

UNIVERSITY OF EDUCATION, WINNEBA

STUDENTS' PERCEPTION OF SEX EDUCATION IN SENIOR HIGH
SCHOOLS IN BIAKOYE DISTRICT IN THE VOLTA REGION OF GHANA

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A THESIS IN THE DEPARTMENT OF SOCIAL STUDIES EDUCATION,
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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, and that it has not been submitted either in part or whole for another degree elsewhere.

Candidate's Name: Joseph Appiah

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I hereby declare that the preparation and presentation of this thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Education, Winneba.

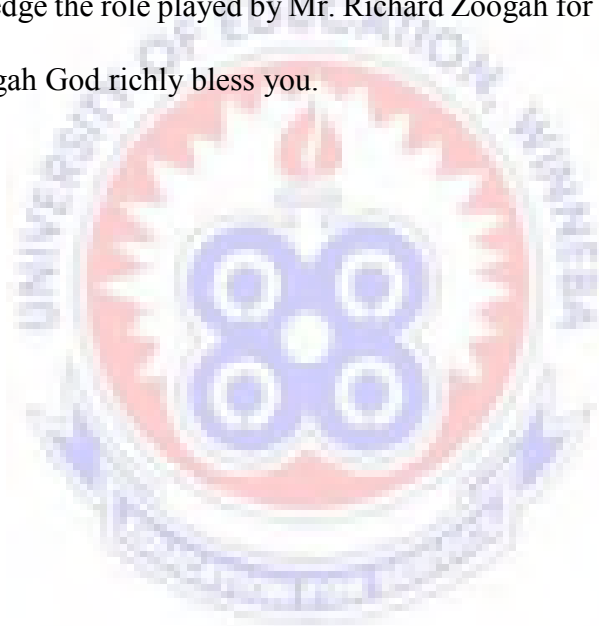
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DEDICATION

This work is dedicated to my cherished mother Janet Afua Asiedu, my loving wife Theresa, my lovely daughter Jessica, and my impeccable son Alan.



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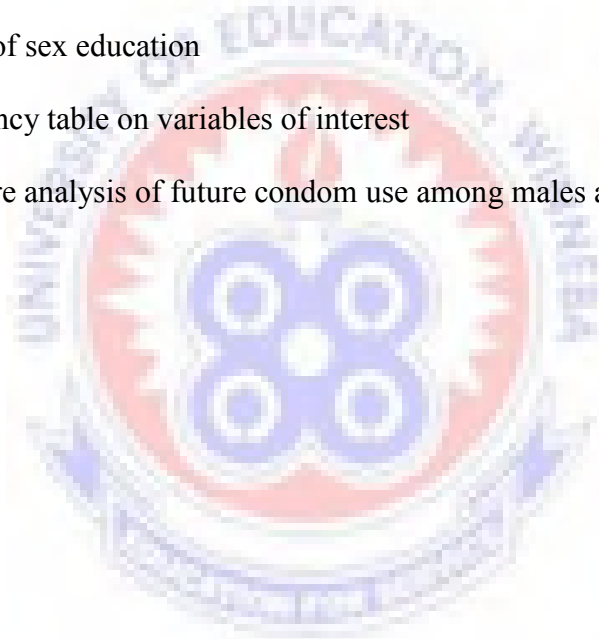
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LIST OF ACRONYMS

GES	Ghana Education Service
GNA	Ghana News Agency
GSS	Ghana Statistical Service
JHS	Junior High School
SHS	Senior High School
SIECUS	Sexuality Information and Education Council of the United States
SLT	Social Learning Theory
UNAIDS	United Nations AIDS
UNESCO	United Nations Educational Scientific and Cultural Organization
UNFPA	United Nations Population Fund
WHO	World Health Organization
DOVVSU	Domestic Violence and Victim Support Unit

ABSTRACT

This thesis investigated students' perception of sex education in senior high schools in Biakoye District in the Volta Region of Ghana. The study sought to unearth students' perception of the sex education in senior high schools. The study reviewed theoretical and empirical studies on sex education. The goal of the study was to address the knowledge gap in the literature by contributing to an understanding of the need to enhance teaching of sex education in senior high schools. Descriptive research design was used for the study. Simple random sampling was used to select sample size of 298 senior high students to respond to sets of questionnaire. Also purposive sampling techniques was used to select ten teachers for interviews. Out of 298 sets of questionnaire sent out, 293 were received indicating a response rate of 98 percent. The study adopted descriptive statistics using frequencies, percentages, and contingency tables to present the results. The main findings of the study were that most students understand sex education to mean knowledge about sexual activities and sexual intercourse, and sex education lessons in senior high schools lay little emphasis on contraceptives. Also, most students agree that comprehensive sex education is more likely to benefit them in their healthy sexual life decisions. It is therefore recommended that efforts should be made by the Ministry of Education, Ghana Education Service, and other district authorities to intensify teaching of comprehensive sex education in senior high schools in the Biakoye District, and finally, future research should be conducted on this phenomenon to ascertain the relationship between comprehensive sex education and application of such knowledge to the benefits students and also help for theory development and policy implication.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

There is a great deal of evidence indicating that children are entering puberty earlier in recent times than decades ago due to probably improved nutrition and other factors that may account for this change. Thus, girls today have, on average, their first menstrual period (menarche) earlier than their mothers did and the onset of sperm development in boys is also occurring earlier than in the lives of their fathers (Kirby, 2011). Unintended pregnancy and sexually transmitted diseases (STDs), including HIV, continue to be problems among young people in developed countries like the United States (Kirby, Coyle, Alton, Roller, & Robbin, 2011) and developing countries like Ghana (Ghana News Agency, 2013; World Health Organization (WHO), 2002).

A great number of young people are exposed to early sex and multiple partners before they even enter marriage (Kirby, Laris, & Roller, 2007). As a result, Lloyd (2005) observes that premarital pregnancy rates and some STD rates are increasing. This situation makes young people develop greater risk of contracting sexually transmitted infections (STIs), including the human immunodeficiency virus (HIV), and especially young women have high risk of experiencing unintended premarital pregnancy and its attendant consequences. According to Centers for Disease Control (2004), more than half of HIV infections acquired after infancy occur during adolescence.

Kirby (2011) concurred that young people, and adolescents in particular due to their heightened emotional development, need information not only about physiology and

a better understanding of the norms that society has set for sexual behaviour, but they also need to acquire the skills necessary to develop healthy relationships and engage in responsible decision-making about sex. In the absence of this knowledge and information, the outcomes tend to have major negative impacts not only on the lives of the young people concerned, but also in terms of socioeconomic costs to the nation as most of these young people's dreams would be curtailed as a result of truncated academic pursuits.

Given the above, it is critical for countries of the world to provide their citizenry with the requisite knowledge with which to make informed choices about social realities. This is critical to overall development of the nation as a result of improved lifestyles which translate into significant national output in the long run. One of the most vital ways by which countries can achieve this objective is through education in general, and sex education in particular. Globally, education has become acceptable as the process by which individuals acquire knowledge, skills and attitudes which enable them to develop their faculties in full, and subsequently contribute to meaningful national development.

The target group that occupies a pivotal concern in the national agenda of educational policies is children and adolescent groups to ensure that most, if not all, benefit from educational aspirations. In Ghana, most of these young children and adolescents are in schools, spending a lot of time with their peers than their parents due to longer hours in school. This exposes them to increasing peer influence which can have debilitating outcomes on their future aspirations. In addition, the influence of globalization adds another dimension to this issue. In particular, Osei (2009) concurs that the introduction of new technology has made the conservative practice of concealing sex-

knowledge from the youth impossible to sustain because the values of society have evolved, and adolescents in recent times have become much better informed than their parents because of the information technology age.

Dienye (2011) concurs that youths with the influence of foreign permissive culture have found themselves experiencing sex at a younger age than their parents did. Some of the consequences resulting in teenage pregnancies, illegal abortion, contraction of sexually transmitted diseases, drug abuse, truancy, teenage parenting, school drop-out, truncated educational aspirations to mention but a few. Asmal (2001) suggests that the earlier the school begins to teach students about sex education the better, because they can be easily misled by their peers should proper guidance regarding their sex education not be given.

Sex education given to students will help preventing avoidable deaths from illegal abortions that has engulfed pregnant teenagers and heightening sexually transmitted diseases in the country, and the study site in particular. Given this, a searching exploration of the nature of sex education among senior high school students which has great implications on their future sexual health lifestyles and ultimately appropriate choices in life is long overdue. As a result, there is the need to intensify the education given to adolescents on their sexuality.

Unfortunately, as commented by Dienye (2011), youths fall prey to the consequences of pitiable sex education due to societal reactions to issues that bother on sex and sexuality such that it is regarded as anathema for issues regarding sex to be talked about in public, and unthinkable when discussing with children. This social reaction to sex education is situated in the cultural makeup of African societies, Ghana is no

exception. The belief is that talking about adolescent sexual problems will expose them to profane lifestyles even though, in reality, children are exposed to a great deal of material or media resulting from the impact of globalization and technology which educators and parents cannot control (Osei, 2009; GNA, 2014; Mauldon & Luker, 2004). If children are not taught about sex education, these materials may negatively influence them.

Sadly, some instructors and teachers in schools usually push sex education aside as something to be avoided or suppressed in order not to interfere with learning or quickly brush through the topic during teaching and learning leaving out unanswered questions in the minds of these students to seek answers from elsewhere usually their peers who are in themselves lacking the knowledge. According to Rocheron and Whyld (1983), children are curious by nature and sexual curiosity is awakened very early in the child's life, a characteristic of adolescent stage. Scholars have demonstrated the need to direct attention of sex education to young adolescents who form greater proportion in schools especially in secondary schools.

Again, young adolescents tend to form certain impressions about their sexuality and sex life if unguarded will have significant outcomes on their future aspirations. This is because senior high schools are where most students have reached the adolescent stage, a wild stage with its attendant curiosity and high propensity to peer influence (Kwankye, 2007), and so it is important to understand their knowledge on sex education and how educators perceive the teaching and learning of sex education in senior high schools where they interact with teenagers at this stage of their lives.

More importantly, the Millennium Development Goals (MDGs) recognized the adolescent group as critical to development, and hence, its measure to enhance the lives

of adolescents (youth) in a targeted areas including maternal mortality, education, gender disparity and women empowerment, employment, and infant mortality. One of its key measures is promoting the completion of primary education among boys and girls thereby increasing the literacy level of the youth especially those aged between 15-24 years by 2020. Given their recognition as having high risk of HIV/AIDS especially among teenage pregnant women between 13 years and 19 years (GNA, 2014), they were targeted by the MDGs to reduce the high incidence rate among them. It is not far-fetched when they are considered a concern for this study.

1.2 Statement of the Problem

The rapid growth of Ghana's population has resulted in a youthful population, with two in every five people in the country being less than 15 years (Ghana Statistical Report, 2013) with most of this group in schools. Scholars have noted that schools and schooling are significant cultural places in which sexualities are manifested or contested (Connell, 1996; Thorne, 1993; Redman, 1996). Sex education seeks to equip young people with the relevant knowledge, skills, and values to make informed decisions about their sexual and reproductive life choices in order to contribute to societal progress. Unfortunately, schools do very little to help teens make sense of their sexuality (Stromquist, 2007).

The problem is that most teachers of sex education conceal basic information that can help learners make informed choices about their sexual and health lifestyles under the pretense that detailed knowledge in relation to female reproductive organs, male reproductive organs, and development of physical characteristics associated with adolescence are brushed over, and instead deny students the opportunity to access

productive information from teachers who are supposed to give right information to the yearning students. Instead this is left to amateurs such as peers, ill-informed educators, and the mass media to feed the minds of these ever-craving students. Some teachers shun demonstrating to students the practical aspects in the teaching of sex education. For example, best ways of using condom for both boys and girls are usually not talked about let alone to demonstrate its applicability to students. Students therefore turn to their fellow ill-informed peers for such key information that has the potential to alter one's future lifestyle choices.

In spite of increasing attention from international movements undertaken to support adolescent's right to accurate and balanced information about their sex lives and appropriate ways to develop healthy relationships and make informed decisions about themselves (Kirby, 2011), teenage pregnancy rates, school drop-outs, teenage parenting, multiple sexual partners simultaneously, spread of STIs continue to peak in the Biakoye District of the Volta Region of Ghana as reported in the District Analytical Report of the Ghana Statistical Service (GSS, 2014). Unfortunately, the sexual interest of learners is suppressed through the use of the hidden curriculum, as if sexuality can be removed from their bodies (Epstein, 2003) even though sexual development is a perfectly normal aspect of one's total development and it continues throughout a person's life whether it is planned or not (Harilal, 1993).

Studies carried out in sex education have tended to leave out perception of senior high school students, who constitute a greater majority of the adolescent category of Ghana's population alongside the youth. It is in view of this neglect that this study is carried out among senior high school students to explore their perception about sex

education in terms of teaching methods and application of the knowledge in their sexual and reproductive life choices in the Biakoye District in the Volta Region of Ghana.

1.3 Purpose of the study

The purpose of this study was to investigate students' perception of sex education among senior high school students in the Biakoye District of the Volta Region of Ghana.

Specifically, the objectives sought to achieve the following;

1. To find out from students their understanding of sex education
2. To ascertain from students whether their instructors teach both abstinence from sex and protected sexual behaviours during sex education classes
3. To find out whether students apply relevant knowledge they receive from sex education in their sexual behaviours
4. To determine instructors' views about the teaching of sex education in senior high schools

1.4 Research Questions

The following questions guided the study;

1. What are students' understandings of sex education?
2. What did instructors teach in both abstinence from sex and protected sexual behaviours during sex education classes?
3. What did students make use of the relevant knowledge obtained from sex education classes in their sexual behaviours?
4. What are instructors' views about the teaching of sex education in senior high schools?

1.5 Significance of the Study

The study sought to bring out the diverse perceptions of sex education that senior high school students possess, the nature of sex education, whether comprehensive or selective, given to the students by their instructors or teachers which would help Ghana Education Service to revise measures towards teaching of sex education in senior high schools. Secondly, the findings would help to determine whether the knowledge acquired during sex education lessons addresses the needs of the student in their sexual behaviours. Again, the study would help to assess whether Ghana Education Service (GES) could design guidelines for the teaching of sex education in senior high schools.

In addition, the study aimed at elucidating the levels of students' knowledge and experiences about sex education which could help teachers of sex education to adopt appropriate measures that address specific observed hindrances to effective teaching of sex education in senior high schools. Further, the study aimed at demonstrating how students in senior high schools apply sex education knowledge in their sexual behaviours. Moreover, it would add to already existing knowledge about sex education and students' sexual health behaviours that could expand their frontiers of academic discourse in this field of study. More so, the findings help suggest other ways of changing the conservative ideas of fresh teachers posted to senior high schools to take subjects in which sex education is required of teachers such as offering in-service training for newly recruited teachers and other existing teachers.

The findings also could stimulate collaboration between the school and other stakeholders such as Planned Parenthood Association of Ghana (PPAG) in orienting senior high school students in sex education. Finally, the study serves as a conduit to

direct further research in this all important area of concern that plagued our tomorrows' future leaders.

1.6 Delimitation of the study

The study specifically addressed the main objective of trying to understand senior high school students' views about sex education and its significance on their sexual lives to increase their sexual knowledge about how to make appropriate choices in their lives. In this way, the study helps discuss the ways they relate amongst themselves and how they relate with their teachers in school particularly with regard to their experiences of sexual pressure and sexual desire. Not only was the study concerned about students but also sought to understand the views of the teachers of sex education to determine the level of sex education given to students whether selective or comprehensive.

This was consistent with the fact that adolescents' knowledge in sex education has strong consequences in gender inequalities concerning sexual experiences, as they are very much present in intimate relationships. Students' meanings of having safe sex, how they promote a context of negotiation, and how young women have control and power over their own safety and sexuality (Holland, Ramazanoglu, Scott, Sharpe, & Thomson, 1990) is very much dependent upon their level of knowledge in sex education, which in turn, will affect appropriate sexually healthy lifestyle choices which can result in significant decline in teenage pregnancies, incidence of STIs, abortions and so on.

1.7 Definition of terms

Sex Education: According to Dienye (2011), the ability to exercise self-control and determine one's sexual behaviour by conforming to certain principles as they concern sexual behaviours, are the bases of sexuality/sex education. The UNESCO International Guidelines on Sexuality Education define it as “an age-appropriate, culturally sensitive and comprehensive approach to sexuality education that include programmes providing scientifically accurate, realistic, non-judgmental information. For purposes of this study, sex education refers to actions directed at improving the sexual reproductive health and rights of adolescent physically, emotionally, and psychologically to be able to make prudent choices about their sexual lifestyles.

Holistic Sex Education: This term is used to refer to sex education that covers not only abstinence but also includes teaching students about the need to adopt preventative approach in their sexual life such as teaching about the use of condoms and other birth control pills, as well as accurate information about abortion during the teaching of sex education in class. This conception of holistic sex education is synonymous with what other scholars term “comprehensive sex education” which must teach both abstinence from sex and protected sexual behavior such as contraception and condom use as well as discussions about abortion, STIs and STDs in order to promote responsible sexual health (Kirby, 2001; A nkomah, 1998; UNAIDS, 2006)

Adolescents: The term “adolescent” is often used synonymously with “teenager” that ranges from 13 to 19 years. Although persons below the age of 15 years are not surveyed in demographic and health surveys, the persons that fall in 15-19 years' category are considered as adolescents (GSS report, 2014). Adolescent refers to ages ranging from 13

to 19 years since it is highly unlikely to find persons below 13 years in senior high schools. Another age category from 20 to 24 years will also be included in the study constituting early youth population. This is because in the rural areas, 20 to 24 years' persons can still be in senior high schools due to breaks in school enrollment, late enrollment in basic schools, and so on. Combining adolescent and youth according to the United Nations definition of the youth encompassing all persons 15-24 years, this study refers to all persons with ages from 13-24 years who are students in senior high schools at Biakoye district as target for the study.

1.8 Organization of the study

The research is organized into five (5) chapters. Chapter One provides the introduction and background to the problem. It also contains the problem statement, the objectives, the research questions to be addressed, and the scope of the study. This is followed by a review of literature on sex education, its dimensions, and significance to sexually healthy lifestyles among adolescent and youth in the second chapter. This chapter looks at both theoretical and empirical literature supporting this study. The Chapter Three highlights the research methodology and the design of the study. A profile and analysis of the study results are discussed in Chapter Four. It also contains tables, figures and frequencies used in the analysis. Finally, the summary, conclusions and recommendations based on the outcome of this study are captured in Chapter Five.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter discusses both the theoretical underpinning of the study together with empirical literature that has been undertaken to investigate similar or related area of study to allow appreciable understanding of the issue at stake. The chapter introduces the reader to some reviewed definitions of the concept ‘sex education’, forms and approaches to the teaching of sex education in schools, sexual education and cultural context of the Ghanaian society, social learning theories and sexual education among adolescents, the place of sex education in social studies syllabus, teachers’ professionalism on the teaching of sex education, students aims on sex education, challenges associated with the teaching and learning of sex education, and effects of sex education on students lifestyle choices in relation to their sexual partners as well as the cumulative benefit to national development plans.

2.2 Definition of sex education

Sex education is defined as an age-appropriate, culturally relevant approach to teaching about sex and relationships through the provision of scientifically accurate, realistic, non-judgmental information especially to adolescents and young adults. For Dienne (2011, p. 13), “sex/sexuality education simply means the presentation of every aspect of the sexuality of an individual exactly as it is, and equipping the individual with all options available to enhance a better understanding of sexuality in its holistic manner”.

