ENSIGN GLOBAL UNIVERSITY

KPONG, EASTERN REGION, GHANA

FACULTY OF PUBLIC HEALTH

DEPARTMENT OF COMMUNITY HEALTH

THE USE OF DIGITAL MEDIA TO ACCESS SEXUAL AND REPRODUCTIVE HEALTH INFORMATION AMONG ADOLESCENTS IN SENIOR HIGH SCHOOLS IN THE HO MUNICIPALITY, VOLTA REGION

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NOVEMBER, 2025

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DECLARATION

I, Dodzi Dzifa Manuela hereby declare that "The Use of Digital Media to Access Sexual and Reproductive Health Information among Adolescents in Senior High Schools in the Ho Municipality, Volta Region." is my work as a student of the School of Public Health, Ensign Global University. All sources and information used have been acknowledged.

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Dr Stephen Manortey ……. ……..8-…8-25…….

(Head of Academics Program) Signature Date

DEDICATION

This thesis is dedicated to my lovely and supportive family.

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I would like to express my gratitude to God for his mercies, grace and love that has been my anchor all these years especially through my MPH journey.

Special thanks to my supervisor Dr Stephen Manortey for his support and guidance throughout this journey. I appreciate the time and investments made in me.

To the staff and faculty at Ensign Global University, thank you all for making my stay and study at Ensign memorable.

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ABBREVIATIONS/ACRONYMS

ASRH	**Adolescent Sexual Reproductive Health**
CI	**Confidence Interval**
IRB	**Institutional Review Board**
LI	**Legislative Instrument**
OR	**Odd Ratio**
SRH	**Sexual Reproductive Health**
SRHR	**Sexual Reproductive Health Rights**
WHO	**World Health Organization**
GES	**Ghana Education Service**

ABSTRACT

Introduction: Digital media has increased significantly over the years, with young people worldwide using digital spaces to access information, interact with peers, and ask questions related to Sexual Reproductive Health Rights (SRHR). This pattern is more common in sub-Saharan Africa due to challenges in sexual and reproductive health education, including cultural norms, limited access to resources, and accessibility issues. However, the transition to digital media presents challenges, such as exposing adolescents to unfiltered, harmful, and potentially exploitative interactions.

Aims: This study examined the use of digital media among adolescents in the Ho municipality, to access sexual reproductive health, and identified the types of digital media tools adolescents use. And finally assessed the impact of digital media on sexual and reproductive health knowledge, attitude and behavior.

Methodology: The study employed quantitative research method, specifically, cross-sectional design, using a self-administered questionnaire to receive information from the participants. Stata statistical software package (Version 18) was used for the data analysis. Descriptive statistics, Pearson's Chi-square and multivariate logistic regression analyses were conducted with statistical significance set at p-value <0.05.

Results: Out of 342 respondents, the majority were aged 16–19 years (82.7%) and female (78.0%). Digital media emerged as the most commonly used source of sexual and reproductive health (SRH) information (40.5%), followed by school teachers and family. Social media was the most frequently used digital platform (67.7%), while mobile apps were least used (24.0%). Educational level and relationship status were significantly associated with digital media use ($p < 0.05$). Multivariable analysis revealed that digital media use was significantly associated with higher

odds of positive SRH attitudes (AOR = 4.74, p = 0.001), perceived knowledge gain (AOR = 4.39, p = 0.002), and positive behavior change (AOR = 3.14, p = 0.013).

Conclusion: There is a high reliance on digital media, particularly social media, for sexual and reproductive health (SRH) information among adolescents in senior high schools in the Ho Municipality. This digital engagement is significantly associated with improved SRH knowledge, attitudes, and behaviors, and is shaped by socio-demographic factors such as educational level and relationship status. To strengthen adolescent SRH outcomes, school-based interventions should integrate digital literacy, promote access to youth-friendly online content, and combine digital tools with classroom-based education and adolescent-responsive health services, especially in underserved areas.

Keywords: Adolescents, Sexual and Reproductive Health, Digital Media, Ho Municipality.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Adolescents, defined by the World Health Organization as individuals aged 10 to 19 years represent a significant demographic globally, with approximately 1.2 billion adolescents worldwide (WHO, 2020). The stage of adolescence is a distinct period that forms a bridge between childhood and early adulthood. It is a critical life stage for cognition, attitudes, behaviors, and resilience development that affects a person's future health and well-being (Decosas *et al.*, 2018). The adolescence stage can be broadly divided into three phases: Early (10–13 years), middle (14–16 years), and late (17–19 years). Early adolescence is characterized by physical changes, where they are very concerned about their body image. Adolescents develop abstract thinking and reasoning, and emotionally, they develop a sense of identity during late adolescence, social involvement, peer interaction, as well as sexual interest. Behavioral experimentation is seen during early adolescence, taking risk in middle adolescence and adolescents later learn to assess their own risk taking (Kar, Choudhury and Singh, 2015).

Adolescents face obstacles that are frequently made worse by cultural taboos, restricted access to thorough sexual and reproductive education, and disparate degrees of awareness (Jing *et al.*, 2023). This demographic deals with the complexity of sexual and reproductive health (SRH) on a growing basis (WHO, 2021). Sexual curiosity surges in adolescence as young people try to make sense of the changes in their bodies and the new identities they have as sexual beings (Kar, Choudhury, & Singh, 2015). However, teenagers' natural curiosity frequently encounters obstacles because they may be embarrassed to ask questions or worry that their queries may be interpreted as impolite (Mbarushimana, Conco, & Goldstein, 2022).

Over the years, adolescents' use of digital media has increased massively (Prinstein, Nesi and Telzer, 2020). Young people around the globe are using digital spaces to get information, interact with their peers, and ask questions related to sexual and reproductive health rights (SRHR) which they might not feel comfortable talking about openly (Mbarushimana, Conco and Goldstein, 2022). They also tend to use the media to find information they do not know (WİBOWO *et al.*, 2019). The occurrence of this pattern is more common in sub-Saharan Africa due to the challenges that sexual and reproductive health education faces in the region, including cultural norms, limited access to resources for learning, and issues of accessibility (Klu *et al.,* 2023). The World Health Organization emphasizes adolescent-friendly health services that are responsive to the needs of young people and acknowledges information as essential for preventing negative Sexual and Reproductive health outcomes (World Health Organisation (WHO), 2024).

Sub-Saharan Africa is home to 20% of the world's adolescent population (African Regional Forum for Sustainable Development, 2022) making the region a critical area for adolescent sexual and reproductive health (ASRH) interventions. In this region, the use of digital media for sexual and reproductive health education has been presented as a potential opportunity to increase adolescents' health literacy. A study conducted by (Feroz *et al.,* 2019) points out that digital media interventions can also be effective in improving adolescents' sexual reproductive health (SRH) knowledge and attitudes, especially where face-to-face education is limited. Supported by this, are findings from Bhandari *et al.,* 2024 that social media-based health education interventions are promising when it comes to promoting sexual health behaviors among adolescents. The developing dependence on digital media draws attention to the importance of understanding its implications on sexual and reproductive health outcomes in different cultural settings.

In Ghana, 6.7 million adolescents make up a significant portion of the population (*Population by*

Place of Birth, District, Region, Type of Locality, Age, Sex, and Education. PxWeb, 2021). According to Dabalen and Mensah (2023), young people in Ghana aged 15-29 have the highest prevalence (80%) of internet usage. The incorporation of new technologies including digital media into sexual reproductive health (SRH) education has taken root as a developmental trend that is reflected in the region. Borzekowski, Fobil and Asante, 2006 conducted a study in Accra, Ghana revealing that 53% of the respondents sought for health information online. Similarly, Salifu and Abubakari, 2024 conducted a study that revealed that a great proportion of adolescents utilized social media platforms to seek information, as did Ibegbulam *et al.,* 2018, who found a high proportion of school-going female adolescents in Nigeria relied on the internet for sex education.

In light of this, the transition to digital media as a primary source of sexual and reproductive health information is not without its challenges. Even though they offer unparalleled access to information, they also expose adolescents to unfiltered, harmful, and potentially exploitative interactions.

Finally, the growing usage of digital media by Ghanaian teenagers poses a difficulty as well as an opportunity for ASRH education. Making sure that the content young people come across on these platforms is safe, factual, and supportive of their general health and well-being is crucial as more of them rely on them for information. To better understand these dynamics and design digital interventions that are specifically suited to the needs of teenagers in the Volta Region, this research will examine these dynamics.

1.2 Problem Statement

Adolescents in the Volta Region have a difficult time finding complete and accurate sexual and reproductive health information (Klu *et al.,* 2023). Issues such as “Trokosi”, and violence at school and home, are still of major concern, as they tend to make the adolescent vulnerable to SRH issues

(UNICEF, 2018). Many adolescents are still ignorant of their rights regarding their sexual health and the services that are accessible to them (World Health Organisation (WHO), 2024), despite the growing use of digital media, which has the potential to improve health literacy among youth (Klu *et al.,* 2023). A total of 6,039 female adolescents in the Volta Region were pregnant in 2023, according to recent figures, underscoring the urgent need for effective SRH education in the region (*MyJoyOnline*, 2023).

There is a growing amount of literature on the use of digital media for health education in other locations (Ibegbulam *et al.,* 2018; Bhandari *et al.,* 2024), however, there is a noticeable gap in understanding the specific patterns of digital media use among adolescents in the Volta Region. This includes the preferred platforms, the nature of the content accessed, and the perceived effectiveness of these resources in meeting their SRH needs.

The creation of focused interventions that could successfully encourage adolescents to use digital media for their SRH needs is hampered by the dearth of localized research. This research aims to delve into the extent to which adolescents in the Volta Region use digital media to access SRH information, the types of resources they engage with, and their overall experiences with these platforms. By focusing on the use of digital media, this study seeks to provide valuable insights that could guide the development of more effective and culturally relevant digital health interventions tailored to the needs of adolescents in this region. Consequently, there is a pressing need to look into the best ways to include digital media in SRH education in the Volta Region, with a particular emphasis on the kinds of resources available to adolescents, their experiences using them, and the obstacles they encounter.

1.3 Rationale of the Study

Adolescents around the world are increasingly using digital media to access sexual and reproductive health (SRH) information (UNFPA, 2021; Borzekowski, Fobil and Asante, 2006; Ibegbulam *et al.*, 2018). This shows the need to understand this trend better in the Volta Region. Digital technologies are becoming more integrated into young people's daily lives. It's crucial to study how they use these platforms for health-related information so we can create better ASRH educational programs.

Recent research shows that adolescents globally are using digital platforms for health information (Borzekowski, Fobil and Asante, 2006; Ibegbulam *et al.*, 2018; Bhandari *et al.*, 2024). In sub-Saharan Africa, a recent survey emphasized the importance of digital media in providing health interventions to young people (Saha *et al.*, 2022; Wang *et al.*, 2023).

Digital media can improve health literacy among adolescents by providing accessible, trustworthy, and confidential information. Understanding how adolescents in the Volta Region use these resources can help us create interventions that fit their needs. While there is a growing body of literature on digital media use among adolescents, there is limited research focusing specifically on the Volta Region. This study aims to fill this gap by exploring digital media use among adolescents in this region, the types of SRH information accessed, and the overall experiences of these young people with digital resources.

The findings from this study could have significant implications for public health policy and practice in Ghana. By finding effective strategies for using digital media in SRH education, we can improve how we give health information to adolescents, ultimately improving health outcomes and reducing rates of unintended pregnancies and sexually transmitted infections.

The Volta Region's unique socio-cultural context requires a focused investigation into how digital media can address the specific SRH needs of adolescents. The need for informal sources of

information due to cultural stigmas surrounding sexuality shows the importance of this research in promoting safe and informed health choices among young people (World Health Organisation, 2024).

1.4 Conceptual Framework

This conceptual framework adopts the uses and gratification model. Adolescents seek information about sexual and reproductive health (SRH) to fulfill various needs. Adolescents use digital media to seek specific gratifications such as information seeking, social interaction, and entertainment related to SRH. The gratifications sought, influences the choice of platforms, including social media, health websites and apps, and search engines. The selected digital media platforms affect how effectively adolescents access SRH information, including content availability and source credibility. The information accessed influences adolescents' knowledge, attitudes, and behaviors regarding sexual health, leading to changes in knowledge, attitudes, and behaviors. Cultural norms and peer influence can moderate the entire process, shaping how these relationships manifest in specific communities.

