METACOGNITIVE THERAPY, NEGOTIATION SKILLS TRAINING AND SEXUAL DECISION-MAKING AMONG IN-SCHOOL ADOLESCENTS IN BAYELSA STATE, NIGERIA

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CERTIFICATION

I certify that this research work was carried out by **Nestor Johnson ALAKEME,** (Matric. Number: 160469) in the Department of Counselling and Human Development Studies, Faculty of Education, University of Ibadan, under my supervision.

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DEDICATION

This thesis is dedicated to Almighty God, my Source of Inspiration throughout the durationof the study, and for raising‘human angels’ who were of immense assistance to me allthrough the programme.To Him alone be praised forever. Amen.

“I can do all things through Christ, who strengtheneth me.”(*Philippians 4:13).*

Truly, this contains my blood, tears and sweat of my life with the supports of my wife and best friend, Ebiye Doris and my lovely Children.

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ABSTRACT

Sexual decision-making is a major challenge among adolescents globally. Reports have shown that adolescents in Nigeria, including Bayelsa State, encounter numerous life-threatening adverse effects due to lack of sexual decision-making which resulted into unwanted pregnancy, sexually transmitted infections and HIV/AIDS. Previous studies concentrated more on risky behaviours and practices using survey methods than interventions. This study, therefore, was carried out to investigate the effects of Metacognitive Therapy (MT) and Negotiation Skills Training (NST) in enhancing sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. The moderating effects of HIV risk-perception and self-esteem were also examined.

The study was anchored to the Theory of Planned Behaviour, while the pretest-posttest control group quasi-experimental design with a 3x3x3 factorial matrix was adopted. The multistage sampling procedure was used. Three Local Government Areas (LGAs) (Sagbama, Southern-Ijaw and Yenagoa) were randomly selected out of the existing eight LGAs in Bayelsa. Three secondary schools were randomly selected from each of the LGAs. The students were screened with Carey and Steinberg Sexual Decision-making tool, and those who scored below 40 participated. The schools were randomly assigned to MT (21), NST (28) and control (26) groups. Interventions lasted 10 weeks. The instruments used were Sexual Decision-making (α=0.75), Sexual Risky-Behaviour (α=0.77), Self-esteem (α=0.89) and HIV Risk-perception (α=0.71) scales. Data were analysed using Analysis of covariance and Bonferoni Post-hoc test at 0.05 level of significance.

The participants' age was 16.56±3.23 years, and 58.0% were male. There was a significant main effect of treatment on sexual decision-making ($F_{(2,56)} = 397.34$; partial $\eta^2 = 0.93$). The participants in MT had the highest mean score (61.93) compared to those in negotiation skills (57.57) and control (30.24) groups. There was a significant main effect of HIV risk-perception on adolescents sexual decision-making ($F_{(2,56)} = 7.36$; partial $\eta^2 = 0.21$). The participants with high HIV risk-perception had the highest mean score (57.45) compared to those with moderate (45.74) and low HIV risk-perception (39.04) groups. There was a significant main effect of self-esteem on sexual decision-making behaviour ($F_{(2,56)} = 32.02$; partial $\eta^2 = 0.53$). Those with high level of self-esteem had the highest mean score (53.18) compared to those with moderate (51.16) and low self-esteem (40.46) groups. There was a significant interaction effect of treatment and self-esteem on sexual decision-making ($F_{(4,56)} = 2.15$, partial $\eta^2 = 0.13$) in favour of those with high self-esteem in MT group. There was no significant effect of treatment and HIV risk-perception. There was no significant interaction effect of HIV risk-perception and self-esteem on sexual decision-making. The three-way interaction effect was not significant.

Metacognitive therapy and negotiation skills training enhanced sexual decision-making

among in-school adolescents in Bayelsa State, with Metacognitive Therapy being more effective. Counselling psychologists and other helping professionals should adopt these interventions for effective sexual decision-making.