On his part, Mba (2006) refrains from elaborate definition of sex education but rather provides a parameter of the content of sex/sexuality education including human growth and development, relationships, life skills, sexual attitude and behaviour, sexual health, and society and culture as constituting sex education. In the words of Batwa (1986), sex education is a continuous learning process among the peoples in societies taught within acceptable customs, values and norms of a particular society. For Vriesendorp (1980), sex education deals with developing in children and adults an understanding of their own sexual nature and needs, of changing sex roles and of the place of sex in the individual's personal and family life, for the individuals to make responsible decisions with regard to sexual behaviour.

In essence, sex education can be seen as a life-long process of acquiring information about one's sexuality and sexual identity and forming corresponding attitudes, beliefs, and values about relationships and intimacy. Sex education provides opportunities to explore one's own values and attitudes and to build decision-making, communication and risk reduction skills about many aspects of sexuality. More so, as Redman (1996) notes, sexual identity is built on cultural practices and unconscious identification processes during adolescence and early adult years.

World Health Organization (WHO) in 1986 acknowledged that sexuality is an integral part of everyone's personality including man, woman and child. It is a basic need and aspect of being human that cannot be separated from other aspects of life and it influences thoughts, feelings, actions and interactions and thereby our mental and physical health (Osadan & Safir, 2014).

Stromquist (2007) comments that students' construction of their identities takes place not only in relation to teachers and the official curriculum but also in conversations with classmates, activities in the playground and through their engagement in related extracurricular activities. According to Shtarkshall, Santelli, and Hirsch (2007), sex education can contribute to psychosocial development and wellbeing throughout adolescence and adulthood by promoting sexual literacy. The authors differentiate sexual literacy, one which is carried out by professionally trained resource persons who consciously impart sex and reproduction health knowledge to learners, from sexual socialization. They continue to say that sexual socialization takes place at home with parents being the main agent of unconsciously transmitting family values such as modesty, privacy, chastity, and proper conduct to the young ones.

Similarly, other scholars have supported the need for sex education arguing that receiving sex education before becoming sexually active could equip young people with information to make better informed decisions in the sexual sphere and consequently increase their chances of avoiding unwanted sexual intercourse (Moore, Awusabo-Asare, Madise, John-Langba, & Kumi-Kyereme, 2007). As children grow, they come into contact with the wider community outside the home where sexual socialization continues as they observe societal norms, consume mass media, interact with peers, and participate in cultural and religious activities as active or passive actors. As a result, interactions among peers and the mass media have the capacity to either reinforce or contradict messages about gender and or sex education that is embedded in the school curriculum.

Adolescents usually tend to access certain information from greater exposure to uncontrolled mass media and mass communication and Western ideas about sex which

they carry to school. It becomes the responsibility of the school and teachers to challenge and alter these negative ideologies that are absorbed wholesomely by the adolescents.

At present, there is scant students' consciousness about sex education and sexual identities which are necessary for better sexually healthy lifestyles among senior high school students especially at the study site as a result of heightening of teenage pregnancy rates, HIV/AIDS infection, school-drop outs rates, and teenage parenting. For example, a study conducted by Owolabia, Onayadeb, Ogunlola, Ogunniya and Kutia (2005) concluded that there is a high risk of the spread of STIs, including HIV/AIDS among a study population that consisted of senior high schools 1 and 2 students. This supports the claim that there is a miniscule of consciousness about sexual health behaviours among senior high school students which warrant critical attention.

When little attention is given to this all important aspect of child(ren)'s development, the physical harm often results in low self-esteem, poor levels of participation in learning activities, dropping out of school, teenage pregnancy, teenage parenting, infection and infestation of sexually transmitted diseases notably HIV/AIDS, and even in acts of suicide.

For young people and especially adolescent to contribute their full social and economic potential, according to Rosen, Murray and Moreland (2004), they need the knowledge and skills to make the right choices about when to have sex and how to protect themselves from infection and unintended pregnancies. Burgeoning international conferences and agreements such as the 1989 Convention on the Rights of the Child, the 1994 International Conference on Population and Development (ICPD), the U.N. World Program of Action for Youth to the Year 2000 and Beyond, and the 2001 U.N. General

Assembly Special Session on HIV/AIDS have affirmed the needs of young people for information, counselling, and high quality sexual and reproductive health services (Cited in Rosen et al, 2004).

Because sexuality education involves a lifelong learning about physical, moral and emotional development, it is imperative that adolescents are not denied with proper information about understanding the importance of marriage for family life, stable and loving relationships, respect, love and care which is embedded in sexuality education. It is also about the teaching of sex, sexuality, and sexual health, and it is not about the promotion of sexual orientation or sexual activity – this would be inappropriate teaching.

2.3 Brief history of sex education

Sex education in schools began in the 1970s in most European countries, and also in U.S.A and Canada. In Finland, sex education is incorporated into various obligatory courses mainly as part of Biology lessons in lower grades and, later, in courses related to general health issues. The Population and Family Welfare Federation provide all 15 year olds with an introductory sexual package that includes information brochures, a condom and a cartoon love story.

In Ghana, like many other African countries, traditions, morality, and religion have proven highly uncompromising in the discussions surrounding teaching of sex education in schools. Consequently, the state of sex education has suffered enormously as manifested by religious and moral resistance (Frimpong, 2010). At best, any attempt to teach sex education must not go beyond strict adherence of total abstinence until one is properly and legally married.

The advent of HIV/AIDS pandemic has succeeded to expand emphasis in sex education beyond total abstinence but even that, Ghana's sex education still does not go beyond AIDS teaching resulting in utter relegation of other concerns that plague adolescents and young adults like other sexually transmitted diseases, contraceptives, abortion and explicit sexuality. This is evidenced by the fact that there are no national policies or guidelines on what should be taught or not taught which will be disseminated through the Ministry of Education in Ghana.

According to Osei (2009), introduction of sex education in schools in Ghana would be met with vehement demonstrations and opprobrium by parents and the general public who view the teaching of sex education to school children as extension of immoral tool of inducting children into early sexual intercourse and subsequent pregnancies. According to Owusu (2012), due to intolerance for sex education, sexual encounters among Ghanaian youth have become increasingly alarming, leading to unwanted pregnancies, infections and drop-outs from schools. The risk of attracting HIV virus is very high among the youth and girls are the worst affected with early pregnancies cutting short their dreams to continue their education (Owusu, 2012).

In the study entitled 'Protecting the next generation of adolescents in Sub-Saharan Africa' which was based on national surveys of about 20,000 African adolescents as well as focus groups discussions and in-depth interviews of hundreds of young people, parents, teachers and health care providers, Biddlecom, Hessburg, Singh, Bankole, and Darabi (2007) found that at least half of 15-19 year olds in Ghana, Burkina Faso, Malawi and Uganda did not receive any sex education because it is not offered at their schools. They often drop out of schools due to unprotected sex leading to early pregnancies. In

Ghana, there is no policy on sex education other than a topic on adolescent reproductive health in the social studies syllabus that is devoted to sex education.

2.4 Forms of Sex Education

According to UNAIDS (1997), sexual health education for children and young adults has been one of the most contested emotional issues facing policy makers, national AIDS programme planners, and educators in recent times. This is consistent with the observation that there is limited data on sexuality education status in the Sub-Saharan Africa (SSA) (SSAR, Fact Sheet, 2012). Meanwhile a call made by Guttmacher study conducted by Biddlecom et al., (2007) emphasize the need for sexuality education both in school and out of school in SSA, given the magnitude of HIV, unintended pregnancies and the vulnerabilities of adolescent and young girls.

Although some interventions have been made in this direction by inculcating sex education in curricula in some countries including Ghana, where HIV and AIDS campaigns have been made part of the primary school curriculum in some African countries with a high prevalence of HIV, interventions by planned parenthood associations, and sexual counselling units and clinics across the length and breadth of communities, implementation of the programmes have not been effective (SSAR Fact Sheet, 2012). This is because majority of young people in Ghana between the ages of 10 and 24 years are at risk or already struggling with the consequences of an unplanned pregnancy or a sexually transmitted infection (STI), including HIV/AIDS (The Allan Guttmacher Institute, 2004).

In Ghana, school-based sex education programmes do not address the needs of the youth because religious groups and parent associations have tended to define the

boundaries and content for its age appropriateness. As a result, sex education has been noted to lack comprehensiveness. This situation has led to ongoing debate in relation to whether adolescents are even ripped to consume knowledge about sex, sexual health, and sexually transmitted diseases in the first place. Some criticisms go as far as questioning whether it is good to give comprehensive knowledge or selective knowledge about sexual issues to adolescents (SSAR Fact Sheet, 2012), or whether sex education should be age-specific or not, as well as parental role in the teaching of sex education in schools (Henry J. Kaiser Family Foundation, 2000).

This is because some people believe that whether or not young people are sexually active, they should be given information to protect themselves from unplanned pregnancies and sexually transmitted diseases whereas other people contend that telling young people about birth control and sexually transmitted diseases only encourages them to have sex or exposes them to riskier sexual behaviours.

The ongoing debate has surrounded the context, content and ideological orientation of sex education and public outcry. Consequently, sex and sexual education has been far from being uniform thereby encompassing diverse curricula with respect to their context, aims, scope, content, and implementation (Jorgensen, Potts & Camp, 1993; Nazario, 1992) across the globe. According to Kirby (2011), sex education programmes that discuss both the benefits of abstinence and the need to use condoms and contraception to prevent the risks associated with sexual intercourse among adolescents and young people have been effective in changing their behaviour when implemented in school.

The sex education debate has taken two main opposing stands which have given rise to sex education approaches currently practiced by different societies depending upon the direction of reasoning. The two main approaches that have currently gained attention are abstinence-based approach to sex education and comprehensive-based approach to sex education. The former focuses on teaching young people about the values of abstaining from sex until marriage as the best possible means of ensuring that they avoid infection with HIV, other sexually transmitted diseases and unwanted pregnancy whereas the latter seeks to explain to young people the potential benefits of delaying having sex until they are emotionally and physically ready and how to protect themselves from infections and pregnancy even when they do decide to have sex (Bearman & Bruckner, 2001; Collins, Alagiri & Summers, 2002).

Inherent in the abstinence-only based type of sex education lays the belief that many teenagers will not become sexually active early and that abstinence from sex among adolescents is encouraged. Adherents to this approach suggest that teaching adolescents or teenagers about sex corrupts them and subject them to undue exposure to sexual activity which is immoral and inappropriate. Hence, teenagers should not be taught about contraception or condom use, avoid discussions of abortion with teenagers since their curiosity will expose them to uncontrolled experimentation.

Moral entrepreneurs usually cite raw sex education as the cause of the escalating sexually transmitted diseases and HIV among the adolescents and that the best way to curb this situation is to preach solely about the need to remain abstinent from sexual activity until married. As a result, any discussions in sex education in classrooms must

foster positive values, character building, and, in some cases, refusal skills (SIECUS, 2001).

Opponents of selective (abstinence-only) sex education argue that programmes that consider holistic and comprehensive sex education do more in helping adolescents than is made to appear. They contend that Abstinence-only education programmes frequently employ scare tactics and impose guilt for feelings experienced during normal sexual development (Brewer, Brown & Migdal, 2007). They acknowledge the relevance of abstinence but goes beyond to support other ways of staying safe from unwanted pregnancy, incidence of HIV/AIDS, and other risky sexual behaviour. To them, sex education programmes must not only focus on staying away from sex but also explore the context and meanings involved in sex (Collins et al, 2002). Brewer and colleagues (2007) vehemently declares that suppression of knowledge about contraception and infection-prevention leaves adolescents and young adults needlessly vulnerable to unintended pregnancy and STIs, including HIV/AIDS.

A comprehensive sex education must promote first and foremost abstinence from sex as ideal for the betterment of society. But since teenagers tend to become sexually active earlier than in the past, it is equally important to teach about protected sexual behaviours such as contraception and condom use as well as discussions about abortion, STIs and STDs in order to promote responsible sexual health (Kirby, 2001; Ankomah, 1998; UNAIDS, 2006).

The argument that comprehensive sex education corrupts adolescents lacks scientific basis as findings do not support the claim that they hasten the onset of sex, increase the frequency of sex, and increases the number of sexual partners. Rather studies

have shown that comprehensive sex education has reduced or even delayed incidence of first intercourse and teenage pregnancy, delay the onset of sex, reduce the frequency of sex, or reduce the number of sexual partners (Ankomah, 1998; Kirby, 2001; Kirby, Laris, & Roller, 2005; Kirby, 2007; UNAIDS, 1997).

The proponents of the comprehensive education argue that sex education must also promote public health goals such as reduction in HIV/AIDS, unintended pregnancy, pelvic inflammatory disease, personal body hygiene, awareness of STIs, and teenage parenting whose socioeconomic costs on wider society cannot be quantified (Collins et al., 2002). Globally, the lack of access to accurate and comprehensive information regarding sexual health has been identified as a key contributor to rising adolescents' susceptibility to poor sexual health outcomes (Wellings, Collumbien, Slaymaker, Singh, Hodges, Patel, & Bajos, 2006).

Also, unintended pregnancy has been a major reproductive health problem among young people in sub-Saharan Africa (Henry & Fayorsey, 2002). For example, STIs are one of the leading cause of ectopic pregnancies, reproductive cancers, spontaneous abortions or still births, and other health problems, and make women 2-5 times more vulnerable to HIV infection. There is no empirical support for abstinence-only or selective sex education being effective in delaying first sex or age at first intercourse (Kirby, 2007, Kirby et al., 2005).

According to Ghana News Agency (GNA) (2014), lack of comprehensive sexuality and or sex education in schools has been one of the major cause of teenage pregnancies, abortion and school dropouts. In delivering a Position Paper on "Comprehensive Sexuality Education (CSE) in Ghana", Mr. Tia Abdul-Kabiru reiterated

the alarming nature of heightened teenage pregnancy, abortion and school dropout resulting from lack of comprehensive sex education and called for a radical approach to address the situation (GNA, 2014).

Studies have demonstrated the impact of limited or inadequate sex education on adolescent girls who suffer from teenage motherhood leading to truncated academic aspirations. For example, it is estimated that about 750 000 teenagers between 14-20 years become pregnant annually in Ghana (GNA, 2014). In “Gendered School Experiences: the impact on retention and achievement in Botswana and Ghana”, Dunne, Leach, Chilisa, Maundeni, Tabulawa, Kutor, Dzama-Forde, and Asamoah (2005) found that in Ghana and Botswana, drop-out is proportionately higher for girls but it is of a significantly greater magnitude in Ghana, with nearly 20% of females dropping out over the JSS cycle. In Botswana, it is 2.4%, with higher rates for girls (3.2%) than boys (1.6%).

In both countries, pregnancy has been identified as the major cause of girls’ drop-out. Children born by teen mothers are more likely to experience poorer health outcomes, lower educational attainment, and higher rate of adolescent childbearing themselves when compared to children born to older mothers thereby leading to reproduction of poverty in various forms.

Local non-governmental organizations concerned with sexual and reproductive health including Planned Parenthood Association of Ghana (PPAG), Hope for Future Generations (HFFG), and others who have demanded for efforts at improving the sexual and reproductive health of young people. They have called on Ghana Education Service to integrate CSE as part of the curricula at the junior high schools, senior high schools,

and the teacher training college levels to help solve the problem (GNA, 2014). Collins and colleagues (2002) are of the view that if the goal of school-based sex education is to increase positive health outcomes for youth, comprehensive (or abstinence-plus) sex education is the proven effective choice.

In line with that reasoning, UNESCO's published international guidance on 'sexuality education' (2009) set out the evidence supporting sexuality education and detailing what should be included in the curriculum for children and young people between the ages of 5 and 18. The guidance urges both developing and developed countries to make sure all children and young people learn about HIV, contraception, human sexuality and relationships. Selective sex education or abstinence-based sex education neglects young people who are at most risks uninformed and alienated (Kirby, 2001).

More so, evidence suggest that sex education intervention programmes that focus only on an abstinence message do not have positive effects on young people's behavior (Kirby, 2007; UNESCO, 2009). Effective sex education must address both the needs of the adolescents and the national development agenda by providing instructions on issues relating to human sexuality including human sexual anatomy, sexual reproduction, sexual intercourse, reproductive health, emotional relations, reproductive rights and responsibilities, abstinence, birth control, contraception, sexually transmitted diseases, and other aspects of human sexual behaviour.

2.5 Theoretical framework

Sexuality, a product of social creation, finds meaning in the cultural maze of every society in relation to its dominant ideology which affects the way people view and

approach issues of sexuality in a particular social context (Reiss, 1967; Fine, 1993). There has been a concern related to sexuality, sexual health and sexual rights of individuals in recent times which has attracted great attention in diverse academic fields, stimulating research and activism through diverse ways of understanding sexual life and experiences of people regardless of age, sex, race, ethnicity, or social class (Parker & Aggleton, 2007).

While the intersection of concerns related to sexuality, sexual health and sexual rights has thus increasingly become a central focus of attention for researchers and activists from a range of diverse fields, the challenges that have been faced in seeking to build a more varied understanding of sexual life and experience should not be underestimated. The study draws on Bandura's (1977) social learning theory (SLT) to help explain senior high school students' perception of sex education.

2.6 Albert Bandura's Social Learning Theory

The social learning theory by Albert Bandura (1977) is based on the idea that we learn from our interactions with other people in a social context. Originally, social Learning Theory (SLT) started in the 1940s to explain the phenomenon of animals and humans imitating behaviour but gained prominence in the early 1960s through Albert Bandura who began contributing to the development of the theory by showing that children naturally imitate the behaviour of other children without necessarily needing or receiving any direct reward for the new behaviour.

The theory shows that people learn behaviours of others by observing them. The theory combines behavioural reinforcement and cognitive elements to describe the learning process in which individuals adopt. Bandura stresses the personal or self-system

which controls learning by influencing the various ways of attention that people attract to them, varied experiences, memory representation and reconstruction, cognitively-based motivation, emotion activation, psycho-biologic functioning and the ease and skill to which these are employed to deal with everyday life experiences (Bandura, 1986).

Thus, the learner has the power to influence his/her own learning in new situations by controlling the environment around him/her, whether that environment is imposed, selected or constructed (Bandura, 1999). Three key components undergird Bandura's social learning theory that manifest in the learning process: observational learning, imitation, and behavior modeling (Bruner, 1990). People learn from those they observe through imitation. Bandura contends that imitation involves the actual reproduction of observed motor activities. Bandura (1977, 1986) opined that human behaviour is also driven by beliefs and expectations. He suggests that self-efficacy (a sense of personal competence) and efficacy expectation (an expectation that one can personally accomplish a goal) play an important role in motivation and human behaviour.

2.7 Viability of SLT to the Current Study

Social learning theory, an offshoot of learning theories, assumes that human behavior is determined by cognitive or personal factors (such as students' knowledge, attitudes, expectations about sex education), contextual or environmental influences (social norms surrounding sex education, influence of other people such as peers and the media, access in community through school environment, marriage and the family etc), and behavior (which includes skills, practice and self-efficacy). Thus, the theory attempts to explain how people think and the factors that drive their behaviour.

As concurred by Bandura, the proponent of the theory, the theory explains human behaviour in terms of a continuous reciprocal interaction between cognitive, behavioural, and environmental determinants (Bandura, 1977). Based on the postulations of the theory, students are likely to observe and imitate behaviour of others, and the students are believed to practice the behaviours they see as positive and shun those viewed as negative. Based upon their positive evaluation of the behaviour, they are likely to garner their capabilities and confidence to learn new skills. This positive evaluation helps students to form positive attitudes towards the new skills and knowledge about a particular practice in their lives. If the environment in which they find themselves, in this case the school environment, offer supporting factors consistent with their beliefs, it furthers their continued dependence on the new skills experienced in their daily practice.

