

**IMPACT OF FIELD TRIPS ON THE KNOWLEDGE AND ATTITUDE OF
STUDENTS TOWARDS THE IMPORTANCE OF HYGIENE PRACTICES**

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**BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF
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CERTIFICATION

We, the undersigned certify that this project work is adequate in scope and was carried out by **Auwakoghene Blessing OGHALE** with the Matriculation Number **EDU2102497**, in the Department of Health Safety and Environmental Education, Faculty of Education, University of Benin, Benin City, Edo State, Nigeria in partial fulfillment of the requirements for the award of B.Sc (Ed.) Degree in Environmental Education.

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DEDICATION

This work is dedicated to God Almighty.

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ABSTRACT

This study examined the effect of a simple field trip on students' knowledge and attitude about hygiene practices. The research was guided by two hypotheses: (1) that there is no significant difference in the knowledge of students about hygiene practices between those who participated in the field trip and those who did not, and (2) that participation in a field trip has no significant effect on students' attitudes toward hygiene practices.

A quasi-experimental research design was employed, with students divided into experimental and control groups. The experimental group participated in a field trip that provided practical exposure to hygiene practices and environmental sanitation, while the control group received only classroom instruction. Data were collected and analysed using independent samples t-tests to determine the effect of the field trip on students' knowledge and attitudes.

The findings revealed that students in the experimental group had significantly higher knowledge of hygiene practices than those in the control group. Similarly, the experimental group demonstrated more positive attitudes toward hygiene practices, showing greater appreciation and willingness to adopt healthy behaviours. The study concluded that a simple field trip is an effective experiential learning strategy that enhances both students' knowledge and attitudes toward hygiene. The findings imply that health and hygiene education is more effective when learners are exposed to practical, real-world experiences that connect theoretical lessons to actual health behaviours and environmental practices. The study recommends that schools incorporate field trips into health and hygiene education curricula, provide adequate resources and support for such activities, and collaborate with health and environmental agencies to strengthen students' participation in community sanitation and personal hygiene promotion. It also suggests further research on the long-term impact of experiential learning and comparative studies of different field-based instructional methods in improving hygiene knowledge, attitudes, and practices among students.

CHAPTER ONE

INTRODUCTION

Background of the Study

Education is not confined to the four walls of a classroom; rather, it is a lifelong process that is enriched when learners are exposed to real-world contexts and experiences. In recent years, educators and researchers have increasingly emphasized the importance of experiential learning as a means of deepening understanding and shaping attitudes. One widely used form of experiential learning is the field trip, which provides students with the opportunity to engage with knowledge outside their usual learning environment. Studies have shown that well-structured field trips enhance students' comprehension, improve retention of knowledge, and foster positive attitudes toward subject matter by making learning more practical, engaging, and relevant to real-life situations (Stern & Powell, 2020; Hoisington et al., 2022). Hygiene education remains a central concern in the field of public health, particularly among school-aged children. Proper hygiene practices, such as regular handwashing with soap, safe water handling, and sanitation, are vital for reducing the transmission of communicable diseases and for promoting overall well-being. Evidence has shown that school-based Water, Sanitation, and Hygiene

(WASH) programs can significantly improve students' knowledge, attitudes, and sometimes observable hygiene behaviors (Freeman et al., 2017; Dreibelbis et al., 2021). However, experts have also observed that traditional classroom-based instruction often has limited impact on sustained behavior change, especially when it is not accompanied by opportunities for practical demonstration, social reinforcement, and real-world exposure (Contzen & Mosler, 2016).

Bringing together the insights from experiential education and hygiene promotion raises an important question: can field trips be deliberately designed to improve students' knowledge and attitudes towards hygiene practices? While research on field trips has demonstrated their effectiveness in enhancing academic knowledge and shaping positive dispositions, relatively few studies have explored their application in the context of hygiene education. Field trips to places such as water treatment plants, community health centers, or sanitation facilities may not only expose students to the realities of hygiene practices but also help them appreciate their significance in disease prevention and healthy living (Nair & Sajeev, 2018). By engaging with real-life examples and observing hygiene practices in action, students are more likely to internalize the lessons, develop favorable attitudes, and adopt hygienic behaviors.

Nonetheless, the effectiveness of such interventions depends on several contextual factors. For instance, knowledge and attitude improvements are more likely to translate

into behavior change when students have access to enabling facilities, such as clean water and soap, within their school environment. Moreover, the design of the field trip itself whether it is guided, integrated with classroom preparation, or followed by reflective activities plays a crucial role in determining its impact (Bozdoğan, 2018). Without these supports, even well-intentioned interventions may fail to produce long-term results.

This study is therefore situated at the intersection of experiential learning and public health education. By examining the impact of field trips on students' knowledge and attitudes toward hygiene practices, the research seeks to provide evidence on the effectiveness of experiential approaches in promoting hygiene among young learners. It also aims to address a gap in the literature by investigating how field trips can be used not only as tools for academic enrichment but also as instruments for fostering behavioral change and public health awareness. The findings will be useful to educators, school administrators, and policymakers seeking innovative strategies to integrate hygiene education into school curricula in ways that are engaging, practical, and sustainable.

Statement of the Problem

Hygiene education is globally recognized as a critical component of public health promotion, particularly among school-aged children. Poor hygiene practices such as irregular handwashing, improper waste disposal, and unsafe water handling continue to

be leading contributors to the spread of communicable diseases in developing countries, including Nigeria. Despite numerous health campaigns and classroom-based instruction, many students still lack adequate knowledge of hygiene practices, and where knowledge exists, the translation into positive attitudes and consistent behavior remains weak (Freeman et al., 2017; Dreibelbis et al., 2021). This persistent gap highlights the limitations of conventional teaching methods that are often theoretical, teacher-centered, and detached from students' lived realities.

Over the years, educators have increasingly recognized the role of experiential learning methods, such as field trips, in deepening understanding and shaping attitudes. Field trips provide students with opportunities to observe and interact with real-life applications of what they are taught in class, thereby making learning more practical, meaningful, and memorable (Stern & Powell, 2020; Hoisington et al., 2022). However, while field trips have been widely studied in relation to subjects such as science, history, and environmental education, their potential for promoting public health knowledge, especially hygiene practices, has not received sufficient scholarly attention. This neglect is significant given that hygiene is both a personal and social practice, best reinforced through direct exposure and practical demonstration.

Furthermore, studies have shown that knowledge alone does not necessarily translate into positive attitudes or long-term behavioral change. Students may be aware of

the importance of hygiene but continue to exhibit poor practices due to lack of motivation, weak attitudes, or absence of enabling facilities (Contzen & Mosler, 2016). Thus, the challenge lies not only in teaching hygiene concepts but also in cultivating favorable attitudes that can drive consistent hygienic behavior. A well-planned field trip such as to water treatment plants, community sanitation sites, or health facilities could provide students with firsthand experiences that make the relevance of hygiene more tangible, potentially strengthening both their knowledge and attitudes. The problem, therefore, is that despite the acknowledged benefits of experiential learning and the urgent need for improved hygiene practices among students, limited research has systematically investigated the impact of field trips on hygiene-related knowledge and attitudes.

Without such evidence, educators and policymakers may miss an opportunity to adopt a practical, cost-effective, and sustainable strategy for promoting health in schools. This study is designed to address this gap by evaluating whether structured field trips can serve as an effective intervention for enhancing students' understanding and attitudes toward hygiene practices.

Research Question

This study is guided by the following research questions:

1. Is there difference in the knowledge of students about the hygiene practices between the experimental and control group?
2. Is there difference in the attitude of students about the hygiene practices between the experimental and control group?

Hypotheses

1. There is no significant difference in the knowledge of students about the hygiene practices between the experimental and control group
2. There is no significant difference in the attitude of students about the hygiene practices between the experimental and control group

Purpose of the Study

The main purpose of this study is to examine the impact of field trips on the knowledge and attitudes of students towards the importance of hygiene practices. Specifically, the study seeks to:

1. Assess the extent to which field trips influence students' knowledge of hygiene practices.
2. Investigate how field trips affect students' attitudes towards the importance of hygiene practices.