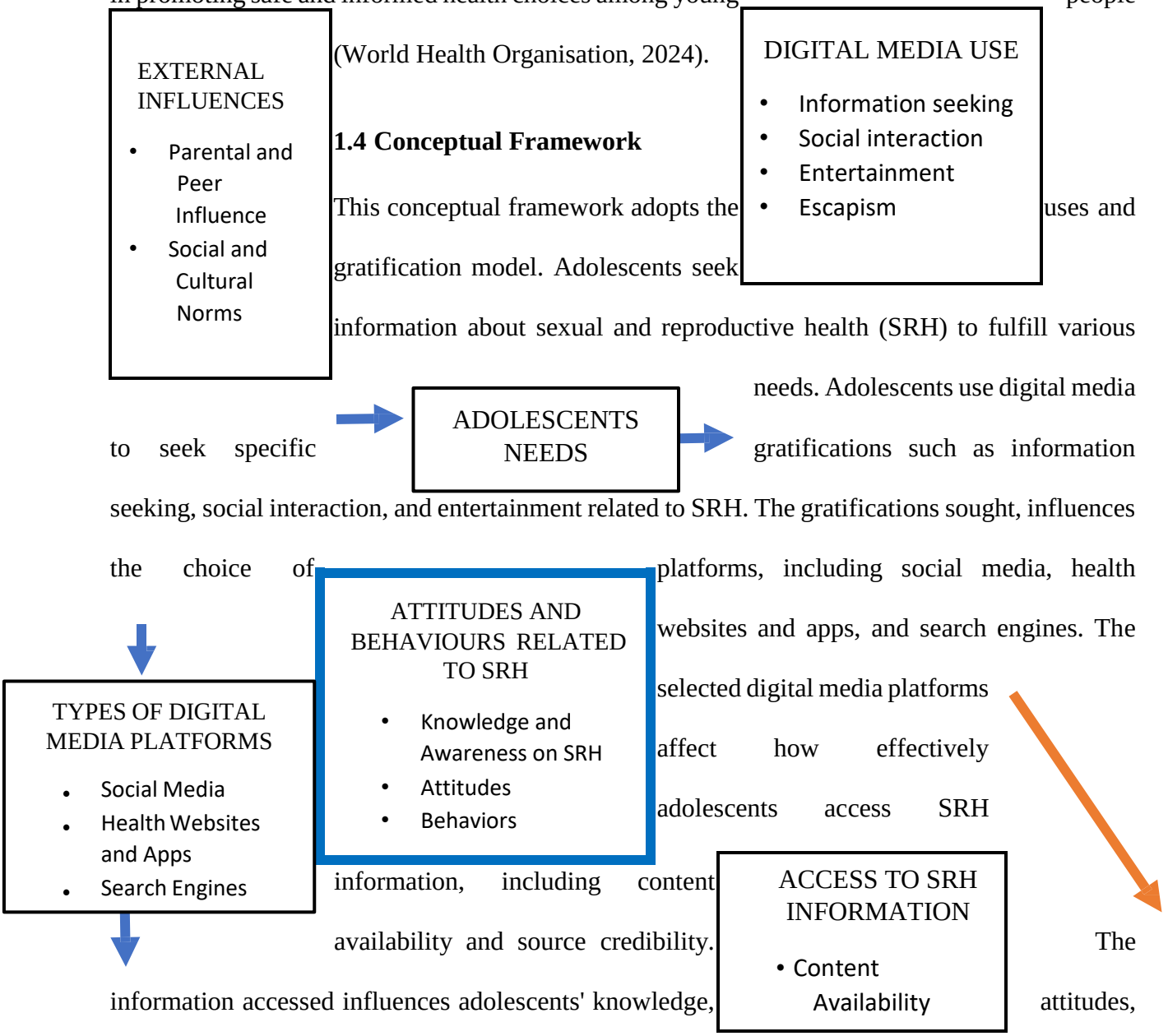


Figure 1: A conceptual model of digital media use among adolescents to access SRH information

Source: Adapted from (Katz, Blumler and Gurevitch, 1973)

1.5 Research Questions

i. How frequently do adolescents in the Volta Region use digital media to seek sexual and reproductive health issues compared to other sources?

ii. What are the primary sources of sexual and reproductive health information accessed by adolescents in the Volta Region through digital media?

iii. To what extent does the availability of Sexual and Reproductive Health information on digital media influence adolescents' attitudes and behaviors regarding sexual health in the Volta Region?

1.6 General Objective

To examine the patterns and effectiveness of digital media use by adolescents in accessing sexual and Reproductive health information.

1.7 Specific Objectives

i. To identify the pattern of digital media use by adolescents for seeking sexual and reproductive health information compared to other sources, such as healthcare providers and school education.

ii. To identify the types of digital media platforms that adolescents in the Volta Region predominantly use to access Sexual and Reproductive Health (SRH) information.

iii. To analyze how access to SRH information via digital media affects adolescents' attitudes and behaviors related to sexual health.

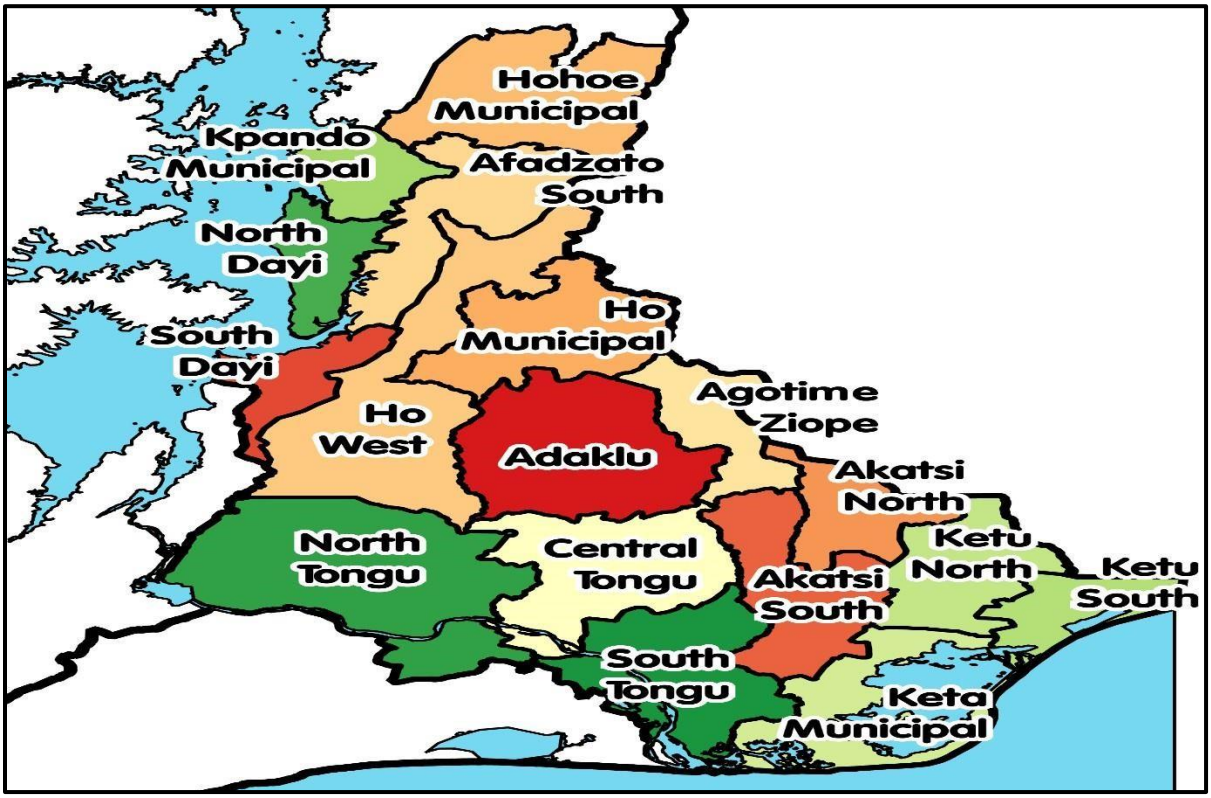
1.8 Profile of Study Area

The Ho Municipal, is one of the 5 Municipalities in the Volta Region, was established by a Legislative Instrument (L.I) 2074 of 2012. Ho is the capital of the Municipality, it also serves as the capital and economic hub of the Volta Region. The Municipality shares boundaries with Adaklu and Agotime-Ziope Districts to the South, Ho West District to the North and West and the Republic of Togo to the East. Its total land area is 2,361 square kilometers, representing 11.5 percent of the region's total land area.

The general relief of the Municipality is made up of both mountainous and lowland areas. The general drainage pattern is southwards and dominated by rivers like Tsawe (Alabo) and Kalapa, which flow into the lower Volta or Avu Lagoon. These rivers are seasonal and therefore do not provide an all-year-round dependable source of water supply to the communities for home use and irrigation for farming. Ho Municipality has two main types of vegetation zones, the moist semideciduous forest and the savannah woodland. The governance structure of the Municipality is made up of 43 Assembly Members, including 29 elected members and 14 government appointees. Administratively, the Municipality has five Zonal Councils which operate below the Assembly structure. Traditionally, chiefs are the main custodians of stool lands, beliefs, and customs in the Municipality. They are also the symbol of authority in the Municipality. The Municipality is made up of two major traditional councils. These are the Asogli Traditional Council and Hokpeta Traditional Council, both headed by paramount chiefs, and supported by divisional and sub-chiefs who play various roles in the traditional society.

The public service employs 9 percent of the workforce while the private sector (dominated by the informal sector) employs the remaining 91 percent. The industrial sector in the Municipality is less developed. There are currently no large industrial holdings in the Municipality. The commercial

sector is dominated by retail activities. There are limited wholesale activities in agricultural and industry. On the other hand, the service sector is dominated by small-scale operators in activities such as telecommunication services, hair dressing and barbering, electronic repairs, vehicle repairs and footwear repairs. The Municipality has a number of small-scale industries. These include cassava flour processing, mushroom growing, bee keeping, gari production, soap making, batik tie and dye making, carpentry and metal work.



Map 1: A Volta Regional map showing the Ho Municipal

1.9 Organizational Structure of the Thesis

This thesis is in six parts. Chapter One which is the introductory chapter presents an overview of the study by providing a brief background to adolescence and the challenges they face in regards to SRH information, and their use of digital media to access such information by previous studies

from a global perspective to the African context. This is followed by the problem statement which highlighted the challenges adolescents in the volta region face in accessing ASRH.

The Chapter Two involves the review of literature and it presents an introduction to the chapter, a review of empirical literature on digital media use among adolescents to access SRH information taking into cognizance the various traditional sources adolescents have access to and the impact of digital media access on adolescents SRH attitudes and behaviors.

The Chapter Three is the methodology that was used in the present study. This consists of research methods and design as well as the necessary procedures that are required to carry out a successful research project.

The Chapter Four is the findings and this consists of a summary of the socio-demographic characteristics, prevalence and patterns of digital media use amongst adolescents, bivariate associations between digital media use and sociodemographic factors and the multivariate analysis assessing the impact of digital media use on good sexual and reproductive health knowledge, attitude, and behavior.

Chapter Five of this thesis presents the discussions of the key findings by contextualizing the findings and relating the findings to previous works on digital media use among adolescents who are in school to access SRH information. The implications of the findings are also discussed in this chapter.

Finally, Chapter Six presents the conclusion from the study and recommendations for public health practice, policy and research regarding digital media use among adolescents in senior high schools in the Ho Municipality to access SRH information.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter provides an overview of empirical literature on digital media and its use among adolescents to access sexual reproductive health. The chapter begins with an empirical review of studies conducted among adolescents on the prevalence and patterns of digital media use to SRH information. It further looks at the various traditional methods available for SRH information, the impact of digital media access on their attitude and behavior. The chapter concludes with some barriers and facilitators to the use digital SRH information.

2.2 Prevalence and Patterns of Digital Media Use for Adolescent Sexual Reproductive Health Information

Digital media refers to user interactive forms of communication (Guse *et al.*, 2012). Around the world, adolescents are using digital media as a medium to learn, experience and communicate with one another. The internet has impacted how adolescents communicate, learn and experience sexual reproductive health. It offers increased access to information, people and communities with maximum anonymity (UNFPA, 2021), making it a more desirable medium for adolescents to use in accessing sexual reproductive health (Macharia *et al.*, 2021; Abdurahman *et al.*, 2022). The anonymity it provides and its convenient access to content that many youth find difficult to discuss in person pulls adolescents to its use (Maes, Van Oosten and Vandenbosch, 2022).