Apart from the fact that the theory provides resounding postulations to explain students' behaviour towards sex education in school environments, this theory has also been used in most sexuality education studies by scholars as valuable and effective ways of gaining insight in how students form certain behaviour characteristics and shun other behaviour characteristics. For example, how do students adopt and adapt the values and practices of using complete abstinence, condom use, contraceptives, and other risky behaviours.

The theory helps to understand the patterns of communication students engage in and how they negotiate and set limits regarding appropriate information regarding sexual and reproductive health in their daily interactions between and among themselves. For example, if a student is informed that condom-use prevents unplanned pregnancy, and observes from others and based on his/her evaluation, agrees that using condom, in the

worse scenario when abstinence fails, is able to prevent unplanned pregnancy, the student is more likely to uphold this belief and teach others about it.

Out of their experience and knowledge gained in sex education classes, they can imitate and model their sexual lives along the appropriate knowledge they have been exposed to in classes. In addition, the theory helps to explain the variety of ways students receive (positive and or negative) models for healthy sexual and reproductive behaviour since modeling appropriate and strong sexually-related information to adolescents is very important for both personal and national development. This is necessary given the fact that youngest adults or adolescents model their sexual behaviour along much of what they observe on TVs, movies, magazines, internet, and even peers involving early sexual activity, unprotected sex, limited talk about sexual risky behaviours, sexual violence, unplanned pregnancies, and teenage abortions which constitute the diverse ways by which young people become advertently or inadvertently exposed to sex information (UNAIDS, 1997).

Using this theory helps unearth the varied opinions, values, experiences that are embedded in the minds of senior high school students to be able to fashion out desirable ways to promote effective teaching and learning of sex education in schools. In furtherance to the above, this theory elucidates the triadic influence of cognitive, behavioural and environmental aspects that are cardinal to appropriate modeling of practical behavioural skills such as avoiding early sexual activity, withstanding the pressure to have sex during intense adolescent changes, using condoms, resorting to counselling from experienced family and youth educators, turning to hospitals and clinics

in case of teenage pregnancy rather than self-inflicted abortions, HIV testing services etc., when they find themselves in the actual situations in their real lives.

For example, in finding out the common features of successful programmes that achieved delays in first intercourse, and or increased the use of contraception or condoms. Kirby (1995) identified social learning theory otherwise called influence theory or cognitive-behavioural theories of behaviour as underpinned such interventions. Sadly, most sex education lessons are usually silent on these pertinent issues that face these adolescents in their real lives thereby making it difficult to tackling the need to become and stay sexually healthy. The absence of this vital information needed by students to model positive sexual behavioural skills hampers effective teaching of sex education in classes.

2.8 Strengths and Weaknesses of the Social Learning Theory

In spite of the much strength that the social learning theory provides a case for observational learning through imitation among individuals and a relationship a link between what children observe and what they actually put into practice, it has attracted critique from some quarters. The strength of the theory in terms of observational learning supports all three tenets of the theory such that students learn sexual attitudes and behaviours by observing what they see on TVs, movies, internet, and even from their peers about abstinence, sexual protection skills, teenage abortion, HIV/AIDS, adolescent changes and dating opposite sex.

The social learning theory has some weaknesses, notably its inability to explain the reality that not all behaviours that are observed are imitated by observers. This is one

weakness as many people today are exposed to all sorts of information such as violence but not all people are violent everywhere. Also, not all children copy blindly from their peers inappropriate sexual behaviours in their real lives. Again, the fact that a person engages in pre-marital sex in school can serve as disincentive to other adolescents to avoid pre-marital sex based on the outcomes to that child who engages in the pre-marital sex. In addition, some individuals are naturally curious whether they observe others or not, will continue particular behavioural skills in relation to sexual behaviour which are inappropriate.

Nevertheless, the theory helps to understand varied opinions, experiences, expectations, attitudes, values, and beliefs regarding sexually healthy behaviours that drive senior high school students' risky sexual behaviour practices to be able to design appropriate sex education lessons for the betterment of both the students and the nation at large. In sum, SLT is considered more viable in helping to understand and explain the deep-seated perspectives that undergird students' attitudes, norms, behaviours and expectations in relation to sex education to be able to carve out appropriate niche to intensify the teaching and delivery of sex education in senior high schools, and hopefully by extension to the basic schools.

2.9 School as a viable place for sex education lessons

Studies have shown that more than two-thirds of young people engage in sexual intercourse in their teens in the developed societies such that approximately 25 percent of 15 year olds and 50 percent of 17 year olds have had sex (UNICEF Innocenti, 2008). The situation is not different in developing countries either. Mgalla, Schapink and Boerma (1998) aver that sexual relationships among students are on increase and common in

schools. As a result, the prevalence of students' sexual activity in schools has soared public concerns (Miyakado, 2013).

Given that a large number of adolescents are sexually active but lack basic knowledge about both the biological functioning of their bodies and the associated risks of becoming sexually active during adolescent stage (Hellar, 2001; Mori, 2004). Consequently, instead of the school or teachers advising or providing supportive environment to students who are found to engage in any sexual activity or relationships in school, they rather punish these students making students to miss classes, school and education altogether (Petro, 2009), and others suffer the consequences of teenage pregnancy, teenage parenting, and HIV infections.

These could have been prevented if teachers demonstrated enormous concern to educate these adolescents on their sexual and reproductive rights and do not only concentrate on academics to the neglect of equally pressing social aspects of adolescent life like sex education (Petro, 2009). Schools have been noted to be effective places to offer adolescents sexual and reproductive health-related information and skills (Biddlecom et al., 2007). Hellar (2001) contend that teachers are the preferred agents for provision of sexual and reproductive health education to students in schools. Unfortunately, they are reluctant in doing so (Miyakado, 2013). Meanwhile, Kajang, Jatau, and Kolawole (2015) declare that the absence of sex education gives rise to adolescent sexuality.

In a related context, Benzaken, Palep, and Gill (2011) found from their study that the majority of students identified school as the most important source of their knowledge regarding contraception and sexual health. This suggests strong support for the teaching

of sex education in schools contrary to popular myths that teaching sex education in schools only exposes adolescents to immoral acts. In an evaluation of the need for sexuality education within educational systems in developing countries including Ghana, Singh, Bankole, and Woog, (2005) maintain that sex education is vital to address the increasing engagement of young people in high-risk sex behaviours.

Scholars have observed that traditional and modern programmes on adolescent sexual and reproductive health have tended to focus on pregnancy and fertility-related issues to the neglect of other equally important issues such as STIs (Kumi-Kyereme, Awusabo-Asare, & Biddlecom, 2007). Even the formal and informal education that was taught in the traditional system exclusively stressed motherhood, marriage and general domestic activities with little emphasis on broad knowledge of sexual health and sexual rights, and even when family life education was introduced into the school curriculum in the 1970s, emphasis was still on fertility regulation (Kumi-Kyereme et al., 2007).

It was not until the outbreak of HIV/AIDS in the mid-1980s that government ministries and agencies, nongovernmental organizations, community groups, traditional leaders and individuals started initiating interventions such as media campaigns, training of peer educators and community education campaigns to create awareness about the epidemic (Awusabo-Asare, 1995).

Currently, there is no information found that document any robust intervention or promotion of the teaching of sexual education apart from the limited sections inculcated in subjects such as social studies and biology at the senior high schools. This is compounded by Allen (2008) finding that there is often a disconnection between the perception of the school about the sexuality of their students and the reality they actually

peddle around leading to the inconsistency between what the teachers give to students and what the students actually need to make informed choices about their future sexual and reproductive healthy lifestyles.

Although Kumi-Kyereme et al. findings in a 2007 study of adolescents' sexual reproductive health in Ghana that family members were not mentioned as much as teachers and health care workers as sources of information on pregnancy prevention which provides support for the school as an ideal place for the teaching and learning of sex education, teachers are found confused as regards to the depth of knowledge on sex education during lessons. As indicated above, the family organization is the worse culprit in relation to sex education of young ones. In Kumi-Kyereme and colleagues (2007) study, the researchers reported another finding which indicated that parents hardly discuss ways by which their young adolescent children could prevent pregnancy even though they warned the children about the consequences of teenage pregnancy (Kumi-Kyereme et al., 2007).

It is reported in a study conducted on the preferred information and its sources about prevention of teenage pregnancy among adolescents in Ghana that adolescents would want to receive information about pregnancy prevention from teachers and health professionals as well as specific information about contraceptive methods and how these specific methods are used. Some adolescents were also found to want more information about abstinence within the context of being able to refuse unwanted premarital sex (Kumi-Kyereme et al., 2007).

While the main source of information on HIV/AIDS and contraceptives among adolescents was found to be the mass media, adolescents, especially younger adolescents,

preferred teachers and health workers as sources for information (Awusabo-Asare, Biddlecom, Kumi-Kyereme, & Patterson, 2006). The intensification of the teaching of sex-related issues in schools and other non-familial settings, using formal and informal school systems to disseminate detailed information about how pregnancy can occur and be prevented, and intensifying the campaign on delaying sexual debut and pregnancy within the context of achieving universal basic education were some of the policy implications identified by the researchers who conducted the survey (Awusabo-Asare et al., 2006).

In a related study, Sutherland-Addy (2002) observes that girl education in Ghana has consistently been below par in relation to boys, and one of the reasons for this decreasing enrollment among girls in all levels of education in Ghana is school dropouts. Teenage pregnancy is one of the highest factors, if not the highest, that accounts for school dropouts among adolescent girls in Ghana. She notes that the low admission rates of females in primary one, together with other factors like high repetition, dropout and low transition rates affect their participation at all other levels of the educational ladder (Sutherland-Addy, 2002). Sutherland-Addy (2002) eloquently declares that there is no doubt that Girls' Education Programme is a timely and much needed one and that measures must be instituted to heighten its intensification considerably if the national objectives for gender equity are to be met.

Apart from above, the school context provides an excellent forum for reaching a large number of adolescents in a structured setting, particularly given that today's adolescents receive more years of education than previous generations did (Biddlecom et al., 2007). Also, Lloyd (2005) contends that formal education in general appears to

improve adolescents' ability to make healthy decisions, as it has a positive association with protective behaviors like contraceptive use.

Further, research provides compelling evidence indicating that school-based sex education is effective and does not lead to increased sexual activity among adolescents (Kirby et al., 2007; Ross, Dick & Ferguson, 2006). Similarly, studies conducted with the aim of finding out from students about the need for sex education in schools have yielded resounding outcomes. For example, Frimpong (2010) found from his study that specifically tended to find out about adolescent's attitude towards sex education and their opinions on various sexual issues in the Kumasi Metropolis that respondents were overwhelmingly in support of the view that sex education should be introduced in the senior high school curriculum.

This situation is depressing giving the fact that many adolescents in Ghana are sexually active and engages in pre-marital sex even before age 20. For example, Afenyadu and Goparaju (2003) study on 'Adolescent Sexual and Reproductive Health Behaviour in Dodowa, Ghana revealed a staggering 55 percent of the adolescents who participated in the study having ever had sex. In the same vein, among the in-school students 65 percent of the males and 44 percent of the females had ever had sex.

Kirby et al., (2007) concur that the school offers a better place for the implementation of promising interventions geared towards reducing adolescent sexual risk behaviours. The researchers emphasized that the school provides a great opportunity to potentially reach large numbers of youth (Kirby et al., 2007). Evidence suggest that education programmes have been particularly effective in reducing reported risky sexual

behaviours in school going adolescents in developing countries (Kirby, Obasi, & Laris, 2006).

The purpose for inculcating sexual and reproductive matters into the formal educational system to teach various aspects of family life and, through that, positively influence sexual and reproductive health behaviour may fail to live up to its expectation if efforts are not made to strengthen the teaching and delivery of sex education in senior high schools in the country. It must however be stated that teacher competence and professionalism in handling sex education is vital to achieving desired outcomes in teaching sex education.

2.10 Teacher Professionalism and Sex Education

Scholars have shown how teacher competence in the teaching of sex education interact with the content and influencing achievement of the aims of the programme to an appreciable extent in the classrooms (de Gaston, Jensen, Weed & Tanas, 1994). Despite a large number of adolescents being sexually active but lack basic knowledge about both the biological functioning of their bodies and the associated risks of becoming sexually active during adolescent stage (Hellar, 2001; Mori, 2004), teachers' reactions to students' sexual activity in schools have been tainted with either ignorance or negligence for decades as they either dismiss or suspend these adolescent students from studies (Mlyakado, 2013). Kajang et al., (2015) noted that adolescent boys and girls deserve to know about sex education and for that matter there must be dedicated and knowledgeable teachers who can teach them sex education. These adolescent boys and girls are in the senior high schools.

Authorities recognized about three decades ago that a well-qualified teacher is the most ingredients for effective school sex education (Yarber & McCabe, 1981). Mulama (2006) recently waded into this debate when she argued that adequate teacher professional preparation for any subject is necessary since it determines teachers' understanding of the content, nurturing of positive attitudes to subject matter and acceptable understanding on 'what it means to teach'. Similarly, Tijuana, Finger, Ruland, and Savariaud (2004) assert that teachers are gatekeepers of knowledge and skills for the large majority of young people. For Martin-Weiler and Martin Weiler (2012), addressing HIV/AIDS in teaching and learning has more to do with teachers' full commitment in terms of encouraging personal values and experiences as part of the learning process than just a cognitive academic exercise.

Akyeampong and Stephens (2002) demonstrate how the socio-cultural backgrounds of teacher's understanding of what the process of teaching and learning affects classroom norms. This is because non-availability of professionally trained and competent teachers of sex education typifies the current state of sex education programmes in schools. Efficient sex education can only be a reality under the guidance of qualified personal who would not kowtow to the dictates of religion and morality to the detriment of young adolescents' sexual and reproductive lives.

Unfortunately, some teachers often avoid topics that are related to the reproductive system and others, too, feel embarrassed and ashamed to talk about male and female genitals. Still others neither answer questions on male and female reproductive system nor respond to questions about sexuality posed by learners during lesson period (Ajala, 2002).

Although Kajang et al (2015) study on the knowledge and attitudes associated with the teaching of sex education in Nigeria found that both male and female secondary school teachers have positive attitudes towards teaching sex education, do not refuse to respond to students' questions that are related to sexuality, and don't skip topics that deal with male and female reproductive systems. But the finding is insignificantly robust in generality of the nature of sex education across Sub-Sahara Countries including Ghana.

Kajang and colleagues (2015) consider the need for teachers to possess accurate and scientific knowledge relating to sexuality education in such areas as reproduction, body image, friendship, marriages, growth and development. Teachers should be emotionally stable, honest, and accessible and should have positive attitude towards sex education (Kajang et al., 2015). The negative attitude put up by teachers in the teaching of sex education can hinder efforts towards the teaching of comprehensive sex education (Kajang et al., 2015).

Hellar (2001) contend that teachers are the preferred agents for provision of sexual and reproductive health education to students in schools. Mkumbo (2009) observed from studies that examined attitudes towards provision of sex education in schools in developing countries that they bring more benefits to students and the community in general. Sadly, most teachers do not possess any formal training on sex education either through seminars or workshops on sex education.

This is consistent with Mlyakado (2013) finding that out of the thirty teachers who were asked to indicate any formal education they have had on sex education, a whopping twenty-three indicated had never attended any formal sex education training with the rest obtained formal training on sex education through seminars and workshops

held on sex education. This may result from the fact that there are limited if not none sex education programmes available to train teachers about sex education as found in the study by Mlyakado (2013).

Also, sexuality or sex education in schools has been observed to be mainstreamed in other subjects like social studies, civic education and management in living as well as brushed over in integrated science during lessons in reproductive system in biology class in the case of Ghana and other African countries like Tanzania (Mkumbo, 2009). Regrettably, only social studies which is a core subject where all students in senior high schools offer but management in living is a concentrated course or elective course where virtually a handful of students enroll in that course. Civic education is also not treated in the senior high schools. On integrated science which is equally a core subject but because of its course load, instructors have had to spend insignificant amount of time teaching comprehensive reproductive system during class hours.

It is unfortunate that the content of the topics treated in social studies and integrated science are very limited with little emphasis given to certain critical sexual and reproductive health issues such as STIs, STDs, abortion, and safe sex which are either mentioned in passing or are not talked about at all. Sex education is not treated as a separate subject to allow teachers to concentrate on it during classes. Senior high school teachers who play pivotal role in the teaching of sex education should be exposed to special training, workshops, seminars and conferences on sex education so as to update their skills.

It is not surprising that Okafor (1997) found that senior high school students possess average level of knowledge of sex education. Due to that, authorities of

educational institutions do not see the need to organize special training, workshops, seminars, and conferences on sex education as a measure to update and upgrade skills and knowledge of senior high school teachers in order to play critical role in the teaching of sex education. This is ill-fated given the impressive role sex education plays in shaping sexual and reproductive health. Sex education thrives in culturally supportive contexts that consider it a necessity to safeguarding the future generations of the society from unwanted pregnancies, HIV/AIDS infections, large-scale school dropouts, teenage parenting and malnourished children being born to teenage mothers.

2.11 Sex education and the Ghanaian society

The cultural context of Ghana like many other societies especially in Africa prohibits discussion of matters of sex in public spaces especially with adolescents under the pretence that sex related matters are treated as sacrosanct or taboo only exclusive to married adult couples (Dienye, 2011; Osad'an, & Safir, 2014; Prazak, 2000). Consequently, sex education and its implementation suffer a lot of setbacks in schools. Given that parents and other adults in the Ghanaian society usually renounce issues of sex with their children or adolescents. Ajala (2002) revealed in his study that subject teachers of religious study, moral education and guidance counsellors often do not feel comfortable with discussing some sex education topics with the students and do not know how to address their concerns and issues.

Sexual issues, according to Osad'an and Safir (2014) are often not explored enough or at all even though some scholars have asserted that early sexual experience may affect the ways in which women experience their sexuality (Villanueva, 1997). Apologists claim that sex education—too soon and too explicit—fails our children by

raising their curiosity. A finding from a study conducted in Ghana across 100 parents by Nyarko, Adentwi, Asumeng and Ahulu (2014) showed that “about 58% of parents have an unfavourable attitude towards sex education at the primary level” (p. 25). This intolerance arises from the fact that exposing young ones (adolescents and other youth) to sexual issues too often equip young men and women with all manner of information and resources thereby subjecting younger ones to moral turpitude.

Parents' communication about sex with their children has been noted to be an important influence (Villanueva, 1997) on sexual behaviours of young adults. However, scholars have noted that the evolving values of Ghanaian society due to modern technological advancement have been contributory factor to the inability to conceal knowledge on sex impossible to the youth (Osei, 2009). Sexual education should no longer be viewed as a typically taboo subject in the Ghanaian society since concealing sex education and sex-knowledge from the youth makes them curious and vulnerable (Osei, 2009).

Ankomah (1997) also observed the silence which surrounds sexuality in the Ghanaian culture. As a result, the Ghanaian society is left with little or none choice but to provide her youth sexual education knowledge to enable them make informed decisions about their health and sexual lives (Osei, 2009) given that sexual policies are changing at global, national and even local levels (Jones, 2011).

Osei (2009) concurs that the introduction of new technology has made the conservative practice of concealing sex-knowledge from the youth impossible to sustain because the values of society have evolved, and adolescents in recent times have become much better informed than their parents because of the information technology age.