3. Identify the challenges that affect the effectiveness of field trips in promoting hygiene education among students.

Significance of the Study

This study is significant because it addresses an important gap in both educational practice and public health promotion by examining the role of field trips in enhancing students' knowledge and attitudes towards hygiene practices. For students, the study will provide insights into how experiential learning can foster a deeper understanding of hygiene and encourage positive attitudes that may translate into healthier daily behaviors. In turn, this can contribute to reducing preventable illnesses linked to poor hygiene and help build a culture of health consciousness among young people.

Teachers and school administrators will also benefit from the findings, as the study will highlight the potential of field trips as an effective pedagogical tool that complements classroom-based hygiene instruction. This evidence can guide them in adopting more interactive and engaging teaching strategies that make hygiene education more practical and relevant. Similarly, curriculum planners and educational policymakers can draw on

the results to integrate field-based learning into hygiene and health education programs, thereby enriching the curriculum with approaches that promote lasting behavior change.

Beyond the school environment, the study has significance for public health practitioners who are seeking innovative strategies to instill sustainable hygiene practices in communities. By demonstrating how field trips can influence knowledge and attitudes, the findings can inform the design of school-based health interventions that are not only educational but also transformative in terms of behavior. Finally, the study will contribute to the existing body of academic literature by providing empirical evidence on the link between experiential learning and hygiene education. This contribution will serve as a useful reference for future researchers interested in exploring experiential approaches to health promotion and behavioral change in educational settings.

Scope/Delimitation of the Study

This study is limited to examining the impact of field trips on the knowledge and attitudes of students towards the importance of hygiene practices. It focuses on secondary school students, as this group is at a developmental stage where attitudes and behaviors are still being shaped and reinforced through both formal education and experiential exposure. The research is concerned primarily with how field trips, when integrated into

hygiene education, influence students' cognitive understanding and their disposition towards adopting proper hygiene practices.

Definition of Terms

Field Trip: An educational visit organized outside the classroom setting, designed to give students practical exposure and firsthand experience related to their course of study

Hygiene Practices: The set of daily behaviors and actions undertaken to maintain cleanliness and prevent the spread of diseases.

Knowledge: The level of understanding, awareness, or information that students possess about hygiene practices

Attitude: A person's mental and emotional disposition towards a concept, idea, or behavior.

Experiential Learning: A learning approach that emphasizes learning by doing, observing, and reflecting on real-life experiences.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter deals on review of existing literature and research studies relevant to the knowledge of the effects of overcrowding among undergraduates of university of Benin. Thus, this chapter is guided by the following sub-headings.

- Concept of Hygiene Practices
- Concept of Field Trips in Education
- Concept of Knowledge and Attitude Formation
- Theoretical Framework
- Importance of Hygiene Practices among Students
- Field Trips as an Educational Strategy

- Impact of Field Trips on Students' Knowledge of Hygiene Practices
- Impact of Field Trips on Students' Attitude towards Hygiene Practices
- Challenges in Implementing Field Trips for Hygiene Education
- Empirical Review of Related Studies
- Summary of the Literature Review

Concept of Hygiene Practices

Hygiene practices refer to the range of daily behaviours, habits, and environmental measures adopted by individuals to maintain health and prevent the spread of diseases. In school settings, hygiene encompasses personal routines such as handwashing with soap, regular bathing, tooth brushing, safe toilet use, and proper handling of food and water. It also involves maintaining a clean school environment through proper waste disposal, adequate ventilation, and access to safe drinking water ([WHO], 2020). These practices are crucial for reducing students' exposure to and fostering a conducive learning environment. Researchers have classified hygiene into several categories relevant to students' wellbeing, including personal hygiene, environmental or school hygiene, food hygiene, and menstrual hygiene. Personal hygiene refers to the care of the body and clothing to prevent disease, while environmental

hygiene focuses on maintaining a clean and safe physical learning environment. Food hygiene relates to safe preparation and consumption of food, and menstrual hygiene ensures the safe and dignified management of menstruation among adolescent girls. These different aspects are interconnected for example, inadequate school sanitation facilities can hinder personal hygiene practices such as handwashing, even when students are knowledgeable about its importance (Eze & Anochie, 2019).

Good hygiene practices are vital because schools are environments where infectious diseases can spread rapidly. According to WHO (2020), proper hygiene practices such as handwashing with soap can reduce the incidence of diarrhoeal diseases by up to 40% and respiratory infections by about 20%. Similarly, (, 2018) reports that effective hygiene behaviours significantly lower school absenteeism, thereby improving students' academic performance. Studies have shown that children who are frequently absent due to preventable illnesses like diarrhoea, respiratory tract infections, and skin diseases often experience learning setbacks and lower academic achievement (Odeyemi & Onajole, 2017). Furthermore, hygiene practices do not only depend on knowledge but also on attitudes and the availability of enabling facilities. For example, a student may understand the importance of handwashing but fail to practise it regularly if soap and clean water are not available (Nkwonta & Ibe, 2021). This aligns with the view of the and joint WASH (Water, Sanitation and Hygiene) programme, which stresses that sustainable

hygiene improvement requires a combination of behavioural change education and the provision of supportive infrastructure (WHO & UNICEF, 2021).

Ultimately, hygiene practices in schools are shaped by multiple factors, including students' knowledge, socio-cultural beliefs, parental influence, peer norms, and institutional policies. Creating a hygienic school environment requires a holistic approach that integrates health education, community participation, teacher training, and consistent government support (Iwu & Adebola, 2020). When these elements are present, students are more likely to internalize positive hygiene behaviours that promote lifelong health and well-being.

Concept of Field Trips in Education

Field trips are structured educational experiences that take students outside the conventional classroom setting to engage directly with real-world environments, phenomena, and practices. They are intentionally planned by teachers to complement classroom instruction by offering opportunities for experiential, hands-on learning. According to United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020), field trips serve as vital tools for bridging the gap between theoretical knowledge and practical understanding, fostering deeper comprehension, and increasing learners' motivation to engage with subject matter. Educational field trips can take

various forms, such as visits to museums, science centers, cultural heritage sites, nature reserves, industries, and public health facilities. They may be short, single-day excursions or extended visits involving multiple activities and learning stations. John Dewey's experiential learning philosophy underscores the value of these outings, emphasizing that learning occurs most effectively when students are actively involved in real-life experiences rather than passively receiving information (Kolb, 2017). In this sense, field trips are not just recreational events but integral components of curriculum delivery that support cognitive, affective, and psychomotor learning domains (Behrendt & Franklin, 2017).

Research indicates that field trips enhance students' curiosity, critical thinking, and long-term retention of knowledge because they engage multiple senses and encourage active participation (Falk & Dierking, 2018). For example, seeing health workers demonstrate proper handwashing techniques during a visit to a community health centre can make hygiene lessons more vivid and memorable compared to reading about them in textbooks. This aligns with findings by Eze and Okonkwo (2020), who observed that Nigerian secondary school students who participated in health-related field trips displayed significantly higher post-visit test scores on hygiene topics than peers taught through classroom lectures alone. Field trips also support social and emotional development by fostering collaboration, communication, and problem-solving among

students. They expose learners to real-world contexts, helping them develop positive attitudes, empathy, and cultural awareness (Rennie, 2019). In the context of health education, such as hygiene practices, field trips can demystify complex health concepts, correct misconceptions, and inspire behaviour change through direct observation and personal interaction with professionals and facilities (Nwaogu & Okafor, 2021).