For example, Park and Kwon (2018) found that 81% of teens had searched online for sexual health information, and 71% were likely to search the internet for information on health. Similar patterns emerge internationally, though usage varies widely. Systematic reviews conducted by Linzi (2015) showed that 20-76.5% of adolescents used the internet for sex education.

A cross-sectional study in Benin City, Nigeria, found that 81.6% of in-school adolescents had internet access, yet only 35.4% actively used digital platforms for SRH information, stating slow connectivity and limited digital literacy as barriers (Abdurahman *et al.*, 2022).

Studies show that males are more likely to rely mainly on the internet for sexual reproductive health information as compared to females (Silva *et al.*, 2024). Also, a study conducted amongst homeless and runaway youth show that gay males and females, had higher odds of using digital media to access SRH information as compared to their heterosexual peers, underplaying the importance of digital platforms in serving marginalized groups that face barriers to additional healthcare access (Barman-Adhikari and Rice, 2011).

2.2.1 Sources of Adolescent SRH Information: Digital versus Traditional

While digital media use is widespread, adolescents still continue to confide in other traditional sources for SRH information. Healthcare providers and school-based programs remain primary sources for younger adolescents, however, their reliance on these sources declines with age due to concerns about confidentiality, socio cultural barriers and judgmental attitudes (WHO, 2008; Macharia *et al.*, 2021; Mbarushimana, Conco and Goldstein, 2022). For example, qualitative interviews in Kibra, Kenya, revealed that only 22% of older adolescents preferred parental guidance, opting instead for peer networks or anonymous online forums (Abdurahman *et al.*, 2022).

A study conducted in Enugu, Nigeria, found that young people tend to go to digital media for SRH need because of social stigma that comes with visiting SRH centers, poor treatment or hostility by health care providers, and lack of information about policies concerning youth reproductive healthneeds (Ibegbulam *et al.*, 2018). Another recent systematic review across Sub-Saharan Africa found parallel barriers pushing adolescents online for SRH support. In their synthesis of 22 studies,

Alhassan *et al.*, (2025) reported that sociocultural stigma around adolescent sexuality, disrespectful or judgmental attitudes from clinic staff, and poor awareness of youth-friendly service policies all discouraged young people from attending in-person SRH services, leading them instead to seek information through digital platforms.

2.2.2 Healthcare Providers as Information Sources

Healthcare providers have been recognized as the reliable and medically sound source of information, however, they rank as least utilized among adolescents as a source of SRH (Silva *et al.*, 2024)**.** This paradox reflects significant barriers that hinder adolescent-provider communication regarding sexual health topics (Hoopes *et al.*, 2017). While adolescents recognize health care providers as knowledgeable in sexual health topics, multiple factors hinders their effectiveness as primary sources of SRH information. Santelli *et al.,* (2006) showed that over 60 per cent of adolescents' report discomfort discussing sex with clinicians, although this hesitancy declines with age and experience. Barriers such as concerns about confidentiality, fear of being judged, anonymity and practical obstacles, such as costs, and transportation cost, are reasons purchase of SRH information at healthcare centers is relatively low (Hoopes *et al.*, 2017; Waling, Fraser and Fisher, 2020). Study revealed that adolescents tend to be bolder about seeking SRH information from healthcare providers as they mature (Hoopes *et al.*, 2017).

2.2.3 School-Based Sexual Health Education

School-based sexual health education represents a traditional formal source that varies significantly in availability and comprehensiveness across different contexts. In the United States, more than half of states lack comprehensive sexual health education in public schools, with only 15 states requiring no sexual health education at all (Nguyen and Carvalho, 2023). This educational

gap creates opportunities for digital media to fill information voids that formal education systems fail to address.

Research indicates that adolescents seek information about sexuality through school-based programs and teachers, but the effectiveness of these programs depends heavily on their comprehensiveness and cultural sensitivity (Silva *et al.*, 2024). Where comprehensive sexual education is available, it can significantly impact adolescents' knowledge and behavior. However, the limitations of school-based education including curriculum restrictions, cultural barriers, and varying quality of instruction often drive adolescents to seek supplementary information through digital channels (Nguyen and Carvalho, 2023).

Meta-analyses demonstrate that comprehensive programs reduce adolescent pregnancy by up to 50 per cent and lower STI rates (Kirby, Laris and Rolleri, 2007; Kohler, Manhart and Lafferty, 2008). Curricular restrictions and cultural pushback often undermine effectiveness, driving adolescents to supplement with online resources.

2.2.4 Family and Peer Networks

Family members, especially parents are a good source of SRH information for adolescents, but adolescents do not utilize this source significantly. (Silva *et al.*, 2024). Parents are theoretically well-placed to guide SRH decisions, but adolescents' shyness and perceived parental disapproval limits uptake (Widman *et al.*, 2016). Mbarushimana, Conco and Goldstein (2022) found that young adolescents were mostly unable to speak to their parents about their SRH needs, mainly because they are shy. This gives room to harboring misconceptions and turning to other sources for help. On the contrary, a study indicates that parental connectedness decreases with age, leading older adolescents to

perceive their parents as potentially less knowledgeable compared to digital sources (Macharia *et al.*, 2021).

Most adolescents turn to the closest people around them to seek for advice on SRH matters, not necessarily expecting facts, but for sharing and comparing experiences (Waling, Fraser and Fisher, 2020). Peer networks offer emotional backing and shared experiences but frequently perpetuate myths, which in turn lead youth back to digital platforms for accurate content. Even though, peer networks provide emotional support and are a much easier platform to discuss sexual health, their reliability as sources that provide accurate information is limited (Waling, Fraser and Fisher, 2020). This often drives adolescents toward digital resources for more factual content.

2.3 Impact of Digital Media Access on Adolescent SRH Attitudes and Behaviors

Studies have shown a significant influence of digital media on positive sexual and reproductive health attitudes and behaviors amongst adolescents. A study conducted by Tadele (2024) found that digital interventions greatly increases the knowledge of adolescents on SRH. A quasi-experimental study conducted in Nepal, to assess the effectiveness of a social media-based health education intervention in promoting sexual health among adolescents, identified that social media interventions, are very promising for promoting positive SRH behaviors amongst adolescents (Guse *et al.*, 2012; Bhandari *et al.*, 2024) and in India's Bihar and Uttar Pradesh, social-media diffusion correlated with a 25 per cent uptick in self-reported safe-sex practices (Saha *et al.*, 2022).

A similar study was conducted in Bihar and Uttar Pradesh, India, thi s study found that there was significant positive association between social media and the knowledge of SRH. It also suggested that social media led knowledge diffusion improved sexual practices among adolescents (Saha *et al.*, 2022). A scoping review conducted by Dowling *et al.* (2025) showed that many technological interventions have led to increased SRH knowledge among adolescents. He further found that

LMIC digital programs improved SRH knowledge by an average of 35 per cent across 18 studies.

Ishii (2010) observed that adolescents engaging with moderated online forums exhibit more positive attitudes toward condom use than those relying on unmoderated blogs.

2.4 Barriers and Facilitators to Digital SRH Information Use

2.4.1 Misinformation and Content Inaccuracy on Digital Platforms

Misinformation and content inaccuracy when dealing with digital platforms has become a pressing issue. Without the appropriate guidance, adolescents are unlikely to discern from wrong and accurate SRH information online. This can lead to adolescents indulging in unsafe practices, and believing in myths, which reduces the impact of digital media (Linzi, 2015; Sawedi, 2025).

The spread of misinformation can be deepened by the case of viral content on digital platform, where sensational information gets much attention with no credibility (Sawedi, 2025). Chou, April and Klein, (2018) showed that health-misinformation exposure on social platforms correlates with a 40 per cent drop in accurate SRH knowledge. Interventions employing AI-powered fact-checkers can mitigate these effects (Mendoza, Poblete and Castillo, 2010).

Many digital platforms allow any user to post and share content without verifying the validity of the information. This makes it difficult to curb myths, stigma, and misunderstandings related to SRH. Unverified online SRH content fuels myths and unsafe practices. Adolescents exposed to sensational or viral “remedies” often adopt dangerous behaviors, one Ghanaian focus group reported girls using unproven herbal abortion methods found on social media, resulting in medical complications (Salifu and Abubakari, 2024; Sawedi, 2025). In a focus group discussion, respondents cited that there were a number of girls who got pregnant and made their situation complicated by relying on information from social media to get rid of their pregnancies (Salifu and Abubakari, 2024).

2.4.2 Technical and Access Issues

The accessibility of the internet was a good reason for utilizing digital media for SRH for most adolescent, however, 313 respondents stated that slow internet was of the challenges they face (Ackah *et al.*, 2024). In some regions, adolescents are faced with the challenge of weak connectivity, power outages and limited phone ownership. Even with devices available, the cost of data can be a challenge to some. Data costs consume up to 15 per cent of a teen's monthly income in low-resource settings. This affects a number of adolescents from accessing SRH information online (Nwaogwugwu and Isara, 2022). Offline-capable apps and zero-rating partnerships with telecoms have been proposed as solutions (Guse *et al.*, 2012; UNICEF, 2019).

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

This chapter looks at the methods and procedures that were used to gather data, the variables included in the analyses and the statistical analyses that were used to analyze the data. This methodology section consists of the data source and sample, study variables, ethics and data analysis among others. The details are presented below.

3.2 Research Methods and Design (Study Methods and Design)

A descriptive study design simply describes the desired characteristics of the study sample. This study design generalizes findings from a representative sample to a larger population. This study will specifically use the cross-sectional study design which involves collecting data at one point. This descriptive research allows the collection of data to answer the stated research questions concerning how adolescents in the Ho municipality use digital media to access sexual and reproductive health information (Fathalla, 2015; Adu and Miles, 2023).

3.3 Study Site

The study site is the Ho municipality in the Volta Region, Ghana. The study is targeted at selected senior high schools in the Ho, dispersed across a variety of both Public and Private Senior High Schools to ensure the sample well represents the population.

3.4 Subjects/Study Population

The study population will include adolescents that are aged 10-19 years, enrolled in Senior High Schools within the Ho municipality in the Volta Region. This will specifically target both public and private schools.

3.4.1 Inclusion Criteria:

1. Adolescents aged 10-19 years.
2. Adolescents currently enrolled in the selected senior high schools.
3. Adolescents who have access to digital media tools (smartphones, computers, internet-enabled devices).

3.4.2 Exclusion Criteria

1. Adolescents below 10 years or above 19 years of age.
2. Adolescents who are not enrolled in any senior high school in the selected districts.
3. Adolescents who do not use any digital media for accessing information.

3.5 Sample size

The sample size will be calculated using the Cochran's formula:

$$n = \frac{Z^2 \times pq}{e^2}$$

Where;

n = sample size (Cochran, 1977)

Z = the z-score that corresponds with 95% confidence interval which is 1.96
p = Proportion of adolescents that use social media to access SRH 66.7%
q = Proportion of adolescents who don't use social media is equal to 1-0.667= 0.33

e = Margin of error set at 5% (0.05)
Therefore;

$$n = \frac{(1.96)^2 \times (0.667 \times 0.33)}{(0.05)^2} \cong 339$$

3.6 Sampling Procedure

The Stratified Random Sampling technique would be used to select the study participants. The Volta Region will be divided into two strata, the Private and Public-school strata. This is divided according to the types of schools (Public schools, Private schools) in the Volta Region. Using the Simple Random Sampling technique, two schools will be selected from each of the two strata. After selecting the schools, students will be randomly chosen from each selected strata still using the Simple Random technique.

3.7 Data collection methods and instruments

A semi-closed-ended questionnaire will be used in collecting data. The questionnaire will assess adolescents' access to digital media, the frequency of use, and the types of platforms that are used. The questionnaire will be self-administered. KoboCollect will be used as a media tool for data collection, to prevent the use of paper questionnaires.

3.8 Pre-testing

Pre-testing of the questionnaire will be done in a senior high school in a district outside the selected study sample within the Volta Region. This school will be chosen based on its similarities to the study population (like student demographics). A small sample size of 30-50 adolescents will be randomly selected from this school to participate in the test. This is done to find out the appropriateness of the questionnaire, so necessary corrections and modifications are made on questions that were tricky to understand.

3.9 Data handling

Data collected will be encrypted to ensure that participant information remains confidential. KoboCollect automatically backs up data to its cloud server, hence, no data is lost during and after collection. Access to KoboCollect to access data will be restricted to authorized personnel using login credentials.