Through that, the youth and for that matter the adolescent will be guarded against unwanted information being peddled around the media.

Other studies conducted by Okpani and Okpani (2000) have shown a decline in the age of sexual experience among adolescents contrary to accepted moral and cultural values. There is no doubt that this is a dangerous trend which affects the educational system and the society at large (Dienye, 2011). For example, experts have noted that apart from curiosity and the lack of sex education, which leads some teenagers into adolescent pregnancy, most become victims through no fault of theirs.

As part of the teenage development stage, many teenagers become curious about the rapid changes in their body, and the strange passion of emotional feelings and attraction for the opposite sex which exposes them to such unfortunate incidence. The advent of dangerous and incorrigible diseases coupled with heightened teenage pregnancy rates leaves the school as an important institution in the society to salvage the menace by giving it mandate to train and prepare the future generations of this country to live up to that expectation.

Dienye (2011) avers that the school must be expected to provide the necessary guidance through wholesome educational programmes to ensure the survival of societal future generation of leaders rather than allowing them to be lost to teenage parenting, mortality resulting from abortion and diseases. Dixon-Mueller (1993) reports that there is an increase in the number of sexually transmitted infections including Acquired Immune Deficiency Syndrome (AIDS) among adolescents arising from their sexual activeness.

In 2001, the World Health Organization found increases in the rate of pre-marital sex as well as a decline in the age of sexual encounter among adolescent from its studies

in Africa suggesting that sex education cannot hide behind the curtain of socio-cultural justifications for denying adolescents what is most needed to their personal and national development.

2.12 Effects of sex education

In 2000, WHO indicated that teenage or adolescents are more likely to die in childbirth than adult mothers. Given the fact that reports from international non-governmental organizations, governmental organizations, and other local NGOs indicating the challenges facing the youth, it is significant to explore alternative ways to reduce if not eradicate their impact on the youth. A useful way to achieve that is to first and foremost find out the diverse knowledge embedded in the minds of these adolescents regarding their sexuality to be able to fashion out appropriate measures to deal with them.

In his 1981 work on sex education and marital guidance, Olayinka observed that the root of moral decadence among youth in recent times lies in the fact that these youths were denied with the facts they are supposed to know about sexuality education. Appropriate and adequate knowledge about sex education makes adolescent take responsibility in their expression of sex life and social relationships. More so, sex education knowledge enhances desired self-esteem in building proper social skills and attitudes which help in the equitable determination of one's gender and therefore control of one's reproduction (Dienye, 2011).

Sociologist Giddens (2001) stressed the need to regulate human sexual behaviour for the promotion of a healthy living and positive interpersonal relationship. But denying a category of people with this essential aspect of life is tantamount to loss of human dignity since access to such information contributes to the development of well-rounded

healthy, psychologically and emotionally stable personality capable of making choices regarding indulging or shunning sexual risky behaviours. Through that, the individual takes a conscious and deliberate decision about his/her courses of action with full awareness of the outcomes.

Sex education also helps in the formation of desirable attitudes about one's sexuality that can enhance practical control of emotions. According to Dienye (2011), diminished or insufficient knowledge about one's sexuality has the ability to induce a chain of negative outcomes that suppresses and destroys a person's wellbeing and subsequently, terminates his/her useful contributions to the development of society.

When students harbour wrong information about their sexuality and are further deprived of sex education, they become predisposed to risky behaviours that devour their future potential positive contribution to their personal lives, families, and the society in general. For example, Oikeh and Iziren, (1993) cited in Dienye 2011, p.15) study revealed that "adolescents with inaccurate knowledge of safe sex outnumbered those with adequate knowledge of safe sex".

Also, Sallar (2001) study of three districts in Ghana found that 38% of adolescents had sex for the first time for pleasure, while 23% of males and 24% of females had sex because of peer pressure. It was observed that due to the circumstances under which those first sexual experiences occurred, they were unable to protect themselves. These studies show clearly that currently many teenagers are sexually active in Ghana.

It will be a herculean task to attempt advising, supervising and enforcing traditional and moral choices on teenagers if there is uncontrollable impact of mass media

and technological advances which allow the transfer of highly sexual messages between and among teens through internet, popular music, and television. Apart from that, these teenagers are deprived of the opportunity to develop their self-confidence and taking responsibility of their actions because society imposes abstinence as the only acceptable choice. This weakens adolescents' ability to stand up to unwanted sexual advances. As a result, adolescents are more likely to regard consequences of their actions as a given rather than emanating from their conscious reasoning.

Inadequate sexual and reproductive health education in Ghana means a lot of teenagers, especially girls, are not adequately informed about reproductive issues. Given that these adolescents rely heavily on ill information being at the heart of their predicament, many teenagers fall prey to pregnancy and become a burden on their families and society. Experts say approximately 40 per cent of teenage pregnancies result in an unsafe abortion, in turn leading to medical complications and in some cases fatalities (WHO, 2007; Haddad & Nour, 2009; Grimes, Benson, Singh, Romero, Ganatra, Okonofua, & Shah, 2006).

According to the Innocenti Report by the UNICEF (2001), giving birth while still a teenager is strongly associated with disadvantage in later life. This is accentuated by studies that have shown that adolescent girls who become mothers are less likely to complete high school, experience high unemployment and low-paid jobs, suffer from depression, live in poor housing conditions, and the Children born to these younger teens may also experience poorer health outcomes, lower educational attainment, grow up without fathers, predisposed to victim of neglect and abuse, and higher rates of adolescent childbearing themselves when compared to children born to older mothers

(Henry & Fayorsey, 2002; Kirby, 2001; The Allan Guttmacher Institute, 2004; Feijoo, 2001; UNICEF, 2001). It would not be out of place to respond to the clarion calls on the need to reduce teenage births in order to reduce the likelihood of poverty and its attendant perpetuation from one generation to the next (UNICEF, 2001).

Similarly, in a review of the impact of sex and HIV education programmes on sexual behaviours of adolescents and young adults, Kirby et al., (2007) noted that there is strong evidence showing positive impact of curriculum and group-based sex and HIV education programmes on the behavior of adolescents and young adults. According to the researchers, two-thirds of the programmes had a significant positive impact on behaviours such as delaying or reducing sexual activity, increased condom use, or contraceptive use or both (Kirby et al., 2007).

Strong evidence found suggests that curriculum-based sex education programmes did not increase sexual behaviours (Kirby et al., 2007). Cohen (2010) provides the economic benefits of providing education on contraceptive use to young people in his estimation that every dollar spent on contraceptive services to help women prevent unintended pregnancies saves \$1.40 in maternal and newborn health care costs.

Lack of comprehensive sex education can affect the lives of young people and, as a result leading to the loss of entire generation of the youth which is a bane to national development. Given the grave consequences of inadequate or ill-knowledge about sexuality and reproductive health, one cannot but agree with the need to strengthen and inject appropriate resources to ensure good delivery of teaching and learning of sex education in the senior high schools to provide a safe haven for developmental initiatives and programmes in the future.

2.13 Further empirical support

The United Nations Department of Economic and Social Affairs (2012) estimates that adolescents and young people in Sub-Saharan Africa (SSA) constitute 19.6% (224,432,000) of the region's population by 2015. In spite of the fact that about 45 countries that comprise SSA have shown stable economic growth during the past decade or two, the socioeconomic and health indicators for the young population in SSA have been below par (Sub-Saharan Africa Region (SSAR) Fact Sheet, 2012).

According to Kumi-Kyereme, Awusabo-Asare, and Biddlecom (2007), young people in Ghana constitute a sizable and numerous group whose sexual and reproductive health needs cannot be overlooked. Studies have found that although there are increasing numbers of young people delaying marriage until they are older, they have become increasingly more likely to engage in sex before marriage leading to high rates of teenage pregnancy, premarital pregnancy, and STD rates (Lloyd, 2005).

Another study reports that the level of adolescent fertility continues to be high, with 24% of females aged 18–19 either pregnant or having already given birth (Ghana Health Service, 2003). Also, about seven percent of females aged 15–19 years left school due to pregnancy (Awusabo-Asare et al., 2006). The authors continue to assert that, generally, high levels of formal education are associated with positive sexual and reproductive health outcomes (Awusabo-Asare et al., 2006), and if youngest adults and adolescents are dropping out of school due to teenage pregnancy, teenage motherhood, teenage parenting to mention a few, the future tends to remain bleak.

Added to the burden is the increasing child and teenage pregnant mother mortality that is sweeping teenage mothers and children at birth. For instance, adolescent mothers

are twice as likely to die in childbirth as mothers in their 20s; those younger than 15 are five times as likely to die (UNFPA, 2004). Similarly, adolescent mothers who give birth before age 16, are also likely to have poorer maternal health care than older mothers with similar characteristic including beginning antenatal care later, making fewer antenatal care visits and are more likely to deliver outside of health facilities or with an unskilled birth attendant (Magadi, Agwanda & Obare, 2007). A holistic intervention that takes into consideration adequate and informed sex education among adolescents can be a useful measure to reverse this debilitating trend.

Awusabo-Asare et al (2006) contend that when an adolescent leaves school at an early stage, it is likely to negatively affect his/her future livelihood partly because of a relatively low level of overall educational attainment and, for females, possible early exposure to the risk of pregnancy. It is imperative to encourage adolescent girls in school to pursue higher education instead of being lost to teenage pregnancy and other sexually risky behaviours. One of the ways to ensure this is to promote effective teaching and learning of sex education that addresses the needs of young adolescents comprehensively to allow senior high school students to make informed choices about their sexual and reproductive lives.

Also, the reproductive health risks correlated with sexual coercion include sexually transmitted infections (which can cause cervical cancer and infertility) such as HIV, unintended pregnancy which can possibly lead to unsafe abortion and as a consequence morbidity and even mortality, as well as the onset of risk-taking behaviors including other nonconsensual sexual experiences, multiple partnerships and unprotected sex (Heise, Moore & Toubia, 1995).

Another glaring statistics provided by the Allan Guttmacher Institute (2004) reveal that four in every 10 Ghanaian women and two in every 10 men aged 15–19 have ever had sex, 83 percent of women and 56 percent of men have had sex by the age of 20 with the median age at first intercourse being 17.4 for women and 19.5 for men. Most of these people within this age range are in the senior high schools. Among those between the ages of 12-24 who have had sex, four in 10 women and six in 10 men have had more than one sexual partner.

Despite more than two-thirds of 15–19-year-olds (female and male) found to indicate their approval of family planning, most sexually active teenagers do not use contraceptives (The Allan Guttmacher Institute, 2004). Among sexually active adolescents in this age-group, 80 percent of females and 63 percent of males currently do not use any modern method. Young people do not feel confident insisting on condom use as expressed in twenty-seven percent of men and 30 percent of women say that they could not insist on using a condom if their partner did not want to use one (Awusabo-Asare, Abane, & Kumi-Kyereme, 2004).

Teenagers can, in most cases, choose their sexual behaviour but Kirby (2001) research findings demonstrate that how those decisions are made is greatly influenced by the world that surrounds young people. This explains the overwhelming dependence upon try and error type of sex education obtained from peers, internet and other media sources. Although actual changes in students' behaviour due to sex education have been harder to demonstrate (Mauldon & Luker, 1996), some studies have shown that sex education programmes result in increased knowledge about contraception and more favourable

attitudes toward it (Hayes, 1987). Also, teaching young people about contraception does not contradict messages about delaying the first experience of sex (Kirby, 2008).

In conclusion, this chapter has illustrated both theoretical and empirical evidence that necessitates the conduct of this study to help churn out interventions to strengthen and promote effective and comprehensive teaching and learning of sex education in senior high schools. The chapter has shown realities and myths of sex education as pertains in the Ghanaian society and the degree of emphasis that the educational system places on sex education relation to the professional standards and depth of knowledge that teachers profess about sex education and the approach being used in sex education classes.

Given the above illustration, it is imperative to find out from senior high school students the level and degree of knowledge on sex education they demonstrate and ascertain the sources of such knowledge whether from classrooms or outside classrooms. Also, if the sources of sex education are from classrooms, do students receive adequate and comprehensive knowledge on sex and their sexual nature of their bodies during sex education classes? Is the knowledge on sex education influencing the students positively or negatively?

CHAPTER THREE

METHODOLOGY

3.1 Introduction

Leedy and Ormrod (2001, p. 14) define research methodology as “the general approach the researcher takes in carrying out the research project”. Saunders, Lewis and Thornhill (2003) point out that research methodology makes available a reliable underpinning to a study and describes how the study is carried out to achieve reliability and validity of the findings. Hence, this chapter outlines the general approach adopted by the researcher to undertake this study. Chapter three discusses the design adopted by the researcher to undertake the study which includes the philosophical underpinning of the research method, profile of the study area including population and sample as well as how the sample size was determined

The third chapter also addresses sampling procedure, data collection instruments, data analysis techniques, dependability and consistency determination, and ethical issues. The chapter begins with the research philosophy undergirding the study design, followed by a description of the study area, population and sample, and sample determination. Sampling procedures, data collection techniques, data management, data analysis, and ethical issues are discussed accordingly.

3.2 Research Design

Research design, according to Creswell (2008), is a plan or proposal to conduct research which involves the intersection of philosophy, strategies of inquiry, and specific method adopted by the researcher. The study adopts mixed methods research to

undertake this study by combining quantitative (or positivistic) and qualitative (interpretivist) approaches (Yin, 2006) because of the goal of the study.

Mixed research is a general type of research in which quantitative and qualitative methods, techniques, or other paradigm characteristics are mixed in one overall study (Creswell, 2009; Greene, 2006; Johnson & Onwuegbuzie, 2004). According to Tashakkori and Teddlie (1998), mixed method research is the combination of qualitative and quantitative approaches in the methodology of a study.

Johnson, Onwuegbuzie, and Turner (2007) also add that mixed research combines elements of qualitative and quantitative research approaches including use of qualitative and quantitative viewpoints, data collection, and analysis and inference techniques for the purposes of breadth and depth of understanding and corroboration. In view of that, I collected and analyzed not only numerical data, which is customary for quantitative research, but also narrative data, which is the norm for qualitative research in order to address the research question(s) defined for a particular research study (Williams, 2007; Greene, 2006).

Hence, the researcher distributed sets of questionnaire that contains both closed-ended and open-ended questions to collect the numerical, or quantitative, data. The open-ended questions were coded to aid numerical analysis of the data. Also, the researcher conducted an interview using open-ended questions to collect the narrative or qualitative, data from teachers in the various schools that participated in the study (Williams, 2007).

In lieu of the above, the quantitative methods employed was used to sample a representative sample of students between the ages of 13-25 years in the senior high schools at the Biakoye District in the Volta Region to provide responses to self-

administered sets of questionnaire that yielded quantitative analysis. Then, the qualitative method was used to gather in-depth interviews from purposively selected teachers who teach sex education as part of their topics in classrooms to explore their views, opinions, experiences, and beliefs in the teaching of sex education in classrooms.

The determination of samples, sampling techniques, data collection and data analysis constituted elements of both research approaches. That notwithstanding greater emphasis is placed on the quantitative element of the study which looks at the responses of senior high school students in the study area about the teaching of sex education in their respective classrooms.

Taking note of the fact that no particular (research) method is privileged over the other as alluded to by Borrego, Douglas and Amelink (2009), the researcher's decision to stick to a specific method is driven by answering the identified research questions (Creswell, 2002). The mixed methodology was favoured over either adopting each of the main research approaches because of its strength in helping to elicit detailed understanding supplementary to the quantitative dimension of the study at hand (Creswell, 2002). This helps to provide a better understanding of research questions posed by the researcher that may not be understood by either approach alone.

In overcoming challenges associated with mixed method research approach such as representation, methodological and data integration as identified by some scholars (Mingers, 2001; Onwuegbuzie & Collins, 2007; Tashakkori & Teddlie, 2003), the researcher recited extensively into the various strengths and weaknesses of each divide to be able to deal with the potential challenges as suggested by Bazeley (2003). In reviewing mixed method research literature, the researcher recognized and paid adequate

attention to what is to be done and sought advice from leading methodologists as a measure to avoid how apparent differences in each of the approach might influence the research study and be resolved.

The quantitative method is employed to address objectives one through three which adopted survey and were subjected to quantitative analysis through the use of tables and percentages. The qualitative method was employed to address objective four of the study. Hence, the researcher carried out interviews to obtain in-depth knowledge about their experiences and views in the teaching of sex education in the senior high schools in the district.

The study adopted a descriptive research design which enabled the administration of closed-ended self-administered sets of questionnaire or surveys (Williams, 2007) across a representative sample of students from the district to participate in the study, and open-ended instrument to gather in-depth and textual responses from the purposively selected teachers of sex education at the study site.

This is because the descriptive study design is useful in determining proper and thorough description of a situation or event and to help explain why it is happening and once the causes are known, solutions become easy to find. More so, as noted by de Jong and van der Voordt (2002), a methodological way of collecting knowledge that may contribute to well-considered and well-founded decisions is the precise description of the nature of reality. Through that, the researcher is able to capture phenomena unfolding at their natural setting. This method afforded the researcher the opportunity to use the quantitative method which provides an objective measure of reality, together with the

qualitative method that allowed the researcher to explore and better understand the complexity of the phenomenon under study (Williams, 2007).

3.3 Profile of study site

According to the MMDAs Composite budget, Biakoye District is located in the Northern part of the Volta Region of Ghana and lies within longitude 0 150 E and 0 450 E and latitude 6 450 N and 7 150 N at the heart of the Volta – Region. It shares common borders with the Hohoe and Jasikan Districts to the east, Kpando to the south, Kadjebi and Krachi East Districts to the North and the Volta Lake to the west. The District has a total land area of 738.20 sq. Km. representing about 4.08% of the total land area of the Volta Region (18,093.27).

Biakoye District Assembly has one constituency, 33 Electoral Areas, six (6) Urban/Town/Area Councils and 82 Unit Committees. The sub – District structures of the Assembly are Nkonya Area Council, Bowirie Area Council, Kwamekrom Town Council, Tapa Area Council, Worawora Town Council and Apesokubi Area Council. The population is based on the 2010 population and housing census in which Biakoye District is estimated to be 65,901 representing 3.1 percent of the total population of the Volta Region comprising approximately 31,324.7 females and 33,082.3 males representing 49.8 and 50.2 percent respectively (GSS, 2014). It is estimated that the District annual population growth rate is 1.9 percent.

According to Ghana Statistical Service (GSS), about 33.9 percent of the population is rural with the population of the district characterized as youthful given that the populations under age 15 constitute 40.2 percent. The district has a sex ratio of 100.6 (GSS, 2014). About 46.3 percent of the population aged 12 years and above are married

with the proportion of married female higher than that of the males 49.3 and 43.1 percent respectively. Towns like Kwamekrom, Worawora and Abotoase form the urban centres of the District whilst others are rural. Nkonya is fast becoming an urban centre due to its strategic location as the District capital. The district has 317 communities based on the 2010 population and housing census.

Biakoye District strives on primary economic activities given the fact that about 60.4 percent of the employed population engage in occupations such as agriculture, forestry, and fishing which employs about 70 percent of the total population (GSS, 2014). Specifically, economic activities in the areas of forestry (lumbering) employs about 3% of the population, and small scale manufacturing and industrial activities like carpentry, blacksmithing, distilling, palm oil extraction, gari processing employs about 10 percent. Other economic activities like commercial and service employs the remaining 5 percent of the population.