Keywords: Metacognitive therapy, Negotiation skills training, Sexual decision-making, In-school adolescents in Bayelsa State

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LIST OF ABBREVIATIONS

Acquired Immunodeficiency Syndrome	AIDS
Action Health International	AHI
Analysis of Covariance	ANCOVA
Association for Reproductive and Family Health	ARFH
Bayelsa State Ministry of Education	BSMoE
Body Mass Index	BMI
Bonferoni Pair-Wise ComparisonAnalysis	BPWCA
British National Probability Survey Data	BNPSD
Centers for Disease Control and Prevention	CDCP
Centre for Disease Control	CDC
Cognitive Attentional Syndrome	CAS
Community Health Workers	CHW
Conditional Knowledge	CK
Declarative Knowledge	DK
Department for International Development	DFID
Faith-Based Organisations	FBO
Family Life Planning Education in Nigeria	FLPE
Federal Ministry of Health	FMoH
Generalised Anxiety Disorder	GAD
Government and Non-Governmental Organizations	GNGOs
Health Anxiety, Obsessive Compulsive Disorder	HAOCD

HIV National Sentinel Survey	HIV-NSS
HIV Risk-Perception	HIV-RP
Human Immunodeficiency Virus	*HIV*
Information Processing Model	IPM
Internationals Women's Health Coalition	IWHC
Knowledge of Cognition	KC
Local Government Areas	LGA
Metacognition of Problem-Solving Strategies	MPSS
Metacognitive Therapy	MCT
Ministry of Education	MoE
Myers-Briggs Type Indicator	MBTI
National Demographic Health Survey	NDHS
National HIV Sentinel Survey	NHIVSS
National HIV/Aids and Reproductive Health Survey-Plus	NARHS
National Survey of American Adolescents	NSAA
Negotiation Skills Training	NST
Nigerian Association for the Promotion of Adolescent Health and Development	NAPAHD
Nigerian Educational Research and Development Council	NERDC
Non-Governmental Organisations Initiatives	NGOI
Non-Governmental organizations	NGO
Parent Teachers Association	PTA
Poor Sexual Communication	PSC
Post-Traumatic Stress Disorder	PTSD
Precuneus, Medial Prefrontal Cortex	PMPC
Procedural knowledge	PK
Risky Sexual Behaviour	RSB
Rosenberg Self-esteem	RSE
Sexual Communication and Reproductive Health Issues	SCRHI
Sexual Decision-Making Skills	SDMS
Sexuality Information and Education Council	SIECUS
Sexually Transmitted Infections	STIs
Stimulus Organism Response	S-O-R
Temporoparietal Junction	TPJ

The Health Belief Model	HBM
Theory of Planned Behaviour	TPB
Triarchic Theory of Control	TTC
United States Agency for International Development	USAID
World Health Organization	WHO

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Adolescents face the problem of making important decisions about relationships, sexuality, and sexual behaviour as they grow up. Incidentally, they are growing up in circumstances quite different from that of their parents, with greater access to formal education and more exposure to new ideas through media, telecommunications and other avenues. The environment in which young people are making decisions related to sexual and reproductive health is also rapidly evolving. Whatever decision adolescents make has enormous consequences for adolescents and society. The decisions they make impact their health and well-being for the rest of their lives. Also, any faulty sexual decision of adolescents can pass from one generation to the next generation in terms of social, economic and demographic consequences. That is why intervention in the sexual decision of adolescents is an intergenerational investment with huge benefits for subsequent generations. The decision to delay sexual initiation or other forms of sexual intimacy can be difficult, especially when adolescents are being pressured by peers.

A decision regarding relatively inconsequential matters such as cloth to wear, food to eat, films to watch, amongst others may not be as complex for adolescents as deciding to have a relationship that involves sexual activities. The high increase in the rate of sexual reproductive health problems among young people in Nigeria is alarming (National Demographic Health Survey, 2018). This suggests the need for adequate attention to how adolescents make sexual decisions. Studies show that about one-quarter of Nigerian adolescents are sexually active by the age of sexual debut, ranging from 10 to 15 years (National Demographic Health Survey, 2018). One in 20 of an estimated Nigerian population of 191, 835, 936 are reported to contract sexually transmitted infections each year, and half of all cases of HIV infection take place among people under the age of 25 years (NDHS, 2018, and Worldometers World population by country 2017). This could result from the earlier sexual debut and early marriage, which increase adolescents' vulnerability to negative outcomes.

