotion activities on selected secondary schools' students in Owo, Owo Local Government Area of Ondo State, Nigeria. This study's specific objectives include:

- To evaluate the effect of knowledge of health promotion activities on the students' well-being in boys' school in Owo, Ondo State.
- To ascertain the impact of knowledge of health promotion activities on the students' well-being in girls' school in Owo, Ondo State
- To investigate the influence of knowledge of health promotion activities on the students' well-being in coeducational school in Owo, Ondo State.

1.3 Research Questions

The following research questions are formulated to guide the study:

- What is the effect of knowledge of health promotion activities on the students' well-being in boys' school in Owo, Ondo State?
- What is the impact of knowledge of health promotion activities on the students' well-being in girls' school in Owo, Ondo State?
- What is the effect of knowledge of health promotion activities on the students' well-being in coeducational school in Owo, Ondo State?

1.4 Research Hypotheses

The following hypotheses were tested in the study:

Ho_1: There is no significant effect of knowledge of health promotion activities on the students' well-being in boys' schools in Owo, Ondo State.
Ho_2: There is no significant effect of knowledge of health promotion activities on the students' well-being in girls' schools in Owo, Ondo State.
H_{O3}: There exists no significant effect of knowledge of health promotion activities on the students' well-being in co-educational schools in Owo, Ondo State.

2. Literature Review

This section delves into pertinent literature, encompassing conceptual and theoretical reviews, along with an examination of empirical studies relevant to the subject under investigation. Providing the backdrop for the study, the literature review establishes the context within the existing body of knowledge. It also elucidates to the researchers the findings of prior studies closely connected to the ongoing research. This comprehensive review addresses key issues and identifies research gaps within the existing literature.

2.1 Conceptual Review

In this section, we delve into the interconnected variables and concepts, supported by relevant theories pertinent to this study. Comprehensive explanations of the definitions and components of each variable are provided. The discussion focuses on elucidating the understanding of health promotion activities and the well-being of secondary students. Moreover, it explores the relationships between the knowledge of health promotion activities and the well-being of secondary students.

2.1.1 Health

Health, as defined by the World Health Organization (WHO), is a state of complete physical, mental, and social well-being, transcending the mere absence of disease (Leonardi, 2018). This holistic concept implies that various factors, including genetics, lifestyle choices, environmental conditions, access to healthcare, and social and economic factors, collectively influence an individual's health (WHO, 2021).

In 1948, the WHO comprehensively defined health as a state encompassing physical, mental, intellectual, emotional, and social well-being. It emphasizes adaptability to life's challenges, stress management, skill acquisition, and positive relationships. The influence of biological, socio-cultural, economic, and environmental forces on health is widely acknowledged (National Council of Educational Research, 2023). Physical health denotes the proper functioning of the body, the absence of diseases or disorders, and the ability to engage in daily activities without significant limitations. Mental health involves emotional and psychological well-being, encompassing stress management, resilience, and a positive mindset. Social health considers the quality of relationships, social support, and meaningful interactions within one's community (Germanov et al., 2018; Pashchenko & Krasnikova, 2017).

Physical health is foundational for current well-being and future life outcomes, encompassing physical activity, a balanced diet, and a healthy weight range, particularly crucial during adolescence when health-related attitudes and behaviors form (Government of Western Australia, 2023). The scientific interpretation of physical health describes it as a dynamic state involving the preservation and development of biological, physiological, and mental functions, optimal work capacity, and social activity. It is a dynamic balance with the external environment and a crucial aspect of individual survival and reproduction (Koipysheva et al., 2018).

Various definitions highlight physical health as the result of a balance between internal and external relations, a normal function at all levels, and the body’s ability to adjust to changing conditions. Lebedinsky et al. (2017) propose a new definition, describing physical health as the genetically determined motor capacity of individual undergoing changes in morphofunctional adaptation throughout life. Promoting and maintaining health involves adopting healthy behaviors such as regular exercise, balanced nutrition, adequate sleep, stress management, and avoiding harmful habits. Regular health check-ups are crucial for early detection and management of potential health issues. Importantly, health is dynamic, individualized, and requires ongoing attention and effort (WHO, 2021).

2.1.1.2 Health Knowledge

Health knowledge encompasses understanding and awareness of information related to health and well-being, covering diverse topics such as anatomy, physiology, nutrition, exercise, mental health, preventive measures, medical conditions, and treatment options. It is crucial for making informed decisions about one's health and lifestyle (Rinco´n Uribe et al., 2021). According to Trevethan (2017), health knowledge is a theoretical construct that includes detailed information about various aspects of health, from etiology and prevalence to risk factors, prevention, transmission, symptomatology, disease treatment, health services, and patient rights. Acquiring health knowledge is possible through formal education, personal experiences, reading, attending health-related events, workshops, seminars, and consulting healthcare professionals. This knowledge empowers individuals to actively manage their health, prevent illnesses, and make lifestyle choices contributing to overall well-being.

Pandemic knowledge, focusing on transmission and prevention, is highlighted by Rinco´n Uribe et al. (2021) as a crucial factor influencing the adoption of preventive behaviors during health emergencies. While evidence syntheses reveal the importance of knowledge about health components in shaping preventive practices, there is ongoing exploration to identify other categories within the broad conceptual structure of health knowledge relevant to public behavior during such emergencies. Promoting health knowledge is deemed a fundamental strategy during public health crises, enabling communities to comprehend risk factors and respond swiftly to contain infection outbreaks (Costa et al., 2018).

Health literacy, as defined by Adekoya-Cole et al. (2015), is the capacity of individuals to obtain, process, and understand basic health information and services needed for informed decision-making about their health. Influencing factors in Nigeria include culture, belief systems, communication barriers, lack of education, low educational levels, and socioeconomic status. Low health literacy is linked to poorer health outcomes, inadequate understanding of preventive services, and increased hospital visits. To enhance health literacy and improve health indices, identifying and modifying factors that influence health literacy is crucial.

Olabanji (2023) emphasizes the vital role of health knowledge in enabling individuals to navigate and make informed decisions within the healthcare system. It involves understanding, interpreting, and acting upon medical information, as well as sourcing and analyzing relevant health information for preventive measures and self-care. In Nigeria, challenges in achieving universal health coverage and promoting health are evident due to low literacy rates, particularly in rural areas, and the lack of functional health literacy competencies among adults. Comprehensive solutions require collaborative efforts involving the government, healthcare professionals, non-governmental organizations, media, and the community.

Nigeria has taken steps towards achieving universal health coverage, evidenced by initiatives such as the Basic Healthcare Provision Fund in the 2014 National Health Act (signed in 2018) and the National Health Insurance Authority bill in 2022 (Olabanji, 2023). However, the country faces challenges in health literacy, with an adult literacy rate of 62%, 28% for those over 65, 59.5% for rural males, and 35.4% for rural females (FAWCO, 2021), emphasizing the need for improved health education and literacy. In a survey of rural women in southern Nigeria, functional literacy and health literacy were found to be inadequate, revealing shortcomings in functional, communicative, and critical health literacy competencies. Conversely, a study in metropolitan Lagos found that 74.8% of the surveyed population demonstrated health literacy (Ekoko, 2020). Factors influencing health literacy include internet use, knowledge of common antibiotics, English language proficiency, and broadcast media use (Kuyinu et al., 2020).

Stakeholder support and adoption are high in Nigeria, with a fairly strong regulatory environment, although scores are lower for health policies related to self-care and patient empowerment (Olabanji, 2023). The country's informal sector often relies on traditional and alternative medicinal practices, potentially driven by high poverty rates (40%) and an overburdened healthcare system (NBS, 2019). The decay of the primary healthcare system further contributes to long queues and unsatisfactory healthcare, prompting individuals to seek alternative means of care (Koce et al., 2019). Challenges include the proliferation of unregulated 'cures,' fake medicines, high costs, and ineffective supply chains (Garuba et al., 2009).

In conclusion, health knowledge is a valuable resource that empowers individuals to make informed decisions, actively participate in healthcare, and adopt behaviors promoting a healthier life. It is a lifelong learning process encompassing various components, including understanding the body, nutrition, exercise, mental health awareness, preventive measures, healthcare systems, medical conditions and treatments, health promotion and disease prevention, and holistic health (Matingwina, 2017; Colizzi et al., 2020). This comprehensive understanding is essential for fostering a healthier and more fulfilling life.

2.1.1.2 Health Promotion Activities

Health promotion activities encompass a diverse range of efforts and strategies designed to enhance the well-being and health of individuals and communities. These initiatives are geared towards preventing illness, promoting healthy behaviors, and creating supportive environments that contribute to overall health (Owoyemi, 2018). Within this broad framework, various activities and interventions contribute to the multifaceted field of health promotion. Common health promotion activities include health education, preventive services, community outreach and engagement, physical activity programs, nutrition programs, stress management, mental health promotion, tobacco and substance abuse prevention, workplace wellness programs, public awareness campaigns, school health programs, policy advocacy,

support for healthy aging, environmental health initiatives, and family and community support (Hamilton-Ekeke et al., 2020).

Health education involves disseminating information about healthy lifestyles, nutrition, physical activity, and the risks associated with certain behaviors, such as smoking and excessive alcohol consumption. Preventive services focus on providing vaccinations, screenings, and health check-ups to detect and address health issues early on. Community outreach and engagement entail understanding the needs and concerns of communities, involving them in the planning and implementation of health promotion programs. Physical activity programs encourage regular exercise through fitness classes, sports activities, and initiatives promoting walking or cycling, emphasizing the benefits of an active lifestyle. Nutrition programs provide information on healthy eating habits, conduct nutrition workshops, and promote access to nutritious foods. Stress management and mental health promotion offer resources and programs to manage stress, promote mental well-being, and reduce the stigma associated with mental health issues (Raghupathi & Raghupathi, 2022).

Tobacco and substance abuse prevention involve anti-smoking campaigns, resources for smoking cessation, and raising awareness about the risks of substance abuse. Workplace wellness programs implement health initiatives in the workplace, including ergonomic improvements, stress reduction programs, and fitness challenges. School health programs integrate health education into school curricula, promote physical activity, and ensure access to nutritious meals (Golechha, 2016). Public awareness campaigns utilize media, social networks, and communication channels to raise awareness about health issues and promote healthy behaviors. Policy advocacy involves championing policies that support health, such as smoke-free zones, healthy food initiatives, and urban planning that encourages physical activity. Support for healthy aging provides resources and support for older adults to maintain a healthy lifestyle, including regular health check-ups and social engagement. Environmental health initiatives promote a clean and safe environment, addressing pollution and other factors impacting health. Family and community support encourage strong social connections, family support, and community engagement as integral factors contributing to overall well-being (Hamilton-Ekeke & Moses, 2019).