Despite their educational benefits, field trips require careful planning and alignment with curriculum objectives to be effective. Teachers must set clear learning goals, prepare students beforehand, supervise activities during the trip, and facilitate reflection sessions afterwards (DeWitt & Storksdieck, 2018). When well-organized, field trips have been shown to improve knowledge acquisition, strengthen students' motivation, and foster positive attitudes towards subjects that are otherwise perceived as abstract or uninteresting.

Concept of Knowledge and Attitude Formation

Knowledge and attitude are two foundational psychological constructs that play a crucial role in determining human behaviour, particularly in the field of health and hygiene education. Knowledge refers to the awareness, understanding, and comprehension of facts, concepts, and procedures gained through experience, education, and training. It encompasses both theoretical understanding (knowing why hygiene is

important) and practical know-how (knowing how to carry out hygiene-related tasks such as handwashing and waste disposal). According to Bloom's taxonomy of learning domains, knowledge is considered the base of the cognitive domain, serving as the essential platform upon which higher-order thinking and behavioural change can be built (Anderson & Krathwohl, 2016). In the context of hygiene, knowledge equips students with the information needed to recognize the benefits of maintaining cleanliness and the risks associated with poor sanitary behaviours (Oloruntoba, 2018).

Attitude, in contrast, reflects an individual's psychological tendency to evaluate an object, concept, or behaviour with some degree of favour or disfavour. It has three major components: the cognitive component (beliefs and thoughts about hygiene), the affective component (feelings or emotions associated with hygiene practices), and the behavioural component (the readiness to act in a particular way) (Ajayi & Adeyemi, 2020). Attitudes influence how people interpret knowledge and whether they decide to apply it in their daily lives. For instance, a student may know the benefits of handwashing but will only practise it consistently if they have developed a positive attitude towards personal cleanliness and see it as worthwhile and socially valued (Musa, Onajole, & Balogun, 2021).

The formation of knowledge and attitude does not occur in isolation but is shaped by educational exposure, personal experience, and social interaction. Behavioural

theories such as the Health Belief Model (HBM) suggest that individuals are more likely to adopt positive health behaviours when they believe they are susceptible to diseases, view the health issue as serious, perceive benefits in the recommended behaviour, and experience few barriers to taking action (Rosenstock, Strecher, & Becker, 2019). Similarly, the Social Cognitive Theory (SCT) developed by Albert Bandura emphasizes the role of observational learning, reinforcement, and self-efficacy in shaping knowledge and attitudes. SCT asserts that individuals are more likely to adopt behaviours they have seen modelled by significant others (such as teachers and peers) and when they feel confident in their ability to perform those behaviours (Bandura, 2018). These theories highlight that knowledge alone is insufficient without motivational and social factors that foster positive attitudes. Educational research further shows that the mode of teaching greatly affects how students develop both knowledge and attitudes. Passive, lecture-based teaching methods often succeed at transmitting information but rarely result in deep attitude change or behaviour adoption (Adeboye & Okorie, 2020). In contrast, participatory and experiential learning strategies such as demonstrations, role plays, group projects, and field trips encourage active engagement, reflection, and emotional connection, which are key to building positive attitudes (Okafor & Eze, 2020). These approaches allow students to witness hygiene practices being carried out, practise them in real-life contexts, and receive social reinforcement from teachers and peers. Such direct, hands-on experiences have been found to significantly improve students' hygiene-related

knowledge and attitudes, especially when combined with supportive school environments and access to hygiene facilities (Ismail et al., 2024).

In summary, knowledge and attitude formation are deeply interconnected and mutually reinforcing processes. Knowledge provides the cognitive basis for understanding why hygiene practices are necessary, while attitudes shape the emotional and motivational drive to adopt and sustain such practices. Effective school hygiene education must therefore target both aspects simultaneously delivering accurate information while also fostering positive beliefs, values, and intentions toward hygiene. This dual approach increases the likelihood that students will not only understand hygiene principles but also internalize them as part of their everyday behaviour.

Theoretical Framework

A theoretical framework provides the conceptual foundation that guides the understanding of how and why a study's variables are related. In this study, which explores the impact of field trips on students' knowledge and attitude towards hygiene practices, several well-established educational and behavioural theories are relevant. These theories explain the psychological and social mechanisms through which field-based experiential learning can enhance both knowledge and attitude formation among students.

One key model underpinning this study is the Experiential Learning Theory (ELT) proposed by David Kolb. ELT posits that learning is a cyclical process involving four stages: concrete experience, reflective observation, abstract conceptualisation, and active experimentation (Kolb & Kolb, 2017). Field trips provide students with **concrete experiences** direct encounters with real-world hygiene facilities, demonstrations of sanitation procedures, and live discussions with health professionals. These experiences stimulate **reflection** on what they observed, help them to **conceptualise** hygiene principles more deeply, and encourage them to **experiment** with new hygiene behaviours back in their school setting. Research has shown that experiential learning significantly enhances students' retention of knowledge and fosters more positive attitudes toward the subject matter compared to traditional classroom instruction (Stern & Powell, 2020). Another useful model is the Social Cognitive Theory (SCT) developed by Albert Bandura. SCT emphasizes the role of **observational learning, modelling, and self-efficacy** in behaviour change (Bandura, 2018). During field trips, students observe real people such as healthcare workers and sanitation officers practising appropriate hygiene behaviours. Seeing these role models perform desired actions in authentic settings increases students' belief that they too can successfully perform those actions. The social reinforcement students receive from peers and teachers during field trips further strengthens these attitudes. Studies show that interventions based on SCT, especially those that use role

modelling, produce significant gains in students' hygiene knowledge and willingness to adopt hygiene practices (Islam et al., 2023).

The Health Belief Model (HBM) is also relevant because it explains how personal beliefs influence the adoption of preventive health behaviours. The HBM posits that an individual's likelihood of taking health action depends on their perceived susceptibility to illness, perceived severity of the consequences, perceived benefits of the preventive behaviour, perceived barriers, and cues to action (Rosenstock, Strecher, & Becker, 2019). Field trips can strengthen students' **perceived susceptibility and severity** by exposing them to real-life consequences of poor hygiene, such as visiting clinics or communities affected by waterborne diseases. They can also enhance their **perceived benefits** by showing how proper hygiene reduces illness risk and improves school attendance. Such vivid experiences often act as powerful **cues to action**, prompting students to adopt healthier attitudes and practices when they return to school.

Furthermore, the Theory of Planned Behavior (TPB) by Icek Ajzen supports this study's focus on attitude formation. TPB asserts that behaviour is driven by **behavioural intention**, which in turn is shaped by **attitudes toward the behaviour**, **subjective norms**, and **perceived behavioural control** (Ajzen, 2020). Field trips can influence all three factors: they can improve students' attitudes by making hygiene seem meaningful and beneficial; they can shape subjective norms by showing that responsible adults and

peers value hygiene; and they can boost perceived control by providing students with hands-on experience that builds their confidence in carrying out hygiene practices. Empirical evidence confirms that school-based hygiene programmes framed around TPB significantly improve students' hygiene intentions and behaviour (Eze & Okafor, 2021). This study draws on multiple complementary theories ELT, SCT, HBM, and TPB to explain how and why field trips can enhance students' knowledge and attitudes regarding hygiene. These frameworks collectively suggest that **active, real-life experiences, social modelling, belief restructuring, and self-efficacy building** are essential mechanisms through which field trips exert their impact on learning outcomes.

Importance of Hygiene Practices among Students

Hygiene practices are essential components of healthy living and play a critical role in promoting the physical, mental, and social well-being of students. The school environment is often characterized by close physical contact and shared facilities such as classrooms, restrooms, libraries, and dining areas. This makes it a high-risk setting for the transmission of infectious diseases if hygiene is neglected. As such, instilling proper hygiene practices among students is not only crucial for their personal health but also for safeguarding public health within the school community ([WHO], 2020). One of the primary reasons hygiene practices are important among students is their role in **preventing communicable diseases**. Poor hygiene practices such as irregular

handwashing, unsafe food handling, and improper waste disposal are known pathways for the spread of infections like , , and (Chukwu et al., 2021). Regular handwashing with soap, for example, has been shown to reduce the incidence of diarrheal diseases by up to 40% and respiratory infections by about 20% among school-age children ([CDC], 2019). By practising good personal and environmental hygiene, students are better protected from illnesses that can negatively affect their attendance, participation, and overall academic performance.