In Nigeria, the median age at first sexual intercourse has declined from 19 years in

2013 to 15.6 years in 2018 (NDHS, 2018). Teenage unwanted pregnancies are also problems of adolescents who have an early sexual experience. It is also reported that about 1.25 million young people commit induced abortions yearly and many have serious complications without obtaining the post-abortion care needed (UNFPA, 2013). This trend is worrisome if one third (36.5 million) of Nigeria's total population of 123 million are youth between the ages of 10 and 24.1 years.

Broadly speaking, decision-making is the process of identifying and choosing between alternatives based on the values and preferences of the decision-maker. It is a cognitive process of choosing a path of action in response to potential alternatives after examining the possible consequences of each alternative (Beyth-Marom, von-Winterfeldt and Edwards, 2013). Trewatha and Newport (2012), observed that the decision-making process plays an important role in the functioning of an individual life. Human destiny is determined by the type of decisions made and the choice can make individuals happy or unhappy and can as well, give an individual peace of mind or destabilize such, even after a seemingly reasonable decision has been made. The interference of short emotions makes decision-making more challenging, and short-term emotions get in the way of decisions, hence, beclouding one's judgment.

A sexual decision is the preferences and resolutions made by an individual regarding the timing of sexual intercourse, contraceptive use and conditions under which sexual relationships occur (Ofole, 2016). Similarly, Madison (2001) opined that sexual decision-making for adolescents involves delaying sexual initiation, focusing on other achievements (i.e., school, student organizations, career); avoiding the risk of unplanned pregnancy, STIs, and HIV. According to Casey, Getz, and Galvan, (2008) components of sexual decision-makings kills for adolescents who are not married include the understanding choice to be sexually active; being informed about sexuality, sexual health, and the components of a healthy relationship, having the ability to communicate with the opposite sex. This justifies why the International Planned Parenthood Federation, (2010) stated that comprehensive sexuality education (CSE) should “seeks to equip young people with appropriate knowledge, skills, attitudes and values they need to determine and enjoy their sexuality, physically, emotionally, individually and in relationships”.

Sexuality Information and Education Council of the United States (SIECUS), (2008) corroborated this by stating that sexually healthy teens will show or have the following qualities within their relationship with peers which include: the practices health-promoting behaviours; understanding the consequences of their actions; understand that media messages

can create unrealistic expectations related to sexuality and intimate relationships; ability to tell the difference between personal desires from that of their peer group; understand the consequences of sexual behaviours; accept people with different values and experiences and recognize and stay away from relationships that may not be healthy for themselves or others. A major concern is that as adolescents are beginning to explore their sexuality at the same time they are being bombarded with a jumble of confusing messages about sex which includes the watching of mainstream movies, television, and music (not to mention the pornography industry) make sex seem highly desirable, but ignore its consequences, and peers typically perpetuate a wide range of misinformation as they brag, exaggerate, and tease each other thereby creating a psychological pressure to have sex.

On the other end of the spectrum, parents and other adults, including teachers, often communicate vague or dire warnings that aim to cast sex as unappealing, dangerous, or sinful, but all too often give biased or incomplete information, which fails to prepare young people for the joys and heartbreak, responsibilities and risks, that they will inevitably experience when they do have sex. The disturbing reality is that this is happening with increasing frequency and the exhibition of a teenager's promiscuity has raised awareness of the consequences experienced in society.

Moreso, anecdotal report shows that sometimes teens do not feel ready or want to have sex until later in life, but they may lack the skill to communicate their wishes or feel good about a sexual decision to abstain due to several reasons. First of all, there is an increased risk-taking behaviour that occurs during adolescence. Moreso, multiple factors may contribute to this phenomenon, which includes biological changes, peer pressure, individual differences in genetic composition, environmental exposures, cultural and family influences (Feldstein and Ewing, 2016; Somerville, Jones, and Casey, 2010).