The District is endowed with about 42,000 hectares of arable land and water source (the Volta Lake) for irrigation to produce annual crops and vegetable. Lands for crop production are evenly distributed in the district. It is made up of forest areas of Bowiri and Akporso and the savanna areas which cover the Nkonya, Worawora and Tapa areas. Food crops are produced mainly by peasant farmers using simple hand tools. The average land holding per farmer is about 0.5 ha. Mixed cropping is gradually giving way to mono cropping especially for crops such as maize, yam, rice and cassava.

There is a decreasing level in the use of inorganic fertilizers. Crop productivity levels are dropping with each cropping season as a result of poor soil fertility management practices. Income level of food crop farmers is low because of the low

yields from their farms. The major food crops cultivated in the district are maize, rice, vegetables, yam and cassava. There are seven circuits in the District, namely Nkonya Ahenkro, Nkonya Wurupong, Kwamekrom, Tapa Abotoase, Tapa Alavanyo, Worawora and Bowiri. There are 119 schools scattered all over the District out of which 41 are Junior High schools, 74 are Basic schools, and 3 public Senior High Schools (MMDAs Composite Budget, 2012).

3.4 Sources of data

Both primary and secondary data was relied upon for gathering data for this study. The secondary data comprised articles, books, internet, archives, and public records whilst the primary data was gathered using sets of questionnaire to solicit responses from the students and in-depth interview guides designed to obtain responses from the teachers of sex education in the study site.

3.5 Population and Sample

In any educational research study, it is important to have a precise description of the population of elements (persons, organizations, objects, etc.) that is to form the focus of the study (Ross, 2005). The defined target population of this study comprised senior high school students and teachers whose subjects they teach cover sex education lessons all at Biakoye district in the Volta Region. There are three senior high schools in the district: all being public schools. They are Worawora Senior High School [647 students], Nkonya Senior High School [500 students], and Tapaman Secondary Technical School [175 students].

The Tapaman Secondary Technical School was recently converted from privateschool into public secondary technical school. The total number of students in all the three schools identified above is 1,322 constituting the desired target population. The desired target population includes all forms two and three senior high school students in the district whereas the form one students constitute excluded populations (Ross, 2005).

Form one students were excluded because they were newly admitted students who had barely received any rigorous teaching and learning about sex education in their classrooms. As a result, gathering responses from them may not yield any usefulness to the goal of this study, hence, their exclusion from the study. Those populations included in the study had at least received a certain amount of teaching and learning over a year or two, and that could express their experiences, views, opinions, and assessment of sex education lessons in their classrooms. The sample was therefore drawn from forms two and three which constituted the desired target population for the study.

The total enrollment of all forms two and three students in the three senior high schools in the Biakoye district constituted the sampling frame upon which the sample size was determined for this study. This way of selecting students were embedded in the quantitative research approach where samples are rigorously determined to avoid any inherent biases to increase the accuracy and reliability of the findings in order to make generalizations from the sample across the populations.

Kish (1967) adds that the first step in the selection of a sample is to consider a sampling design. He argues further that the sampling design denotes all the stages and the processes involved in reaching out to the respondents (Kish, 1967). The sampling design that was adopted comprised both probability and non-probability sampling techniques.

The probability sampling techniques were adopted to reach out to students to provide responses to self-administered sets of questionnaire and the non-probability sampling was used to select teachers of sex education in the district to express their views, experiences, opinions, and challenges they face in the teaching of sex education in their respective classes.

3.6 Determination of sample size

According to Krejcie and Morgan (1970), 302 respondents in a sample is representative of a population of 1,400. But since the population found is 1,322 students in all the schools identified in the district, which is less than 1,400, Fisher, Laing, Stoeckel, and Townsend (1998) formula was dwelt upon to draw the sample size proportional to the population. As a result, a total of 298 senior high school students would constitute the sample from which sets of questionnaire would be administered to elicit responses.

This is because Biakoye District has a total student population of 1,322 in all the three senior high schools (as indicated earlier). The sample was corroborated by Fisher et al, (1998, p. 43) formula for determining sample size for survey research (the result is 298 in the case of Fisher et al., 1998. The difference lies in estimation of the total population according to Krejcie and Morgan 1970. Hence, 298 would be used as sample because it was an even number).

Also, ten (10) teachers of subjects which have topics in sex education in all the senior high schools were conveniently and purposively selected to provide responses to an in-depth interview to elicit enriched views from the instructors or teachers of sex

education about how they view the teaching of sex education in adolescent classes, the reactions of adolescents to sex education lessons, how they teach sex education topics whether comprehensive or selective, challenges they face in the teaching of sex education, and what they think can be done to strengthen the teaching of sex education in senior high schools for a better and informed choices to be made by the adolescents and youth about their sexual and reproductive healthy lifestyles.

The interview schedule constituted the qualitative research approach whose goal was to gather naturally occurring, enriched, in-depth views, opinions, attitudes, experiences, and values undergirding the occurrence of a particular behaviour, event or phenomenon to enhance a better understanding of it.

The sample size for the study of senior high school students was determined using Fisher et al., (1998) formula in determining the sample size for the total number of students and supported by Krejcie and Morgan (1970) calculation of sample size in senior high schools in the Biakoye District. It must, however, be noted that Krejcie and Morgan (1970) calculation of sample size was used to confirm sample size obtained from using Fisher et al. (1998) formula for sample size determination. In effect, the researcher adopted integration of both sample size determination formulas to confirm each other about the arrived sample size.

This formula, popularly referred to as Fisher's Formula, is used to calculate sample population from a target population greater than 10,000. But to calculate the sample size for a target population less than 10,000, the researcher has to first determine any given proposition with a given degree of accuracy at a given level of statistical significance by using the formula when the target population is greater than 10,000. Thus,

the researcher used the formula for the sample size when the entire population was estimated to be greater than 10,000 to arrive at the population for the study. Then, another formula is used after obtaining the estimate of the target population which is less than 10,000 to compute for the actual sample for the study from the target population.

According to the formula:

$$n = \frac{z^2 pq}{d^2}$$

Where,

n= desired sample estimate when the entire population is greater than 10,000

z= the standard normal deviation set at 1.96 confidence level with alpha value of 0.05

p= the proportion in the entire population estimated to have particular characteristic (50%)

q=1.0 – p (that is, if p= 0.50 (50 %) then q=0.50 (50%))

d= degree of desired accuracy which is set at 0.05

Hence, by substitution;

$$\begin{aligned} &= \frac{1.96^2 \times 0.50 \times 0.50}{0.05^2} \\ n &= \frac{3.8416 \times 0.25}{0.0025} \\ n &= \frac{0.9604}{0.0025} \\ n &= 384.16 \end{aligned}$$

Therefore, n=384

This enabled the researcher to draw an estimation of the target population from the entire population for the sample that was drawn for the study. The formula was used to determine sample size of the participants of the study taking into consideration the

chance factors or estimation chances in order not to draw too low or too high sample sizes. Since the desired sample size from the entire population was less than 10, 000, we used the value of $n=384$ representing the target population to compute the final sample estimate (n_f) from the target population that was less than 10, 000 using the formula;

$$n_f = \frac{n}{1 + \left(\frac{n}{N}\right)}$$

Where,

n_f = desired sample size when the target population is less than 10, 000

n = desired sample size for a target population less than 10, 000 (384 after the computation)

N = estimate of the target population size (1322)

By substitution,

$$n_f = \frac{384}{1 + \left(\frac{384}{1322}\right)}$$

$$n_f = \frac{384}{1 + 0.2905}$$

$$n_f = \frac{384}{1.2905}$$

$$n_f = 297.559$$

$$n_f = 298$$

Now the total sample for the study was obtained as 298 out of the target population of 1,322 senior high school students in all the senior high schools in the Biakoye district

The total number of students varies from one senior high school to another as shown earlier. Among students from the three senior high schools that participated in the study, Worawora Senior High School had the highest number of students being 647 students followed by Nkonya Senior High School with total students of 500, and finally, Tapaman Secondary Technical School with 175 students.

As a result, the researcher used quota sampling in proportion of 3:2:1 to draw samples of students from each of the senior high schools according to the proportion of the total number of students representing each school. Hence, 149 students from Worawora senior high school, 99 students from Nkonya senior high school, and 50 students from Tapaman senior secondary technical school respectively were drawn to make up for the total sample of 298 [149+99+50=298] students considered for the study.

3.7 Sampling Techniques

Both probability and non-probability sampling techniques were employed to select respondents to participate in this study. Simple random sampling technique which allows all students from forms two and three in the senior high schools a non-zero chance of equal selection to participate in the study constituted the probability sampling technique. This technique is informed by the fact that all students shared similar characteristics and the degree of homogeneity was found to be high thereby suggesting that any participant selected would provide similar responses in answering the questions designed for the study.

Given that all forms two and three students have had a lesson or have been thought sex education in their respective classes and all students fall within the adolescent category, the use of this simple random technique allowed the opportunity to give equal chance for each of the student for selection to participate in the study. All forms two and three students in the senior high schools were subjected to lottery method associated with simple random to ensure that each member of the defined target population had a known, and non-zero, chance of being selected into the sample (Ross,

2005) YES and NO were written on pieces of paper and put into a container and the students were asked to pick one from the container. Those students who picked YES responded to the sets of questionnaire. The non-probability sampling technique that was used consisted of convenience and purposive sampling techniques to select teachers whose subjects concern topics in sex education in the senior high schools in the study area.

3.8 Data Collection Instruments

Sets of questionnaire and in-depth interviews were used to collect data from the participants of the study. The sets of questionnaire informed the data gathering from the students on the one hand, and in-depth interviews conducted with teachers of sex education on the other hand. The sets of questionnaire were designed and pretested on five students from Bueman senior high school at Jasikan District in the Volta Region with similar characteristics as Biakoye District to check accuracy and consistency as well as validity of the questions before the actual administration of the questions to the participants at the study area.

Similarly, the in-depth interviews were also sent to experts and the supervisor to check if the questions were appropriate for the field. This was done to ensure that useful comments and suggestions in the review of the questions to meet acceptable standards for the field. After the review, the questions were sent back to them and approval was given to go to the field for data collection.

With the interview technique, as noted by some scholars (Babbie, 2005; Kumar, 2005; Monette, Sullivan, & DeJong, 2002; Neuman, 2007; Sarantakos, 1998), the researcher was able to gather deeper feelings and more detailed subjective field

experiences of teachers of sex education which could not be obtained using other more rigorous quantitative-driven techniques that lack flexibility. Again, the interview technique enabled the researcher to meet face-to-face with the selected respondents in their natural setting in a more relaxed, conducive, and convenient and appropriate time to engage in interaction (Neuman, 2007). The participants were allowed to freely talk about the subject matter according to their experiences in their day-to-day teaching of sex education in their respective classes.

3.9 Validity and Reliability of Measures

The validity and reliability of the measures were tested using Cronbach's Alpha and the result obtained was 0.7. Cronbach's (1951) alpha of between 0.7 and 0.8 were considered as valid for the measures and reliable conclusions were drawn from the results of the study.

3.10 Data Management and Processing

The data obtained from the questionnaire was kept out of public scrutiny for purposes of ensuring confidentiality. Such data was entered into the researcher's personal computer with a password used to lock it from unauthorized persons. The researcher cross-checked the data from the field to check inaccuracies.

3.11 Data Analysis

The data gathered was analyzed using qualitative and quantitative data analysis techniques. The data collected from the students using the questionnaire was coded and subjected to some quantitative data analysis to provide vivid findings and conclusions

which would enable generalization across the population possible. Statistical Product for Service Solutions (SPSS) analytical tool was used for the data analysis.

Descriptive statistics were presented to provide vivid description of the views and opinions expressed by students in terms of means and standard deviations. Parametric and non-parametric tests were conducted including Chi-square statistic was used to compare the mean scores of males and females in relation to their understanding of sex education and their knowledge on the teaching of sex education in class. The Chi-square statistic is a procedure for determining statistical significance of a relationship between categorical variables (Utts & Heckard, 2004).

3.12 Ethical issues

The study strictly upheld ethical standards as enshrined in the research enterprise. Respondents were duly informed about the content and focus of the study to allow adequate and reasoned informed consent to participate in the study. No attempt was made to deceive or harm the respondents in anyway whatsoever. The researcher observed the principles of informed consent, anonymity, confidentiality, right to participate in the study and to withdraw at any time that the respondent deemed so fit.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the results of the study using frequencies, percentages, descriptive statistics, and cross-tabulations obtained from the processed data gathered from the field. Generally, four objectives are set for the study as the researcher investigated students' perception of sex education among senior high school students in the Biakoye District of the Volta Region of Ghana. The first three objectives are subjected to quantitative analysis followed by a qualitative analysis of the last objective.

4.2 Demographic characteristics of survey respondents

The demographic characteristics including sex, age, year of study, programme of study, and housing status of students are presented in Table 1. Out of the 298 sets of questionnaire delivered, the researcher received 293 sets of questionnaire from respondents representing 98 percent of response rate. Females constituted 166 representing 56.7 percent of the respondents and the remaining 43.3 percent representing 127 males indicating that more females participated in the study.

On ages of respondents, 128 students (43.7 percent) fall within the age bracket of 14-18 years, 155 students (52.9 percent) within the age category of 19-23 years, and the remaining 10 students (3.4 percent) representing the age brackets of 24 years and above. This shows that about 96 percent of the respondents fall between the ages of 13 and 24, and most of them were in senior high school years two and three.

On years of study, 189 senior high school students representing 64.5 percent were in their third and final year at the time of the conduct of the study, and the remaining 35.5

percent constituting 104 students were in their second years of schooling. Most of the respondents offered General Arts programme with 207 students (70.6 percent), fifty-two students offering Science programme (17.7 percent), thirty-one students in Business (10.6 percent) with Visual Arts and other programmes such as Technical and Vocational with one and two students representing 0.3 percent and 0.7 percent respectively.

On housing, 150 students representing (51.2 percent) were going to school from the house (Day Students) and the remaining 48.8 percent consisting of 143 students staying in the school compound whilst attending school (Boarding house). Table 1 shows details of the demographic characteristics of respondents.

Table 1: Frequency distribution of respondents' background information

Sex	Frequency	Percentage
Male	127	43.3
Female	166	56.7
Total	293	100

Age	Frequency	Percentage
14-18	128	43.7
19-23	155	52.9
24+	10	3.4
Total	293	100

Year of Study	Frequency	Percentage
Year Two	104	35.5
Year Three	189	64.5
Total	293	100

Programme of Study	Frequency	Percentage
General Arts	207	70.6
Science	52	17.7
Business	31	10.6
Visual Arts	1	0.3
Others	2	0.7
Total	293	100

Housing	Frequency	Percentage
Day Student	150	51.2
In Boarding House	143	48.8
Total	293	100

(Source: Data from fieldwork, 2016)

4.3 Research Question 1: What is students' understanding of sex education?

The study sought to explore students' knowledge of sex education by finding out whether they have heard the term before, where they heard it from, how they understand it, whether their schools teach sex education, how frequent they take lessons on sex education, where they get information about sex from, and the content of sex education. From Table 2, 281 students (95.9 percent) have heard about sex education as against 12 students (4.1 percent) who indicated that they have not heard about sex education before. This shows that a significant number of senior high school students are more likely to have heard about sex education.

Table 2: Frequency Distribution of SHS students' Knowledge about sex education

Heard about Sex Education	Frequency	Percentage
Yes	281	95.9
No	12	4.1
Total	293	100
Source of Information about Sex Education	Frequency	Percentage
School	226	77.1
Friends	20	6.8
Internet	16	5.5
Home	22	7.5
Hospital	9	3.1
Total	293	100
Teaching of Sex education in School	Frequency	Percentage
Yes	208	71
No	85	29
Total	293	100
Students' Understanding of Sex Education	Frequency	Percentage
I have not been taught in the School	5	1.7
Knowledge about one's sexuality	11	3.8
SE is about the knowledge one has about the reproductive system	25	8.5
It is about male and female agree to be in a relationship and have sex	61	20.8
Knowledge about protecting one's self from STDs and teenage pregnancies	41	14.0
Training or guide about sexual activities and sexual intercourse	72	24.6
Teaching about relationships especially and commitment	17	5.8
Sex education is about advising children not to have sex	61	20.8
Total	293	100

No. of Times Sex Education is held in School	Frequency	Percentage
Once every week	114	38.9
More than once in every week	46	15.7
Once every two weeks	63	21.5
More than once in every two weeks	30	10.2
No lessons on sex education	40	13.7
Total	293	100

Content of Sex Education	Frequency	Percentage
Physical change during puberty	68	23.2
Sexual reproduction	35	11.9
Sexually transmitted disease (HIV)	117	39.9
Contraceptives	19	6.5
Relationship	11	3.8
Laws related to sexual behavior	32	10.9
Religious and cultural views on sex	11	3.8
Total	293	100

Source of Information about Sex	Frequency	Percentage
School	184	62.8
Internet	33	11.3
Home	21	7.2
Peers	43	14.7
Hospital	12	4.1
Total	293	100

(Source: Data from fieldwork, 2016)

Given the information presented in Table 2, the researcher was interested to know where the students heard about sex education. From Table 2, 226 students (77.1 percent) heard about sex education in school supporting the assertion that the school context provides

grounds for the dissemination of sexual information to young ones (Benaken et al., 2011) since sexual relationships are on the ascendancy in schools (Mgalla et al., 1998). Twenty-two students (7.5 percent) heard it from the home indicating that the home is not doing much to inculcate sexual information into young ones supporting studies that showed that parents are reluctant to deliver sexual information to their children (Nyarko et al., 2014; Ankomah, 1997).

Twenty students (6.8 percent) heard it from friends and sixteen students (5.5 percent) indicated that they heard it from the internet showing that peers and the internet can serve as sources of sexual information to adolescents which may not be accurate information. Adolescents are prone to learning sexual information from their peers because they see and hear things from inappropriate sources like the internet lending support to social learning theory that behaviours are a product of social interactions.

Nine students from the survey (3.1 percent) indicated that they have heard it from the hospital showing that there is very limited patronage of sexual information from the hospital which can provide accurate and adequate sexual information to young ones contrary to the observation that adolescents prefer health workers as sources of information about HIV/AIDS and contraception (Awusabo-Asare et al., 2006). From the data, sex education would reach wide audience if attempt is made to inculcate it into school curriculum as a separate subject so that more adolescents who are in school can learn it.

The researcher sought to find out from senior high school students their understanding of sex education and the results are displayed in Table 2. From Table 2, seventy-two students (24.6 percent) indicated that sex education has to do with

knowledge, guide, or training about sexual activities and sexual intercourse. Eleven students (3.8 percent) indicated that sex education is knowledge about one's sexuality; another sixty-one students (20.8 percent) indicated that sex education is about male and female agreeing to be in a relationship and having sex with each other.

Similarly, sixty-one students (20.8 percent) indicated that sex education is about advising children not to have sex; and twenty-five students representing 8.5 percent understood sex education to be about the knowledge one has about the reproductive system. Again, forty-one students (14.0 percent) understood sex education to mean knowledge about protecting one's self from sexually transmitted diseases and teenage pregnancies. These understandings students possess ran short of the parameters suggested by Mba (2006) that the content of sex education should go beyond just guide about sex to include human growth and development, sexual health, sexual attitude and behaviour, relationships and life skills. The finding suggests that students possess inaccurate understanding of sex education, and this can have significant reflection on the way they approach issues of sexuality.