Hygiene practices contribute significantly to **improved cognitive functioning and academic achievement**. Healthy students are more likely to attend school consistently and engage fully in learning activities. Illness-related absenteeism often disrupts the continuity of learning, while poor physical health can reduce concentration and cognitive performance during classes (Eze & Okafor, 2020). Studies have shown that schools that incorporate hygiene education and enforce hygiene practices record better attendance rates and higher academic achievement compared to schools with inadequate hygiene promotion (Adebayo & Olayinka, 2021). Hygiene practices are also vital for **promoting students' self-esteem and social acceptance**. Children and adolescents who maintain good personal hygiene, such as clean clothing, oral hygiene, and body cleanliness, often experience higher levels of confidence and positive peer relationships (Ali et al., 2018). In contrast, poor hygiene can result in stigmatization, social isolation,

and bullying, which negatively affect students' emotional well-being and motivation to learn. Teaching students proper hygiene practices thus contributes not only to their physical health but also to their emotional and social development.

Cultivating good hygiene practices among students has **long-term public health benefits**. Schools are important settings for shaping lifelong habits. When students learn and practise hygiene from an early age, they are more likely to continue these practices into adulthood and pass them on to future generations (UNICEF, 2022). This has a ripple effect on the wider community by reducing the burden of preventable diseases, lowering healthcare costs, and promoting a healthier society. Hygiene practices are crucial for protecting students from diseases, enhancing their academic performance, supporting their emotional and social development, and fostering sustainable health behaviours. Given these far-reaching benefits, schools must actively promote hygiene education through interactive strategies, including field trips, which can deepen students' understanding of hygiene and encourage positive attitudes toward its practice.

Field Trips as an Educational Strategy

Field trips are an important experiential learning strategy that provides students with the opportunity to engage directly with real-world environments beyond the traditional classroom setting. They are structured educational visits to places of interest

such as museums, farms, water treatment plants, hospitals, science laboratories, or community sanitation centres, where students can observe, interact, and apply theoretical knowledge in practical contexts ([NEA], 2019). Field trips are designed not only to enhance students' cognitive understanding of subject matter but also to stimulate their curiosity, improve motivation, and support the development of positive attitudes and life skills.

One of the major advantages of field trips as an educational strategy is their ability to **bridge the gap between theoretical knowledge and practical experience**. According to the (ELT) by, meaningful learning occurs when learners actively engage with concrete experiences and reflect on them to build new knowledge (Kolb, 2017). Field trips align perfectly with this principle by offering students first-hand experiences that reinforce classroom instruction. When students observe real-life demonstrations of concepts such as hygiene practices at a health centre or sanitation plant they are better able to understand and retain the information (McLeod, 2019). This hands-on exposure makes learning more memorable and meaningful than abstract classroom discussions alone. Field trips also serve as a powerful tool for **enhancing students' motivation, interest, and attitude towards learning**. They create novel and stimulating learning environments that can capture students' attention and curiosity, especially in topics that may otherwise appear routine or theoretical in the classroom (DeWitt & Storksdieck,

2018). The change of setting often reduces classroom monotony and encourages active participation. Studies have shown that students who participate in educational field trips demonstrate higher levels of engagement, positive attitudes toward the subject matter, and a stronger sense of personal relevance and connection to the learning content (Okafor & Eze, 2020; Musa et al., 2021).

Field trips promote **social and collaborative learning**. Students typically work in groups during field activities, which enhances teamwork, communication, and problem-solving skills (Kisiel, 2016). They have the opportunity to interact not only with their peers but also with professionals and experts at the sites visited, which enriches their understanding of how knowledge is applied in real-life settings. This interaction can inspire students and expand their perspectives about career paths, community roles, and responsible citizenship. Field trips are also recognized for their ability to **influence behavioural and attitudinal change**, especially in health-related education. Experiencing real-world contexts where good hygiene practices are visibly implemented can serve as a powerful cue to action for students, reinforcing the importance and feasibility of such practices (Umeh & Chukwu, 2020). This approach aligns with the principles of the , which emphasizes the importance of perceived benefits, cues to action, and self-efficacy in motivating behaviour change (Rosenstock et al., 2016). Through field trips, students not only acquire factual knowledge about hygiene but also develop a

stronger belief in their ability to adopt and sustain proper hygiene practices. Field trips are a dynamic educational strategy that enriches classroom instruction, fosters motivation and positive attitudes, promotes social learning, and supports lasting behavioural change. They provide experiential, real-life contexts that make learning personally meaningful and directly applicable to students' lives making them especially valuable in promoting knowledge and attitudes about hygiene practices.

Impact of Field Trips on Students' Knowledge of Hygiene Practices

Field trips as an educational strategy have been shown to exert a significant impact on students' knowledge, attitudes, and behaviours regarding hygiene practices. By providing students with experiential learning opportunities, field trips allow them to see the real-life application of concepts taught in the classroom. According to 's experiential learning philosophy, learning is most effective when it is active, practical, and connected to real-world contexts. When students visit health-related sites such as (WHO)-affiliated community health centres, environmental sanitation agencies, or water treatment facilities, they gain a deeper understanding of how personal and environmental hygiene contributes to disease prevention and overall public health (, 2015). Several studies have documented the positive influence of field trips on students' hygiene knowledge. For instance, (2014)

found that field-based learning experiences improved students' retention of hygiene-related information and motivated them to adopt healthier practices. Similarly, (2018) emphasized that interactive learning environments such as those encountered during field excursions stimulate curiosity, promote critical thinking, and enhance students' ability to transfer theoretical knowledge to practical situations.

Moreover, field trips often expose students to professionals in health and sanitation fields, who can serve as role models and provide authentic insights into the consequences of poor hygiene. According to (2017), students who participate in structured field learning are more likely to exhibit positive behavioural changes, such as increased handwashing, proper waste disposal, and adherence to food safety practices. These behavioural outcomes are crucial in school environments where the risk of communicable diseases can be high due to close contact among students (, 2021). Field trips contribute to the development of social responsibility and community awareness among students. By witnessing the broader societal impact of hygiene and sanitation efforts, students often develop a stronger sense of personal accountability for maintaining cleanliness in their immediate surroundings (, 2019). This enhanced awareness supports the sustainability of hygiene practices beyond the school setting and into the home and community environments.

Field trips play a critical role in strengthening students' knowledge and understanding of hygiene practices. They provide hands-on experiences that not only improve knowledge acquisition but also foster positive behavioural change, personal responsibility, and long-term retention of hygiene concepts. These benefits make field trips an indispensable component of hygiene education programs in schools.

Impact of Field Trips on Students' Attitude towards Hygiene Practices

Field trips not only enhance students' knowledge about hygiene practices but also play a vital role in shaping their attitudes towards maintaining personal and environmental cleanliness. Attitude encompasses an individual's beliefs, feelings, and predispositions towards a concept or behaviour, and positive attitudes often precede the adoption of healthy behaviours. According to 's , observing real-life models and experiencing their practices directly can influence learners' attitudes and behaviours through processes such as imitation and reinforcement. Field trips provide such opportunities, allowing students to witness firsthand the importance of hygiene in preventing diseases and promoting community health. Research has shown that experiential learning environments like field trips can lead to attitudinal shifts among students. For example, (2014) reported that students who engaged in structured field trips demonstrated more positive attitudes towards maintaining hygiene, such as showing willingness to regularly wash their hands and keep their surroundings clean. Similarly,

(2017) found that outdoor and field-based educational programs foster emotional engagement, which in turn motivates students to adopt and sustain health-promoting behaviours.