3.10 Data security and confidentiality

Participants will be assured that under no circumstance will their identity, particularly names or addresses be linked to the data analysis, reporting, and dissemination of the findings of the study. This study will be done to ensure that individual respondents remain unknown, and any information provided by the participant will be kept strictly confidential.

No data received will be disseminated to any other party, because data will be collected using software, data generated, will be safely kept in a private folder on a locked machine to ensure it does not get into the wrong hands. To ensure data validity and quality, data will be cleaned to remove duplicates and errors.

3.11 Statistical analysis

Quantitative data collected will be exported into STATA analytic software (*StataCorp. 2007. Stata Statistical Software. Release 18. StatCorp LP, College Station TX, USA)* for analysis. Univariate, bivariate, and multivariate analyses using Frequency tables, Pearson's Chi-Square tests, and Logistic regression models, respectively, will be conducted to determine the prevalence, levels of association, and effects. Findings will be presented in tables, graphs and charts.

3.12 Study variables

For this study, three primary outcomes (positive sexual and reproductive health (SRH) attitudes, perceived knowledge gain, and SRH behavior change) were considered. Each analyzed as a binary (YES/NO) variable in the logistic regression models.

1. Perceived Knowledge Gain

Affirmative responses indicating knowledge gain were grouped together, while neutral or negative responses were grouped as no perceived gain. Participants who reported gaining SRH knowledge were coded YES; those who did not were coded NO.

2. Positive SRH Attitudes

Individual responses were summed or averaged to generate an overall attitude score for each participant. Participants whose scores met or exceeded a pre-specified threshold (e.g., median split or a priori cut-off) were classified as having "positive SRH attitudes" (coded YES); all others were coded NO.

3. SRH Behavior Change

Any report of positive change in behavior, reflecting safer practices, was counted as evidence of behavior change. Participants indicating at least one SRH behavior modification were coded YES; those reporting no change were coded NO.

Details of the variables are presented in the Table 3.1 below;

Table 3.1: Measurement and Recoding of Impact Variables

VARIABLE	SURVEY QUESTION	ORIGINAL RESPONSE OPTIONS	RECODED
Impact: Knowledge	How has digital media affected your knowledge about sexual health?	Increased significantly; Increased slightly; No change; Slightly less; No influence	Increased significantly/slightly = 1; Other = 0
Impact: Attitudes	How has online SRH info influenced your attitudes towards safe sexual practices?	Increased significantly; Increased slightly; No change; Slightly less; No Influence	Increased significantly/slightly = 1; Other = 0
Impact: Behavior change	Have you changed any SRH-related behaviors after accessing online info?	Yes significant; Yes some; Already safe; No changes	Yes significant/Yes some = 1; Others = 0
Attitude_1	I can make more informed decisions since I access SRH info online.	Strongly agree; Agree; Neutral; Disagree; Strongly disagree	Strongly agree/Agree = 1; Neutral/Disagree/Strongly disagree = 0
Attitude_2	Internet SRH knowledge changed my perspective on safe sex practices.	Strongly agree; Agree; Neutral; Disagree; Strongly disagree	Strongly agree/Agree = 1; Neutral/Disagree/Strongly disagree = 0
Attitude_3	I feel more comfortable talking about SRH issues thanks to digital media.	Strongly agree; Agree; Neutral; Disagree; Strongly disagree	Strongly agree/Agree = 1; Neutral/Disagree/Strongly disagree = 0
Attitude_4	I am encouraged to consult specialists for SRH concerns due to digital media.	Strongly agree; Agree; Neutral; Disagree; Strongly disagree	Strongly agree/Agree = 1; Neutral/Disagree/Strongly disagree = 0
Attitude_5	I am more inclined to practice healthy sexual conduct because of online info.	Strongly agree; Agree; Neutral; Disagree; Strongly disagree	Strongly agree/Agree = 1; Neutral/Disagree/Strongly disagree = 0

Attitude_Score	Sum of Attitude_1 to Attitude_5	0–5 (number of positive responses)	Sum of 1’s from all attitude items
Good_Attitude	Overall attitude classification	Score ≥ 3 = good; Score < 3 = poor	Good attitude = 1; Poor attitude = 0

3.13 Dissemination of results

Easily readable reports that highlight important conclusions and offer suggestions relating to the circumstances of each school that took part in the study. Peer education initiatives in schools would be strengthened and informed by the study's results. Findings could be merged into curriculum discussions on SRH topics. Study findings will also be presented at conferences, seminars, and workshops to provide visibility to the study, and trigger the interest of other researchers to the subject matter.

3.14 Ethical Issues/Considerations

Ethical clearance was obtained from the Institutional Review Board of Ensign Global University before the study begins. Administrative permissions to conduct the study in the Senior High Schools was obtained from the Regional Ghana Education Service through a letter of introduction provided by Ensign Global University, and submitted to the District Ghana Education Service. Introductory letter was submitted to the various schools, and headmasters or assistant headmasters were given a written parental consent form to sign. Written informed consent was then obtained from all study participants before data collection and assured of anonymity and confidentiality of all information gathered. The research objectives were discussed with participants and they were informed that participation is voluntary and they have the power and right to withdraw from the study at any point at all should they feel like it.

3.15 Risk and Benefit

There will be no anticipated risk associated with the study. However, an inconvenience may be the time and effort the participants will take to participate in this study. There will be no direct benefits for participating in the study but indirectly, its success will help enrich the literature on adolescent

sexual and reproductive health, as well as serve as an information guide to organizations and institutions, looking to work around the digital media interventions for ASRH. This indirectly improves the overall health and well-being of adolescents in this region and country.

CHAPTER FOUR

4.0 RESULTS

4.1 Introduction

This chapter presents results from the analysis of the data that was collected during the field activities in senior high schools in the Ho Municipality, Volta Region of Ghana over 4 weeks. The results are presented according to the objectives of the study. Tables and graphs were used to better illustrate findings. Out of 345 questionnaires that were distributed, 342 were cleaned and completed upon entry.

4.2 Socio-Demographics of Study Participants

As shown in Table 1, the study participants largely fell within the 16-19 age group, accounting for 82.70% of the total sample, while 17.30% were aged 13-15. They had a mean age of 16.66 years with a standard deviation of 1.33. The majority (78.01%) of the study participants were female. Additionally, 87.68% resided in urban areas while 12.32% lived in rural areas. In terms of educational level, 52.20% were in SHS 2 and 47.80% in SHS 3. 30.21% reported being in a romantic relationship compared to 69.79% who were not.

Table 4.1: Socio-Demographics of Study Participants

VARIABLE	CATEGORIES	FREQUENCY (N)	PERCENTAGE (%)
AGE GROUP (YEARS)	13-15	59	17.30
	16-19	282	82.70
GENDER	MALE	75	21.99
	FEMALE	266	78.01
RESIDENCE	RURAL	42	12.32
	URBAN	299	87.68
EDUCATIONAL LEVEL	SHS 2	178	52.20
	SHS 3	163	47.80
	YES	103	30.21

RELATIONSHIP STATUS	NO	238	69.79
AGE (YEARS)	(16.66 ± 1.33)		

4.3 Sexual Reproductive Health (SRH) Information Source Used by Participants

In Figure 2, the predominant source of SRH information reported by the respondents was digital media (40.47%), followed by school education/teachers (21.99%), family members (19.65%), and healthcare providers (11.44%). Peers (6.45%) were the least used source of SRH amongst the participants.

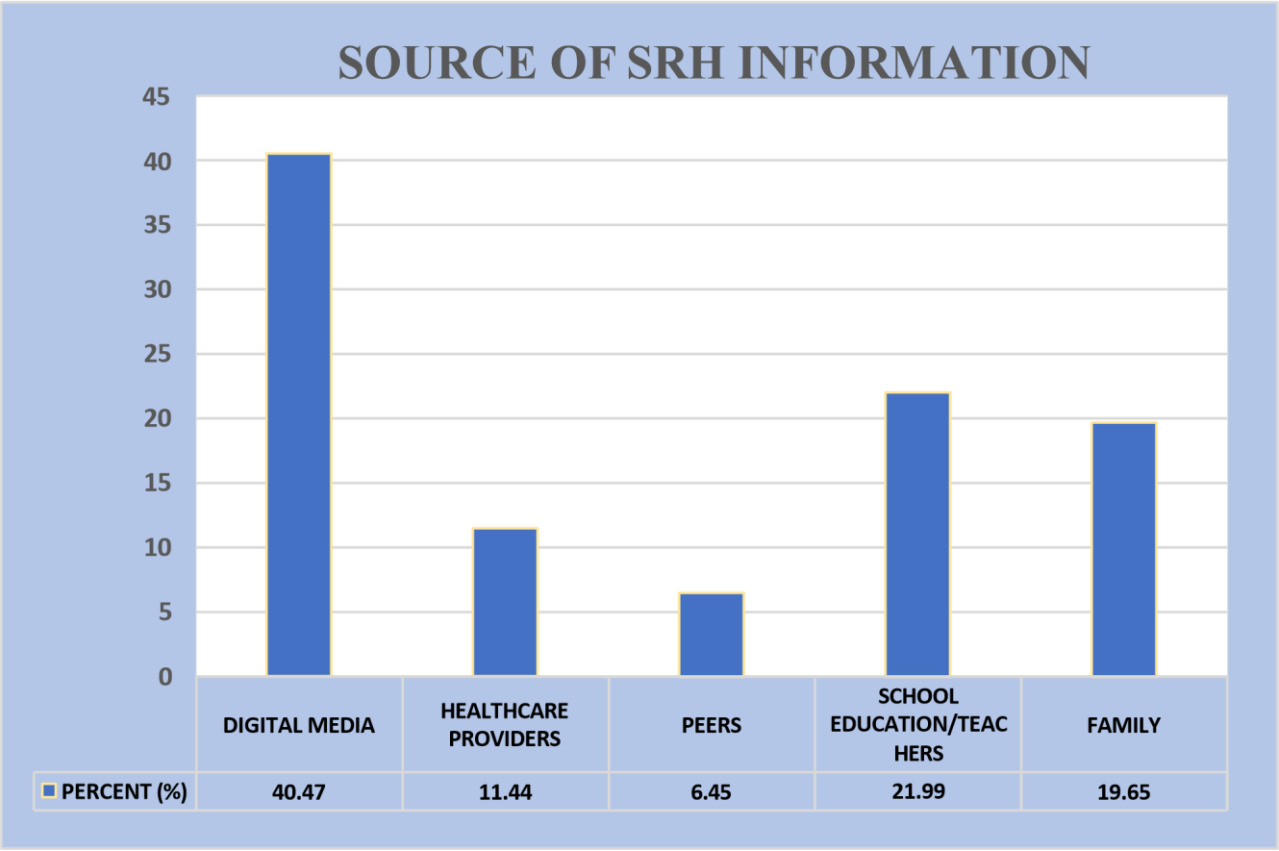


Figure 2: Sexual Reproductive Health (SRH) information source used by participants

4.4 Frequency of Digital Media Compared to Other SRH Information Sources

Table 2 represents the frequency with which participants accessed SRH information through digital media, compared to other sources. The results revealed that when using digital media, 35.78% of participants sought information occasionally, while 6.74% did so monthly. In contrast, 42.52% of participants were not sure or had never sought information from them, while 3.52% did so daily. School teachers were consulted occasionally by 33.72%, and monthly by 6.74% of participants. Family members were an occasionally source of information for 36.07% of participants, and a weekly source to 2.64%. 44.57% of participants were not sure or had never relied on peers as an information source, compared to 3.23% who did so occasionally.

Table 4.2: Frequency of Digital Media compared to other information sources

VARIABLE	CATEGORIES	FREQUENCY (N)	PERCENTAGE (%)
DIGITAL MEDIA	DAILY	65	19.06
	WEEKLY	48	14.08
	MONTHLY	23	6.74
	OCCASIONALLY	122	35.78
	NOT SURE	83	24.34
HEALTHCARE PROFESSIONALS	DAILY	12	3.52
	WEEKLY	11	3.23
	MONTHLY	50	14.66
	OCCASIONALLY	123	36.07
	NOT SURE	145	42.52
SCHOOL TEACHERS	DAILY	63	18.48
	WEEKLY	29	8.5
	MONTHLY	23	6.74
	OCCASIONALLY	115	33.72
	NOT SURE	111	32.55
FAMILY MEMBERS	DAILY	87	25.51
	WEEKLY	9	2.64
	MONTHLY	20	5.87
	OCCASIONALLY	123	36.07

	NOT SURE	102	29.91
PEERS	DAILY	81	23.75
	WEEKLY	15	4.40
	MONTHLY	82	24.05
	OCCASIONALLY	11	3.23
	NOT SURE	152	44.57

Source: *Field data, 2025*

4.5 Association Between Information Source Used and Socio-Demographics of Participants

Pearson's Chi-Square was used to examine whether use of digital media, healthcare providers, peers, school teachers, or family varied by gender, age, class, location, or relationship status. The analysis concerning the relationship between SRH-information source and socio-demographic factors (Table 4) revealed no statistically significant associations at $\alpha = 0.05$. Choice of digital media, healthcare providers, peers, school teachers or family as an information source did not vary by gender (digital media $p = 0.883$), age group ($p = 0.189$), educational level ($p = 0.868$), location ($p = 0.941$), or relationship status ($p = 0.392$).