Research has shown that providing regular sex education to children and adolescents can increase their awareness on appropriate sexual healthy behaviours such as abstinence, contraceptives, abortion, and relationships, which can help adolescents make sexually healthy decisions to guard themselves against unwanted pregnancy, school drop-outs, teenage parenting and so on. As a result, the research sought to find out from students the number of times they take lessons on sex education. The result shown in Table 2 indicates that close to 114 students (38.9 percent) from the survey mentioned that they take sex education lessons once every week. Forty-six students (15.7 percent)

indicated that they take sex education lessons more than once in every week; sixty-three students (21.5 percent) take sex education lessons once every two weeks; and 30 students (10.2 percent) take sex education lessons more than once in every two weeks. Forty students representing 13.7 percent indicated that they do not take sex education lessons in their schools.

Meanwhile, 208 students (71 percent) indicated that sex education is taught in their schools with eighty-five (29 percent) indicating otherwise in Table 2. The issue of concern here may arise from the fact that teachers do not do much to explain in detail what constitutes sex education during sex education lessons. Surprisingly, 211 students among the total students surveyed representing 72 percent indicated that their teachers taught them sex education. This is shown in Table 2.

On the contents of sex education lessons, 117 students representing 39.9 percent noted that teachers mostly teach them about sexually transmitted diseases. This is followed by sixty-eight students (23.2 percent) noting that physical change during puberty is mostly discussed during sex education lessons. Discussions of relationships and religious and moral views on sex had eleven students each (3.8 percent apiece) in terms of what teachers teach students during sex education.

Nineteen students (6.5 percent) out of the total 293 noted that sex education lessons include information on contraceptives whereas thirty-five students (11.9 percent) indicated that teachers teach students about sexual reproduction during sex education lessons. The findings suggest that the content of sex education given to students from this survey is largely about sexually transmitted diseases and physical changes during adolescent stage supporting the claim that sex education in Sub-Saharan Africa including

Ghana does not touch on holistic aspects of students needs such as relationships, abortion, sexual rights, emotional needs, sexual intercourse, etc (UNESCO, 2009)

In finding out from senior high school students where they get information about sex, 184 students (62.8 percent) surveyed indicated that they get information about sex from school; forty-three students (14.7 percent) mentioned that they get such information from their peers; and thirty-three students (11.3 percent) noted that they get information about sex from the internet. Twenty-one students and twelve students indicated that they get information about sex from the home and the hospital respectively supporting the claim that especially the home is a place that denies young ones' access to vital information on sex and sexual health related issues. This leaves adolescents with little choice than to seek that information from peers and schoolmates as shown from Table 2.

In Table 3, the researcher sought to find out from senior high school students at what age they had sex at first time and Table 3 displays the results. From the table, three students engaged in sex at age 10 years or below, and thirty-three students (22 percent) engaged in sex at age 11-15 year category. Ninety-seven (64.7 percent) of the students who indicated that they have had sex before indicated that, it occurred when they were between 15 years and twenty-one years. Seventeen students (11.3 percent), out of the 150 students who indicated that they have had sex before, mentioned that they engaged in sex at age twenty-one or above. Comparing males and females in relation to age at first sex, three males as against one female experienced age at first sex at age 10 or below and seventeen males and seventeen females had sex for the first time when they were within the age bracket of 11-15 years. Among 16-20 age group where age at first sex occurred, thirty-eight of them were males whilst fifty-nine were females. Eight males and nine

females had sex for the first time when they were aged 21 years and above. This shows that age at first sex occurs mostly among persons within the age bracket of 16-20 years, and this group constitutes a greater percentage of students in the senior high schools supporting the claim that sexual activity in schools are rising (Mlyakado, 2013; Mori, 2004; Petro, 2009).

In finding out sex at first time among senior high school students, 150 students representing 51.2 percent indicated that they have had sex before whilst the remaining 143 students (48.8 percent) indicated they have not had sex before at the time of the conduct of the study as shown in Table 3. Hence, 150 senior high school students indicated that they have had sex before as against 143 students who have not had sex before. This finding support extant research suggesting that sex at first time occurs among secondary school students who are mostly adolescents within the ages of 14 years and 20 years. Among those who have had sex before, 42.7 percent were males and the remaining 57.3 percent being females. Among those who indicated that, they have not had sex before, 44.1 percent were males whilst 55.9 percent were females.

On the question of whether students have had sex before, those who mentioned that they have had sex before had sixty-one students (40.7 percent) belonging to the age bracket of 14-18 years. Eighty students (53.3 percent) within 19-23years age bracket and nine students (6.0 percent) within 24-28years age brackets have engaged in sexual activities. This result shows that majority of senior high school students (94 percent) are likely to engage in sex before they turn age 24. Sixty-seven students within 14-18 years' bracket have not had sex before, seventy-five students from 19-23 age brackets have also not had sex, and one student belonging to the age bracket of 24-28 years has not had sex

before as of the time of the conduct of the study. This finding confirms Afenyadu and Goparaju (2003) finding that about 55 percent of adolescents have engaged in sex.

Given this finding, it was necessary to find out the age at which students are likely to engage in sex. Among those who indicated that they are ready to have sex, thirty-one (40.8 percent) of them fall within the age bracket of 14-18 years, thirty-seven students (48.7 percent) belonging to the age category 19-23 years and eight students (10.5 percent) within 24-28 years. This shows that about 88 percent of the students who stated that they are ready for sex ages between 13 years and 24 years. The researcher sought to find out from senior high school students whether they think they are ready to have sex. Table 3 presents the result with cross-tabulation.

In Table 3, out of seventy-six students who indicated that they think they are ready for sex, forty-three (34.1 percent) were male students and thirty-three were female students whilst fifty-seven (45.2 percent) and ninety-nine (59.6 percent) are of the view that they are not ready for sex. Twenty-six males (20.6 percent) and thirty-four (20.5 percent) females were unsure of whether they were ready or not to have sex, which is denoted as 'maybe' in the table. In all, 156 female students think that they are not ready for sex and seventy-six male students think they are ready for sex. Sixty students were unsure whether they are ready or not to have sex.

Table 3 displays the results of the reasons senior high school students gave for having had sex at first time. From Table 3, twenty-five students (16.7 percent) mentioned that they just felt like having sex and another twenty-seven students representing 18.0 percent had sex at first time because their boy/girlfriends asked for it. For threat of break

up with their boy/girlfriends, eleven students (7.3 percent) had sex at first time to keep their partners.

Twenty-four (24) percent of students indicated that they had sex at first time because they wanted to know if their partners loved them. Thirty-six students indicated that their partners forced them to have sex with them at first time supporting studies that assert that coerced sexual intercourse occurs among students in the secondary school level. The study revealed that, coerced sexual intercourse among senior high school students is a reality as reported by other studies (Awusabo-Asare et al, 2004; Awusabo-Asare et al., 2006; Biddlecom et al., 2007; Kumi-Kyereme et al., 2007).

Fifteen students (10 percent) had sex at first time because their friends advised them to know how it feels like having sex. This finding lends support to claims of social learning theory and theory of reasoned action that people learn behaviours from other people in the social context based upon weighing benefits and costs among alternative courses of action. In a cross-tabulation of sex of students and their reasons for sex at first time, sixteen males as against nine females had sex at first time because they just felt like having sex. Eight males and nineteen females had sex because their partners asked for it and four males and seven females had sex for the first time because their partners threatened to break up with them if they declined to have sex.

Twenty-two males as against fourteen females had sex for the first time because they wanted to know whether their partners really loved them and eight males as against twenty-eight females stated that they had sex because their partners forced them to have sex. Finally, six males and nine females heeded to the advice of their friends to have sex with their partners just to know how it feels like to have sex. The finding suggests girls'

vulnerability to giving into sex even at earlier stage of their adolescent period highlighting the Sutherland-Addy's (2002) finding that females disproportionately enjoy decreasing enrollment as a result of teenage pregnancy resulting in school drop-out.

Table 3: Cross-tabulations of Variables of Interest

Ages of sex at first time	Sex of Respondents		Total (%)
	M (%)	F (%)	
Age 10 or below	2 (66.7)	1 (33.3)	3 (100)
Age 11-15	16 (48.5)	17 (51.5)	33 (100)
Age 16-20	38 (39.2)	59 (60.8)	97 (100)
Age 21 or above	8 (47.1)	9 (52.9)	17 (100)
Total	64 (42.7)	86 (57.3)	150 (100)

Had sex before	Sex of respondents		Total (%)
	M (%)	F (%)	
Yes	64 (42.7)	86 (57.3)	150 (100)
No	63 (44.1)	80 (55.9)	143 (100)
Total	127 (43.3)	166 (56.7)	293 (100)

Had sex before	Age of Respondents			Total (%)
	14-18 (%)	19-23 (%)	24+ (%)	
Yes	61 (40.7)	80 (53.3)	9 (6.0)	150 (100)
No	67 (46.9)	75 (52.4)	1 (0.7)	143 (100)
Total	128 (43.7)	155 (52.9)	10 (3.4)	293 (100)

Readiness for sex	Age of respondents			Total (%)
	14-18 (%)	19-23 (%)	24+ (%)	
Yes	31 (40.8)	37 (48.7)	8 (10.5)	76 (100)
No	74 (47.4)	80 (51.3)	2 (1.3)	156 (100)
Maybe	23 (38.3)	37 (61.7)	0 (0)	60 (100)
Total	128 (43.8)	154 (52.7)	10 (3.4)	293 (100)

Sex of Respondent	Readiness for sex			Total (%)
	Yes (%)	No (%)	Maybe (%)	
Male	43 (34.1)	57 (45.2)	26 (20.6)	126 (100)
Female	33 (19.9)	99 (59.6)	34 (20.5)	166 (100)
Total	76 (26.0)	156 (53.4)	60 (20.5)	292 (100)

Reason for sex at first time	Sex		Total (%)
	M (%)	F (%)	
Just felt like having sex	16 (64.0)	9 (36.0)	25 (100)
My boy/girl friend asked for it	8 (29.6)	19 (70.4)	27 (100)
S/He would break up with me if I had not done it	4 (36.4)	7 (63.6)	11 (100)
To know whether s/he really loves me	22 (61.1)	14 (38.9)	36 (100)
S/He forced me to have sex with her/him	8 (22.2)	28 (77.8)	36 (100)
My friends advised me to do that to know how it feels like having sex	6 (40.0)	9 (60.0)	15 (100)
Total	64 (42.7)	86 (57.3)	150 (100)

(Source: Fieldwork, 2016)

4.4 Research Question 2: What did instructors teach in both Abstinence from sex and protected sexual behaviours?

The second research question was to ascertain from students whether their instructors teach sex education that focuses beyond just abstinence to include safe sex practices such as condom use, demonstration of condom use in class, touch directly on information about vagina and penis, and whether teachers try to explain to students questions students ask during sex education lessons as well as benefits of comprehensive or total or holistic sex education according to students. That is, whether lessons in sex education include knowledge about the root issues that help teenagers make responsible decisions to keep themselves safe and healthy.

Frequency distribution and contingency analysis were relied upon in this objective. Also, attempt was made to determine whether there is a relationship between adopting a holistic approach that provides young people with complete, accurate, and age-appropriate sex education, and benefits learners derive from total or comprehensive sex education to help reduce risk of HIV/AIDS, other sexually transmitted infections (STIs), and unintended pregnancy. The mode was used as the average measure of the respondents with strongly disagree coded as zero (0), disagree coded as one (1), neutral coded as two (2), agree coded as three (3) and finally, strongly agree coded as four (4) in Table 4.

In Table 4, 223 respondents representing 76.1 percent indicated their responses to be in disagreement with the assertion that sex education lessons in school do not include learning about condoms with 21.5 percent constituting sixty-three respondents agreeing and seven respondents (2.4 percent) choosing to remain neutral. This means that sex

education lessons in school do include learning about condoms contrary to those studies suggesting that sex education lessons do not include learning about safe sex practices including condom use.

As regards to the assertion that teachers mostly do not touch on information about vagina and penis during sex education lessons, 184 respondents (62.8 percent) as against 100 respondents (34.1 percent) indicated their disagreement with nine respondents (3.1 percent) neither agreeing nor disagreeing. This suggest that teachers mostly talk about vagina and penis during sex education lessons contrary to studies that claim that teachers mostly shun talking about private parts to students during sex education lessons in schools (Asuaba, 2009).

The assertion that teachers usually do not teach about safe sex practices during sex education classes 191 students(65.2 percent) agreeing, eighty-five students (29 percent) indicated disagreement, and seventeen students (5.8 percent) indicating that they are undecided, implying that teachers usually teach about safe sex practices in sex education lessons contrary to studies that identified incorrect and non-use of contraceptives, lack of knowledge about sexual and reproductive health, risky adolescent sexual behaviours and customs and tradition as major causes of teenage or adolescent pregnancy (UNICEF, 2008) because teachers hardly talk about it in class.

As for teachers talking about abstinence from sexual encounters in sex education classes, 236 respondents (80.5 percent) agreed whilst forty-four students (15.1 percent) disagreed. The rest remained neutral. This implies that teachers mostly stress abstinence from sexual encounters during sex education classes confirming studies that assert that sex education lessons hinge on abstinence more than lessons on safe sex practices. This finding partly

corroborates the observation that incorrect and non-use of contraceptives, inadequate knowledge about sexual and reproductive health, risky adolescent sexual behaviours and customs and tradition as major causes of teenage or adolescent pregnancy (UNICEF, 2008).



Table 4: SHS students level of agreement towards comprehensive sex education

STATEMENT	SD	D	N	A	SA	M
	F (%)	F (%)	F (%)	F (%)	F (%)	
Sex education lessons in school do not include learning about condoms	160(54.6)	63(21.5)	7(2.4)	26(8.9)	37(12.6)	0
Teachers mostly do not touch on information about vagina and penis during sex education lessons	108(36.9)	76(25.9)	9(3.1)	54(18.4)	46(15.7)	0
Teachers usually do not teach about safe sex practices during sex education classes	116(39.6)	75(25.6)	17(5.8)	48(16.4)	37(12.6)	0
Teachers mostly talk about abstinence from sexual encounters during sex education classes	28(9.6)	16(5.5)	13(4.4)	100(34.1)	136(46.4)	4
Students are labeled as ‘spoilt’ children if they attempt to know more than what is given by the teacher during sex education lessons	51(17.4)	54(18.4)	26(8.9)	75(25.6)	87(29.7)	4
Teachers do not teach about how to use male condoms	65(22.2)	69(23.5)	18(6.1)	82(28.0)	59(20.1)	3
Teachers do not teach about how to use female condoms	60(20.5)	65(22.2)	19(6.5)	81(27.6)	68(23.2)	3
Teachers show to students female condoms during sex education classes	120(41.0)	81(27.6)	18(6.1)	40(13.7)	34(11.6)	0
Teachers demonstrate how to use female condoms during sex education lessons	130(44.4)	81(27.6)	11(3.8)	41(14.0)	30(10.2)	0

(Source: Fieldwork, 2016) SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly agree M: Mode

Table 5: Chi-square test on sex and comprehensive sex education

STATEMENT	TEST STATISTIC		
	X ²	df	P-value
Sex education lessons in school do not include learning about condoms	7.12	4	.130
Teachers mostly do not touch on information about vagina and penis during sex education lessons	2.92	4	.572
Teachers usually do not teach about safe sex practices during sex education classes	0.41	4	.981
Teachers mostly talk about abstinence from sexual encounters during sex education classes	12.32	4	.015**
Students are labeled as ‘spoilt’ children if they attempt to know more than what is given by the teacher during sex education lessons	9.73	4	.045**
Teachers do not teach about how to use male condoms	8.97	4	.062
Teachers do not teach about how to use female condoms	6.93	4	.139
Teachers show to students female condoms during sex education classes	23.46	4	.000**
Teachers demonstrate how to use female condoms during sex education lessons	5.86	4	.210

** Significant at 5 percent N=293

Table 6: Benefits of comprehensive sex education

Statement	SD F (%)	D F (%)	N F (%)	A F (%)	SA F (%)	M*
Sex education makes students become more open to seeking counseling from teachers, parents, and social workers on their sex life	24(8.2)	30(10.2)	14(4.8)	101(34.5)	124(42.3)	4
Sex education lessons help us to know more about transmission of HIV/AIDS	10(3.4)	3(1.0)	4(1.4)	107(36.5)	169(57.7)	4

Sex education lessons help us to abstain from sexual intercourse until marriage	24(8.2)	29(9.9)	17(5.8)	97(33.1)	126(43.0)	4
Sex education lessons make us develop feelings for having sex	119(40.6)	63(21.5)	23(7.8)	48(16.4)	40(13.7)	0
Sex education lessons help students to know more about other STDs such as Chlamydia	20(6.8)	11(3.8)	10(3.4)	107(36.5)	145(49.5)	4
Sex education lessons help students to know more about the dangers of abortion	9(3.1)	8(2.7)	6(2.0)	91(31.1)	179(61.1)	4
Sex education lessons help students avoid multiple partners in their sexual life	8(2.7)	14(4.8)	16(5.5)	110(37.5)	145(49.5)	4
Sex education lessons help students to know more about the physical development especially in their adolescent stage	7(2.4)	6(2.0)	6(2.0)	98(33.4)	176(60.1)	4
Sex education helps students to plan about their lives against inappropriate sexual behaviours	17(5.8)	10(3.4)	10(3.4)	108(36.9)	148(50.5)	4
Sex education lessons help students to delay age at first sex	42(14.3)	35(11.9)	20(6.8)	93(31.7)	103(35.2)	4
Sex education promotes chastity among adolescents in school	9(3.1)	12(4.1)	4(1.4)	78(26.6)	190(64.8)	4

(Source: Data from fieldwork, 2016) SD: Strongly disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly agree M: Mode

There were 162 respondents (55.3 percent) as against 105 respondents (35.8 percent) who agreed that students tend to be labeled as spoiled when they try to ask more questions about their sexual matters than what teachers are willing to provide during sex education lessons in school. The rest chose to remain neutral. This situation makes students seek clarification from inappropriate sources like friends who are likely to give inadequate information to help students make better sexual life choices.

In finding out whether teachers teach about how to use male condoms, 139 respondents (45.7 percent) indicated that teachers teach about how to use male condoms whilst 141 respondents (48.1 percent) mentioning that teachers do not teach about how to use male condoms during sex education classes with eighteen respondents (6.1 percent) neither agreeing nor disagreeing. Although the difference in responses is not large, it is worth noting that more students mentioned that teachers of sex education do not teach practical demonstration of condom use to students during lessons on sex education in classrooms. This implies that teachers are less likely to teach about how to use male condoms during sex education classes, which can be dangerous given that most adolescents engage in intimate relationships in senior high schools.

There were 149 respondents (50.8 percent) as against 125 respondents (42.7 percent) agreeing that teachers do not teach about how to use female condoms during sex education classes with nineteen respondents (6.5 percent) remaining neutral. On whether teachers show to students female condoms during sex education lessons, 201 respondents (68.9 percent) disagreed whilst seventy-four respondents (25.3 percent) agreed with eighteen respondents (6.1 percent) showing neither agreement nor disagreement.

Finally, 211 respondents (72.7 percent) as against seventy-one respondents (24.2 percent) indicated their agreement to the assertion that teachers demonstrate to students how to use female condoms during sex education. The rest remained neutral. This implies that sex education lessons in senior high schools lack practical demonstration to facilitate teaching and learning. This situation stems from the fact that teaching and learning materials needed to enhance appropriate teaching and learning of sex education are neither unavailable nor teachers are unwilling to use them during sex education lessons. This is unfortunate given that students are denied the opportunity to witness the proper ways to adopt safe sex practices, which accounts for high teenage pregnancy rates, teenage parenting etc despite the fact that most students indicated that their schools teach about sex education.