2.1.1.3 Secondary Schools' Students Knowledge of Health Promotion Activities

Schools play a crucial role in disseminating health messages through curricula, making them essential environments for promoting health literacy among adolescents (Oparaeke & Bello, 2012). This significance stems from the fact that adolescence is a pivotal stage where many risk behaviors are established. Consequently, secondary schools are strategically positioned to cultivate a robust level of health literacy, defined in this research as the ability to utilize health information, especially knowledge acquired at the secondary school level, to make informed health decisions (Hamilton-Ekeke et al., 2020).

Within the realm of health promotion, attention is directed towards addressing the health education and promotion of children and young people. However, the knowledge of health promotion activities among secondary school students can vary, influenced by factors such as the education curriculum, the effectiveness of health education programs, and individual experiences. Efforts to enhance students' understanding of health promotion activities generally focus on integrating health education into the curriculum and fostering a holistic comprehension of well-being. The promotion of students' well-being is not only linked to reducing the prevalence of measurable unhealthy outcomes but also improving academic achievements. Notably, a significant portion of preventable diseases, such as heart diseases, strokes, type 2 diabetes, and certain cancers, can be addressed through health education, underscoring the importance of primary prevention and early health promotion (Pulimeno et al., 2020).

Secondary schools are instrumental in facilitating the development of health literacy among students, as this age group is exposed to various attitudes and habits while exploring new lifestyles and making new connections. Without proper guidance, students may adopt lifestyles that are detrimental to their health. Unhealthy habits reported in secondary schools, including low personal hygiene, drug abuse, alcohol consumption, and risky behaviors, may result from a lack of awareness of the potential consequences (Hamilton-Ekeke & Moses, 2019).

Health promotion activities in secondary schools, as outlined by the World Health Organization (WHO) in 1996, encompass a range of initiatives. These include providing a conducive physical environment for indoor and outdoor activities, organizing sports competitions, ensuring proper sanitation facilities to

reduce pollution, supplying portable water, inspecting school meals and environments, offering medical facilities such as first aid boxes and sick bays, employing trained medical personnel, forming health clubs, and conducting immunizations and screening tests for various health conditions (Samson-Akpan, 2011). Overall, these activities contribute to creating a healthy and supportive school environment that fosters the well-being of students.

2.1.2 Students' Well-Being

Students' well-being encompasses their overall health, happiness, and life satisfaction, spanning physical, mental, emotional, social, and academic dimensions. A positive and supportive environment is pivotal in fostering students' personal and academic flourishing (Kolbe, 2019). Positive psychology emphasizes optimal functioning across physical, social, mental, and emotional well-being, focusing on positive traits, constructive sensations, and the role of the environment and institutions in individual well-being growth (Wang et al., 2021). The multifaceted nature of learners' well-being includes the quality of school conditions and their emotional, subjective, and cognitive assessments of the school reality (Scrimin et al., 2016). Learners' well-being is an emotional state influenced by various factors inside and outside the classroom, with a positive impact on their learning cycle and outcomes (Zheng, 2022).

Educators play an indisputable role in influencing learners' well-being through various actions such as mindful conversations, thoughtful feedback, attentive listening, and revisiting classroom supervision for positive interactions (Mercer & Dörnyei, 2020). Creating a safe and compassionate classroom environment where learners feel heard is crucial, recognizing that educators' well-being has a ripple effect on their students. Educators should also prioritize their own well-being to effectively carry out their roles. To engage learners effectively, educators can adopt a dominant-cooperative learning model that allows autonomy while ensuring discipline when needed. Consistent participation in training and professional development is essential for managing and enhancing learners' well-being in the educational setting.

Moreover, educators can empower learners by addressing anxiety, managing conflict, fostering positive social interactions, and building strong relationships. Open communication with educators enables learners to express emotions and concerns, receive appropriate guidance, and foster successful interactions within and outside the classroom (Opre et al., 2018). Emotional stability and satisfying emotional support from educators contribute to effective learning (Zheng, 2022). Promoting students' well-being necessitates a comprehensive and collaborative approach involving educators, parents, and the broader community. By addressing various dimensions of well-being, schools not only contribute to academic success but also foster the development of resilient, well-rounded individuals prepared to navigate life's challenges.

2.1.3 Effects of Knowledge of Health Promotion Activities on Students' Well-being

The relationship between health knowledge, health promotion activities, and students' well-being is intricate and impactful. When students possess sufficient health knowledge and actively participate in health promotion activities, their overall well-being are positively affected (Sibeudu, 2022; Kolbe, 2019).

Pulimeno et al. (2018) emphasize the broader scope of promoting children's well-being beyond just healthy nutrition. They advocate for innovative, active approaches in schools that engage students in practical actions related to various aspects of a healthy lifestyle, such as balanced nutrition, physical exercise, and avoiding harmful substances. The World Health Organization (WHO) supports this idea, recommending the incorporation of health literacy into the core curriculum and fostering a health-promoting school environment (Kilgour et al., 2015). A comprehensive commitment to students' well-being by schools is expected to positively influence both children's behaviors and their families (Kolbe, 2019). Pulimeno et al. (2020) further explored the school as an ideal setting for promoting health and well-being among young people. They found that effective school-based preventive approaches should motivate students to internalize health knowledge personally and develop critical thinking about the consequences of risky behaviors. Educators are encouraged to receive adequate training on health topics and innovative approaches to effectively engage students in adopting healthy lifestyles (Sibeudu, 2022).

In a socio-cognitive perspective, Bandura (2004) suggests that schools should educate young people to take responsibility for their health from early childhood. This approach fosters the development of children's self-efficacy, enabling them to maintain healthy lifestyles throughout life and reap the benefits of acquired behavioral changes. Schools and families are urged to prioritize students' positive dimensions, such as self-esteem, happiness, and resilience, in a collaborative effort (Masten, 2001). Ahlstrand et al.

(2022) delved into health-promoting factors among students in higher education, specifically in healthcare and social work fields. Their study highlighted the importance of high-intensity exercise, no sleeping problems, and non-smoking for general health and health-promoting resources. This knowledge is crucial for planning universities with a salutogenic approach.

Health knowledge plays a pivotal role in promoting an understanding of the significance of regular exercise, balanced nutrition, and other healthy behaviors. Participation in health promotion activities, including physical education programs and sports, contributes to improved physical fitness, reduced risk of chronic diseases, and overall better physical health (WHO, 2022). Additionally, such activities often address stress management, emotional resilience, and mental health awareness, leading to reduced stress levels and improved emotional well-being (Singh et al., 2022). Empowered with health knowledge, students can make informed decisions about their lifestyles, including choices related to nutrition and substance use. Engaging in health promotion activities reinforces positive lifestyle choices, contributing to long-term benefits for overall well-being (Pulimeno et al., 2020). Preventive measures, such as vaccinations and health screenings, are better understood through health education, aiding in early detection and management of health issues (Kisling & Das, 2023).

Furthermore, health education often encompasses interpersonal skills, communication, and building positive relationships. Students knowledgeable in these areas and actively participating in related activities experience enhanced social well-being and a sense of belonging within the school community (Zheng, 2022). The cultivation of healthy habits early in life is a significant outcome of health knowledge and participation in health promotion activities. These habits, established during formative years, are more likely to persist into adulthood, promoting lifelong well-being (Rippe, 2018). Empowering students to take an active role in managing their health through education and promotion activities positively influences their overall well-being, fostering a proactive and positive approach to health (Pulimeno et al., 2020).

Moreover, health knowledge and promotion activities contribute to addressing health disparities, ensuring all students have access to essential health information and resources, thereby supporting the well-being of diverse student populations (Pulimeno et al., 2020). Importantly, the cumulative effects of health knowledge and promotion activities depend on the quality of educational programs, community support, and individual factors. Therefore, a comprehensive and holistic approach to health education and promotion is crucial for maximizing the positive impact on students' well-being (Sibeudu, 2022).

2.2 Theoretical Review

This study is grounded in several theoretical frameworks that collectively provide a comprehensive lens for understanding and addressing health promotion in secondary schools. The chosen theoretical frameworks are as follows: Community Mobilization Theory, Theory of Urbanization, Health Promotion Analysis Model, Modified Pender's-Ecological Model, and Health Belief Model.

2.2.1 Community Mobilization Theory

Developed by Paolo Freire in 1970 (Freire, 1977), Community Mobilization Theory serves as a foundational framework for encouraging active community participation in projects. Emphasizing empowerment, community competence, participation, and the selection of relevant issues with critical consciousness, this theory, as highlighted by Murphy (2005), encourages the development of communities capable of evaluating and resolving health problems. In the context of this study, the application of this theory involves planning and implementing health promotion programs with students. This approach enhances project ownership and self-reliance, addressing challenges such as building group consensus around pressing issues like sanitation in dormitories. Students can take action through initiatives like petitioning authorities for improved facilities or mobilizing local resources for self-help projects.

2.2.2 Theory of Urbanization

First described by Mabogunje in 1968 (Sule, 2010), the Theory of Urbanization provides insights into the concentration of people in specific areas. According to this theory, the concentration of individuals is driven by the generation of surplus, essential for the livelihood of the community. This surplus includes food, medical facilities, and the specialization of functions. Sule (2010) further outlines centripetal and centrifugal forces at play. Centripetal forces attract individuals to urban centers due to factors such as employment opportunities, higher pay, better services, and conducive environment. On the other hand, centrifugal forces act as push factors, compelling individuals to seek better conditions, salaries, job opportunities, security, and education elsewhere. This model is particularly relevant to the study as

centrifugal forces contribute to subject specialists leaving rural areas for urban centers, where social support services are more readily available. Conversely, centripetal forces concentrate subject specialists in urban areas, hindering their transfer to rural regions. Consequently, the expectation is that health promotion activities will be more prevalent in urban secondary schools compared to their rural counterparts.

2.2.3 Health Promotion Analysis Model (HELPSAM)

The Health Promotion Analysis Model (HELPSAM), developed by the World Health Organization during the Sundsvall Conference in 1991 (WHO, 2010), constitutes a crucial framework for understanding and implementing health promotion strategies. Comprising seven key strategies for creating supportive environments for health, HELPSAM includes policy development, laws and regulations, reorienting organizations, building alliances and creating awareness, and enabling and mobilizing/empowering (Taylor et al., 2000).