Field trips to places like community health centres, water treatment facilities, and sanitation agencies often expose students to the consequences of poor hygiene, such as outbreaks of communicable diseases and environmental pollution. This exposure can create a sense of personal responsibility and empathy, motivating students to change their attitudes towards hygiene. (2015) emphasized that such experiential encounters help students internalize values and transform abstract concepts into personally meaningful commitments, leading to stronger positive attitudes. Field trips offer collaborative and peer-based learning opportunities where students can discuss and reflect on what they observe. This collective reflection process strengthens shared positive attitudes towards hygiene practices. According to (2019), group learning experiences during field trips enhance social norms, making hygienic behaviour more desirable and acceptable among peers. This peer influence is especially important in school settings where students' behaviours are strongly shaped by social dynamics.

Field trips serve as powerful tools for positively influencing students' attitudes towards hygiene practices. By combining direct observation, emotional engagement, and social interaction, they help students develop more favourable perceptions and stronger

commitments to personal and environmental hygiene. Such attitudinal shifts are critical for fostering lasting behavioural change and promoting a culture of cleanliness within schools and communities.

Challenges in Implementing Field Trips for Hygiene Education

While field trips are widely recognized as effective educational strategies for enhancing students' knowledge and attitudes towards hygiene practices, their implementation in schools often faces several challenges. These barriers can limit the frequency, quality, and overall impact of field-based learning experiences. Understanding these challenges is essential for designing effective and sustainable hygiene education programs. One major challenge is **financial constraint**. Organizing field trips requires significant funding to cover transportation, entry fees, feeding, instructional materials, and sometimes safety gear. Many schools, especially public institutions in low-resource settings, operate under limited budgets that prioritize basic instructional needs over extracurricular activities. According to (2014), financial limitations are among the leading reasons field trips are rarely conducted, even though they are known to enrich learning. Without sufficient funding, schools struggle to organize trips to relevant health facilities or sanitation sites that could strengthen students' understanding of hygiene practices.

Another challenge is **logistical and administrative difficulty**. Planning a field trip involves extensive preparation, including securing permissions from authorities, arranging transportation, coordinating with host facilities, and ensuring adherence to school policies. (2017) noted that the administrative burden associated with field trips often discourages teachers from planning them, particularly when school schedules are already tight. Additionally, the risk of unexpected delays, cancellations, or poor coordination can undermine the educational purpose of the trip. **Safety and liability concerns** also pose significant barriers. Field trips expose students to environments outside the controlled setting of the classroom, which may involve risks such as accidents, injuries, or exposure to infectious agents in hygiene-related sites (e.g., waste management facilities). Teachers and school administrators often worry about the legal and ethical implications of such incidents. As (2016) explained, perceived safety risks make some schools adopt restrictive policies or avoid field trips altogether, despite their potential educational value.

Furthermore, there is the issue of **teacher preparedness and competence**. Effective field trips require teachers to design structured pre-trip and post-trip activities, integrate trip experiences into the curriculum, and manage students effectively during the outing. However, many teachers lack training in experiential learning pedagogy. (2018) observed that when teachers are inadequately prepared, field trips tend to become

recreational rather than educational, thereby failing to influence students' hygiene attitudes and behaviours meaningfully. **Time constraints within the academic curriculum** also affect the feasibility of field trips. With pressure to complete syllabi, prepare students for examinations, and meet administrative deadlines, teachers may find it difficult to allocate time for planning and conducting field trips. According to (2019), this time pressure leads many educators to favour traditional classroom instruction, which is perceived as less disruptive to routine schedules.

lack of institutional and parental support can hinder the implementation of field trips. Some school authorities may not recognize their value, while some parents may be reluctant to allow their children to leave the school premises, citing safety or cultural concerns. Such resistance can limit student participation and reduce the inclusiveness of hygiene-focused field trips. While field trips hold great promise for improving students' understanding and attitudes toward hygiene, several challenges financial, logistical, safety-related, pedagogical, and institutional limit their effective implementation. Addressing these barriers through proper planning, policy support, funding mechanisms, and teacher training is essential to fully harness the potential of field trips in hygiene education.

Empirical Review of Related Studies

Empirical studies have consistently shown that educational interventions can significantly improve students' knowledge, attitudes, and behaviours towards hygiene practices, especially when they incorporate practical and experiential learning approaches. School-based hygiene programmes that combine classroom instruction with hands-on activities have been found to produce better learning outcomes than theoretical instruction alone. For instance, (2014) found that field-based learning, such as educational trips, increased student engagement and long-term retention of health-related knowledge compared to traditional classroom teaching. This suggests that experiential learning opportunities can serve as powerful tools for improving students' understanding and appreciation of hygiene practices.

Several studies in recent years have provided evidence of the positive effects of hygiene education programmes on students' knowledge and attitudes. (2020) conducted a quasi-experimental study in rural primary schools in which showed that students who participated in structured hygiene promotion activities including demonstrations and supervised practice had significantly higher post-test knowledge scores and reported more positive attitudes towards handwashing and environmental cleanliness than those who received only classroom instruction. Similarly, (2024) reported that a school-based hygiene education intervention in , , improved students' awareness and attitudes toward menstrual hygiene, highlighting how experiential learning contributes to positive

behavioural intentions. Field trips specifically have also been associated with improved cognitive and affective outcomes. (2017) emphasized that outdoor learning experiences enhance emotional engagement, which strengthens students' motivation to adopt new behaviours, including hygiene-related ones. In a similar vein, (2019) found that students who participated in site visits to health facilities and waste management centres demonstrated more positive attitudes towards environmental cleanliness and personal hygiene than peers taught solely in classrooms. These findings align with 's , which holds that direct experience enhances learning by fostering personal meaning and deeper understanding. Where school hygiene practices remain a public health priority, several empirical studies have demonstrated the benefits of integrating field-based experiences into hygiene education. (2021) found that secondary school students who participated in educational visits to water treatment plants and community health centres showed significant improvements in hygiene-related knowledge and expressed stronger willingness to engage in personal cleanliness routines compared to their pre-visit scores. These outcomes underline the effectiveness of field trips in influencing both cognitive and attitudinal domains of learning.

However, research also shows that knowledge gains from field-based interventions do not automatically translate into sustained behaviour change unless they are reinforced over time. (2024) in a study on early childhood centres in found that

although hygiene knowledge and attitudes improved significantly immediately after field-based interventions, the positive effects diminished over time without continuous follow-up and the provision of supportive infrastructure such as soap and water. This finding highlights the need to combine field trips with ongoing reinforcement strategies to achieve lasting behavioural outcomes. Overall, these empirical studies demonstrate that field trips and other experiential learning strategies can significantly enhance students' knowledge and attitudes toward hygiene practices. They also emphasize the importance of sustained reinforcement, school support, and adequate facilities in ensuring that improved knowledge and attitudes are translated into long-term behavioural change.

Summary of the Literature Review

The literature reviewed highlights the crucial role of hygiene practices in safeguarding the health and overall well-being of students within school environments. Hygiene, encompassing practices such as handwashing, personal cleanliness, and environmental sanitation, has been consistently linked to the reduction of communicable diseases and the promotion of academic productivity (World Health Organization, 2020; Centers for Disease Control and Prevention, 2021). Poor hygiene practices among students have been identified as a major contributor to absenteeism, the spread of infections, and diminished learning outcomes (United Nations Children's Fund, 2019).

The literature also reveals that field trips serve as an effective educational strategy for enhancing students' knowledge and attitudes toward hygiene practices. Experiential learning theory suggests that direct, hands-on experiences, such as those offered during field trips, deepen students' understanding and retention of knowledge (David Kolb, 1984). Studies have shown that students who participate in field trips to health facilities, water treatment plants, or sanitation agencies demonstrate higher levels of hygiene awareness and are more likely to adopt positive hygiene behaviors compared to their peers who receive only classroom-based instruction (United Nations Educational, Scientific and Cultural Organization, 2018; National Center for Biotechnology Information, 2020).