TABLE 4.3: Association Between Information Source Used and Socio-Demographics of Participants

VARIABLE	CATEGORIES	INFORMATION SOURCE BY SOCIO-DEMOGRAPHICS					P-VALUE
		DIGITAL MEDIA	HEALTHCARE PROVIDERS	PEERS	SCHOOL TEACHERS	FAMILY	
GENDER	MALE	32 (23.19%)	9 (23.08%)	6 (27.27%)	16 (21.33)	12 (17.91)	0.883
	FEMALE	106 (76.81%)	30 (76.92)	16 (72.73%)	59 (78.67%)	55 (82.09)	
AGE GROUP (Years)	13-15	23 (16.67)	8 (20.51)	0 (0.0)	13 (17.33)	15 (17.30)	0.189
	16-19	115 (83.33)	31 (79.94)	22 (100)	62 (77.61)	52 (77.61)	
EDUCATIONAL	FORM 2	75 (54.35)	19 (48.72)	11 (50.00)	36 (48.00)	37 (55.22)	

LEVEL	FORM 3	63 (45.65)	20 (51.28)	11 (50.00)	39 (52.00)	30 (44.78)	0.868
RESIDENCE	RURAL	15 (10.87)	5 (12.82)	2 (9.09)	12 (16.00)	8 (11.94)	0.941
	URBAN	123 (89.13)	34 (87.18)	20 (90.91)	63 (84.00)	59 (87.39)	
RELATIONSHIP STATUS	NO	93 (67.39)	29 (74.36)	12 (54.55)	54 (72.00)	50 (74.63)	0.392
	YES	45 (32.61)	10 (25.64)	10 (45.45)	21 (28.00)	17 (25.37)	

Source: *Field data, 2025*

4.6 Chi Square Test Association Between Digital Media Use and Participants Characteristics

We assessed "use vs. non-use" of any digital platform across demographics, results shown in Table 4. The chi square test showed that educational level (p=0.006), and relationship status (p=0.004) were significantly associated to using digital media to access SRH information. However, no significant associations between gender (p = 0.379), age group (p = 0.111), location (p = 0.771) and accessing SRH information by digital media.

Table 4.4: Chi-Square Test Association Between Digital Media Use and Participants Characteristics

VARIABLE	CATEGORIES	USE OF ANY DIGITAL MEDIA PLATFORM		P-VALUE
		NO	YES	
GENDER	MALE	68 (21.45%)	7 (29.17%)	0.379
	FEMALE	17 (70.83%)	249 (78.55%)	
AGE GROUP (Years)	13–15	7 (29.17%)	52 (16.40%)	0.111
	16–19	17 (70.83%)	265 (83.60%)	
EDUCATIONAL LEVEL	SHS 2	19 (79.17%)	159 (50.16%)	**0.006***
	SHS 3	5 (20.83%)	158 (49.84%)	

RESIDENCE	RURAL	4 (16.67%)	38 (11.99%)	0.771
	URBAN	20 (83.33%)	279 (88.02%)	
RELATIONSHIP STATUS	NO	23 (95.83%)	215 (67.82%)	**0.004***
	YES	1 (4.17%)	102 (32.18%)	

Source: *Field data, 2025*

NOTE: * *Statistically significant association at a 95% Confidence Interval*

4.7 Digital Media Platforms Usage by Study Participants

Figure 3 shows the various digital platforms and their reported use for accessing sexual and reproductive health information. Social media emerged as the most frequently used platform, with 67.7% of participants indicating usage, while 32.3% did not use social media as an information source. This was followed by health websites, used by 30.8% of participants, compared to a 69.2% who reported no-use. Mobile apps were the least used digital platform, with 24.0% of participants using it, while 75.9% did not.

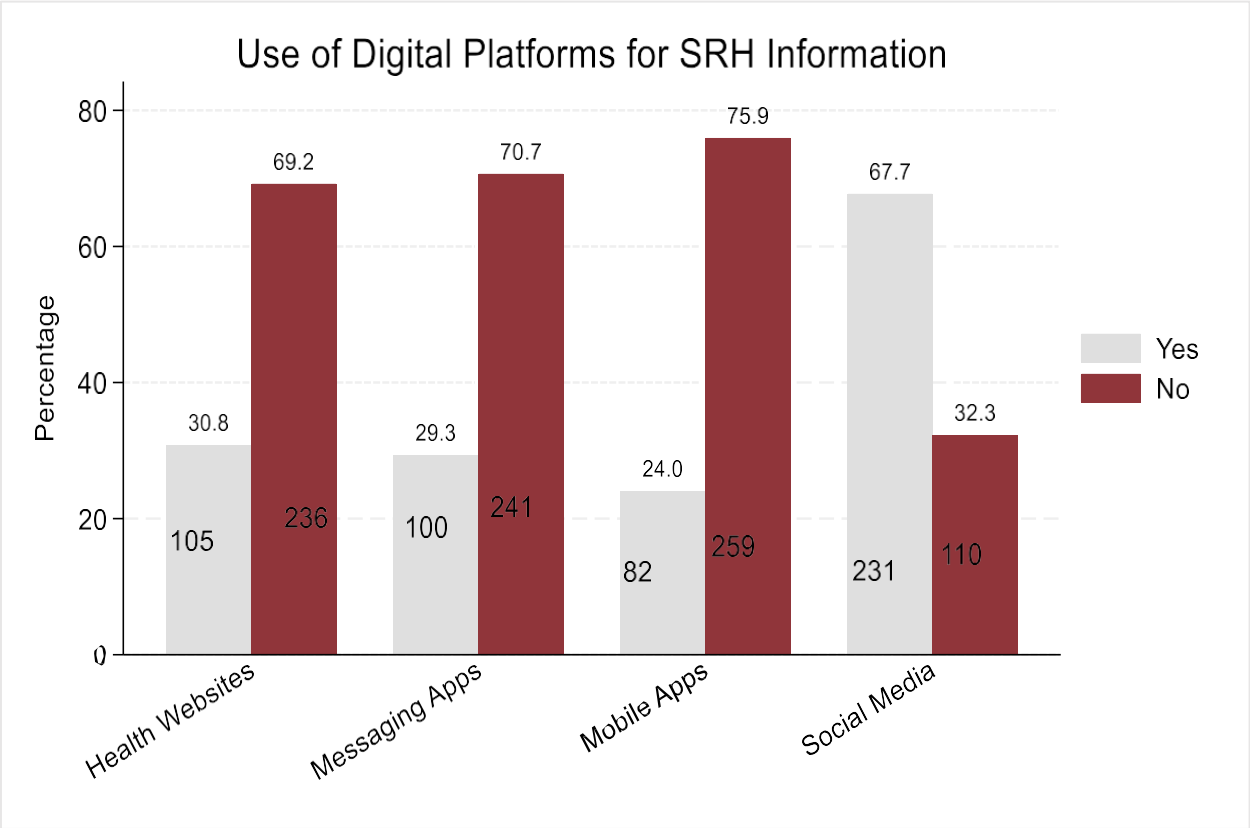


Figure 3: Digital Media Platforms Usage by Study Participants

4.8 Bivariate Analysis of The Types of Digital Media Used and Socio Demographic Characteristics of Study Participants

As regards the types of digital-media platform use (Table 5), the analysis revealed overall usage rates of 67.74% for social media, 30.79% for health websites, 29.33% for messaging apps and 24.05% for mobile apps. Statistically significant socio-demographic associations included: Social-media use to access SRH information by participants was significantly associated with relationship status ($p = 0.038$), and class level ($p = 0.011$). Messaging-app use was significantly associated with relationship status ($p = 0.023$). There was also statistically significant association between gender ($p = 0.031$), class level ($p = 0.006$) and use of mobile app to access SRH information. All other gender, age, and location comparisons yielded $p > 0.05$.

Table 4.5: Bivariate Analysis of Digital Media Use by Sociodemographic Characteristics

VARIABLES	CATEGORIES	SOCIAL MEDIA USE			HEALTH WEBSITES USE			MESSAGING APPS USE			MOBILE APPS USE		
		NO	YES	P-VALUE	NO	YES	P-VALUE	NO	YES	P-VALUE	NO	YES	P-VALUE
GENDER	MALE	22 (20.00)	53 (22.94)	0.540	51 (21.61)	24 (22.86)	0.797	54 (22.41)	21 (21.00)	0.775	64 (24.71)	11 (13.41)	0.031
	FEMALE	88 (80.00)	178 (77.06)		185 (78.39)	81 (77.14)		187 (77.59)	79 (79.00)		195 (75.29)	71 (86.59)	
AGE GROUP (Years)	13-15	21 (19.09)	38 (16.45)	0.547	42 (17.80)	17 (16.19)	0.717	42 (17.43)	17 (17.00)	0.924	44 (16.99)	15 (18.29)	0.786
	16-19	89 (80.91)	193 (83.55)		194 (82.20)	88 (83.81)		199 (82.57)	83 (83.00)		215 (83.01)	67 (81.71)	
EDUCATIONAL LEVEL	SHS 2	60 (54.55)	118 (51.08)	0.550	134 (56.78)	44 (41.90)	**0.011***	125 (51.87)	53 (53.00)	0.849	146 (56.37)	32 (39.02)	**0.006***
	SHS 3	50 (45.45)	113 (48.92)		102 (43.22)	61 (58.10)		116 (48.13)	47 (47.00)		113 (43.63)	50 (60.98)	
RESIDENCE	RURAL	18 (16.36)	24 (10.39)	0.235	34(14.41)	8(7.62)	0.072	28 (11.62)	14 (14.00)	0.243	33 (12.74)	9 (10.98)	0.190
	URBAN	92 (83.64)	207 (89.61)		202 (85.59)	97 (92.38)		213 (88.38)	86 (86.00)		226 (873.26)	73 (89.02)	
RELATIONSHIP STATUS	NO	85 (77.27)	25 (22.73)	**0.038***	166 (70.34)	72 (68.57)	0.743	177 (73.44)	61 (61.00)	**0.023***	186 (71.81)	52 (63.41)	0.149
	YES	153 (66.23)	78 (33.77)		70 (29.66)	33 (31.43)		64 (26.56)	39 (39.00)		73 (28.19)	30 (36.59)	

Source: *Field data, 2025*
NOTE: *** represents p-values with statistically significant values.*

4.9 A Multivariable Analysis Assessing the Effect of Digital Media Use on Adolescents' Sexual and Reproductive Health Attitudes, Knowledge and Behavior

The multivariable analysis results are presented in Tables 6 to 8. For positive sexual and reproductive health (SRH) attitudes (Table 6), digital-media use was significantly associated with 4.74-fold higher odds of having positive attitudes ($p = 0.001$) compared to not using digital media for SRH information adjusting for all other variables, while other socio-demographic variables assessed were non-significant.

Regarding perceived knowledge gain (Table 7), digital-media use was associated with 4.39-fold higher odds ($p = 0.002$). Being in a relationship significantly reduced the odds of perceived knowledge gain (AOR 0.41, $p = 0.007$), while residing in urban areas increased the odds by 2.60 times ($p=0.007$); all other factors were non-significant.

In the matter of behavior change (Table 8), digital-media use was linked to 3.14 higher odds ($p = 0.013$). Participants aged 16–19 years had 1.97 higher odds ($p = 0.028$), as did being in a romantic relationship, with an odds ratio of 2.15 ($p = 0.007$). Educational level, gender and residence on the other hand showed no significant associations.