Given the responses from the frequency distribution of respondents on Likert type questions, the researcher considered it pertinent to find out from the respondents' responses whether one's sex was likely to affect his or her perception about teaching of comprehensive sex education. The researcher used a contingency table displaying joint frequency distribution of cases between sex of students and responses to comprehensive sex education with a chi-square test of independence to determine whether the variables have statistical differences or similarities between them.

From Table 5, the chi-square performed indicated a significant evidence of a relationship between sex of respondents and abstinence lessons in sex educations, $X^2(4, N=293) = 12.32, p=.015$. Also, there is evidence suggesting a significant relationship between sex of respondents and students being labeled as spoilt when they attempt to know more than what is given to them by the teacher during sex education classes, $X^2(4,$

$N=293) = 9.73, p = .045$. Finally, there is a very strong evidence of an association between sex of respondents and showing students female condom during sex education lessons, $X^2(4, N=293) = 23.46, p = .000$.

4.5 Research Question 3: What did students make use of the relevant knowledge obtained from sex education classes in their sexual behaviours?

To answer this question, the researcher asked senior high school students about their views about condom use, and their willingness to use condom in their next sexual encounter given the exposure they have had through the lessons in sex education in order to understand whether senior high school students favour the use of condoms or not for appropriate intervention. In addition, the researcher asked students about their willingness to seek counselling from their teachers on sexually healthy behaviours in the future and the reasons for their various choices.

Table 6 displays the frequency distribution of responses on benefits of sex education. From Table 6, 225 respondents (76.8 percent) agreed as against fifty-four respondents (18.4 percent) disagreeing that sex education makes students become more open to seeking counselling with fourteen respondents (4.8) showing that they neither agree nor disagree. Thirteen respondents (4.0 percent) indicated disagreement whereas 275 respondents (94.2 percent) agreed that sex education lessons help students know more about transmission of HIV/AIDS. Only four respondents (1.4 percent) failed to support agreement or disagreement.

About 76 percent of respondent (223 students) agreed that sex education helps students to abstain from sexual intercourse until marriage whilst 53 respondents representing 18.1 percent showing their disagreement with seventeen respondents (5.8

percent) neither agree nor disagree to that assertion. Unlike eighty-eight respondents (30.1 percent), agreeing that sex education lessons make students develop feelings for having sex, 182 respondents representing 62.1 percent disagreed with 23 respondents remaining neutral. Out of the 293 respondents surveyed, 252 respondents (86.0 percent) agreed that sex education lessons help students to know more about other STDs such as Chlamydia, thirty-one respondents (10.6 percent) disagreed and ten respondents (3.4 percent) remaining undecided.

As regards to sex education helping students know more about the dangers of abortion, 270 respondents (92.2 percent) as against seventeen respondents (5.8 percent) agreed whilst six respondents neither agreeing nor disagreeing. On the issue of sex education lessons helping students avoid multiple partners in their sexual life, twenty-two respondents (7.5 percent) out of the 293 respondents surveyed disagreed whereas 255 respondents (93.5 percent) agreeing with sixteen respondents (5.5 percent) remaining neutral.

With regard to sex education lessons helping students know more about the physical development especially in their adolescent stage, 93.5 percent (274 respondents) agreed with 14.4 percent (13 respondents) disagreeing. The rest remained neutral. In the case of sex education having the benefit of helping students plan about their lives against inappropriate behaviours including sexual harassment, gang rape, forced sexual intercourse, and rape, twenty-seven respondents disagreed representing 9.2 percent and ten respondents remaining neutral. The rest largely agreed representing 87.4 percent (256 respondents). Out of 293 students surveyed, 196 respondents (66.9 percent) as against seventy-seven respondents (26.2 percent) agreed that sex education lessons help students

delay age at first sex with twenty respondents (6.8 percent) indicating that they neither agree nor disagree. Finally, most of the respondents, 268 respondents (91.4 percent) agreed that sex education promotes chastity among adolescents in school with twenty-one students (7.2 percent) indicating their disagreement. The rest were undecided about it. From the distribution, one notices that most of the respondents largely agree that teaching students' sex education has greater benefits to the students to make appropriate life choices when it comes to their sexual matters supporting studies that emphasize benefits of sex education to adolescents (Kirby et al., 2007; Kirby et al., 2006; UNESCO, 2009; Ankomah, 1998).

It was pertinent to find out about relationships between the sex of a student and his/her likelihood to seek counselling and age and the likelihood of seeking counselling to support extant literature. To find out whether students are likely to apply the knowledge they obtain from the teaching of sex education in schools, Table 7 shows contingency table analysis.

From Table 7, out of 127 males surveyed, seventy-eight respondents representing 61.4 percent indicated that they seek counselling from their teachers as against forty-nine respondents (38.6 percent) indicating otherwise. In the case of the females, eighty-nine respondents (53.6 percent) out of 166 respondents seek counselling from their teachers whilst seventy-seven respondents (46.4 percent) do not seek counselling from their teachers in school. This shows that females are more likely than males to seek counselling about their sexual matters from teachers. In all, 167 respondents representing 57 percent seek counselling from their teachers about their sexually related information.

On age of respondents and seeking counselling, seventy-eight respondents representing 60.9 percent out of 128 respondents within the age bracket of 14-18 years seek counselling from their teachers whilst fifty respondents (39.1 percent) do not seek counselling. Among 19-23 age brackets, eighty-two respondents (52.9 percent) seek counselling whilst 73 respondents (47.1 percent) indicated that they do not seek counselling from teachers. For the 24 and over age bracket, seven respondents (70 percent) seek counselling whereas three respondents (30 percent) fail to seek counselling from teachers. From the distribution, adolescents younger than 24 years are more likely to seek counselling from teachers than those who are 24 years and older.

Out of 293 respondents surveyed, 174 representing 59.4 percent are willing to use condom in their next sexual encounter as against 119 respondents (40.6 percent) indicating otherwise. This shows that senior high school students or adolescents show high willingness to use condom in their next sexual intercourse even though this does not translate into actual usage. From the results, more efforts still need to be done to discourage unwillingness to use condom given the record of students who indicated their unwillingness to use condom in their next sexual intercourse. As regards to the 14-18 age brackets, eighty-one respondents (63.3 percent) as against forty-seven respondents (36.7 percent) are willing to use condom in their next sexual intercourse. With regard to 19-23 age bracket, eighty-seven (56.1 percent) as against sixty-eight (43.9 percent) respondents indicated their willingness to use condom in their next sexual encounter.

For 24 years and older category, six respondents as against four respondents are willing to use condom in their next sexual intercourse. The distribution shows that condom use is likely to be greater among the age bracket of 19-23 years although that

number is not significantly different from condom use among 14-18 years' age bracket. From the distribution, adolescents younger than 24 years have greater likelihood of using condom when exposed to safe sex practices during the teaching of sex education. The findings below show that teaching comprehensive sex education in schools is more likely to lead to increased sexual knowledge to make healthy decisions as claimed by Lloyd (2005; Ross et al., 2006).

Table 7: Contingency Table on SHS students' seeking counselling and willingness to use condom

Sex of respondents	Seeking Counselling		Total (%)
	Yes (%)	No (%)	
Male	78 (61.4)	49 (38.6)	127 (100)
Female	89 (53.6)	77 (46.4)	166 (100)
Total	167 (57.0)	126 (43.0)	293 (100)

Age of Respondents	Seeking Counselling		Total (%)
	Yes (%)	No (%)	
14-18	78 (60.9)	50 (39.1)	128 (100)
19-23	82 (52.9)	73 (47.1)	155 (100)
24+	7 (70.0)	3 (30.0)	10 (100)
Total	167 (57.0)	126 (43.0)	293 (100)

Age of respondents	Willingness to use condom		Total (%)
	Yes (%)	No (%)	
14-18	81 (63.3)	47 (36.7)	128 (100)
19-23	87 (56.1)	68 (43.9)	155 (100)
24+	6 (60.0)	4 (40.0)	10 (100)
Total	174 (59.4)	119 (40.6)	293 (100)

(Source: Data from fieldwork, 2016)

Given the above findings, the researcher sought to investigate whether male and female students differ in terms of using condom in their next sexual intercourse. Although outside the core questions driving the study, it was considered pertinent to find out the differences in the responses of students about using condom to be able to understand condom use as males are more likely than females to demand sex as a determinant of true love with their partners. A chi-square statistic was used. Table 8 displays the Pearson chi-square results and shows that male and female students are significantly different in terms of whether they are more likely to use condom in their next sexual encounters ($\chi^2 = .019$, $df = 1$, $N = 293$, $p > .05$). This means that there is a difference in the willingness among female students to use condom in their next sexual encounter than that of male students. Hence, the result shows that the females are more likely than males to use condom in sexual encounters.

Table 8: Chi-square Analysis of Future condom use among Male and Female students

Willingness to use condom in next sexual intercourse					
Variable	n	Yes	No	X²	P
Sex				0.019	>.05
Males	127	76	51		
Females	166	98	68		
Total	293	174	119		

(Source: Data from fieldwork, 2016)

From Table 8, senior high school students are more likely to apply the knowledge they receive from sex education lessons in their future sexual life as 174 senior high school students representing 59.4 percent as against 119 senior high school students representing 40.6 percent indicated their willingness to use condom in their next sexual intercourse. Among those who indicated their willingness to use condom in their next sexual intercourse, 56.3 percent were female

students whereas male students constituted 43.7 percent indicated their willingness to use condom in their next sexual intercourse. Among students who indicated their unwillingness to use condom in their next sexual intercourse, fifty-one were males whilst sixty-eight were females.

4.6 Research Question 4: What are instructors' views about the teaching of sex education in senior high schools?

The last question the study sought to answer was about teachers' views regarding the teaching of sex education in senior high schools. The researcher obtained this information through the interviews conducted among ten (10) purposively selected teachers from the three senior high schools at the study site whose subjects' address sex education.

This section presents qualitative finding of the key themes that emerged from the transcripts of interviewees. They include teachers' understanding of sex education, relevance of teaching sex education in schools, and significance of teacher professionalism in the teaching of sex education. The others were how teachers view sex education and age appropriateness, school environment and teaching of comprehensive sex education, role of parents in the teaching of sex education, challenges in the teaching of sex education in schools, and improvements in the teaching of sex education. The section begins with the presentation of background information of teachers interviewed.

Among the ten teachers interviewed, nine teachers (90 percent) were males and the remaining one teacher being a female. The average age of the teachers was 40.3 years with 13.4 years of average length of teaching. Nine of them are married with the highest level of qualification occurring between Bachelor degrees and Master degrees. In fact,

eight of the teachers have first degree as their highest level of qualification and the remaining being Master of Philosophy (one respondent) and Postgraduate Diploma in Education (one respondent) respectively.

Similarly, all the teachers interviewed indicated Christianity as their religion. In terms of teachers' position or ranks in the teaching service, three teachers were assistant director two (AD2), six teachers had principal superintendent (PS) ranks in the teaching service, and one of the teachers interviewed having assistant director one (AD1) ranks in the teaching service.

Four of the teachers interviewed teach at Worawora senior high school, three from Nkonya senior high school, and the remaining three being teachers from Tapaman senior high school. The teachers interviewed handle the following subjects Social Studies, Science, Christian and Religious Studies, and Government.

4.7 Teachers' Understanding of Sex Education

From the interviews conducted, it became obvious that there was no single definition of sex education given by the respondents. This situation arises from the fact that there is no single document designed to guide the teaching of sex education and this gives rise to various conception of the term. However, the common theme evident in all their conception of sex education is teaching adolescents about sex related issues and their implications to help them make better sexual life choices. One respondent had this to say:

“Sex education is about the kind of education giving to both gender that is female and male, in relation to their sex behaviours as to how they should comport themselves as far as sex issues are concerned” (Yaw, 45-year- old male teacher)

Another participant expressed that;

“Actually what I understand about sex education is the kind of education that tries to enlighten the students about their reproductive health and how best they can make use of the knowledge in order to take good care of themselves” (Bemoah, 43-year-old with 20 years of teaching experience)

Sex education is about teaching the adolescent about their sexuality, fertility regulation and family life education. How they should take care of themselves as they are growing up into adults. Thus, sex education is about teaching students generally about their gender, reproductive system, and consequences of their actions and inactions in order to make better choices for a better future.

4.8 Relevance of Teaching Sex Education in Schools

On relevance of teaching sex education, all the participants asserted that teaching of sex education should be enhanced even from the basic school level because of its ability to help young ones protect themselves against venereal diseases in the system in order to adopt appropriate healthy sex life. Again, it helps young ones to avoid any danger in relation to sex issues as they enter adulthood.

Sex education helps to broaden students understanding about sex and better ways of approaching sex related decisions. This is because students are curious to know more about sex and even to have sex but parents fail to inculcate in their children sexual information. Parents do not even like talking about it in the presence of their wards let alone to teach them making them crave for such information outside the home. Teaching sex education in schools will help salvage ever-craving adolescents after sex information.

Sex education in schools helps greatly because the students are in their teens, who develop adolescent features and its associated risks of experiencing sex as a result of

curiosity and body changes in order to enlighten them about strange features they are likely to go through at adolescent stage to manage themselves better. One participant with 20 years teaching experience stated:

“Students are adolescents, and some of the features of adolescents that come is the development of breast, sperm count by the boys, some menstruate, this clearly shows that they are becoming or are young adults. And they need to be taught this sex education so that they will not be misinformed by their peers” (Adoko, 49-year-old Science teacher)

4.9 Significance of Teacher Professionalism in the Teaching of Sex Education

From the interviews, mixed responses emerged from participants in the area of teacher professionalism in teaching sex education. However, they all agreed that providing training and retraining interventions is critical to help teachers of sex education update their knowledge on the current trends in the teaching of sex education and better eschew shyness during delivery of sex education in schools. One participant alludes

“It is true that you can’t give what you don’t have. So unless you know something about it you can’t be able to give any teaching or advice on it to any other person. But if you have much knowledge about it you will be able to give quality information to the students that will help them” (50-year-old male teacher)

Another participant provided contrasting view”

“I think I don’t agree with that very well because not many of us have got that adequate education on sex education” (A 38-year-old female teacher)

Teacher professionalism is relevant in order to give well-informed information to the students to become responsible adults

4.10 Sex Education and Age-specific Debate

Participants in the interview also expressed mixed responses on whether sex education should be age specific. That is, whether sex education should be taught based on one's age and not necessarily level one has attained. For example, whether sex education should start from primary level, basic level, or senior high school level remains a debate. Some participants were of the view that sex education should not be age specific because children even indulge in sexual behaviours at such tender age. A participant indicated:

“Sex education shouldn't be age-specific and that it should start from the basic schools because it will even surprise you that those at the younger level or primary or JSS, some of them have been indulging themselves in sex” (A 49-year-old male teacher)

A contrasting viewpoint that emerged is that sex education should be age-specific in order that it will not prompt curiosity of children who have not attained adolescent stage like pupils in the basic schools to try to engage in sex prematurely. One participant commented:

“Yeah I think so (sex education should be age-specific) because if the person is below certain age which may not make identification of those kind of things and you teaching that child such a thing, you rather be confusing that person but where the person can identify those things and even begin to use them before they will start teaching sex education. It will be of much importance to that person” (Armah, 28-year-old social studies teacher)

It should be age-specific because children in the kindergarten may not know much or understand much about sex education. There are certain things that a senior high school student or a junior high school student understands but a primary student cannot comprehend. As a result, certain things should be taught at a particular age and time in order that instructors do not end up prompting the curiosity of the young ones to try things on their own.

4.11 Teaching of Comprehensive Sex Education

On comprehensive sex education, all participants affirmed that sex education must address not only abstinence knowledge but also emphasize safe sex practices such as condom, and other contraceptives, as well as adequate information on abortion so that young ones can make well-informed choices to protect themselves from unwanted pregnancies, teenage parenting, school drop-outs to mention but a few. Sex education must include lessons on safe sex practices such as condom use and birth control methods because many of young ones in recent times are tempted to indulge in sex and sex related issues. A participant added:

“Most adolescents are already engaging in sex so if you don’t teach them they would rather go wayward... They should be aware of them so that they will not learn wrong things from their peers” (A 43-year-old female Social Studies teacher)

Comprehensive sex education otherwise known as total sex education has the ability to save young ones from premature pregnancy because they are likely to adopt these measures to prevent themselves in case they are unable to control their incessant desire for sex as adolescents. Whilst abstinence should be encouraged, relationship, condom use, and STDs must also be included.

4.12 School Environment and Teaching of Comprehensive Sex Education

The researcher was also interested in knowing how the school environment allows the teaching of sex education and the participants alluded that adequate materials for the teaching of sex education were non-existent. In addition, they do not organize training and retraining on current issues in sex education, no seminars organized on current trends in the teaching of sex education in order to upgrade teachers’ knowledge on issues of sex education.

Further, there is no subject instituted to focus on the teaching of sex education but only aspect of sex education contained in the topic “adolescent reproductive health” in social studies concentrates on enlightening learners about their sexual and reproductive needs. Given that, there is no time allocation specifically for teaching of sex education in schools and that time allocated for subjects with components of sex education has very short duration, which makes it difficult to spend great time on sex education topics in these subjects. According to the participants, materials for demonstration such as teaching and learning aids like condoms and other contraceptives to demonstrate their proper usage during the teaching of sex education are unavailable. One teacher had this to say:

“The school does not provide the teachers the necessary teaching and learning aids that we can use to demonstrate what we teach during sex education lessons... Even condom and pictorial or instructional materials we don’t have them... How can we show them what we teach?” (A 47 year old male teacher)

Another female teacher observed that:

“I think the school does not want us to show the students the practical ways of doing things during the teaching of sex education. I say this because management of the school does not show a commitment to provide the teachers the things they will need during the teaching of sex education” (A 35 year old female Biology teacher)

4.13 Challenges in the Teaching of Sex Education in Schools

In finding out from participants what they view as challenging in the teaching of sex education, they commented that the major issue at stake is that there is no specific time for teaching sex education because there is no syllabus designed for it to earn a time on a time table. This is unfortunate given that sex education is critical to educating a nation’s precious future labour force as it prevents them from school drop-out syndrome,

teenage pregnancy, teenage parenting, malnourished children, and cutting short one's academic aspirations.

Again, non-availability of materials such as condoms, pills, IUDs, for practical demonstration to students remains a cause for concern in teaching sex education. Others mentioned shyness as a challenge during the teaching of sex education. Thus, shyness prevents the mentioning of words verbatim to students. This arises from the fact that some parents tend to label teachers as spoiled ones for mentioning words verbatim. Finally, some students tend to call teachers names for being blunt during the teaching of sex education. One participant said:

“How can we demonstrate condom use when the school fails to provide us male and female condoms to be shown to the learners when the need arises?” (A male science teacher with 18 years of teaching experience)

4.14 Improvements in the teaching of sex education

Participants advocated for the provision of syllabus to enable sex education to be taught as a course on its own like social studies, management in living, science and the rest of the subjects. One participant vehemently adds:

“Sex education should be a subject on its own so that adequate time can be allocated for it” (45-year-old Social Studies Teacher)

Others call for the provision of training and retraining of teachers on current trends in the teaching of sex education and materials for demonstration such as male condoms, female condoms, and other birth control methods should be provided as teaching aids to help students know exactly what is taught.

In addition, comprehensive or holistic sex education should be encouraged rather than abstinence-dominated sex education lessons where students are not given

comprehensive information about realities so that students can develop their sexualities adequately. More so, experts such as doctors, social workers and others can be invited from time to time to interact with the students on sex education. Finally, teachers should shun shyness and be blunt during the teaching of sex education.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings of the study, draws conclusions and makes recommendations for policy consideration and for future research.