Policy development, a cornerstone of HELPSAM, involves a range of complementary measures across different societal levels to support health promotion activities. In the context of this study, the analysis of health promotion activities is based on the examination of written or unwritten policies in both urban and rural secondary schools. Policies play a pivotal role in influencing health promotion activities, and Taylor et al. (2000) emphasize their significance as one of the most important strategies for creating a supportive environment for health. The Health Promotion Policy (2006) in Nigeria provides guidelines for positive outcomes, such as empowerment for health action and increased community involvement. The absence of health promotion policies at various levels hampers coordinated health promotion activities. Thus, schools should formulate and implement health promotion policies covering various aspects such as nutrition, exercise, prevention of HIV/AIDS, elimination of bullying and violence, and the enhancement of the physical and psychosocial environment.

Public health laws and norms, applicable to schools as social institutions, guide actions in cases of communicable disease outbreaks, food safety, environmental health, and school registration (Lucas & Gilles, 2003). The study will analyze how schools apply these laws to protect students against environmental hazards, HIV/AIDS transmission, and inadequate provision of safe food. Non-compliance with public health laws can endanger the health of students and staff, emphasizing the importance of adherence to these regulations.

Reorienting organizations toward sustainable development and supporting public health is essential. Health-promoting schools serve as examples of this reorientation, necessitating awareness and the adoption of health promotion strategies to improve the health of staff and students. The study will analyze strategies for preventing HIV/AIDS, addressing environmental hazards, promoting nutrition, encouraging exercise, and providing further education on health promotion.

Advocacy for improved health involves actions at different societal levels based on health needs. Schools need to engage in lobbying through mass media, pressure groups, and other channels to influence policy makers to adopt healthy public policies and enforce laws that promote health among students and staff. Building alliances and creating awareness require collaboration with non-governmental organizations and Parent-Teacher Associations to address issues such as drug misuse, bullying, violence, and improved access to nutrition.

Enabling organizations or individuals involves providing basic prerequisites to support health-conducive behavior and product development. This includes offering facilities for exercise, sanitation, safety measures, and training opportunities for staff and students to stay updated on health promotion. Lack of an enabling environment can result in a scarcity of health-promoting activities, leading to increased incidents of accidents, HIV/AIDS, and obesity. Mobilizing and empowering focus on active involvement and participation of those affected by public health problems. Schools are encouraged to involve students and staff in planning and implementing health promotion programs for success, aligning with the principles highlighted in the Alma Ata Declaration (Lucas & Gilles, 2003).

2.2.4 Modified Pender's–Ecological Model (PEM)

The Modified Pender's Ecological Model (PEM), developed by Samson-Akpan in 2002, serves as a comprehensive framework that synthesizes categories of factors from Pender's health promotion and ecological model. Pender's model encompasses intra-personal, inter-personal, institutional, community, and public policy factors (Samson-Akpan, 2013), while also introducing cognitive perceptual and modifying factors. The Modified Pender's Ecological Model integrates these components into four distinct parts:

Cognitive Perceptual factors, Modifying factors, Participating in health-promoting behavior, and Ecological factors.

Cognitive perceptual factors within the Modified PEM include key elements such as the perception of the importance of health, perceived control of health, perceived health efficacy, definition of health, perceived health status, perceived benefits of health-promoting behavior, and perceived barriers to health-promoting behavior. These factors, shaped by modifying factors, collectively influence the likelihood of participating in health-promoting behavior.

Modifying factors, as identified by the Modified PEM, encompass demographic characteristics, biological characteristics, interpersonal influence, situational factors, and behavioral factors. When cues to action or triggers are present, these modifying factors interact with cognitive perceptual factors, further influencing participation in health-promoting behavior. The likelihood of participating in health-promoting behavior is contingent not only on cognitive perceptual and modifying factors but also on ecological factors. This aspect, integrated with Pender's health promotion model, includes intra-personal factors, inter-personal factors, community factors, and public policy. Samson-Akpan (2011) emphasized that the integration of these two influential models sheds light on individual and social factors influencing health-promoting behavior. The PEM, applicable to individuals, groups, communities, or countries, reconciles conflicting views on health promotion—namely, individual lifestyle and the broader sociopolitical influences affecting health and diseases.

In the current study, the Modified PEM is employed to identify modifying factors at the individual level, encompassing demographic characteristics (age and sex), interpersonal influences, situational factors, and behavioral factors. This approach is grounded in the belief that these factors impact cognitive perceptual elements, subsequently enhancing the likelihood of participation in health-promoting activities. Beyond individual factors, the analysis of health promotion activities is also based on ecological factors at the school level, including intra-personal, inter-personal, community (school), and public policy (health promotion policy) factors. This comprehensive approach allows for a factor analysis of health promotion activities within schools, treating them as integral components of a broader community, and facilitates a comparative assessment between urban and rural secondary schools.

2.2.5 Health Belief Model

The Health Belief Model, introduced by psychologist Irving Rosenstock in the 1950s, is a widely recognized conceptual framework in the field of health behavior (Murphy, 2005). Developed to elucidate health-related behaviors, this model focuses on an individual's perception of the threat of a health problem and their appraisal of recommended behaviors for preventing or managing that problem. Rosenstock identified several key concepts influencing the likelihood of seeking preventive health care, including perceived susceptibility, perceived benefit of action, perceived barriers to action, cues to action, and self-efficacy (Murphy, 2005). These elements collectively contribute to an individual's readiness to act or participate in health-promoting activities.

The Health Belief Model holds significance for this study as it underscores that the right combination of perceptions determines an individual's readiness to engage in health-promoting activities. In the context of secondary schools, health promotion messages conveyed through mass media, peer education, films, and field trips serve as cues to action, translating individual readiness into overt behavior. In secondary schools, health promotion messages play a crucial role in overcoming detrimental health behaviors such as unhealthy eating habits, smoking, and drug misuse. These negative health behaviors not only pose threats to health but also have the potential to impede educational achievements. For example, an adolescent smoker, who may not believe in their ability to quit independently, can be provided with specific information on proven cessation methods and encouraged to participate in a supportive smoking cessation program. This proactive intervention aims to prevent the development of conditions like coronary heart disease and cancer, which could otherwise disrupt educational attainment.

In summary, the Health Belief Model serves as a valuable framework for understanding and addressing health-related behaviors in secondary schools. By recognizing the influence of perceptions on individual readiness to engage in health-promoting activities, the model highlights the importance of targeted health promotion messages to facilitate positive behavioral changes among students. This approach is essential for mitigating the impact of negative health behaviors on both health outcomes and academic success.

2.3 Empirical Literature Review

Bosede et al. (2023) conducted a descriptive cross-sectional study to evaluate the quality of implementation of the school health programme (SHP) in Ondo State, Southwest Nigeria, from the perspective of the National School Health Policy (NSHPo) of 2006. Utilizing an observational checklist, the study found that none of the schools in the study area adhered to or employed the NSHPo for their SHP. While 36% of the schools demonstrated good quality of implementation (QoI) of the SHP, no significant differences were observed between private and public schools or between schools in rural and urban areas ($p>0.05$). The study recommended increased awareness and utilization of the NSHPo by relevant stakeholders in the health and education sectors to enhance the SHP's implementation.

Adebayo et al. (2023) explored the history, existing policy, and implementation status of school health in Nigeria, identifying gaps and proposing recommendations for review. The study involved a review of school health documents and analysis of findings from a stakeholder's workshop. It revealed that school health is crucial for the holistic well-being of the school population, with dual roles in promoting health and adapting schools as settings for health-promoting activities. Despite being categorized into pre-policy, policy, and post-policy phases, the Nigerian SHP has been poorly implemented over the years, displaying multiple policy gaps. The study concluded by emphasizing the urgent need for a review of the school health policy in Nigeria to enhance community awareness and facilitate effective implementation.

Faleke et al. (2022) investigated the perceived effects of school health programs among secondary school students in Ogun East senatorial district. Using a simple random sample technique and a descriptive survey research design, the study collected data from 300 secondary school students in Ogun State. The findings, analyzed through chi-square inferential statistics, revealed that improving the school environment, nutrition and food programs, counseling and psychological services, health policies, and health services were significantly perceived as effects of school health programs among secondary school students in Ogun State.

Hamilton-Ekeke et al. (2020) explored health literacy in the promotion of wellness among secondary school students in Bayelsa State, Nigeria. The study, guided by three research questions and one hypothesis, employed a survey design with 260 senior secondary three (SS3) students selected through a simple random sampling technique. The results indicated fair knowledge of drug abuse among participants, but the hypothesis testing revealed no significant relationship between knowledge and application. The study concluded by emphasizing the importance of applying the knowledge acquired about drug abuse to practice, particularly during adolescence, as it represents a cost-effective approach to enhancing healthy child development and addressing health early in life.

Ilesanmi et al. (2018) conducted a quasi-experimental design study to assess the knowledge and perceptions of asthma among secondary school students in Ile-Ife, Nigeria, and to evaluate the impact of an asthma health education program. Using a pre-tested 71-item questionnaire, data on knowledge and perceptions were collected before and after the intervention. The results indicated poor initial perceptions and knowledge of asthma among the students. However, following the health education program, there was a significant improvement in both knowledge and perceptions of asthma among the intervention group. Furthermore, the study demonstrated a sustained positive effect over time, with significant changes observed at 1 week, 3 weeks, and 6 weeks post-intervention. The conclusion drawn was that health educational interventions have a substantial positive impact on asthma knowledge and perceptions among secondary school students in Ile-Ife, Osun State, South-west Nigeria.

Ngwu and Ekpiken-Ekanem (2017) employed a survey research design to investigate the impact of health education on health knowledge among secondary school students in Cross River State, Nigeria. A structured questionnaire was used to collect data from 500 students, and the Pearson Product Moment Correlation Coefficient (r) was employed for data analysis. The findings revealed a significant relationship between health knowledge and health education among senior secondary school students in Cross River State. This suggested that the introduction and implementation of health education programs in secondary schools contributed significantly to increased knowledge about health-related issues among students, fostering proper healthy living essential for societal development.

Storey et al. (2016) explored the essential conditions for implementing comprehensive school health to bring about changes in school culture and improvements in students' health behaviors. Utilizing statistical tools, the study found a relationship between students' health and well-being, emphasizing that students' health improves overall well-being. The study advocated for a holistic approach involving schools, parents, and the community, emphasizing the

importance of partnerships, advisory councils, and collaboration with stakeholders to enhance support for school health programs. By actively involving parents and utilizing community services and resources, schools can better meet the health needs of students.

3. Research Methodology

3.1 Research Design

This study will be *ex-post facto* research design, incorporating primary survey strategies within three selected secondary schools at Owo local government in Ondo State. The survey will target secondary schools, government teachers, PTA teachers, and youth corp members in each of chosen schools, which will include Imade College Owo, St. Louis Grammar School Owo, and Owo High School - all situated in Ondo State. The choice of this research design is deemed appropriate because it enables the examination of the knowledge of health promotion activities on selected secondary schools' students in Owo, Ondo State, Nigeria. It will facilitate the collection of pertinent data and will offer insights into the specific effects of knowledge of health promotion activities on selected secondary schools' students. The design also will allow for the use of structured questionnaires and observation as data collection methods.