Table 4.6: A Sexual and Attitudes

PREDICTORS OF POSITIVE SRH ATTITUDES						
VARIABLE	**COR**	**95% CI**	**P-VALUE**	**AOR**	**95% CI**	**P-VALUE**
USED DIGITAL MEDIA						
NO	Ref	-	-	Ref	-	-
YES	5.11	2.16-12.12	**0.000****	4.74	1.91-11.74	**0.001****
AGE GROUP (YEARS)						
13-15	Ref	-	-	Ref	-	-
16-19	0.9	0.41-1.95	0.790	0.79	0.34-1.81	0.579
EDUCATIONAL LEVEL						
SHS 2	Ref	-	-	Ref	-	-
SHS 3	1.07	0.60-1.90	0.822	0.74	0.35-1.53	0.413
GENDER						
FEMALE	Ref	-	-	Ref	-	-
MALE	0.82	0.42-1.59	0.553	0.77	0.34-1.77	0.540
RESIDENCE						
RURAL	Ref	-	-	Ref	-	-

URBAN	1.72	0.76-3.74	0.172	1.63	0.72-3.69	0.237
RELATIONSHIP STATUS						
NO	Ref	-	-	Ref	-	-
YES	2.23	1.08-4.61	**0.031****	2.00	0.94-4.26	0.072

Source: *Field data, 2025*

NOTE: *** represents p-values with statistically significant values.*

Table 4.7: A Sexual and Knowledge

PREDICTORS OF PERCEIVED KNOWLEDGE GAIN						
VARIABLE	**COR**	**95% CI**	**P-VALUE**	**AOR**	**95% CI**	**P-VALUE**
USED DIGITAL MEDIA						
NO	Ref	-	-	Ref	-	-
YES	3.81	1.60-9.07	**0.002****	4.39	1.72-11.19	**0.002****
AGE GROUP (YEARS)						
13-15	Ref	-	-	Ref	-	-
16-19	1.80	0.92-0.48	0.086	1.99	0.96-4.14	0.064
EDUCATIONAL LEVEL						
SHS 2	Ref	-	-	Ref	-	-
SHS 3	1.35	0.77-2.37	0.296	1.24	0.61-2.52	0.562

GENDER						
FEMALE	Ref	-	-	Ref	-	-
MALE	0.81	0.43-1.56	0.536	0.94	0.43-2.05	0.868
RESIDENCE						
RURAL	Ref	-	-	Ref	-	-
URBAN	2.40	1.16-4.96	**0.018****	2.60	1.21-5.54	**0.014****
RELATIONSHIP STATUS						
NO	Ref	-	-	Ref	-	-
YES	0.59	0.33-1.05	0.071	0.41	0.22-0.78	**0.007****

Source: *Field data, 2025*

NOTE: *** represents p-values with statistically significant values.*

Table 4.8: A Sexual and Behavior

PREDICTORS OF SRH BEHAVIOR CHANGE						
VARIABLE	**COR**	**95% CI**	**P-VALUE**	**AOR**	**95% CI**	**P-VALUE**
USED DIGITAL MEDIA						
NO	Ref	-	-	Ref	-	-
YES	4.16	1.72-10.02	**0.002****	3.14	1.27-7.76	**0.013****

AGE GROUP (YEARS)						
13-15	Ref	-	-	Ref	-	-
16-19	2.24	1.27-3.96	**0.005****	1.97	1.08-3.61	**0.028****
EDUCATIONAL LEVEL						
SHS 2	Ref	-	-	Ref	-	-
SHS 3	1.43	0.91-2.24	0.118	1.14	0.65-1.99	0.645
GENDER						
FEMALE	Ref	-	-	Ref	-	-
MALE	1.013	0.59-1.74	0.962	1.28	0.67-2.44	0.453
RESIDENCE						
RURAL	Ref	-	-	Ref	-	-
URBAN	1.47	0.76-2.83	0.250	1.59	0.79-3.75	0.186
RELATIONSHIP STATUS						
NO	Ref	-	-	Ref	-	-
YES	2.53	1.45-4.34	**0.001****	2.15	1.23-3.75	**0.007****

Source: *Field data, 2025*

NOTE: *** represents p-values with statistically significant values.*

CHAPTER 5

5.0 DISCUSSIONS

5.1 Introduction

This chapter focuses on the key findings of the study, in relation to existing literature, research objectives, and the public health implications. It throws more light on adolescents' sources of sexual and reproductive health (SRH) information, the frequency and patterns of their information-seeking behaviors, and the socio-demographic factors influencing digital media use. Furthermore, this chapter dives into how digital platforms impacts adolescents' knowledge, attitudes and behaviors concerning SRH.

5.2 Respondents' Source of Digital Information

Digital media served as the primary source of information for participants. Four out of ten of study participants identified to have used digital media as their main source of seeking SRH information. The least sought source of information on sexual reproductive health by participants was peers, followed by healthcare providers. This shows a significant shift in adolescent health information seeking patterns. This finding is similar to the finding in a cross-sectional survey conducted in Tamale Metropolis, Ghana. This study reported 45.4% of adolescents to be obtaining SRH information through social media (Salifu and Abubakari, 2024). Just as in this study, this finding made digital media the most common single source in it, despite its usage being below the half. This is also supported by another study conducted in the Tamale Metropolis, that found that the proportion of adolescents who use social media for SRH information is below 50% (Salifu, 2020). This digital domination reflects the specific advantages of digital platforms that make them more appealing to teens seeking sensitive health information.

A possible explanation for the high use of digital media among the study participants could be the anonymity, digital media gives. In a study conducted by Chiu and her colleagues, some adolescents reported of being too embarrassed to fully ask all the questions they have when they visit a facility, but digital media gives them a faceless opportunity (Waling, Fraser and Fisher, 2020; Chiu *et al.*, 2021).

Healthcare providers, despite their known expertise and accuracy, had a relatively low utilization (11.44%) as a source of information by adolescents for SRH. This shows persistent barriers in adolescent-provider communication. This finding was supported by Silva *et al.*, (2024) who found adolescents point to health professionals as a main source of information but were least utilized. The adolescents do not identify the professionals as someone they can trust, hence the hesitation in seeking information from that source. Some adolescents also cited the attitude of the staff members as a reason, they do not utilize health centers (Salifu and Abubakari, 2024). This clearly indicates that adolescents often face structural, cultural, and psychological barriers when seeking health information from healthcare professionals. This finding is concerning considering that healthcare providers are still the most trusted source of medically sound information (Waling, Fraser and Fisher, 2020; Silva *et al.*, 2024; Westerman *et al.*, 2024).

Digital media emerged as the dominant SRH source, followed by school teachers, family members, healthcare providers, and peers. This hierarchy aligns with trends in Ethiopia, where mobile and social media now surpass traditional channels (Sidamo et al., 2024), and contrasts with rural Ghana, where family remains primary (Klu et al., 2023). The relatively low reliance on healthcare providers mirrors findings from Ethiopia's Haramaya district, where only 11% sought professional SRH advice (Abdurahman et al., 2022).

The secondary role of school education (21.99%) as an information source reflects broader challenges in comprehensive sexuality education implementation in Ghana. Recent studies

indicate significant gaps in SRH education coverage across Ghanaian schools, with many adolescents reporting inadequate information about critical topics such as sexual rights, gender-based violence, and reproductive health (Klu et al., 2023; Abdurahman et al., 2022). This educational gap creates opportunities for digital media to serve as supplementary or primary sources of SRH information, though with varying degrees of accuracy and completeness.

5.3 Frequency Patterns and Information Seeking Behavior

The analysis of frequency patterns shows interesting insights into how adolescents engage with different information sources. Digital media showed the highest frequency of daily use (19.06%) among all sources, with 35.78% of participants seeking information occasionally. This implies that digital media platforms do not just serve as a source for immediate information needs, but also a source for ongoing health education (Gyan *et al.*, 2023).

This finding is consistent with the study by Klu *et al.* (2023), who reported that majority (91.9%) of adolescents do not use sexual and reproductive health (SRH) services in the Adaklu district. Adolescents who attained primary education, those who never had sexual communication with their father and adolescents who never experienced any form of sexual coercion had a higher likelihood of not utilizing SRH services in Adaklu district.

These figures corroborate global data showing adolescents favor asynchronous, private digital channels for SRH queries (Saha et al., 2022), while face-to-face sources suffer uncertainty due to stigma or accessibility issues (Abdurahman et al., 2022).

5.4 Socio-Demographic Patterns in Digital Media Use

The analysis ran to identify the association between socio-demographics of adolescents and digital media use showed that there were significant associations between digital media use and

educational level and relationship status. SHS 3 students showed a higher likelihood of using digital media than those in SHS 2.

This could be a reflection of increased digital literacy, greater autonomy of a smartphone, and more advanced developmental needs as they grow (Mbarushimana, Conco and Goldstein, 2022; Salifu and Abubakari, 2024). Adolescents in romantic relationships were found to be more likely to use digital media for SRH information, this aligns with research showing that relationship status influences SRH information seeking behavior (Salifu, 2020; Maes, van Oosten and Vandenbosch, 2022). Adolescents in relationships are likely to have more immediate and practical needs for SRH information and behaviors. This finding may reflect the widespread availability of digital technologies in the Volta Region and suggests that digital platforms may be serving as equalizing forces in health information access across demographic groups. However, there was no significant association between digital media use and gender, age, or location.

5.5 Types of Digital Media Platforms and Usage Patterns

Social media platforms were used by about two-thirds of participants, reflecting the central role social media plays in adolescent communication and information sharing. This finding is consistent in many studies, with a little variation, which is, the percentage of participants who rely on social media for SRH information is over 50% (Salifu, 2020; Salifu and Abubakari, 2024). It is, however consistent with findings from other regions in Ghana, identifying social media as their primary channel for health information dissemination (Waling, Fraser and Fisher, 2020; Davis *et al.*, 2023).

The significant association between social media use and relationship status ($p = 0.038$) suggests that partnered adolescents may be using these platforms for relationship-related information sharing and support. Social media platforms offer unique opportunities for peer-to peer learning

and information validation, which may be particularly valuable for adolescents navigating romantic relationships (Chiu *et al.*, 2021; Maes, van Oosten and Vandenbosch, 2022) .

The moderate usage rates of health websites (30.79%) and messaging apps (29.33%) show that while social media dominates, adolescents also seek for SRH information, more formal and private digital channels. The significant association between health website use and class level ($p = 0.011$) suggests that older, more mature students could be more inclined to look for reliable sources of health information. The use of messaging apps reflects the importance of privacy and direct communication in adolescent health information seeking habits. Messaging apps and health websites makes room for more intimate and confidential information sharing, which is quite important for sensitive health topics (Waling, Fraser and Fisher, 2020; Chiu *et al.*, 2021)

The finding that 24.05% of participants used mobile apps for SRH information, with significant associations with gender ($p = 0.031$) and class level ($p = 0.006$), suggests that mobile health applications are gaining traction among certain demographic groups. The higher usage among females and SHS 3 students may reflect differences in health information-seeking behaviors and digital literacy levels (Chiu *et al.*, 2021; Salifu and Abubakari, 2024).

The study found that 24.05% of participants use mobile apps for SRH information, with significant associations with gender ($p = 0.031$) and class level ($p = 0.006$), suggesting that mobile health applications are highly patronized among certain demographic groups. Higher usage among females and SHS 3 students, most adolescent females tend to use mobile apps like FLO, to track their menstrual cycle, which could explain the high patronage amongst them. The SHS 3 students moreover, have much higher understanding on the use and needs for these apps, hence their high patronize (Chiu *et al.*, 2021).

5.6 Effects of Digital Media on SRH Attitudes, Knowledge, and Behaviors

5.6.1 Sexual and Reproductive Health (SRH) Attitudes

The study found that digital media use was associated with 4.74-fold higher odds of positive SRH attitudes ($p = 0.001$). This aligns with systematic reviews showing that digital interventions social media campaigns, mobile apps, and online modules consistently improve adolescents' attitudes toward contraception, consent, and healthy relationships (Guse et al., 2012; Noar et al., 2010). Guse *et al.* (2012) reported effect sizes ranging from AOR = 2.1 to 5.8 across diverse settings, highlighting that interactivity and peer-to-peer features amplify attitude shifts.

5.6.2 Knowledge Acquisition and Perceived Learning

Digital media use yielded 4.39-fold higher odds of perceived knowledge gain ($p = 0.002$). Meta-analyses of digital health education interventions report comparable gains, with standardized mean differences (SMD) around 0.6 for SRH knowledge when compared to usual curricula (Dove, 2015). This educational potency is attributed to multimedia formats, real-time feedback, and on-demand access. This is supported by a study conducted in India, girls who used social media proved to have sufficient knowledge on SRH information than those who did not (Saha *et al.*, 2022).