Significantly, the developmental changes may also affect decision-making during this period, potentially leading to seemingly poor choices based on biases towards immediately rewarding experiences over those with long-term benefits (Rutherford, Mayes, and Potenza, 2010). Moreso, the biology of bad decision-making in teens shows the frontal lobe, which is responsible for decision-making, impulse control, sensation-seeking, emotional responses and consequential thinking which does not finish developing until their early-to-mid 20s. The relationship between brain development and the risk of making poor choices, particularly during hot situations, is referred to as psychosocial maturity. Research has shown that youth aged 12 to 17 years are significantly less psychosocially mature than 18 to 23 years who are also less psychosocially mature than adults (24 and older).

Moreover, teenagers' psychosocial immaturity makes them more likely to: seek excitement and engage in risk-taking behaviour; make choices on impulse; focus on short-term gains; have difficulty in delaying gratification; be susceptible to peer pressure and fail to anticipate the consequences of their choices (Checkoway, and Richards-Schuster, 2013). Similarly, Akanle (2010) investigated personal decision-making among men in Nigeria using the ages between(20 and 45 years). The result of the findings shows that knowledge of HIV/AIDS will not be significantly related to personal decision-making concerned with HIV/AIDS. Findings show that most of the existing studies (Darteh, 2014; Davis, 2013; Da-Marita, McCabe and Killackey, 2015) were conducted in other countries. Studies also show that sexual decision is culture-specific, which implies that what will influence the sexual decision-making of an average Nigerian adolescent could differ from that which motivates adolescents from European and Asian countries.

Also, adolescence is the time when a person is most susceptible to peer pressure because peers become an important influence on behaviour during adolescence, and peer pressure has been called a hallmark of the adolescent experience. Children entering this period in life become aware for the first time of the other people around them and realize the importance of perception in their interactions. Moreso, peer pressure is widely recognized as a major contributor to the initiation of drug use, particularly in adolescence. This has been shown for a variety of substances, including nicotine, and alcohol (Bongardt, Daphne van de, Reitz, Sandfort, Deković, and Maja, 2015). A study found several unhealthy practices derived from peer pressure, such as condoms, are despised, threats of ridicule for abstinence, and engaging in sexual activity with multiple partners as part of a status symbol (especially for males). The students' colloquially call others who choose abstinence *"umqwayito",* which means dried fruit/meat. An important solution for these problems is communication with adults, which the study found to be extremely lacking within adolescent social groups (Selikow, Ahmed, Flisher, Mathews and Mukoma, 2009).

Darteh, Doku and Esia-Donkoh (2014) examined the reproductive health decision-making and choices, including engaging in sexual intercourse and condom use, among women between ages (15-49) in Ghana. Findings revealed that one out of five women could not refuse their partners' requests for sexual intercourse while one out of four indicated that they could not demand the use of condoms from their partners. Also, it was further revealed that women aged (35-49) were more likely to make a rational decision about engaging in sexual intercourse compared to those aged (15-24). Ofole (2016) investigated the effectiveness of Multimodal Therapy (MMT) on sexual decisions of adolescents studying at

Remedial Centres in Rivers State, Nigeria. The result showed there was a significant main effect of treatment. Male participants were reported to have superior treatment gains when compared with the female participants.

Findings show that most of the existing studies (Darteh, 2014; Davis, 2013; Da-Marita, McCabe and Killackey, 2015) were conducted in other countries. Studies also show that sexual decision is culture-specific, which implies that what will influence the sexual decisions of an average Nigerian adolescent could differ from that which motivates adolescents from European countries. Ofole (2016) made a pioneering effort in modifying sexual decisions among adolescents in Rivers State; however, the research effort produced limited results because it adopted one treatment in the study which makes it impossible to compare the effectiveness of the treatment with other therapies. Given the paucity of researches on sexual decision-making among in-school adolescents in Bayelsa State, this study, therefore, investigated the effectiveness of Metacognitive Therapy and Negotiation Skills Training on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria.