3.2 Source of Data

Data will be collected from a primary source by distributing copies of questionnaire to the designated respondents. The copies of structured questionnaire will be given to the targeted secondary schools government teachers, PTA teachers, and corp. members in each of chosen schools located in Owo, Ondo State, Nigeria. The choice of selected school's premises on proximity, convenience, ease possible accessibility to data to address various hypotheses being that Imade College Owo represents boy schools; St. Louis Grammar School stands in for girl schools while Owo High School is a proxy for co-educational secondary schools.

3.3 Population of the Study

The study's population consists of 228 from suggested state government-owned secondary schools at Owo city, in Ondo State, Nigeria. This information will be sourced from the personnel register of each secondary school at as year 2023. The state government-owned secondary schools at Owo city, in Ondo State include Imade College Owo, St. Louis Grammar School Owo, and Owo High School all situated in Ondo State. These schools suggested are based on their proximity to the researcher, the availability of data, and convenience as at above.

Table 3.1 Summary of Population of the Study

S/No	Institution	Categories	Staff No.
1	Imade College Owo	Govt. Teachers	45
2	Imade College Owo	PTA Teachers	26
3	Imade College Owo	Corp Members	19
4	St. Louis Grammar School Owo	Govt. Teachers	43
5	St. Louis Grammar School Owo	PTA Teachers	25
6	St. Louis Grammar School Owo	Corp Member	1
7	Owo High School	Govt. Teachers	45
8	Owo High School	PTA Teachers	6
9	Owo High School	Corp Members	18
	Total		228

Source: *Researchers' compilation, (2023)*

3.4 Sample Size and Sampling Techniques

The sample for this study will consist of three suggested state government-owned secondary schools at Owo city, in Ondo State namely Imade College Owo, St. Louis Grammar School Owo, and Owo High School all situated in Ondo State as listed in the table above. Respondents from these institutions will be selected using the simple random sampling technique. The sample size for this study is 144 respondents, determined using Taro Yamane's formula.

Figure 1: Taro Yamane (1973) formula:

$$n = \frac{N}{1 + N(e)^2}$$

Source: Yamane (1967)

Where:

N= 228, e= 0.05

$$n = \frac{228}{1 + 228(0.05)^2}$$

n = 145 (approximately)

	Selected Institutions	Categories	Population	Proportion	S/size
1	Imade College Owo	Govt. Teachers	45	0.19737	29
2	Imade College Owo	PTA Teachers	26	0.11404	17
3	Imade College Owo	Corp Members	19	0.08333	12
4	St. Louis Grammar School Owo	Govt. Teachers	43	0.1886	27
5	St. Louis Grammar School Owo	PTA Teachers	25	0.10965	16
6	St. Louis Grammar School Owo	Corp Member	1	0.00439	1
7	Owo High School	Govt. Teachers	45	0.19737	29
8	Owo High School	PTA Teachers	6	0.02632	4
9	Owo High School	Corp Members	18	0.07895	11
	Total		**228**		**146**

Source: *Researcher's Computation (2024)*

3.5 Research Instrument

This study will utilize a questionnaire as the research instrument. The questionnaires will be distributed in various selected secondary schools. The questionnaire will comprise three sections. Section A will be dedicated to collecting personal information from the respondents, including age bracket, gender, and years of experience. Section B and C include the research objectives and associated research questions. The research questions will be prepared using the five-point Likert Scale form (Strongly Agree (SA) =5; Agree (A) =4; Strongly Disagree (SD) = 3; Disagree (D) = 2; Neutral (N) =1). The questionnaires for administration to respondent will be accompanied with introductory letter.

3.6.1 Administration of Research Instrument

In this study, a total of 146 self-administered questionnaires will be distributed to 146 respondents across the four suggested government secondary schools at Owo in Ondo State, Nigeria.

3.6.2 Validity and Reliability of the Research Instrument

To ensure the questionnaire's validity, several steps will be taken. Firstly, copies of the questionnaire will be provided to my supervisor, as well as professionals. They will critically evaluate the alignment of the research questions with the study's objectives.

3.7 Data Analysis Techniques

This study will employ various analytical methods, including descriptive statistics, a correlation matrix. Descriptive statistics encompasses frequency distribution, mean, and standard deviation calculations for each item in the questionnaire. Calculating the mean helps determine the average level of respondents' responses to specific questions.

3.8 Model specification

In this study, data econometric techniques was utilized to assess the significance of relationship between independent variables (Students' Health (SH), which will be broken down into Physical Well-being (PWB), Health Wellness (HWS), Mental Well-being (MWB)) and the dependent variable, Knowledge of Health Promotion Activities (KHPA), this is split to Knowledge of Health Promotion Activities in only male school (KHPAM), Knowledge of Health Promotion Activities in only female school (KHPAF), and Knowledge of Health Promotion Activities in coeducational school (KHPAC), The model for this study was developed using simple regression analysis, and it is represented as follows:

KHPA =f(SH)---------- (i)

Where,

KHPA = Knowledge of Health Promotion Activities

SH = Students' Health

Decomposed

KHPA = f (PWB, HWS, MWB) ----------(ii)

$KHPA = \beta 0 + \beta_1 PWB + \beta_2 HWS + \beta_3 MWB + \varepsilon t$ ---------- (iii)

Model I

$KHPAM = \beta 0 + \beta_1 PWB + \beta_2 HWS + \beta_3 MWB + \varepsilon t$ ---------- (iv)

Model II

$KHPAF = \beta 0 + \beta_1 PWB + \beta_2 HWS + \beta_3 MWB + \varepsilon t$ ---------- (v)

Model III

Where,

PWB = Physical Well-being

HWS = Health Wellness

MWB = Mental Well-being

Ɛt= Error Term

t= time

β_1, β_3 = Co-efficient of associated variables.

This study's *Apriori* expectations are positive between explanatory variables and independent variable.

4. Data Presentation and Analysis

4.1 Demographic Respondents Analysis

Table 1: DEMOGRAHPIC RESPONDENT ANALYSIS

S/N	QUESTIONS	OPTIONS	RESPONDENT
1	Gender		
		Male	66
		Female	74
		TOTAL	140
2	Categories	Govt. Teachers	85
		PAT Teachers	31
		Corp Member	24
		TOTAL	140
3	Years of experience	Below- 5	42
		6- 10	75
		Above 10	23
		TOTAL	140

(Author's Compilation, 2024)

Table 4.3 Gender Distribution of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	M	66	47.1	47.0	47.0
	F	74	52.9	53.0	100.0
	Total	200	100.0	100.0	

Source: Field Survey, 2024

Table 4.3 shows the distribution of respondents by gender, showing that 74 respondents (52.9%) were female and 66 respondents (47.1%) were male. The data reveals a slight predominance of male respondents, constituting the majority of the sample. The significance of the gender distribution data presented in Table 4.3 lies in the nearly equal representation of male and female respondents, albeit with a slight numerical advantage for females. This balance suggests a fair representation of both genders, potentially enhancing the validity and reliability of the study's outcomes. Furthermore, it implies that the perspectives and experiences of both male and female participants are likely to be adequately captured, contributing to a more comprehensive understanding of the research subject.

Table 4.4: Categories of Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Govt	85	60.7	61	61
PAT	31	22.2	22	83
Corp	24	17.1	17	100.0
Total	140	100.0	100.0	

Source: Field Survey, 2024

Table 4.4 displays the categories of the respondents, indicating their distribution. Among the 140 respondents, 85 (60.7%) were from the Government teachers, PAT teachers were 31 representing 22.2% while 24 (17.1%) were from the Corp members. The interpretation of this data suggests that the information necessary for analyzing the data was provided by individuals who are knowledgeable and experienced in the realm of education and promotional activities within the chosen secondary schools. This enhances the validity and reliability of the information gathered, thereby allowing for dependable conclusions to be drawn.
Additionally, it underscores the importance of engaging stakeholders from various categoriess to ensure a comprehensive understanding of the issues at hand and to facilitate holistic decision-making processes.

Table 4.5: Years of experience of the Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Below- 5yrs	42	30.0	30.0	21.0
6 – 10 yrs	75	53.6	53.6	83.6
Above 10yrs	23	16.4	16.4	100.0
Total	140	100.0	100.0	

Source: Field Survey, 2024

Table 4.5 illustrates the distribution of respondents based on their years of experience. Out of the 140 respondents: 42 (30.0%) have less than 5 years of experience, 75 (53.6%) have between 6 to 10 years of experience, and 23 (16.4%) have more than 10 years of experience. The majority of respondents (70%) possess 6 or more years of experience in their respective fields. A significant portion (41.5%) of respondents has over 10 years of experience, indicating a notable presence of seasoned professionals in the sample. Conversely, a smaller proportion (21%) has less than 5 years of experience.

The data suggests that the sample predominantly comprises experienced individuals, with over three-quarters possessing 6 or more years of experience. This implies that the insights and perspectives gathered from the survey are likely influenced by the knowledge and expertise of seasoned professionals in their respective domains. Decision-makers should consider this diverse range of experiences when interpreting the survey findings. Recognizing the varying levels of expertise and perspectives can aid in formulating policies, strategies, or interventions that cater to the needs and preferences of both experienced and less-experienced individuals in the respective fields.

Analyses of Responses of Respondents

Tables 4.6 to 4.9 show the responses of respondents to the structured questionnaire. These are arranged according to dependent and independent variables examined in this study.

Table 4.7 Knowledge of health promotion activities on the students' well-being in boys' schools

SN	Effect of knowledge of health promotion activities on the students' well-being in boys' schools	SA	A	D	SD
1	Knowledge of health promotion activities should be encouraged in secondary schools	30(58%)	18(35%)	4(7%)	0(0%)
2	The health promotion activities at my school have improved our students' physical well-being.	20 (38%)	28(53.5%)	3(6%)	1(2.5%)
3	I believe our students are more knowledgeable about health and wellness due to the activities provided at our school.	18(34.5%)	26(49%)	2(4%)	6(12%)
4	The health promotion activities at our school have positively influenced our students' mental well-being.	26(51%)	21(39.5%)	3(5.5%)	2(4%)

Source: Author's Computation, 2024.