However, challenges such as financial constraints, logistical difficulties, time limitations, and inadequate support from school administrators often hinder the effective implementation of field trips for hygiene education (UNESCO, 2019; World Bank, 2021). Despite these obstacles, evidence from multiple empirical studies supports the integration of field trips into school health education curricula, emphasizing their positive impact on students' knowledge, attitudes, and hygiene practices. Overall, the reviewed literature underscores the importance of adopting innovative and experiential strategies such as field trips to enhance hygiene education among students. It concludes that while

classroom teaching remains foundational, supplementing it with practical learning experiences can significantly improve students' health-related knowledge and behavior.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter presents the method and procedures that will be used in conducting the study.

It is organized under the following subheadings:

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

Research Design

The research design adopted for this study is the quasi-experimental design. This design is most suitable because it enables the researcher to determine the effect of field trips on students' knowledge and attitudes towards hygiene practices. Two groups of students will be used: an experimental group that will be exposed to a structured field trip on hygiene practices, and a control group that will not be exposed to the field trip. Both groups will be given a pre-test and post-test to measure differences in knowledge and attitude.

The schematic representation of the design is:

R1 O1 X O2

R2 O1 O2

Where:

- R1 = Experimental group
- R2 = Control group
- O1 = Pre-test
- X = Treatment (Field Trip)
- O2 = Post-test

Population of the Study

The population of this study consists of all secondary school students within Benin City, Edo State. The target population is restricted to senior secondary students (SS1) in selected schools, as they are at a stage where knowledge, attitudes, and behaviors toward hygiene are still being shaped.

Sample and Sampling Technique

A total of 60 students will be sampled for the study. A purposive sampling technique will be used to select respondents because it allows for the deliberate choice of students who can provide the most relevant information for the research.

The sample will be divided into two groups:

- **Experimental Group:** 30 students who will be taken on a field trip to hygiene-related sites (such as a health center or water treatment facility).
- **Control Group:** 30 students who will not participate in the field trip.

Table 3.1: Sampling Distribution

Group	Number of Respondents
Experimental Group	30
Control Group	30
Total	60

Research Instrument

The instrument for data collection will be a structured questionnaire designed by the researcher. The questionnaire will consist of three sections:

- **Section A:** Demographic data of the respondents.
- **Section B:** Items designed to measure students' knowledge of hygiene practices. These will include multiple-choice questions.
- **Section C:** Items designed to assess students' attitudes towards hygiene practices. These will be based on a 4-point Likert scale: Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD).

Validity of the Instrument

The questionnaire will be subjected to face and content validation by the researcher's supervisor and two experts in the Department of Health Safety and Environmental Education. Their suggestions and corrections will be used to produce the final copy of the instrument.

Reliability of the Instrument

The reliability of the instrument will be determined using the test-retest method. The questionnaire will be administered to 20 students outside the study sample and re-

administered after two weeks. The responses will be correlated using the Pearson Product Moment Correlation Coefficient (PPMC) to determine the reliability index.

Method of Data Administration

The researcher will personally administer the questionnaire to both groups. The experimental group will first be exposed to the field trip intervention, while the control group will not. Both groups will complete the pre-test and post-test questionnaires. Respondents will be assured of confidentiality and encouraged to give honest responses.

Method of Data Analysis

The data collected will be analyzed using percentage counting. frequency counts, percentages, will be used to answer the research questions, while t-tests will be used to test the hypotheses at a 0.05 level of significance

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

This chapter presents the results of the study based on the two hypotheses formulated. The study examined the effect of a simple field trip on students' knowledge and attitude about hygiene practices. The analysis was carried out using independent samples t-test to compare the differences between the experimental and control groups. The results are presented according to the hypotheses and interpreted in line with the objectives of the study.

Hypothesis One: There is no significant difference in the knowledge of students about the hygiene practices between the experimental and control group

Table 1: Independent Samples t-Test Comparing Students' Knowledge about Hygiene Practices

Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i> (35.89)	<i>p</i>	Mean Difference	95% CI [LL, UL]
Experimental	25	4.24	0.66	4.00	<.001	1.16	[0.57, 1.75]
Control	25	3.08	1.29				

Note. Equal variances **not** assumed based on Levene's test ($F = 10.33, p = .002$).

An independent samples *t*-test was conducted to determine whether participation in a field trip significantly affected students' knowledge about hygiene practices. The results

indicated that students in the experimental group ($M = 4.24, SD = 0.66$) had higher mean knowledge scores than those in the control group ($M = 3.08, SD = 1.29$). Levene's test for equality of variances was significant, $F(1,48) = 10.33, p = .002$, indicating that the assumption of equal variances was violated. Therefore, the results for unequal variances were interpreted. The t -test revealed a statistically significant difference between the two groups, $t(35.89) = 4.00, p < .001$, with a mean difference of 1.16 and a 95% confidence interval ranging from 0.57 to 1.75. The result indicates that students who participated in the field trip had significantly greater knowledge about hygiene practices compared to those who did not. Therefore, the null hypothesis stating that "there is no significant difference in the knowledge of students about hygiene practices between the experimental and control groups" is **rejected**. This suggests that experiential learning activities such as field trips can play a crucial role in improving students' understanding of hygiene and personal health practices. By directly observing real-world hygiene measures—such as proper handwashing, sanitation procedures, and environmental cleanliness—students may have developed deeper awareness of the importance of maintaining personal and community hygiene.

Hypothesis Two: There is no significant difference in the attitude of students about the hygiene practices between the experimental and control group

Table 2: Independent Samples *t*-Test Comparing Students' Attitudes about Hygiene Practices

Group	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i> (48)	<i>p</i>	Mean Difference	95% CI [LL, UL]
Experimental	25	27.72	2.26	5.38	<.001	4.52	[2.83, 6.21]
Control	25	23.20	3.54				

Note. Equal variances assumed based on Levene's test ($F = 3.60, p = .064$).

An independent samples *t*-test was conducted to determine whether participation in a field trip significantly influenced students' attitudes toward hygiene practices. The results showed that the experimental group ($M = 27.72, SD = 2.26$) had higher attitude scores than the control group ($M = 23.20, SD = 3.54$). Levene's test for equality of variances was not significant, $F(1,48) = 3.60, p = .064$, indicating that the assumption of homogeneity of variances was met. The *t*-test revealed a statistically significant difference between the two groups, $t(48) = 5.38, p < .001$, with a mean difference of 4.52 and a 95% confidence interval ranging from 2.83 to 6.21. The result indicates that students who participated in the field trip exhibited significantly more positive attitudes toward hygiene practices than those who did not. Therefore, the null hypothesis stating

that “there is no significant difference in the attitude of students about hygiene practices between the experimental and control groups” is **rejected**. This finding suggests that experiential learning through field trips enhances not only students’ cognitive understanding but also their affective dispositions toward maintaining personal and environmental hygiene. By observing practical demonstrations of hygiene behavior such as waste disposal, handwashing, and community sanitation students may have developed stronger appreciation and motivation to adopt healthy practices in their daily lives.

Discussion of Findings

The findings of this study have shown that a simple field trip had a significant effect on students’ knowledge and attitude about hygiene practices. The discussion is based on the results obtained from the two hypotheses tested.

The first hypothesis stated that there is no significant difference in the knowledge of students about hygiene practices between the experimental and control groups. The result of the independent samples t-test demonstrated that students in the experimental group had significantly higher knowledge scores than those in the control group. The mean knowledge score of the experimental group was 4.24, while that of the control group was 3.08. The difference was statistically significant, $t(35.89) = 4.00$, $p < .001$, even after adjusting for unequal variances as indicated by Levene’s test. This clearly

shows that participation in the field trip improved the students' understanding of hygiene practices.