Metacognitive Therapy was the first treatment adopted in this study. This choice is based on preliminary evidence in the literature which suggests that it has the potential to assist students to make a healthy sexual decision. The theory that underlying its application was developed by Flavell (1971) which was originally designed to help people with a generalized anxiety disorder. It has been used for several health-related and mental issues such as social phobia, obsessive-compulsive disorder, depression, and schizophrenia. As the name suggests, it was used to make participants “think about their thinking”, become “aware of their awareness” using its two components of knowledge about cognition and regulation of cognition (Schraw, 1998). It is a therapy based on the Information Processing Model by Wells and Matthews (1994).

Metacognitive Theory is based on the principle that most problems and difficulties in life such as making a rational decision are caused by a pattern of faulty extended thinking. This pattern is known as the Cognitive Attentional Syndrome (CAS) according to Wells (2012). Metacognitive Therapy focuses on removing the CAS in response to negative thoughts and experiences by raising an individual's awareness of this process and improving the selective control of it. Bushman and Anderson (2011), in their findings, confirmed that metacognitive therapy challenges the underlying metacognitive beliefs (irrational) which are associated with negative ideas, unhealthy sexual practices and less reliance on fixed patterns of thinking and mental control such as coping with stress and emotional experiences of life.

Flavell, (1997) reported that metacognitive therapy can modify self-attention to the practice of external attention monitoring within and between sessions from the beginning while removing worry in the first two sessions. The identified processes would both correct the content of the distorted self-image thereby relying on an internally generated self-image that could give rise to an exaggerated negative sense of self. Metacognitive therapy has to do with cognitions that control human thoughts to determine whether one can take appropriate decisions by dismissing irrelevant thoughts rather than "sinking into prolonged distress of life" Wells (2009). The goal of MCT is to first discover what individuals believe about their thoughts and how their minds work, then show the client how these beliefs lead to unhelpful responses to thoughts that serve to unintentionally prolong or worsen symptoms, and finally to provide alternative ways of responding to thoughts to allow a reduction of symptoms. Metacognitive therapy is still relatively new but it is as well documented evidence in treating social anxiety disorder, generalised anxiety disorder (GAD), health anxiety, obsessive-compulsive disorder (OCD) and post-traumatic stress disorder (PTSD) as well as depression (Dammen, Papageorgiou and Wells, 2014; Siegle, Price, Jones, Ghinassi, Painter and Thase, 2014).

Negotiation Skills Training is another therapy that was utilized to assist the adolescents learns how to make a healthy sexual decision. According to the World Health Organization (WHO, 2014), negotiation skills training is one of the ten core life skills required by adolescents to enable them to make an informed sexual decision. Negotiation skills are a process by which people exchange things of value using a win-win approach. Covey, (2000) asserted that negotiation skills mean rationally knowing how to reach the best agreement and not just any form of agreement. The process of negotiation includes the following stages: preparation, discussion, clarification of goals; negotiation towards a win-win outcome, implementation of a course of action, negotiation and conflict management, assertiveness skills and refusal skills as asserted by Geckil and Dundar (2012). Also, when individuals communicate openly about sex, it is more likely to reduce HIV risk through safer sex methods than when adolescents do not discuss such issues.

The goal of sexual negotiation training in this context is to help participants develop personal life skills. These skills are taught using several methods, which include modelling, role-playing, behavioural rehearsal, case studies among others. Specifically, in this study negotiation skill training was used to build the participants self-esteem, which will make them have the belief that their views are worthwhile and equal to those of others. This is to resist the temptation to simply give up hope, rather than creating a "win-lose" situation.

Transactional Analysis was used to explore the position of “I'm OK, you're OK”, the participant's empathy is also known as “the other side of the coin was enhanced to enable them able to see others” points of view, and “put themselves in other peoples position” was inculcated in the sessions.