Table 4.7 displays the findings from a survey regarding effect of knowledge of health promotion activities on the students' well-being in boys' schools. Among the respondents, 30 (58%) strongly agreed that knowledge of health promotion activities should be encouraged in secondary schools, and 18 (35%) agreed while 4(7%) disagreed. Similarly, among the respondents, 20 (38%) strongly agreed that the health promotion activities at school have improved their students' physical well-being, and 28 (53.5%) agreed. Conversely, 3 (6%) disagreed, and 1 (2.5%) strongly disagreed. Regarding effect of knowledge of health promotion activities on the students' well-being in boys' schools, 18 (34.5%) strongly agreed that it has been positive, with 26 (49%) respondents agreeing. However, 2 (4%) disagreed, and 6(12%) strongly disagreed.

Concerning the health promotion activities at school have positively influenced students' mental well-being. , 26 (51%) strongly agreed , and 21 (39.5%) agreed. In contrast, 3 (5.5%) disagreed, and 2(4%) strongly disagreed.

Table 4.8 Knowledge of health promotion activities on the students' well-being in girls' school

SN	Impact of knowledge of health promotion activities on the students' well-being in girls' school	SA	A	D	SD
1	Knowledge of health promotion activities should be encouraged in secondary schools	23(52%)	20(45%)	1(3%)	0(0%)
2	The health promotion activities at my school have improved our students' physical well-being.	21(46%)	22(51.5%)	1(2.5%)	0(0%)
3	I believe my students are more knowledgeable about health and wellness due to the activities provided at my (girls' school) school.	30(71%)	6(11%)	3(8%)	5(10%)
4	The health promotion activities at my school have positively influenced my students' mental well-being.	14(32%)	26(58.5%)	3(6%)	1(3.5%)

Source: Author's Computation, 2024

Table 4.8 presents the findings from a survey on impact of knowledge of health promotion activities on the students' well-being in girls' school. In response to the first questionnaire, which asserts that knowledge of health promotion activities should be encouraged in secondary schools, 23 respondents (52%) strongly agreed (SA), while 20 respondents (45%) agreed (A). Conversely, 1 respondent (3%) disagreed (D), and 0 respondent (0%) strongly disagreed (SD). Regarding the second questionnaire, which suggests that the health promotion activities at my school have improved our students' physical well-being; 20 respondents (46%) strongly agreed, with 22 respondents (51.5%) agreeing. However, 2 respondents (2.5%) disagreed, and nill respondent (0%) strongly disagreed. Concerning the Impact of knowledge of health promotion activities on the students' well-being in girls' school, 30 respondents (71%) strongly agreed that their students are more knowledgeable about health and wellness due to the activities provided at (girls' school) schools. Additionally, 6 respondents (11%) agreed, but 3 respondents (8%) disagreed, and 5 respondents (10%) strongly disagreed. Furthermore, 14 respondents (32%) strongly agreed that the health promotion activities at schools have positively influenced their students', with 26 respondents (58.5%) agreeing. Nonetheless, 3 respondents (6%) disagreed, and a respondent (3.5%) strongly disagreed.

Table 4.9 knowledge of health promotion activities on the students' well-being in coeducational schools

SN	Effect of knowledge of health promotion activities on the students' well-being in coeducational schools	SA	A	D	SD
1	Knowledge of health promotion activities should be encouraged in secondary schools	35(80%)	6(15%)	3(5%)	0(0)
2	The health promotion activities at my school have improved my physical well-being of both male and female students.	15(33%)	24(56%)	3(8.5%)	2(2.5%)
3	I believe both genders are more knowledgeable about health and wellness due to the activities provided my coeducational school.	22(50.5%)	16(36%)	3(8.5%)	3(5%)
4	The health promotion activities at my school have positively influenced my mental well-being of both female and male students	12(28%)	22(50%)	8(19.5%)	2(2.5%)

Source: Author's Computation, 2024.

Table 4.9 outlines the findings from a survey regarding of knowledge of health promotion activities on the students' well-being in coeducational schools. In response to the first question, which suggests that knowledge of health promotion activities should be encouraged in secondary schools, 35 respondents (80%) strongly agreed, while 6 respondents (15%) agreed. Conversely, 3 respondents (5%) disagreed. This indicates that a majority of respondents are familiar with promotion activities in secondary school, with over 95% either agreeing or strongly agreeing. 15 respondents (33%) strongly agreed that the health promotion activities at my school have improved my physical well-being of both male and female students; While 24 respondents (56%) agreed. Conversely, 3 respondents (8.5%) disagreed, and 2 respondents (2.5%) strongly disagreed. This indicates a significant portion of individuals in the coeducational schools agreed that that the health promotion activities at my school have improved my physical well-being of both male and female students.

Regarding the third question, which assesses that both genders are more knowledgeable about health and wellness due to the activities provided the coeducational school, 22 respondents (50.5%) strongly agreed, with 16 respondents (36%) agreeing. However, 3 respondents (8.5%) and 3 respondents (5%) strongly disagreed. Here, a majority also agreed that both genders are more knowledgeable about health and wellness due to the activities provided the coeducational school. though not as overwhelmingly as the previous statement. Question four states that the health

promotion activities at coeducational school have positively influenced the mental well-being of both female and male students. 12 respondents (28%) strongly agreed, while 22 respondents (50%) agreed. In contrast, 8 respondents (19.5%) disagreed, and 2 respondents (2.5%) strongly disagreed. A significant portion of respondents (78%) was in agreement that the health promotion activities at coeducational school have positively influenced the mental well-being of both female and male students in the school.

Data Analysis

4.1.1 Descriptive Statistics- MODEL I

Table 4.1

	KHPAM	PWB	HWS	MWB
Mean	3.500000	3.269231	3.076923	3.365385
Median	4.000000	3.000000	3.000000	3.500000
Maximum	4.000000	4.000000	4.000000	4.000000
Minimum	2.000000	1.000000	1.000000	1.000000
Std. Dev.	0.641689	0.660225	0.925587	0.767702
Skewness	0.899195	0.754732	1.051341	-1.246454
Kurtosis	2.741497	3.195364	3.470343	3.467916
Jarque-Bera	7.152236	8.032654	10.05873	18.13364
Probability	0.027984	0.018019	0.016543	0.016115
Sum	182.0000	170.0000	160.0000	175.0000
Sum Sq. Dev.	21.00000	22.23077	43.69231	30.05769
Observations	52	52	52	52

Source: Author's computation (2024)

Table 4.1 contains descriptive statistics of the study variables. Relevant to the present study are the mean, skewness, kurtosis and the J-B statistics (and its probabilities). For the model 1, the average (mean) values of Knowledge of Health Promotion Activities for male school (KHPAM), Physical Well-Being (PWB), Health Wellness (HWS), and Mental Well-Being (MWB) are 3.500000, 3.269231, 3.076923 and 3.365385 respectively. Many of the variables are skewed to the right of the mean. KHPAM, PWB and HWS have skewness coefficients 0.899195, 0.754732 and 1.051341 respectively except for MWB with skewness coefficient of -1.246454. All the skewness coefficients are not far from the zero. All used variables (KHPAM, PWB, HWS and MWB) have kurtoses approximately 3, signifying that the variables are normally distributed; This scenario is further confirmed by the JB statistics and their respective probabilities. There are 55 observations in all.

4.1. 2 Pearson Correlation Matrix Analysis – MODEL I

Table 4.2

	KHPAM	PWB	HWS	MWB
KHPAM	1.000000			
PWB	0.786796	1.000000		
HWS	0.792317	0.763863	1.000000	
MWB	0.795561	0.746611	0.742688	1.000000

Source: Author's computation (2024)

Table 4.2 shows Pearson correlation matrix for the variables as contained in the analysis. The correlation coefficients between dependent variable (KHPAM) and independent variables: KHPAM, PWB, HWS and MWB are strong positive correlation coefficient as shown in Table 4.2. Positive strong correlation between (KHPAM) and (PWB, HWS and MWB) suggests that when one of these variables increases, the other tends to increase as well, and the relationship is very strong.

Descriptive Statistics- MODEL II

Table 4.3

	KHPAF	PWB	HWS	MWB
Mean	3.477273	3.409091	3.386364	3.204545
Median	4.000000	3.000000	4.000000	3.000000
Maximum	4.000000	4.000000	4.000000	4.000000
Minimum	1.000000	2.000000	1.000000	1.000000
Std. Dev.	0.628347	0.583421	1.039139	0.667503
Skewness	1.336273	0.352447	0.454084	-0.722420
Kurtosis	6.169831	2.246865	3.225033	3.265629
Jarque-Bera	31.51561	1.950826	16.22152	6.763867
Probability	0.000000	0.377037	0.020300	0.133982
Sum	153.0000	150.0000	149.0000	141.0000
Sum Sq. Dev.	16.97727	14.63636	46.43182	19.15909
Observations	44	44	44	44

Source: Author's computation (2024)

Table 4.3 contains descriptive statistics of the study variables. Relevant to the present study are the mean, skewness, kurtosis and the J-B statistics (and its probabilities). For the model II, the average (mean) values of Knowledge of Health Promotion Activities for female school (KHPAF), Physical Well-Being (PWB), Health Wellness (HWS), and Mental Well-Being (MWB) are 3.477273, 3.409091, 3.386364 and 3.204545 respectively. Many of the variables are skewed to the right of the mean. KHPAM, PWB and HWS have skewness coefficients 1.336273, 0.352447 and 0.454084 respectively except for MWB with skewness coefficient of -0.722420. Three out of four skewness coefficients are not far from the zero. Three out of four used variables (PWB, HWS and MWB) have kurtoses approximately 3, signifying that the variables are normally distributed; have are platykurtic with kurtoses less than 3 (2.005441, 2.912855 and 2.612677 respectively) and are normally distributed. However, KHPAM is leptokurtic as its kurtosis is greater than 3 with coefficients of 6.169831. This scenario is further confirmed by the JB statistics and their respective probabilities. There are 44 observations in all.

4.1.4 Pearson Correlation Matrix Analysis – MODEL II

Table 4.4

	KHPAF	PWB	HWS	MWB
KHPAF	1.000000			
PWB	0.750646	1.000000		
HWS	0.672677	0.653859	1.000000	
MWB	0.759877	0.795318	0.688081	1.000000

Source: Author's computation (2024)

Table 4.4 reveals Pearson correlation matrix for the variables as contained in the analysis. The correlation coefficients between dependent variable (KHPAF) and independent variables: KHPAM, PWB, HWS and MWB are strong positive correlation coefficient as shown in Table 4.4. Positive strong correlation between (KHPAM) and (PWB, HWS and MWB) 0.750646, 0.672677 and 0.759877 respectively, suggests that when one of these variables increases, the other tends to increase as well, and the relationship is very strong.