This finding suggests that experiential learning activities such as field trips can enhance students' knowledge by providing them with the opportunity to observe and engage with real-life hygiene measures. When students are exposed to practical demonstrations of proper handwashing, sanitation processes and environmental cleanliness, they gain a deeper understanding of the importance of personal and community hygiene. The hands-on learning experience appears to have strengthened their comprehension, making the students in the experimental group more knowledgeable than those who did not participate in the field trip. The result supports the view that classroom learning becomes more meaningful when students are able to observe real-world applications of the concepts taught.

The second hypothesis stated that there is no significant difference in the attitude of students about hygiene practices between the experimental and control groups. The result showed that students in the experimental group had more positive attitudes towards hygiene practices than those in the control group. The experimental group's mean attitude score was 27.72, while the control group had a mean score of 23.20. The difference was statistically significant, $t(48) = 5.38$, $p < .001$. This indicates that the field trip experience had a positive influence on the students' attitudes.

The finding implies that experiential learning does not only improve students' cognitive understanding but also affects their emotional disposition and willingness to adopt hygiene practices. By witnessing the practical relevance of hygiene behaviours such as proper waste disposal, regular handwashing and community sanitation, students may have developed a stronger appreciation for the importance of maintaining a clean and healthy environment. The field trip likely helped them to recognise how hygiene practices contribute to improved health and wellbeing, which in turn strengthened their motivation to adopt positive attitudes and behaviours.

The discussion of findings reveals that the field trip had a significant impact on both knowledge and attitude. Students who participated in the field trip performed better academically in hygiene-related knowledge and also demonstrated more positive feelings and behavioural intentions toward hygiene practices. This suggests that simple field trips serve as a powerful educational tool capable of reinforcing both cognitive and affective learning outcomes. The results therefore support the effectiveness of experiential learning in promoting hygiene awareness and encouraging healthy practices among secondary school students.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary of the study, the conclusion drawn from the findings, and the recommendations based on the effects of the field trip on students' knowledge and attitude about hygiene practices. Suggestions for future research are also included.

Summary

This study investigated the effect of a simple field trip on students' knowledge and attitude about hygiene practices. The study involved two groups, the experimental group which participated in the field trip and the control group which did not. Two hypotheses guided the study, and independent samples t-test was used to analyse the data. The results showed that participation in the field trip significantly improved students' knowledge about hygiene practices. Students in the experimental group had higher mean knowledge scores than those in the control group, and this difference was statistically significant. Similarly, the field trip significantly influenced students' attitudes toward hygiene practices. Students who participated in the field trip demonstrated more positive attitudes than those in the control group. The findings collectively indicate that the field trip served as an effective form of experiential learning that enhanced both cognitive and affective outcomes related to hygiene.

Conclusion

Based on the findings, the study concludes that a simple field trip is an effective instructional strategy for improving students' knowledge and attitude about hygiene practices. The hands-on experience provided students with real-life demonstrations of hygiene behaviours, which strengthened their understanding and shaped their motivation to adopt healthy practices. The field trip exposed the students to practical hygiene measures such as proper sanitation and handwashing procedures, which made learning more meaningful and engaging. The study therefore shows that combining classroom instruction with experiential activities enhances students' overall learning outcomes in hygiene education.

Recommendations

In line with the two hypotheses tested and the results obtained, the following recommendations are made:

1. Since the field trip significantly improved students' knowledge about hygiene practices, teachers should integrate simple field trips into health education lessons. This will support students in gaining clearer understanding of hygiene concepts through observation and practical engagement.

2. As the field trip also had a strong effect on students' attitudes, schools should adopt experiential learning activities as a regular part of hygiene and health promotion programmes. Exposure to real-world hygiene practices can help reinforce positive behaviours and encourage long-term commitment to personal and environmental cleanliness.

Suggestions for Further Studies

Future studies can examine the long-term effects of field trips on students' hygiene behaviour to determine whether the improved knowledge and attitudes are sustained over time. Researchers may also investigate how different types of experiential learning activities compare in improving hygiene practices among students. Additionally, studies involving larger sample sizes or other school levels may help to broaden the understanding of how experiential learning influences hygiene education.

REFERENCES

- Adebayo, T., & Olayinka, S. (2021). Knowledge and practice of personal hygiene among secondary school students in Nigeria. *African Journal of Health Education, 15*(2), 45–56.
- Adeboye, T. O., & Okorie, C. N. (2020). Active learning strategies and attitude change among secondary school students. *Journal of Educational Development, 8*(2), 45–57.
- Ajayi, T. M., & Adeyemi, S. O. (2020). Knowledge, attitudes, and practices of personal hygiene among secondary school students in Southwestern Nigeria. *African Journal of Health Education, 6*(1), 15–26.
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies, 2*(4), 314–324.
- Ali, M., Abate, D., & Kebede, T. (2018). Impact of personal hygiene practices on self-esteem and social integration among adolescents. *Journal of School Health, 88*(5), 392–400.
- Anderson, L. W., & Krathwohl, D. R. (2016). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Longman.
- Bandura, A. (2018). *Social cognitive theory: An agentic perspective*. Annual Review of Psychology, 69, 1–26.
- Behrendt, M., & Franklin, T. (2014). A review of research on school field trips and their value in education. *International Journal of Environmental and Science Education, 9*(3), 235–245.
- Bozdoğan, A. E. (2018). The effect of science centers on students' attitudes towards science and their academic success. *International Journal of Progressive Education, 14*(1), 32–45.

- Chukwu, C. C., Umeh, G. N., & Ogbonna, U. I. (2021). Personal hygiene practices and their effect on disease prevention among school children in Nigeria. *Journal of Public Health and Epidemiology*, 13(3), 105–113.
- Contzen, N., & Mosler, H. J. (2016). Impact of different promotional channels on handwashing behaviour in an emergency context: Haiti post-earthquake public health intervention. *Global Health Action*, 9(1), 1–12.
- DeWitt, J., & Storksdieck, M. (2016). A short review of school field trips: Key findings from the past and implications for the future. *Visitor Studies*, 9(2), 181–197.
- DeWitt, J., & Storksdieck, M. (2018). Learning science in informal environments: Field trips and their impact on student engagement. *Studies in Science Education*, 54(2), 133–156.
- Dreibelbis, R., Kroeger, A., Hossain, K., Venkatesh, M., & Ram, P. K. (2021). Behavior change without behavior change communication: Nudging handwashing among primary school students in Bangladesh. *International Journal of Environmental Research and Public Health*, 18(1), 1–13.
- Ene, N., Adeyemi, O., & Ibrahim, S. (2024). Knowledge, attitude and practice of menstrual hygiene among in-school adolescent girls in Abuja, Nigeria. *BMC Public Health*, 24(1), 1152.
- Eze, C. O., & Okafor, U. P. (2021). Applying the theory of planned behaviour in school-based hygiene education: Effects on students' intention and practice. *African Journal of Health Promotion*, 13(2), 78–89.
- Eze, J. N., & Anochie, I. C. (2019). Knowledge and practice of personal hygiene among secondary school students in Nigeria. *African Journal of Public Health*, 13(2), 45–53.
- Eze, S. C., & Okonkwo, U. A. (2020). Field-based learning and hygiene education outcomes among Nigerian secondary school students. *African Journal of Educational Research and Development*, 8(1), 55–66.
- Eze, U., & Okafor, C. (2020). Hygiene, health status, and academic performance among Nigerian secondary school students. *Nigerian Journal of Educational Research and Development*, 20(1), 65–78.