Unsurprisingly, participants from urban localities, were 2.6 times more likely to acquire knowledge from using digital media ($p=0.014$), as compared to their peers. This suggests that urban adolescents benefit from broader digital connectivity and more liberal social norms. Saha et al., identified that adolescents from rural parts were less likely to have access to social media, therefore inhibiting the opportunity for adolescents to gain essential SRH knowledge (Saha *et al.*, 2022).

Interestingly, adolescents in relationships had lower perceived learning (AOR = 0.41, p = 0.007), possibly reflecting reliance on partner communication or overconfidence in existing knowledge. A study of Canadian teens found that youth in dating relationships were less likely to engage with online SRH modules, attributing adequate information to partners or offline peers (Parkes et al., 2016). This paradox highlights the need to tailor digital content to relationship contexts, perhaps by integrating couple-focused modules.

5.6.3 Behavioral Change Outcomes

Digital media use was linked to 3.14 higher odds of behavior change (AOR = 3.14, p = 0.015). Widman *et al.* (2020) demonstrated that technology-based interventions reduced unprotected sexual encounters with pooled AOR = 1.8–3.2 across RCTs, indicating that digital messaging can translate knowledge and attitudes into safer practices.

Age and relationship status moderated behavior change: older adolescents (16–19 vs. 13–15 years: AOR = 1.97, p = 0.028) and those in relationships (AOR = 2.15, p = 0.007) were more responsive. Hall (2018) similarly observed stronger behavioral outcomes in older youth, attributing this to advanced cognitive skills and greater autonomy. Moreover, partnered youth may find digital prompts more immediately relevant, thereby reinforcing message uptake.

5.7 Implications for Public Health Practice

5.7.1 Leveraging Digital Platforms for Health Promotion

The ubiquity of social media among adolescents presents an opportunity for embedding SRH content within platforms they frequent. The World Health Organization's digital health guidelines recommend partnering with tech companies to integrate evidence-based messaging into existing apps (World Health Organization, 2020). In Ghana, the Ghana Health Service's MyHealth app pilots show increased

teenage engagement when SRH tips appear alongside popular health trackers (Ghana Health Service, 2021).

5.7.2 Addressing Information Quality and Credibility

Despite high reach, digital media can propagate misinformation. Adolescents often lack critical appraisal skills, risking uptake of harmful content. Building eHealth literacy skills to locate, evaluate, and apply digital health information is crucial (Norman & Skinner, 2006). Interventions that embed critical-evaluation exercises within SRH modules have reduced susceptibility to myths by 35% in trial settings (Miller & Bell, 2017).

5.7.3 Integrating Digital and Traditional Sources

An optimal strategy combines the scalability of digital tools with trusted personal guidance. UNESCO's technical guidance on sexuality education advocates blended models: online modules supplemented by teacher-led discussions and family dialogues (UNESCO, 2018). Telemedicine initiatives, wherein digital consultations segue to in-person referrals, have demonstrated 20% higher provider engagement among adolescents (Hall, 2018). Training healthcare providers to reference digital resources in visits can further bridge this gap.

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter provides a summary of the study's objectives, major findings, and conclusions drawn from the data. It also provides recommendations for policy, education, and public health practice, along with suggestions of areas for future research.

6.2 Summary of Key Findings

The purpose of this study was to examine how adolescents in the Ho Municipality use digital media to access sexual and reproductive health information. The study was guided by these specific objectives: to identify the sources of SRH information and patterns of use by adolescents, identify the types of digital media platforms that are used, and to analyze the effect of SRH information access through digital media affects adolescents' sexual knowledge, behavior, and attitude.

Digital media was the mostly used by adolescents to access SRH information, this was reported by 40.47% of adolescents, followed by school teachers, family members, and healthcare providers, respectively. Peers were the least relied upon. Digital media was used more frequently than traditional sources, with 19.06% using it daily and 35.78% occasionally. On the flip side, traditional sources such as healthcare saw lower daily engagements. Educational level and relationship status significantly influenced the use of digital media. Amongst the various types of digital media, social media platforms were the most used digital tool. Usage varied significantly by gender, class level, and relationship status. Digital media use was strongly associated with improved SRH outcomes; the data revealed about fivefold higher odds of having positive attitudes, a little over fourfold higher odds of perceived knowledge gain, and about threefold higher odds of positive SRH behavior.

These findings heighten the importance of digital media in adolescent health communication, offering both reach, engagement and anonymity that traditional channels often lack.

6.3 Conclusions

The study concludes that digital media is not only a dominant source of sexual and reproductive health information among adolescents in Senior High schools in the Ho Municipality but also a crucial facilitator of improved knowledge, attitudes, and behaviors related to SRH.

Despite the knowledge of and availability of traditional sources such as healthcare providers and school teachers, adolescents in the Ho Municipality prefer digital platforms particularly social media platforms to other forms. These platforms offer them fast, private, non-judgmental and easily accessible information. Digital media usage was significantly influenced by socio-demographic factors such as educational level and relationship status, but showed no significant variation by gender, age group or residence.

Adolescents who accessed SRH information via digital media were more likely to report positive SRH attitudes, enhanced knowledge and health SRH behavioral practices. These depict a picture of digital platforms usage translated into measurable benefits.

6.4 Recommendations

6.4.1 For Public Health Policy

Based on the findings from this study, there is a need for SRH content to be integrated into popular digital platforms. Governing bodies like Ministries of Health and the Ghana Education Service should collaborate with digital content creators, influencers, and the various social media platforms to produce and ensure the presence of accurate, youth-friendly SRH content. The engagement of these entities poses the opportunity for modelling, which is known to yield results amongst adolescents. This would limit misinformation and provide adolescents with the right information at their comfort. Much thought should also be given to creating curriculums that incorporate modules that develops adolescents' ability to keenly evaluate online health content. This enables them to decipher right information from wrong information while strengthening their digital health literacy.

Additionally, there is a need for Ministries of Health, to collaborate with Ministries of Communication to improve access to reliable internet and mobile technology, especially in remote

rural areas. This bridges the digital gap and allows all adolescents to have access to reliable SRH information online.

6.4.2 Recommendations for Public Health practice

In this digital era, much attention should be given to digital media tools in delivering adolescent health services. NGOs involved with ASRH and Ministry of Health should consider integrating mobile health apps and online consultations into their services. These apps should focus on providing the necessary support and education that an adolescent would require on SRH. Also, simpler and more secure measures can be implemented to facilitate the booking of after-work services, for those who might be too people-conscious to go in during regular working hours. This provides adolescents with reliable and safe pathways to seeking adequate health. Healthcare workers should be rigorously trained in the best communication approaches and attitudes, which would make in-person consultations more friendly to adolescents. Health workers should be trained to set their beliefs and values aside and attend to the needs of the adolescent. They should also practice client-health provider confidentiality, this would make adolescents feel safer when visiting the facilities. All these measures would boost in-person consultation rates.

6.4.3 School Teachers and Education

Adolescents spend most of their lives in the classrooms, therefore targeting them at the classrooms would yield a lot of results. Curriculums should be developed to contain the teaching of the use of certain digital SRH resources, as well as combining it with school-based counseling to give adolescents opportunities to find out about things they wouldn't generally have asked. Teachers should also be trained to guide students responsibly in accessing digital SRH content.

6.5 Suggestions for Future Research

This study adapted the cross-sectional studies, which does not allow trends to be measured. It rather relies on the recall ability of the participants, which can lead to recall bias and impact the study. Longitudinal studies would be recommended for further studies. It can help assess how sustained digital media use impacts SRH outcomes over time.

Future research could also explore the content quality and credibility of the SRH information accessed by adolescents on the various digital platforms. And furthermore, examine some challenges and facilitators of digital media use amongst adolescents.

A comparative analysis conducted between urban and rural regions in Ghana would provide a broader generalizability and not just focus on school going adolescents.

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APPENDICES

Appendix 1: Ethical Clearance from IRB-Ensign

ENSIGN GLOBAL
COLLEGE

OUR REF: ENSIGN/IRB/EL/SN-288/01
YOUR REF:

January 3, 2025

INSTITUTIONAL REVIEW BOARD SECRETARIAT

Manuela Dzifa Dodzi
Ensign Global College
Kpong.

Dear Manuela,

ETHICAL CLEARANCE TO UNDERTAKE POSTGRADUATE RESEARCH

At the General Research Proposals Review Meeting of the *INSTITUTIONAL REVIEW BOARD (IRB)* of Ensign Global College held on Friday, January 3, 2025, your research proposal entitled **"The use of Digital Media to Access Sexual and Reproductive Health Information among Adolescents in Senior High Schools in the Ho Municipality, Volta Region"** was considered.

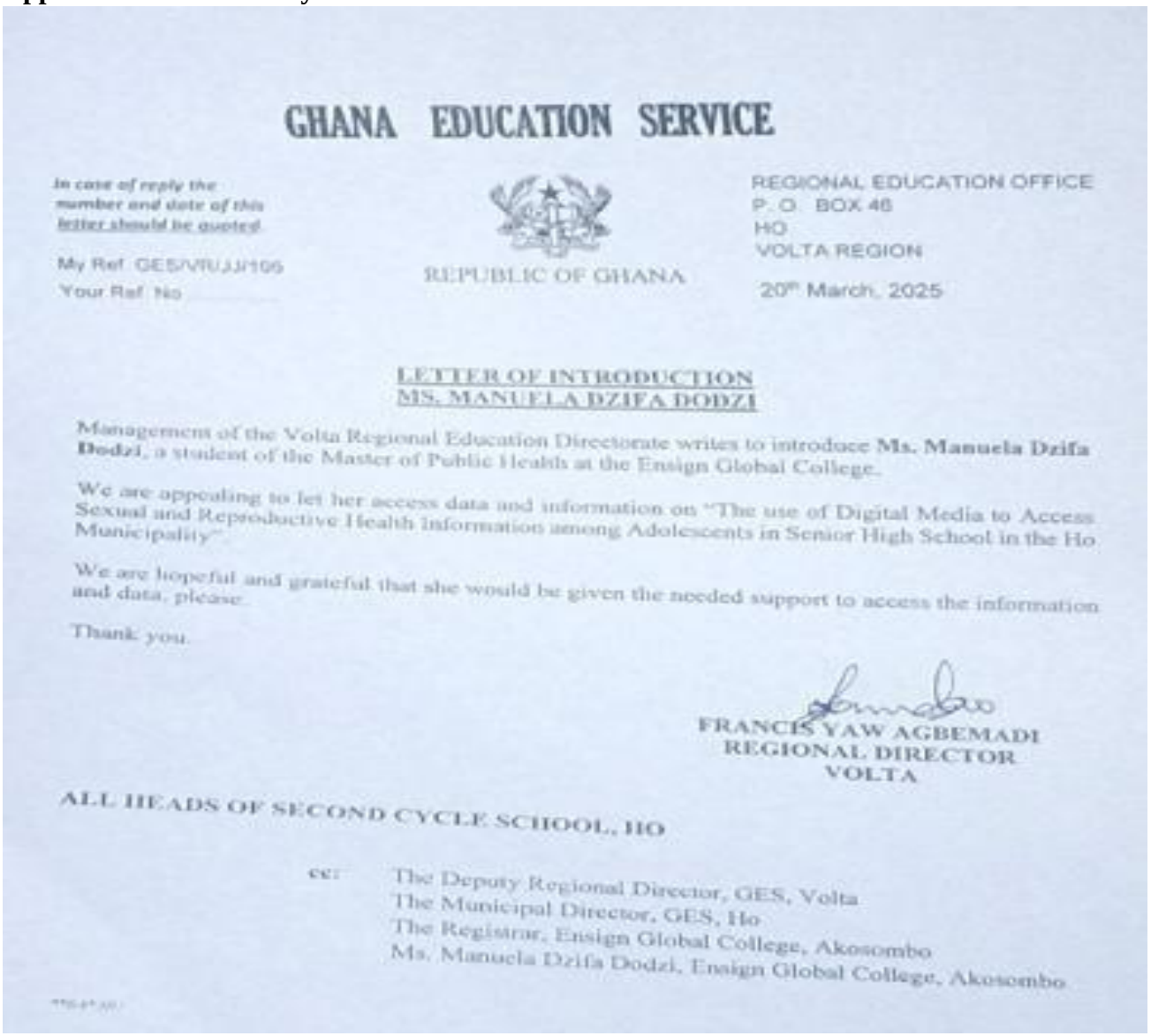
You have been granted Ethical Clearance to collect data for the said research under academic supervision within the IRB's frameworks and guidelines.