Descriptive Statistics- MODEL III

Table 4.5

	KHPAC	PWB	HWS	MWB
Mean	3.727273	3.181818	3.295455	3.000000
Median	4.000000	3.000000	3.500000	3.000000
Maximum	4.000000	4.000000	4.000000	4.000000
Minimum	2.000000	1.000000	1.000000	1.000000
Std. Dev.	0.585230	0.755529	0.878147	0.806947
Skewness	-2.002014	-0.962910	-0.234146	-0.537243

Kurtosis	5.796982	3.230123	3.492975	2.918367
Jarque-Bera	43.73482	9.573639	12.63143	2.128835
Probability	0.000000	0.058339	0.031808	0.344929
Sum	164.0000	140.0000	145.0000	132.0000
Sum Sq. Dev.	14.72727	24.54545	33.15909	28.00000
Observations	44	44	44	44

Source: Author's computation (2024)

Table 4.5 contains descriptive statistics of the study variables. Relevant to the present study are the mean, skewness, kurtosis and the J-B statistics (and its probabilities). For the model III, the average (mean) values of Knowledge of Health Promotion Activities for female school (KHPAF), Physical Well-Being (PWB), Health Wellness (HWS), and Mental Well-Being (MWB) are 3.727273, 3.181818, 3.295455 and 3.000000 respectively. All of the variables are skewed to the left of the mean. KHPAC, PWB, HWS and MWB have skewness coefficients -2.002014, -0.962910, -0.234146 and -0.537243. Three out of four skewness coefficients are not far from the zero. Three out of four used variables (PWB, HWS and MWB) have kurtoses approximately 3, signifying that the variables are normally distributed except for KHPAC, are normally distributed. However, KHPAM is leptokurtic as its kurtosis is greater than 3 with coefficients of 5.796982. This scenario is further confirmed by the JB statistics and their respective probabilities. There are 44 observations in all.

4.1.6 Pearson Correlation Matrix Analysis – MODEL III

Table 4.6

	KHPAC	PWB	HWS	MWB
KHPAC	1.000000			
PWB	0.745908	1.000000		
HWS	0.739218	0.763555	1.000000	
MWB	0.787916	0.777331	0.720464	1.000000

Source: Author's computation (2024)

Table 4.6 reveals Pearson correlation matrix for the variables as contained in the analysis. The correlation coefficients between dependent variable (KHPAF) and independent variables: KHPAM, PWB, HWS and MWB are strong positive correlation coefficient as shown in Table 4.6. Positive strong correlation between (KHPAM) and (PWB, HWS and MWB) 0.745908, 0.739218 and 0.787916 respectively, suggests that when one of these variables increases, the other tends to increase as well, and the relationship is very strong.

4.2 Regression Analysis

A regression analysis was utilized to test the research hypotheses 1 to 3. It was employed to examine the effect of knowledge of health promotion activities on selected secondary schools. Table 4.7 presents the summary of results of the regression technique in order to analyze the effect of knowledge of health promotion activities on selected secondary schools.

Table 4.7: Simple OLS Results for Models I – III

Variable	Simple Ordinal Least Square Results								
	Model I: Dependent Variable = KHPAM			Model II: Dependent Variable = KHPAF			Model III: Dependent Variable = KHPAC		
	Coeff.	t-Stat.	Prob.	Coeff.	t-Stat.	Prob.	Coeff.	t-Stat.	Prob.
PWB	0.042970	2.694791	0.0033	0.672475	4.691065	0.0000	-0.139672	-0.914068	0.3662
HWS	0.074112	2.866330	0.0032	0.195604	2.909172	0.0008	0.445897	4.040629	0.0002
MWB	0.641977	5.869045	0.0000	0.145433	4.745733	0.0000	0.288036	2.282584	0.0278
C	0.970984	4.312650	0.0000	0.394951	4.153573	0.0000	1.838139	8.991875	0.0000
R^2	0.807317			0.754890			0.739930		
Adj R^2	0.795275			0.736506			0.720425		
DW Sta	1.784038			1.800935			1.504328		
F-Stat	67.03808			41.06395			49.5145		
P(F-Sta)	0.000000			0.000000			0.00000		

Source: Author's (2023)

The results in Table 4.7 are explained from the perspectives of each of the dependent variables.

Effect Of Knowledge of Health Promotion Activities on The Students' Well-Being in Boys' School in Owo – Model 1

Table 4.7 presents the outcomes of a least squares regression analysis examining effect of knowledge of health promotion activities on the students' well-being in boys' school in Owo. The variable PWB demonstrates a coefficient of 0.042970, with a t-statistic of 2.694791 and a p-value of 0.0033, indicating a significant positive influence of knowledge of health promotion activities on the students' Physical Well-Being in boys' school (PWB). Similarly, HWS and MWB exhibit coefficient values of 0.074112 and 0.641911, with corresponding t-statistics of 2.5866330 and 5.869045, and p-values of 0.0032 and 0.0000, respectively, indicating significant positive relationships with KHPAM in boys' school.

The overall model has an R-squared value of 0.8073, indicating that it explains 80.73% of the variance in KHPAM in boys' school. The adjusted R-squared value, at 0.795275, adjusts for the number of predictors in the model. The F-statistic of 67.03808, with a p-value of 0.0000, suggests the model's overall statistical significance. The Durbin-Watson statistic is 1.784038, indicating the potential absence of autocorrelation in the residuals.

Impact of Knowledge of Health Promotion Activities on the Students' Well-Being in Girls' School in Owo – Model II

Table 4.7 presents the results of a least squares regression analysis examining the effect of knowledge of health promotion activities on students' well-being in boys' schools in Owo. The variable PWB (Physical Well-Being) has a coefficient of 0.672475, a t-statistic of 4.691065, and a p-value of 0.0000, indicating a significant positive impact of knowledge of health promotion activities on the students' Physical Well-Being (PWB) in boys' schools. Similarly, HWS and MWB have coefficient values of 0.195604 and 0.145433, with t-statistics of 2.909172 and 4.745733, and p-values of 0.0008 and 0.0000, respectively, indicating significant positive relationships with KHPAF in girls' schools. The F-statistic of 41.06395, with a p-value of 0.0000, indicates the overall statistical significance of the model. Additionally, the coefficient of determination ($R^2 = 0.754890$) suggests that about 75% of the variations in KHPAF are explained by the explanatory variables in model II, with the remaining 25% explained by other variables outside the model. The Durbin Watson Statistic (1.800935) indicates that the variables do not suffer from autocorrelation.

4.2.3 Influence of Knowledge of Health Promotion Activities on the Students' Well-Being in Coeducational School – Model III

Table 4.7 shows the results of a least squares regression analysis investigating the influence of Knowledge of Health Promotion Activities on the Well-Being of Students in Coeducational Schools in Owo (KHPAC). The variable PWB has a coefficient of -0.139672, a t-statistic of -0.914068, and a p-value of 0.3662, indicating an insignificant negative impact of knowledge of health promotion activities on students' Physical Well-Being (PWB) in coeducational schools. In contrast, HWS and MWB have coefficient values of 0.445897 and 0.288036, with t-statistics of 4.040629 and 2.282584, and p-values of 0.0002 and 0.0000, respectively, indicating significant positive relationships with KHPAC in coeducational schools.

The overall model has an R-squared value of 0.739930, meaning that approximately 74% of the variations in KHPAC are explained by the explanatory variables in model III. The remaining 26% are accounted for by other variables outside the model. The Durbin Watson Statistic of 1.504328 indicates that the variables do not suffer from autocorrelation. The F-Statistic of 49.5145 and its corresponding probability of 0.0000 reveal that the research model is both significant and reliable.

The various hypotheses formulated in chapter one is, therefore, tested in this section. The decision rule is that if the calculated P-value is lower than 5% significant level, the alternate hypothesis is accepted and the null hypothesis is rejected. The restatement of the hypotheses and their results are as follows:

$H0_1$: There is no significant effect of knowledge of health promotion activities on the students' well-being in boys' schools in Owo, Ondo State.

Knowledge of Health Promotion Activities (KHPAM) has a significant positive effect on the students' well-being in boys' schools in Owo, Ondo State at the probability (F-Sta.) (p-value) of 0.0000 and F-statistic of 67.03808 at 5% significant level. This implies that the alternate hypothesis should be accepted while the null hypothesis rejected.

$H0_2$: There is no significant effect of knowledge of health promotion activities on the students' well-being in girls' schools in Owo, Ondo State.

Knowledge of Health Promotion Activities (KHPAF) has a significant positive effect on the students' well-being in girls' schools in Owo, Ondo State at the probability (F-Sta.) (p-value) of 0.0000 and F-statistic of 41.06395 at 5% significant level. This implies that the alternate hypothesis should be accepted while the null hypothesis rejected.
$H0_3$: There exists no significant effect of knowledge of health promotion activities on the students' well-being in co-educational schools in Owo, Ondo State.

Knowledge of Health Promotion Activities (KHPAC) has a significant positive effect on the students' well-being in co-educational schools in Owo, Ondo State at the probability (F-Sta.) (p-value) of 0.0000 and F-statistic of 49.5145 at 5% significant level. This implies that the alternate hypothesis should be accepted while the null hypothesis rejected.
The overall result shows that knowledge of health promotion activities has a significant positive effect on the students' well-being of selected schools in Owo, Ondo State. This implies that the alternate hypothesis should be accepted while the null hypothesis rejected

4.2 Discussion and Implication of Findings

The objective of this study is to examine the effect of Knowledge of Health Promotion Activities on the students' well-being of selected schools in Owo, Ondo State. The results from the study showed that Knowledge of Health Promotion Activities has a significant positive effect on the students' well-being of selected schools in Owo, Ondo State.

Hypothesis one posits that there is no significant effect of knowledge of health promotion activities on the well-being of students in boys' schools in Owo, Ondo State. However, the study found that Knowledge of Health Promotion Activities (KHPAM) significantly positively affects the well-being of students in boys' schools, with a p-value of 0.0000 and an F-statistic of 67.03808 at a 5% significance level. These findings support the theoretical expectations and endorse the alternate hypothesis over the null hypothesis. This implies that an increase in KHPAM corresponds to an increase in students' well-being in boys' schools in Owo, Ondo State. This outcome is consistent with the studies by Faleke et al. (2022) but contrasts with the findings of Hamilton-Ekeke et al. (2020). The positive impact of health promotion activities on boys' health can be attributed to the critical information provided about maintaining physical and mental health, leading to better personal health practices and decisions. Increased knowledge likely led students to adopt healthier lifestyles, such as improved dietary habits, regular exercise, and better hygiene practices. Health promotion activities often include stress management techniques, which can help reduce anxiety and enhance overall mental well-being among students.