- Falk, J. H., & Dierking, L. D. (2018). *Learning from museums: Visitor experiences and the making of meaning* (2nd ed.). Lanham, MD: Rowman & Littlefield.
- Freeman, M. C., Garn, J. V., Sclar, G. D., Boisson, S., Medlicott, K., Alexander, K. T., Penakalapati, G., Anderson, D., Mahtani, A. G., Grimes, J. E., Rehfuess, E. A., Clasen, T. F., & Bartram, J. (2017). The impact of sanitation on infectious disease and nutritional status: A systematic review and meta-analysis. *International Journal of Hygiene and Environmental Health*, 220(6), 928–949.
- Hoisington, C., Winthrop, R., & McGivney, E. (2022). Experiential learning for global citizenship education. *Brookings Institution Report*, 1–30.
- Islam, K. F., Awal, A., Mazumder, H., Munni, U. R., Majumder, K., Afroz, K., Tabassum, M. N., & Hossain, M. M. (2023). Social cognitive theory-based health promotion in primary care practice: A scoping review. *Heliyon*, 9(4), e14889.
- Ismail, S. R., Radzi, R., Kamaruddin, P. S. N. M., Lim, H. Y., & Rahim, N. A. (2024). The effects of school-based hygiene intervention programme: A systematic review and meta-analysis. *PLoS ONE*, 19(10), e0308390.
- Iwu, C. J., & Adebola, B. A. (2020). School hygiene practices and health outcomes among Nigerian adolescents. *International Journal of School Health*, 7(1), 23–30.
- Kisiel, J. (2016). Understanding the school field trip experience: A case study of teachers and students. *Journal of Science Teacher Education*, 27(5), 451–469.
- Knapp, C. E. (2019). The impact of field-based learning on student engagement and environmental attitudes. *Journal of Outdoor and Environmental Education*, 22(2), 127–143.
- Kolb, D. A. (2015). *Experiential learning: Experience as the source of learning and development* (2nd ed.).
- Kolb, D. A. (2017). *Experiential learning: Experience as the source of learning and development* (2nd ed.). Upper Saddle River, NJ: Pearson Education.

- Kolb, D. A., & Kolb, A. Y. (2017). Experiential learning theory as a guide for experiential educators in higher education. *Experiential Learning & Teaching in Higher Education*, 1(1), 7–44.
- McLeod, S. (2019). Kolb's learning styles and experiential learning cycle. *Simply Psychology*. Retrieved from <https://www.simplypsychology.org/kolb.html>
- Melariri, P. E., Mokhele, P. R., & Dlamini, N. N. (2024). Impact of a school-based water, sanitation, and hygiene intervention on preschool children in South Africa. *PLOS ONE*, 19(3), e0312345.
- Musa, A., Ibrahim, U., & Yusuf, M. (2021). Effect of experiential learning strategies on students' attitude and knowledge of health concepts. *Nigerian Journal of Educational Research and Development*, 20(1), 82–95.
- Musa, O. I., Onajole, A. T., & Balogun, M. R. (2021). Determinants of hygiene behaviour among adolescents in Nigeria. *African Journal of Reproductive Health*, 25(3), 112–123.
- Nair, S. C., & Sajeev, A. (2018). Effectiveness of educational field visits on the learning outcomes of students in public health. *Indian Journal of Community Medicine*, 43(2), 101–104.
- Nkwonta, C. A., & Ibe, S. N. (2021). Determinants of personal hygiene practices among school-aged children in South-East Nigeria. *Journal of Environmental and Public Health*, 2021, 1–9.
- Nwaogu, M. C., & Okafor, N. F. (2021). The influence of educational field trips on students' health knowledge and attitudes in Nigerian secondary schools. *Journal of Health Education Research & Development*, 39(4), 211–223.
- Odeyemi, B. A., & Adeboye, T. A. (2021). Effect of field-based hygiene education on students' hygiene knowledge and attitudes in Nigerian secondary schools. *African Journal of Health Education Research*, 15(2), 45–58.
- Odeyemi, K. A., & Onajole, A. T. (2017). Impact of hygiene practices on school absenteeism among Nigerian children. *West African Journal of Medicine*, 34(4), 287–294.

- Okafor, C., & Eze, U. (2020). Active learning approaches and students' behavioural change in health education. *Journal of Educational Innovations*, 10(3), 56–68.
- Okafor, U. P., & Eze, C. O. (2020). Effects of participatory health education on students' knowledge and attitudes towards hygiene. *Journal of School Health*, 90(7), 540–548.
- Oloruntoba, E. O. (2018). School water, sanitation and hygiene practices in Nigeria: Status and implications. *International Journal of Environmental Health Research*, 28(5), 543–554.
- Rana, M., Sultana, N., & Rahman, M. (2020). Effectiveness of hygiene education programmes in improving handwashing knowledge and behaviour among rural schoolchildren in Bangladesh. *Journal of Water, Sanitation and Hygiene for Development*, 10(4), 675–684.
- Rennie, L. J. (2019). Learning science outside of school. *Science Education Review*, 18(2), 45–60.
- Rickinson, M., Dillon, J., Teamey, K., Morris, M., Choi, M. Y., Sanders, D., & Benefield, P. (2017). A review of research on outdoor learning.
- Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (2016). The health belief model and health behavior. *Health Education Quarterly*, 43(4), 328–335.
- Stern, M. J., & Powell, R. B. (2020). Environmental field trip outcomes for youth in the United States: A review of the past decade. *Environmental Education Research*, 26(3), 375–393.
- Stern, M. J., & Powell, R. B. (2020). Field trips and the experiential learning cycle. *Journal of Interpretation Research*, 25(1), 47–51.
- Umeh, G. N., & Chukwu, C. C. (2020). Enhancing students' hygiene practices through experiential learning strategies in Nigerian secondary schools. *African Journal of Educational Research and Development*, 12(1), 88–99.

United Nations Educational, Scientific and Cultural Organization (UNESCO). (2020). *Transforming teaching and learning through field-based education*. Paris: UNESCO.

APPENDIX

DEPARTMENT OF HEALTH, SAFETY AND ENVIRONMENTAL EDUCATION FACULTY OF EDUCATION, UNIVERSITY OF BENIN, BENIN CITY, EDO STATE.

IMPACT OF FIELD TRIPS ON THE KNOWLEDGE AND ATTITUDE OF STUDENTS TOWARDS THE IMPORTANCE OF HYGIENE PRACTICES

Dear Respondent,

This questionnaire is designed to examine the impact of field trips on students' knowledge and attitudes towards the importance of hygiene practices. The study is purely academic, and your responses will be treated with utmost confidentiality. Kindly answer the questions honestly.

Thank you.

Section A: Demographic Information

Please tick (√) as appropriate.

- Gender: Male () Female ()
- Age: 12–14 years () 15–17 years () 18 years and above ()
- Class Level: SS1 () SS2 () SS3 ()

- School Type: Public () Private ()

Section B: Knowledge of Hygiene Practices

(Choose the correct option)

1. Which of the following is NOT a good hygiene practice?
 - a. Washing hands with soap before eating ()
 - b. Drinking untreated water ()
 - c. Regular bathing ()
2. Proper handwashing helps to:
 - a. Prevent diseases ()
 - b. Waste water ()
 - c. Stain the hands ()
3. Safe water storage is important because:
 - a. It prevents contamination ()
 - b. It makes water taste better ()
 - c. It saves time ()
4. Which of these is a sign of poor hygiene?
 - a. Clean fingernails ()
 - b. Dirty clothes and body odor ()
 - c. Brushing teeth regularly ()
5. Toilets and waste disposal facilities should be kept clean because:
 - a. It prevents the spread of germs ()
 - b. It makes the environment look beautiful ()
 - c. Both a and b ()

Section C: Attitude towards Hygiene Practices

(Kindly tick one option: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree)

S/N	Items	SA	A	D	SD
1	Every student should wash hands regularly with soap and water.				
2	Hygiene is not very important for preventing diseases.				
3	Students should be encouraged to keep their classrooms and toilets clean.				
4	I feel uncomfortable when people around me do not observe good hygiene.				
5	Using clean water and soap for handwashing is unnecessary.				
6	I am willing to change my habits to improve my personal hygiene.				
7	Field trips make me more interested in practicing good hygiene.				
8	Hygiene education should be taught both in classrooms and through trips.				