We wish you all the best.

Sincerely,

Dr. (Mrs.) Rebecca Acquaah-Arhin
IRB Chairperson

Appendix 2: Introductory Letter from GES



GHANA EDUCATION SERVICE

In case of reply the number and date of this letter should be quoted

My Ref GES/VR/JJ/105
Your Ref No

REPUBLIC OF GHANA

REGIONAL EDUCATION OFFICE
P. O. BOX 46
HO
VOLTA REGION

20th March, 2025

LETTER OF INTRODUCTION
MS. MANUELA DZIFA DODZI

Management of the Volta Regional Education Directorate writes to introduce **Ms. Manuela Dzifa Dodzi**, a student of the Master of Public Health at the Ensign Global College.

We are appealing to let her access data and information on "The use of Digital Media to Access Sexual and Reproductive Health Information among Adolescents in Senior High School in the Ho Municipality".

We are hopeful and grateful that she would be given the needed support to access the information and data, please.

Thank you.

FRANCIS YAW AGBEMADI
REGIONAL DIRECTOR
VOLTA

ALL HEADS OF SECOND CYCLE SCHOOL, HO

cc: The Deputy Regional Director, GES, Volta
The Municipal Director, GES, Ho
The Registrar, Ensign Global College, Akosombo
Ms. Manuela Dzifa Dodzi, Ensign Global College, Akosombo

Appendix 3: Questionnaire

THE USE OF DIGITAL MEDIA TO ACCESS SEXUAL AND REPRODUCTIVE HEALTH INFORMATION AMONG ADOLESCENTS IN SENIOR HIGH SCHOOLS IN THE HO MUNICIPALITY, VOLTA REGION.

SECTION 1: SOCIO-DEMOGRAPHICS

1. What is your age?
   Answer _____
2. What is your gender?

   Female [ ] Male [ ]

3. Where do you stay?

   Answer _____

4. Which Senior High School do you attend?
   Answer _____
5. Are you in a relationship?
   [ ] Yes [ ] No

SECTION 2: PATTERNS OF DIGITAL MEDIA VS. OTHER SOURCES

6. How do you mostly seek sexual and reproductive health information?

Digital Media [ ] Healthcare providers [ ]

School Education/ Teachers [ ] Family [ ]

Peers [ ]

How often do you seek information on sexual and reproductive health (SRH) from the following sources?

7. Digital Media (social media, websites, mobile apps)

Daily [ ] Weekly [ ]

Monthly [ ] Occasionally [ ]

Not sure [ ]

8. Healthcare Providers

Daily [ ] Weekly [ ]

Monthly [ ] Occasionally [ ]

Not sure [ ]

9. School Education/Teachers

Daily [ ] Weekly [ ]

Monthly [ ] Occasionally [ ]

Not sure [ ]

10. Family Members

Daily [ ] Weekly [ ]

Monthly [ ] Occasionally [ ]

Not sure [ ]

11. Peers

Daily [ ] Weekly [ ]

Monthly [ ] Occasionally [ ]

Not sure [ ]

12. What is your preferred source of SRH information?

Digital Media [ ] Healthcare providers [ ]

School Education/Teachers [ ] Family members [ ]

Peer groups [ ]

SECTION 3: PRIMARY SOURCES OF SRH INFORMATION ACCESSED VIA DIGITAL MEDIA

13. Which digital media platforms do you use to seek sexual and reproductive health information? (Select all that apply)

[ ] Social media (Facebook, Instagram, X, Threads, Tiktok)

[ ] Health websites (Planned Parenthood, WebMD)

[ ] Mobile health apps (Flo, Healthline)

[ ] Messaging apps (Whatsapp, Telegram)

[ ] Others (please specify): _____

14. What SRH information do you commonly seek online? (Select all that apply)

[ ] Family Planning services

[ ] Sexual Transmitted Infections (STIs)

[ ] HIV/AIDS

[ ]Puberty and body changes

[ ] Relationships, and sexual consent

[ ] Pregnancy and childbirth

[ ] Menstruation and menstrual health

[ ] Others (please specify): _____

15. How reliable do you find SRH information on the various digital media platforms you use?

[ ] Very reliable [ ] Somewhat reliable

[ ] Not reliable [ ] Not sure

SECTION 4: INFLUENCE OF DIGITAL MEDIA ON ATTITUDES AND BEHAVIORS

How much do you agree with the following statements about digital media and sexual health? (Please rate on a scale of **Strongly Agree**, **Agree**, **Neutral**, **Disagree**, **Strongly Disagree**.)

16. I can make more informed decisions about my sexual health since I have access to SRH

information online.

[ ] Strong agree [ ] Agree
[ ] Neutral [ ] Disagree
[ ] Strongly disagree

17. The accessibility of SRH knowledge on the internet has changed my perspective on safe sex practices.

[ ] Strong agree [ ] Agree
[ ] Neutral [ ] Disagree
[ ] Strongly disagree

18. I feel more comfortable talking to people about sexual health issues now that I know more than to digital media.

[ ] Strong agree [ ] Agree
[ ] Neutral [ ] Disagree
[ ] Strongly disagree

19. I'm encouraged by digital media to consult a specialist for SRH concerns.

[ ] Strong agree [ ] Agree
[ ] Neutral [ ] Disagree
[ ] Strongly disagree

20. I am more inclined to practice healthy sexual conduct, because of what I've read online, such as utilizing contraception.

[ ] Strongly agree [ ] Agree
[ ] Neutral [ ]Disagree
[ ] Strongly disagree

21. How has accessing sexual and reproductive health information via digital media affected your knowledge about sexual health?

[ ] Increased knowledge significantly [ ] Increased knowledge slightly

[ ] No change [ ] Slightly less influence

[ ] No significant influence at all

22. How has the information accessed through digital media influenced your attitudes towards safe sexual practices?

[ ] Increased knowledge significantly [ ] Increased knowledge slightly
[ ] No change [ ] Slightly less influence
[ ] No significant influence at all

23. Have you changed any of your behaviors related to sexual health after accessing information online?

[ ] Yes, I have made significant changes [ ] Yes, I have made some changes

[ ] I was already practicing safe behaviors [ ] No changes

24. If yes, what specific behaviors related to sexual health have you changed as a result of accessing information online? (select all that apply).

[ ] Started using contraception [ ] Regular testing for STIs

[ ] Improved communication with partners about sexual health

[ ] Visited a healthcare provider for SRH advice [ ] Reduced risky sexual behaviors

THANK YOU

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Appendix 4: Parental Consent Form

ENSIGN GLOBAL UNIVERSITY INSTITUITIONAL REVIEW BOARD (IRB)
PARENTAL/LEGALLY ACCEPTABLE REPRESENTATIVES CONSENT FORM

Section A- **BACKGROUND INFORMATION**

Title of Study:	The Use of Digital Media to Access Sexual and Reproductive Health Information Among Adolescents in Senior High Schools in the Ho Municipality, Volta Region.
Principal Investigator:	Dodzi Dzifa Manuela
Index Number	247100288

Section B– **CONSENT TO CHILD'S PARTICIPATION IN THE RESEARCH**

General Information about Research

I am Dodzi Dzifa Manuela, a Masters' student from Ensign Global University, Kpong. And I am carrying out research on the **"THE USE OF DIGITAL MEDIA TO ACCESS SEXUAL AND REPRODUCTIVE HEALTH INFORMATION AMONG ADOLESCENTS IN SENIOR HIGH SCHOOLS IN THE HO MUNICIPALITY, VOLTA REGION."** This study seeks to explore the use of digital media among adolescents in the Ho municipality, to access sexual reproductive health, and to identify some barriers that adolescents may face in the process. I am seeking your consent to engage your ward in this study. Your child would be required to answer the questions on the structured questionnaire. His/Her participation

in this study will last for at most 15 minutes; it is only for a day and not intended to disrupt their school work.

Benefits/Risks of the study

There are no direct benefits for participants in the study. However, we anticipate that through your ward's participation in this study, the use of digital media to access sexual and reproductive health information among adolescents in senior high schools in the Ho municipality, Volta region and the information and knowledge from this study will be used **to explore the use of digital media among adolescents in the Ho municipality, to access sexual reproductive health, and to identify some barriers that adolescents may face in the process.**

Confidentiality

All information concerning individual subjects will remain anonymous and confidential. **Each data provided to the principal investigator by the participants, will be treated with outmost confidentiality. Filled questionnaires will be locked in a cabinet, out of reach to all persons except the principal investigator who will use the data only for analysis.**

Compensation

There will be no compensation packages provided for study participants.

Additional Cost

There is no additional cause inferred to your child for participation.

Parents of participants should be informed that participating in the study is voluntary. You have a right to refuse to allow your ward participate or withdraw from the study.

What happens after study or when the participant changes his/her mind

At the end of the study, all information collected from your child will be kept under lock and key will be made accessible solely to the principal investigator and co-investigators. When the information you provided is processed, findings will be shared with the Ensign Global community and the global community through conferences and publications. If you change your mind from participating in the study, you will not be denied any service or benefit and your information will be destroyed.

Contact for Additional Information

Should you have any questions about the research or any related matters, please contact the following:

1. Dzifa- Principal Investigator Phone number – 0202386612
   Email - manuela.dodzi@st.ensign.edu.gh

2. Dr. Stephen Manortey – Supervisor
   Email - steve.manortey@ensign.edu.gh

Section C- **CHILD PARTICIPATION AGREEMENT**

"I have read or have had someone read all of the above, asked questions, received answers regarding participation in this study, and I agree that my child/ward should participate in this study as a volunteer. I will not have waived any of my rights by signing this parental consent form. Upon signing this form, I will receive a copy for my personal records."

_____ _____

Name of Parent/Guardian Name of Child

_____ _____

Signature or mark of Parent/Guardian/LARS Date

Appendix 5: Informed Consent

Title of Study:	The Use of Digital Media to Access Sexual and Reproductive Health Information amongst Adolescents in the Volta Region
Principal Investigator:	Dodzi Dzifa Manuela

GENERAL INFORMATION ABOUT THE RESEARCH

I am Dodzi Dzifa Manuela, a Master of Public Health candidate at the Ensign Global University, Kpong. I am carrying out a study titled: "The Use of Digital Media to Access Sexual and Reproductive Health Information amongst Adolescents in the Volta Region". The study targets students in Senior High Schools, in the Volta Region, Ghana and that is why you have been chosen. During this study, you will need to answer some questions. You will answer the questions by selecting the options that best fit your case.

The questionnaire includes five main sections, demographic information, patterns of digital media vs. other sources, primary sources of SRH information accessed via digital media, influence of digital media on attitudes and behaviors, and barriers to using digital media for SRH information. The answers you provide in this study will be analyzed and used purely for academic reasons only. Should you agree to join this study, it will take you a maximum of 25 minutes to finish the interview.

Benefits/Risks of the study

There will be no anticipated risk connected with the study. However, an inconvenience may be the time and effort the participants will take to join in this study. There will be no direct benefits for participating in the study but indirectly, its success will help enrich the literature on adolescent sexual and reproductive health, as well as serve as an information guide to organizations and institutions, looking to work around digital media interventions for ASRH.

Confidentiality

Your anonymity and privacy will be ensured throughout the study in the sense that data obtained from you will be treated anonymously. We will not use your name or any other personal information that could be used to identify you in the study. Your information will be saved in a file that is protected by a password that is only known to the researcher and her boss.

Compensation

Taking part in this study will be purely optional. There will be no pay for you for engaging in the study. There will be no form of monetary payment as a reward for your participation in the study.
However, we will thank you for your time and effort to join in the study.

Withdrawal from Study

You may decide or not to join and leave the study at any point in time without any penalty or loss of any gain. You are also free to ask questions now and at any other time concerning this study.

PARTICIPANT AGREEMENT

If you agree to take part in the study, please sign the consent form.

I have read the information on the sheet/ the information on the sheet has been read to me. I have been informed that I will be required to give responses to some questions related to the use of digital media to access sexual reproductive health information. I have had the opportunity to ask questions about the study and any question I have asked has been answered to my satisfaction. I understand that I have the right not to take part in this study without in any way affecting me. I have understood the explanation given to me and I voluntarily agree to take part in the study.

_____

Name of Participant

_____

Signature of Participant

_____

Date

I attest that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

_____

Name of Person who Obtained Consent

_____

Signature of Person Who Obtained Consent

_____

Date