Hypothesis two posited that there is no significant effect of knowledge of health promotion activities on students' well-being in girls' schools in Owo, Ondo State. However, the study revealed that Knowledge of Health Promotion Activities (KHPAF) has a significant positive effect on students' well-being in these schools, with a p-value of 0.0000 and an F-statistic of 41.06395 at a 5% significance level. This implies that the alternate hypothesis should be accepted, and the null hypothesis rejected. Consequently, the findings supported the theoretical expectations, indicating that any enhancement in KHPAF is associated with an increase in students' well-being in girls' schools in Owo, Ondo State. This outcome resonates with the research by Adebayo et al. (2023). The significant positive impact of knowledge of health promotion activities on students' well-being in girls' schools in Owo, Ondo State can be attributed to several factors. Knowledge of health promotion activities likely raises students' awareness about the importance of healthy behaviors, such as proper nutrition, physical activity, and mental health practices, leading to better health choices and habits. Understanding health promotion activities can empower students by boosting their confidence and ability to manage their own health, leading to proactive health management and a sense of well-being.

Hypothesis three stated that there is no significant effect of knowledge of health promotion activities on students' well-being in co-educational schools in Owo, Ondo State. The study found that Knowledge of Health Promotion Activities (KHPAC) significantly positively affects students' well-being in co-educational schools, with a p-value of 0.0000 and an F-statistic of 49.5145 at a 5% significance level. Thus, the findings supported the theoretical expectations and endorsed the alternate hypothesis over the null hypothesis. This indicates that for every increase in KHPAC by one unit, there is a corresponding increase in students' well-being in co-educational schools in Owo, Ondo State. This outcome aligns with the research by Ilesanmi et al. (2018) and Ngwu and Ekpiken-Ekanem (2017).

The positive impact in co-educational schools can be attributed to comprehensive education on health

promotion activities, which enhances students' understanding of various health aspects, leading to better health practices and improved well-being. In co-educational settings, students benefit from diverse perspectives and support networks, with both male and female students influencing each other positively and promoting a culture of health and well-being. Additionally, co-educational schools often promote inclusivity and diversity, creating a supportive environment where all students feel valued and encouraged to engage in health-promoting activities.

5. Summary, Conclusion and Recommendations

5.1 Summary of Findings

This section discusses the empirical findings from the research undertaken on the effect of Knowledge of Health Promotion Activities on the students' well-being of selected schools. The findings were organized according to research objectives and hypotheses.

Hypothesis one explored the effect of knowledge of health promotion activities on the students' well-being in boys' schools in Owo, Ondo State. To test this hypothesis and address the research questions, a simple least squares regression analysis was conducted, and the results were displayed in Table 4.7. The findings led to the acceptance of the alternate hypothesis over the null hypothesis, indicating that an increase in Knowledge of Health Promotion Activities (KHPAM) contributes to enhancing the students' well-being in boys' schools in Owo, Ondo State.

Hypothesis two examined effect of knowledge of health promotion activities on the students' well-being in girls' schools in Owo, Ondo State; Similar to hypothesis one, a simple least squares regression analysis was employed to examine this relationship and the results were presented in Table 4.7. The alternate hypothesis was accepted, contrasting with the null hypothesis, suggesting that a higher knowledge of health promotion activities corresponds to an improvement in students' well-being in girls' schools in Owo, Ondo State.

Hypothesis three delved into the effect of effect of knowledge of health promotion activities on the students' well-being in co-educational schools in Owo, Ondo State. Through a simple least squares regression analysis and the presentation of results in Table 4.7, the alternate hypothesis was validated, rejecting the null hypothesis. This implies that an increase in knowledge of health promotion activities is associated with a higher the students' well-being in co-educational schools in Owo, Ondo State.

5.2 Conclusions

This study carefully examined the effect of Knowledge of Health Promotion Activities on the students' well-being of selected schools in Ondo state. On the basis of the research findings, the following conclusions were reached:
Knowledge of Health Promotion Activities exhibited a significant positive effect on the students' well-being in boys' schools in Owo, Ondo State.

Knowledge of Health Promotion Activities showed a significant positive effect on the students' well-being in girls' schools in Owo, Ondo State.

Knowledge of Health Promotion Activities displayed a significant positive effect on the students' well-being in coeducational schools in Owo, Ondo State.
The study concluded that Knowledge of Health Promotion Activities displayed a significant positive effect on the students' well-being of selected schools in Ondo state.

5.3 Recommendations

Based on the findings from this study, the following recommendations are provided:

- Schools should incorporate structured health promotion activities and programs into their regular curricula. This could include lessons on nutrition, physical fitness, mental health awareness, and hygiene practices. Stakeholders should implement programs focused on issues specific to boys, such as puberty education, understanding body image, and addressing common male health concerns. Invite male health professionals for talks and Q&A sessions.
- Schools should focus on female-specific health topics, including menstrual health, reproductive health education, and self-esteem building. They can invite female health professionals to provide accurate and relatable information. They can also provide mental health resources, including counseling services and workshops on stress management, self-care, and body positivity, and create support groups where girls can share experiences and support each other.
- School authorities can develop inclusive physical education programs that encourage both boys and girls to participate. Activities

should cater to a wide range of interests to ensure everyone is engaged and benefits from physical exercise. They can also promote mental health awareness and provide resources that cater to both boys and girls. Create mixed-gender support groups and counseling services that address the unique and shared challenges faced by all students.

References

Abdulelah F. A., Abuobaida, E. E., Abukhelaif, A. S., Alzahrani, S., Ahmad, A., & Abdulkareem, A. (2018). Teachers' perception regarding school health implementation at Albaha; Saudi Arabia. A cross sectional study. *IOSR J Res Method Educ*., 8(1), 24–8. https://doi.org/10.9790/ 7388-0801012428

Adebayo, A., Bella-Awusah, T., Adediran, K., & Omigbodun, O. (2023). School health and well-being in Nigeria: gaps in policy and design. *Journal of Public Health*, https: //doi. org/10.1007/s10389-023-01984-4

Adekoya-Cole, T. O., Akinmokun, O. I., Enweluzo, G. Enweluzo, G. O., Badmus, O. O., & Alabi, E. O. (2015). Poor health literacy in Nigeria: Causes, consequences and measures to improve it. *Nigerian Quarterly Journal of Hospital Medicine*, 25(2), 112-117.

Ahlstrand et al. (2022). Health-promoting factors among students in higher education within health care and social work: a cross-sectional analysis of baseline data in a multicentre longitudinal study. BMC Public Health, 22.1314 https:/ /doi. org/ 10.11 86/s12889-022-13690-

Allensworth, D., & Kolbe L, eds. (1987). The comprehensive school health programme: Exploring an expanded concept. *Journal of school health*, 57. 409-473.

Bakwai, B., & Sarkin-Kebbi, M. (2017). Revitalising school health programme for effective school administration in Nigeria

Bandura A. (2004). Health promotion by social cognitive means. *Health Educ Behav.*, 31(2),143-64. doi: 10.1177/1090198104263660.

Bosede, A. O., Obembe, T. A., & Adebayo, A. M. (2023). Quality of implementation of the school health programme in Ondo State, Southwest Nigeria. *The National School Health Policy Perspective. J. Med Public Health*, 4(4), 1-12.

Colizzi, M., Lasalvia, A., & Ruggeri, M. (2020). Prevention and early intervention in youth mental health: Is it time for a multidisciplinary and trans-diagnostic model for care?. *Int J Ment Health Syst.*, 14(23), 1-22. https://doi.org/10.1186/s13033-020-00356-9

Costa, P., Lima, A., Silva, S. (2018). Knowledge and attitude towards the disease of people with diabetes mellitus assisted in primary health care. *Enferm Glob*., 17: 538–549

Ekoko, N. O. (2020). An assessment of health information literacy among rural women in Delta State, Nigeria. *Library Philosophy and Practice*, 1-14.

Faleke, M. A., Bello, M. O., Igbokoyi, A.V., & Adegbite, S. B. (2022). Perceived effects of school health programmes among secondary school students in Ogun east senatorial district. *Journal of Science and Information Technology*,17(1), 18- 26.

Federation of American Women's Clubs Overseas (FAWCO). (2021). Literacy in Nigeria. (*SDG Target 4.6) FAWCO.org*; 2021 Accessed on 19th Feb, 2023. Available from: https://www.fawco.org/globalissues/education/education-articles/4623-literacy-innigeria-sdg-target-4-6

Flecha, A., Garcia, R., & Rudd, R. (2011). Using health literacy in schools to overcome inequalities. *European Journal of Education*, 46, 209-218.

Freire, P. (1970). *Pedagogy of the oppressed*. New York: Continuum.

Garuba, H. A., Kohler, J. C., Huisman, A. M. (2009). Transparency in Nigeria's public pharmaceutical sector: perceptions from policymakers. *Global Health*, 5(14), 1-14. https://doi:10.1186/1744-8603-5-14

Germanov, G. N., Stradze, A. E., & Sabirova, I. A. (2018). Principles of physical education in the context of doctrine of development of abilities. *Theory and Practice of Physical Culture*, 2, 47-50.

Golechha, M. (2016). Health promotion methods for smoking prevention and cessation: A comprehensive review of effectiveness and the way forward. *Int J Prev Med.*, 11(1), 1-7. doi: 10.4103/2008-7802.173797. PMID: 26941908; PMCID: PMC4755211.

Gostin, L. O. (2023). The World Health Organization on Its 75th Anniversary. *JAMA Health Forum*, 4(4), 1-3. :e231568. doi:10.1001/jamahealthforum.2023.1568

Government of Western Australia. (2023). Physical health. *Australian Institute Of Health And Welfare (AIHW)*, 1-2.

Hamilton-Ekeke, J., Abam, P. R., & Ogobiri, E. (2020). Health literacy in the promotion of wellness among secondary school students in Bayelsa State, Nigeria. *Journal of Health Education Teaching*, 11(1), 1-7 www.jhetonline.com

Hamilton-Ekeke, J-T., & Moses, J.B. (2019). School and home influence on alcohol consumption among school children in Nigeria. *Journal of Basic and Applied Research in Biomedicine*, 5(1), 1-7.

Holfve-Sabel, M. (2014). Learning, interaction and relationships as components of student well-being: differences between classes from student and teacher perspective. *Soc. Indic. Res*. 119, 1535–1555. doi: 10.1007/s11205-013-0557-7

Ilesanmi, O.T., Adegbenro, C. A., Erhabor, G. E., Olatona, F. A. , Adewole, O. O., Awopeju, O. F., & Adeniyi, B. O. (2018). Effect of Health Educational Intervention on Knowledge and Perceptions of Asthma among Secondary School Students in Ile- Ife, South-West, Nigeria. *Journal of Public Health*, 6(1), 1-16.