5.2 Summary

The study sought to investigate perception of sex education among senior high school students in the Biakoye District in the Volta Region by considering their understanding of sex education, their sources of information about sex, contraceptive use, comprehensive sex education, and benefits of sex education to adolescents. The study adopted a mixed method of combining both interview instruments and administration of a set of questionnaires to gather the data.

The unit of analysis of this study combined students from senior high schools and teachers at Biakoye District in the Volta Region of Ghana. The researcher used purposive sampling as a non-probability sampling technique to select teachers to participate in an interview and simple random sampling as probability sampling technique to survey students from senior high school in Biakoye District in the Volta Region. The researcher adopted a descriptive rather than judgmental or prescriptive stance in reporting the findings from the field.

5.3 Perception of sex education

It was found out from the survey that most students have heard about sex education (281 senior high school students' constituting 95 percent) but they do not have

adequate knowledge about what sex education is all about consistent with Okafor (1997). Majority of the students understand sex education to mean a guide about sexual activities and sexual intercourse and information about abstinence from sexual activities. Meanwhile, most of these students (226 students representing 77 percent) heard about sex education in school.

It is unclear regarding the kind of information they are taught about on sex education as the students possessed inaccurate knowledge about sex education even though 208 students (71 percent) indicated that sex education is taught in their schools, and that teachers teach them sex education. Another finding was that the content of sex education revolves around sexually transmitted diseases according to 39.9 percent (117 students) of the respondents. Another 23.2 percent (sixty-eight students) mentioned that sex education lessons talk about physical change during puberty. Also, peers form the second highest source of information about sex to the respondents surveyed chalking up forty-three students (14.7 percent) after school with the highest source of information recording 184 students (62.8 percent) about sex.

Given this situation, the school environment can serve a useful ground to provide adequate knowledge about sexually healthy information so that it will benefit adolescents who are mostly in the senior high schools to guard against improper sexual life choices since these students have erroneous understanding of sex education which can affect how they approach their sexual life choices.

On comprehensive sex education, responses from the survey suggest that sex education lessons in schools consider mostly abstinence-driven focus (otherwise, selective sex education), and to a lesser extent, holistic sex education (otherwise,

comprehensive, total sex education). With the former, teachers emphasize chastity as the best option in keeping one's self from risk behaviours such as early exposure to sex which can lead to teenage pregnancy, school drop-out, contraction of STIs and other venereal diseases resulting in death and financial cost.

From the results, teachers hardly teach about safe sex practices such as condoms and other contraceptives and that teachers do not show to students some of these contraceptives in class. Teachers do not also demonstrate how to use these safe sex practices such as male condoms and female condoms.

Additionally, students who seek more information during sex education classes by asking questions are branded as spoiled children by teachers which are a great hindrance to providing comprehensive sex education. Sometimes, these students ask questions to clarify what they have heard from inappropriate sources. If teachers frequently label these children as spoilt children in their attempt to know more than what is given by teachers in sex education lessons, it becomes worrisome. This is because the child is denied the opportunity to clarify wrong information given to them by their peers.

Contingency analysis results show that students are more likely to apply the knowledge they obtain from sex education classes as these lessons educate students on the need to abstain from sexual encounters, adopt safe sex practices in cases where it becomes difficult to abstain, staying away from maintaining multiple partners simultaneously, plan about their lives against inappropriate sexual behaviours such as gang rape, sexual harassment, forced sexual intercourse, knowing more about the dangers of sexually transmitted infections (STIs), seeking counseling from proper sources about their sexual lifestyles, and delaying age at first sex.

Again, it was found that most students contend that teaching comprehensive sex education provides innumerable benefits including promoting chastity among adolescents, delaying age at first sex, adopting safe sex practices, and seeking counseling. Further, it was found that most students disagreed that teaching sex education in schools make students develop feelings for having sex.

Another finding from the survey was that students engage in sex because their friends advised them to try and know how it feels like to have sex confirming the claims of social learning theory that behavior is socially learned in a social context. It was also found that most of the students who experienced sex at first time occurred because their partners forced them to have sex against their will. Also, most students would have used condom during sex at first time if they had it. Again, most of the students in senior high schools have had sex with mean age at first sex being sixteen years.

On teachers' views about the teaching of sex education, it was found from the interviews conducted among teachers that sex education is relevant and that it should even start from upper primary school through to the university level. There was mixed reaction about teacher professionalism in the teaching of sex education with one strand suggesting that it was necessary for professional teachers to teach sex education in schools and another strand arguing that it is not really a matter of teacher professionalism since teachers do not go to school to study sex education. But they all agree that training and retraining interventions is important to keep teachers of sex education current and updated critical issues of sex education.

Also, there was division in terms of whether sex education should be taught on the basis of one's age or not. One group argues that sex education should target all teens

whether they are in senior high schools or basic school level. Another group vehemently oppose that arguing otherwise that sex education should be characterized by age-appropriateness in order that it will not prompt curiosity among those who are not of age to understand concerns of sex and its associated issues.

In addition, all the participants expressed that sex education should address issues in abstinence, safe sex practices, and knowledge about abortion because young people are brought up in an era where sex is explicitly advertised and propagandized more than ever supporting some scholars (McKay et al., 2008; UNAIDS, 1997). Moreover, it was found that teachers lack materials to aid teaching of sex education resulting in lack of demonstration of the things to make students comprehend major issues under discussion.

Finally, participants advocate for the introduction of a syllabus to address sex education like other subjects taught in schools because of its critical role it plays in development of the youth for a better future.

5.4 Conclusions

The following conclusions are arrived at from the survey and the interviews conducted among teachers in Biakoya District in the Volta Region of Ghana.

Firstly, Students possess inadequate knowledge of sex education even though most of the respondents stated that sex education is taught in their schools and this affect the way they can reasonably adopt sexual risky behaviours practices that can hamper their future aspirations through teenage pregnancy, teenage parenting and so on.

Secondly, most students experience sex at first time around sixteen years of age but were less likely to use safe sex practices such as condom suggesting that senior high school students engage in sex at their adolescent stage. Additionally, coerced sexual

encounters or sexual harassment occur among senior high school students according to the results of the study. Still, senior high school students are more likely to use sex as a measure of love with their partners. Moreover, senior high school students are likely to heed to the advice of their peers in engaging in sex.

Thirdly, teaching of sex education in senior high schools at Biakoye District emphasizes sexually transmitted diseases, physical change during puberty and sexual reproduction more than contraceptives, laws related to sexual behavior and religious and cultural views about sex. Most students get their information about sex from school, internet and their peers.

Fourthly, from the findings, it can be said that much has not been done in teaching students sex education comprehensively in that teachers emphasize more on abstinence than safe sex practices like condom use, knowledge about relationships, knowledge about abortions, and other contraceptives uses. Also, students were found to be labeled as spoilt for asking questions to know more than what teachers give in class.

Also, benefits of sex education were largely dependent upon the ages of respondents suggesting that one is likely to perceive teaching of sex education as beneficial as he or she advances in age. From the results, it can be concluded that students perceived teaching of comprehensive sex education as more beneficial to them than teaching abstinence only type of sex education. Teaching about both abstinence and protected sexual behaviours or otherwise called comprehensive sex education benefits students as are they are likely to use the knowledge to approach sexual issues in their lives.

Another conclusion from the study is that females are more likely to seek counselling from appropriate sources than their male counterparts. Persons aged 24 and above are less likely to seek counselling than are persons aged 14 years to 23 years. Persons aged 19 to 23 years are more willing to use condoms in their next sexual encounters than the age groups of 14-18 years and 24 years and above.

Finally, there was a significant difference in the willingness to use condoms in the next sexual encounter between males and females. Students are more likely to apply knowledge of sex education obtained in class in their sexual life choices.

5.5 Recommendations

The following recommendations are suggested based on the findings;

There should be intensification of the teaching of comprehensive sex education by authorities such as Ministry of Education and Ghana Education Service that takes into consideration abstinence-driven, safe sex practices, knowledge about abortion, relationships, family life education, and other contraceptives for the purpose of enlightening and informing young ones about the need to make better sexual life choices to secure a brighter future.

Ghana Education Service should consider the need to make sex education an equally important subject of study like the other subjects such as Social Studies, Science, Management in Living and the rest. It can even be mounted as first year course like citizenship education so that adequate time can be allotted to it in order that its coverage will be extensive for the benefit of the future leaders of the country- “children and adolescents”.

Additionally, materials for practical demonstration during the teaching of sex education should be provided by Ghana Education Service and Heads of District Assemblies. Here, district education offices, heads of senior high schools and parents of wards can come together to contribute in this cause to provide these materials like condoms, pills, intrauterine device (IUDs), and other teaching and learning materials that can facilitate effective and comprehensive teaching of sex education in classes.

More so, greater emphasis should be placed on laws, rules, and regulations involving sex and sexual matters by law makers such as parliamentarians and law enforcement agencies such as Domestic Violence and Victim Support Unit (DOVVSU) of the Ghana police service as more students had sex because they were forced against their will suggesting that sexual harassment is a reality even in the senior high schools. The Courts should administer strict and swift sanctions to culprits when the matter is prosecuted in order to serve as deterrent to other persons. By this, students will increasingly become aware of their rights and avenues to report improper sexual behaviours that may befall on them in their daily activities in school.

Efforts should be made to provide training and retraining on current trends in sex education by heads of senior high schools and the district office of the Ghana Education Service so that teachers of sex education will become abreast with how best to go about the teaching of sex education in class. This will ensure that students' attitudes and behaviours are streamlined to meet national development agendas including reducing infant mortality, teenage parenting, malnourished children, school drop-out rates, and falling moral standards characterizing senior high school students.

Further, heads of senior high schools and district authorities can adopt measures such as inviting experts like doctors, social workers and other health professionals to have regular interactions with senior high school students on their sexualities to give students first-hand information from practitioners from the field.

5.6 Limitation of the Study

This section discusses the challenges and how the researcher managed to resolve them during the conduct of the study. The study which investigated senior high school students' perception of sex education had some limitations worth reporting. First, access to local literature was a challenge since little domestic research has been carried out in this area. Most of the materials used were therefore drawn from foreign literature especially from the African continent including Nigeria, South Africa, Botswana, and among others. Notwithstanding this challenge, the researcher relied on reports from government agencies such as the Ghana Statistical Service, Ghana Population and Housing Survey, and other international reports and other available local literature.

5.7 Areas for further studies

Future research should address why students adhere to friends' advice to engage in sex, and forced sexual encounter among students, attitudes towards safe sex practices among senior high school students qualitatively for an in-depth understanding and inform theoretical and policy intervention.

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APPENDICES

APPENDIX A

UNIVERSITY OF EDUCATION, WINNEBA
DEPARTMENT OF SOCIAL STUDIES EDUCATION

INTERVIEW GUIDE FOR SHS TEACHERS OF SEX EDUCATION AT BIAKOYE DISTRICT

This interview guide is part of a study on the topic “**Students’ Perception of Sex Education in Senior High Schools in Biakoye District in the Volta Region of Ghana**”. The research is being conducted by an MPhil student of the University of Education, Winneba as part of his thesis for the award of a Master of Philosophy degree in Social Studies Education. Kindly feel free and express your views with sincerity because every information given would be used for academic purposes and would be treated confidential. You are assured of anonymity as well.

SECTION A: Background information of teachers

1. Gender
2. Age
3. Highest Level of Qualification attained
4. Position/Rank in Teaching service
5. Religion
6. Marital Status
7. Length of Teaching
8. Subject of Teaching
9. School

SECTION B – Teachers views about the teaching of sex education in schools

10. What is your understanding of sex education?
11. Do senior high school students really need to be taught sex education? If yes, why?
12. Why should schools teach sex education?

13. Do you think teacher professionalism in teaching sex education relevant?
14. How do you think sex education should be taught in classroom?
15. Do you think SHS students should be taught about safe sex practices such as condom and its usage? [Probe: And other birth control practices]
16. Should the teaching of sex education be age-specific? Why do you think that?
17. Do you think sex education will 'spoil' the students to engage in more sex activities? And why?
18. Will you agree that high teenage pregnancy among adolescents in SHS is attributable to lack of comprehensive sex education? And why?
19. Would you agree that sex education can reduce teenage pregnancy and abortion among adolescents in SHS?
20. Does school environment allow comprehensive teaching of sex education? [Probe: school policies on sex education, school administration response to teaching of sex education, materials available to help teaching of sex education,]
21. How does time allocation affect teaching of sex education?
22. Do you think parents should have a role in the teaching of sex education in schools? [e.g., parents' consent, parents' contributions etc]
23. If yes, how can parents help in the teaching of sex education in schools?
24. Does the district education unit encourage the teaching of holistic sex education in classrooms? [e.g., their responses to teaching of sex education in terms of supply of materials to aid the teaching of sex education, upgrading of teachers' knowledge on trends in the teaching of sex education, training and retraining of teachers on teaching of sex education]
25. Do you think teachers should mention words verbatim during the teaching of sex education?
26. How comfortable are you in teaching sex education in class?
27. What are some of students' responses during the teaching of sex education?
28. Based upon the responses of students during sex education lessons, what would you suggest the way forward in the teaching of sex education?

29. What are some of the challenges associated with the teaching of sex education in class?
30. Recommendations for improvement in the teaching of sex education

Thank you for your cooperation



APPENDIX B

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF SOCIAL STUDIES EDUCATION

QUESTIONNAIRE FOR SHS STUDENTS AT BIAKOYE DISTRICT

This questionnaire is part of a study on the topic “**Students’ Perception of Sex Education in Senior High Schools in Biakoye District in the Volta Region of Ghana**”. The research is being conducted by an MPhil student of the University of Education, Winneba as part of his thesis for the award of a Master of Philosophy degree in Social Studies Education. Kindly complete this questionnaire with sincerity because every information given would be used for academic purposes and would be treated confidential. **NOTE: Do not write your name or index number on this questionnaire**

SECTION A – Demographic information

Kindly tick [] and/or fill in the blank spaces where applicable

1. Sex (a) Male [] (b) Female []
2. Age
3. Year of study (a) SHS Two [] (b) SHS Three []
4. Programme of Study
(a) General Art [] (b) Business [] (c) Home Economics []
(d) Science [] (e) Visual Arts [] (f) other, please specify
5. Are you (a) Day Student? [] (b) In Boarding House? []

SECTION B – Students’ Knowledge of Sex education

6. Where do you get information about sex?
School [] Internet [] Home [] Peers [] Hospital [] Others,
please specify.....
7. Have you heard about sex education before?

Yes [] No []

8. If no to above question, does your school teach you sex education?

Yes [] No []

9. If yes to Q7 above, where did you hear it from?

School [] Home []

Friends [] Hospital []

Internet []

10. If yes to Q8 above, how do you understand sex education.....

11. Who taught you sex education?

Teacher [] Parent [] Doctor [] Social worker [] Other please specify.....

12. What do you learn from sex education?

Physical change during puberty []

Sexual reproduction (fertilization & conception) []

Sexually transmitted disease (HIV) []

Contraceptives (the use of birth control pills) []

Relationship (love & commitment) []

Laws related to sexual behaviour []

Religious & cultural views on sex []

13. If you do not understand certain issues in sex education, who do you seek clarification from?

Friends/siblings [] Parents []

Teachers [] Social workers []

Doctors [] Others [], Please specify.....

14. How often do you have Sex Education lessons at school?

Once every week []

More than once in every week []

Once every two weeks []

More than once in every two weeks []

No lesson on sex education in my school []

15. Does your teacher respond to every question about sex education that a student asks during sex education lessons?
Yes [] No []
16. If no to question Q11 above, can you recall any two of the questions students ask that teachers do not want to answer during sex education lessons?
.....
17. Do you think you are ready to have sex?
Yes [] No [] Maybe []
18. Have you had sex before?
Yes [] No []
19. If yes, at what age did you first have sex?
Age 10 or below [] Age 11-15 []
Age 16-20 [] Age 21 or above []
Never []
20. What might have informed your decision to have sex at first time?
Just felt like having sex []
My boy/girl friend asked for it []
He/she would break up with me if I had not done it []
To know whether he/she really loves me []
He/she forced me to have sex with her/him []
My friends advised me to do that to know how it feels like having sex []
21. What do you think about using condom during sexual intercourse?
It will not make you enjoy sex []
It will prevent pregnancy []
It is against my belief []
It is painful when my partner uses it on me []
22. Did you use condom during your first time having sex?
Yes [] No []
23. If no, why?
.....
24. Are you willing to use condom in your next sexual intercourse?
Yes [] No []

25. If yes, why would you use condom?
.....
26. If no, why would you not use condom?
.....
27. Where do you mostly get information about condom from in school?
Social Studies class [] Biology class []
Friends [] Any other teachers' class []
School assembly sessions []
28. Where do you mostly get information about birth control methods from in school?
Social Studies class [] Biology class []
Any other teachers' class [] Friends []
School assembly sessions []
29. Do you seek counseling from your teachers on sexual healthy behaviours?
Yes [] No []
30. If yes, why?
.....
31. If no, why?
.....
32. Do you think sex education is relevant to you in school?
Yes [] No []

SECTION C – Students' Knowledge on the teaching of sex education in Class and its applicability

34. Sex education lessons in school do not include learning about condoms
35. Teachers mostly do not touch on information about vagina and penis during sex education lessons
36. Teachers usually do not teach about safe sex practices during sex education classes
37. Teachers mostly talk about abstinence from sexual encounters during sex education classes
38. Students are labeled as 'spoilt' children if they attempt to know more than what is given by the teacher during sex education lesson

39. Teachers do not teach about how to use male condoms
40. Teachers do not teach about how to use female condoms
41. Teachers show to students' female condoms during sex education classes
42. Teachers demonstrate how to use female condoms during sex education lessons
43. Sex education makes students become more open to seeking counseling from teachers, parents, and social workers on their sex life
44. Sex education lessons help us know more about transmission of HIV/AIDS
45. Sex education lessons help us to abstain from sexual intercourse until marriage
46. Sex education lessons make us develop feeling for having sex
47. Sex education lessons help students to know more about other sexually transmitted diseases such as Chlamydia
48. Sex education lessons help students to know about dangers of abortion
49. Sex education lessons help students to avoid multiple partners in their sexual life
50. Sex education lessons help students to know more about the physical development especially in their adolescent stage
51. Sex education helps students to plan about their lives against inappropriate sexual behaviours such as rape, gang rape, forced sexual intercourse, sexual harassment of other students etc
52. Sex education lessons help students to delay age at first sex
53. Sex education promotes chastity among adolescents in school

SECTION F: Recommendations for improvement in the teaching of sex education

54. Please make recommendations for improvement in the teaching of sex education

Thank you for your cooperation



**UNIVERSITY OF EDUCATION,
WINNEBA**

**DEPARTMENT OF SOCIAL
STUDIES EDUCATION**

P. O. Box 25, Winneba, Ghana. **Tel.** (03321) 91840
Email: socialstudies@uew.edu.gh

25th February, 2016

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION: MR. JOSEPH APPIAH

We write to introduce Mr. Joseph Appiah to your outfit. He is a second year M. Phil. Social Studies student with registration number 8140140004 from the above named Department.

As part of the requirements for the award of the master's degree, he is undertaking a research on the topic "*Students Perception of Sex Education in Senior High Schools in the Biakoye District in the Volta Region of Ghana*".

We wish to assure you that any information provided would be treated confidential.

Thank you.

Yours faithfully,

DEPARTMENT OF SOCIAL STUDIES EDUCATION
UNIVERSITY OF EDUCATION
Florence Okoro-Hanson
WINNEBA
for: Head of Department