Kilgour, L., Matthews, N., Christian, P., & Shire, J. (2015). Health literacy in schools: Prioritizing health and well-being issues through the curriculum. *Sport Educ Soc*., 20(4), 485-500. doi: 10.1080/13573322.2013.769948.

Kisling, L. A., & Das, M. J. (2023). Prevention strategies. [Updated 2023 Aug 1]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: https: /www. ncbi. nlm. nih.gov /books /NBK537222/

Koce, F., Randhawa, G., & Ochieng, B. (2019). Understanding healthcare self-referral in Nigeria from the service users' perspective: A qualitative study of Niger state. *BMC Health Serv Res.*, 19:209. Https://doi:10.1186/s12913-019-4046-9

Koipysheva, E. A., Lebedinsky, V. Y., & Koipysheva, M.A. (2018). Physical health (definition, semantic content, study prospects). *The European Proceedings of Social & Behavioural Sciences*, 1-5.

Kolbe, L. J. (2019). School health as a strategy to improve both public health and education. *Annu Rev Public Health*, 40, 443- 463. doi: 10.1146/annurev-publhealth-040218-043727.

Kuponiyi, O. T., Amoran, O. E., Kuponiyi, O. (2016). School health services and its practice among public and private primary schools in Western Nigeria. *BMC Research Notes*, 9(203), 2-10.

Kuyinu, Y. A., Femi-Adebayo, T. T., Adebayo, B. I., Abdurraheem-Salami, I., & Odusanya, O. O. (2020). Health literacy: Prevalence and determinants in Lagos State, Nigeria. *PLoS One*, 15(8), 1-15. e0237813. https://doi:10.1371/journal.pone.0237813

Lebedinsky, V. Y., Koipysheva, E. A., Rybina L. D., Kudryavtsev, M. D., Iermakov, S.S, Osipov, A.Yu., & Sidorov, L.K. (2017). Age dynamic of physical condition changes in preschool age girls, schoolgirls and students, living in conditions of Eastern Siberia. *Physical Education of Students*, 06, 280-286.

Leonardi, F. (2018).The definition of health: Towards new perspectives. *International Journal of Social Determinants of Health and Health Services*, 48(4), 1- 15, https://doi.org/10.1177/0020731418782653

Levinger B. (1994).Nutrition, health and education for all. Newton, MA, Education Development Center and United Nations Development Programme.

Lucas, A. O. & Gilles, H. M. (2003). *Short textbook of public health medicine in the tropics* (4th ed.) London: Book Power.

Mabogunje, A. L. (1968). *Urbanization in Nigeria*. London: University of London Press.

Malikhao, P. (2020). Handbook of Communication for Development and Social Change. *PMCID*, 1015–1037. doi: 10.1007/978-981-15-2014-3_137

Masten, A. S. (2001). Ordinary magic. Resilience processes in development. *Am Psychol*, 56(3):227-38. doi: 10.1037//0003-066x.56.3.227

Matingwina, T. (2017). Health, academic achievement and school-based interventions.

Mercer, S., and Dörnyei, Z. (2020). *Engaging Language Learners in Contemporary Classrooms*. Cambridge: Cambridge University Press.

Murphy, M. E. (2005). Promoting healthy behaviour. *Health Bulletin*, 2, 3-10.

Naing, K. M., Htun, Y. M., Tun, K. M., Win, T. T., Lin, H., Sein, T.T. (2022). Involvement of high school teachers in Health Promoting School program in selected township, Yangon Region, Myanmar: A cross-sectional mixed methods study. *PLoS ONE*,17(6), 1- 21: e0270125. https://doi.org/10.1371/journal. pone.0270125

National Bureau of Statistics (NBS). (2019). Poverty and Inequality in Nigeria. Available for download at: Reports | National Bureau of Statistics (nigerianstat.gov.ng)

National Council of Educational Research. (2023). Understanding health. https/incert.mic.> textbook.

Ngwu, U. I., & Ekpiken-Ekanem, R. (2017). Evaluating the impact of health education on health knowledge: a study of secondary school students in Cross River State, Nigeria. *International Journal of Humanities & Social Science: Insights & Transformations*, 3(1), 35- 44.

Olabanji, K. T. (2023). Interventions to improve health literacy in Nigeria: Systematic review of effectiveness and policy recommendations. *The Nigerian Health Journal*, 23(3), 707 – 716

Oparaeke, M.I., & Bello, O.H. (2012). The roles of school in the prevention of drug use and abuse among young adults. *Nigerian School Health Journal*, 24(2), 103-109.

Opre, D., Pintea, S., Opre, A., & Bertea, M. (2018). Measuring adolescents' subjective well-being in educational context: Development and validation of a multidimensional instrument. *Journal of Evidence-Based Psychotherapies*, 18, 161–180. doi: 10.24193/jebp.2018.2.20

Ottawa Charter for Health Promotion [OCHP]. (1986). Health promotion, *Ottawa Charter for Health Promotion*, 1(4), 1-7.

Owoyemi, S.O. (2018). Promoting Nigeria health sector: Roles of stakeholders. *Nigeria Association for Physical Health Education, Recreation, Sports and Dance*, 8(1), 126-134.

Pollitt, E. (1990). *Malnutrition and infection in the classroom*. Paris, UNESCO.

Pulimeno, M. , Piscitelli, P., Colazzo, S., Colao, A., & Mian, A. (2020). School as ideal setting to promote health and wellbeing among young people. *A systematic review. MeTis - Mondi educativi. Temi, indagini, suggestioni*, 10(4), 316-324. doi: 10.34172/hpp.2020.50

Pulimeno M, Piscitelli P, De Marco E, Colazzo S. (2018). Narrative-based strategies to promote healthy eating behaviours in childhood. *A systematic review. MeTis - Mondi educativi. Temi, indagini, suggestion*, 8(1),184- 220. doi: 10.30557/mt000015.

Pyha¨ lto,¨ K., Pietarinen, J., & Salmela-Aro, K. (2011). Teacher–working-environment fit as a framework for burnout experienced by Finnish teachers.

Teach Teach Educ., 27(7), 1101–1110. https:// doi.org/ 10. 1016/j. tate.2011.05.006

Raghupathi, V., & Raghupathi, W. (2020). The influence of education on health: An empirical assessment of OECD countries for the period 1995–2015. *Arch Public Health*, 78, 20-28. https:// doi.org/ 10.1186/ s13690-020-00402-5

Rinco´n Uribe, F. A., Godinho, R., Machado, M. A. S., Oliveira, K., Neira, E. C. A., de Sousa, N . C. V. (2021) Health knowledge, health behaviors and attitudes during pandemic emergencies: A systematic review. *PLoS ONE*, 16(9), 1-7. e0256731. https://doi.org/10.1371/journal. pone.0256731

Rippe, J. M. (2018). Lifestyle Medicine: The health promoting power of daily habits and practices. *Am J Lifestyle Med*., 12(6), 499-512. doi: 10.1177/1559827618785554. PMID: 30783405; PMCID: PMC6367881

Samson-Akpan, P. E. (2011). Comparative analysis of health promotion activities in rural and urban secondary schools in Cross River State, Nigeria. A Doctorate Degree Thesis Carried Out In The Department Of Human Kinetics And Health Education, University Of Calabar, Calabar, Nigeria

Samson-Akpan P.E. (2002). Assessment of health promotion in Nigerian Ports Authority. Unpublished MPH thesis, University of Calabar, Nigeria.

Schwartz P. (1991). *The art of the long view: the path to strategic insight for yourself and your company*. New York, Doubleday.

Scrimin, S., Moscardino, U., Altoè, G., and Mason, L. (2016). Effects of perceived school well-being and negative emotionality on students' intentional bias for academic stressors. *Br. J. Educ. Psychol*., 86, 278–295. doi: 10.1111/ bjep.12104

Shrestha, R. M., Ghimire, M., Shakya, P., Ayer, R., Dhital, R., & Jimba, M. (2019). School health and nutrition program implementation, impact, and challenges in schools of Nepal: stakeholders' perceptions. *Trop Med Health*, 47(1), 32 41. https://doi.org/10.1186/s41182-019-0159-4 PMID: 31114429

Sibeudu, F. T. (2022). Health promotion. *Primary Health Care IntechOpen*, 1-20. DOI: http:// dx.do i.org / 10.5772/intechopen.101933

Singh, V., Kumar, A., & Gupta, S. (2022). Mental health prevention and promotion-a narrative review. *Front Psychiatry*,13, 898009. doi: 10.3389/fpsyt.2022.898009. PMID: 35958637; PMCID: PMC9360426.

Storey, K. E., Montemurro, G., Flynn, J., Schwartz, M., Wright, E., Osler, J., & Roberts, E. (2016). Essential conditions for the implementation of comprehensive school health to achieve changes in school culture and improvements in the health behaviours of students. *BMC Public Health*, 16(1), 1-11.

Sule, R. O. (2010). *Thematic issues of urban and regional development planning in Nigeria*. Calabar: Thumb Prints.

Taylor, M. L., Haglund, B. J. A. & Tillgreen, P. (2000). Policy content and context for health promotion in Swedish schools: An analysis of municipal school plans. *Health Promotion International*, 15 (3), 185–195.

Trevethan, R. (2017). Deconstructing and assessing knowledge and awareness in public health research. *Front Public Health*, 5: 1–6.

United Nations Educational Scientific and Organization Cultural. (UNESCO). (2021). Education for health and well-being. *United Nations Educational, Scientific and Cultural Organization [Internet]. UNESCO*. [cited July 12, 2021]. Available from: https://en.unesco.org/themes/education-health-and-well-being.

Wang, Y. L., Derakhshan, A., & Zhang, L. J. (2021). Researching and practicing positive psychology in second/foreign language learning and teaching: The past, current status and future directions. *Front. Psychol.*, 12, 1–10. doi: 10.3389/fpsyg.2021.731721

World Health Organization (WHO). (2022). Physical activity. https://www.who.int/news-room/fact-sheets/detail/physical-activity

World Health Organization. (2021). United Nations Educational, Scientific and Cultural Organization. Making every school a health-promoting school: implementation guidance. Geneva. *World Health Organization and the UNESCO*, 1–8.

World Health Organization (WHO) (2010). What is health promoting school? www. who. int/ school. youth/ health/en/ashi/hos/en/index.html.

World Health Organization (WHO). (1997). Promoting health through schools. Report of a WHO Expert Committee on Comprehensive School Health Education and Promotion. WHO Technical Report Series 870.

Zheng, F. (2022). Fostering students' well-being: The mediating role of teacher interpersonal behavior and student-teacher relationships. *Front. Psychol.*, 12:796728. doi: 10.3389/fpsyg.2021.796728