In this study, the moderating variables are HIV risk perception and self-esteem. HIV risk perception is simply the way people generate decisions based on assessments of situations as a significant predictor of future life events (Brady, 2012). The construct determines how people will make decisions about behaviours regarding ethical, financial, health, recreational, and social issues (Weber, Blais, and Betz, 2002). One would expect that as the level of perceived risk increases, a person is less likely to engage in risk-taking behaviour, but there is evidence indicating that this is not always the case. Ofole (2010) stated that under negative problem framing, decision-makers perceiving high levels of risk respond to risk-seeking behaviour.

Another factor that could moderate treatment outcomes is self-esteem. Self-esteem is conceptualised as being crucial for personal happiness in human existence as opined by Rosenberg, (1965). The self-esteem of adolescents plays an important role in their engagement in health-related risk behaviours such as physical treatment, dietary behaviours, physical activity, sexual behaviour, substance use, which the Youths Risk Behaviour Surveillance System, (2013) has enumerated. It is believed that self-esteem could either contribute to wellness or lead to harmful effects on the body. Female and male adolescents who have high self-esteem are the ones who likely committed physical inactivity.

Researchers have revealed a significant association between health behaviours and adolescents' self-esteem. More recently, Envuladu, Kwaak, Zwanikken and Zoakah (2017) reported an important association between self-esteem and health risk behaviours of adolescents in their study. They found out that adolescents who scored low on the self-esteem scale had higher scores for health risk behaviours. Similarly, evidence abounds that low self-esteem is strongly linked to unsafe sexual behaviour among adult residents of a drug treatment programme (Okhakhume, 2014).

A study utilizing a large cross-sectional sample of South African adolescents observed that low self-esteem was linked to several risky behaviours including unprotected sex. However, an inverse relationship between high self-esteem and risky sexual behaviour has been reported by Enejoh, Pharr, Mavegam, Olutola, Karick and Ezeanolue (2016). In the above findings thus far, efforts have been made to address the effectiveness of metacognitive therapy and negotiation skills training on sexual decision-making among in-school

adolescents in Bayelsa State, Nigeria.

1.2 Statement of the Problem

Adolescents unwantedpregnanciesare due to early sexual experience leading to faulty sexual-decisions made. It is estimated that approximately 16 million girls aged 15 to 19 years and 2.5 million girls less than 16 years give birth each year in developing regions including Nigeria (UNFPA, 2015). Importantly, the complications during pregnancy and childbirth are the leading cause of death for 15 to 19-year-old girls globally. Every year, an approximate sum of 3.9 million girls within the age bracket that undergo unsafe abortions. Adolescent mothers face higher risks of eclampsia, puerperal endometritis, and systemic infections than women aged 20 to 24 years, (UNFPA, 2015).

Regrettably, the biological development of adolescents has brought not only changes to their bodies, but also new vulnerabilities to abuse, particularly in the arenas of sexuality. Yet, as adolescents enter puberty in Nigeria, taboos, discomfort and fear prevent parents and other trusted adults from teaching relevant information to help adolescents navigate the complexities of their emerging sexuality. This may not be unconnected to the high increase in the rate of sexual reproductive health problems among young people in Nigeria. This suggests the need for research on adolescents' sexual decisions making skills.

It is worisome to note that Nigeria is the second-largest HIV/AIDS disease burden country in the world with 3.2 million after South Africa, which has about6.8 million burdens of the disease NACA, (2017). The National HIV Sentinel Survey researched in 2014 and revealed that HIV/AIDS prevalence among adolescents between ages 15-29 has shows that the Bayelsa State report is higher than the national prevalence rate which was 3.17 per cent with the second-highest prevalence rate in Nigeria. It was placed on record that the Nigerian Association for the Promotion of Adolescent Health and Development (NAPAHD, 2016), further revealed the effect of unwanted pregnancy which the course of the adolescent lives drastically, leading to an untimely death,infantmortality, social stigmatization, ruined future career with low self-esteem and dent of family reputation in the society. Moreso, this challenge has poses a lot of liability to the nation's economy with a frightening spread growthof the diseases to all axis, thereby increases the influx of the national social miscreants, insecurity, unwanted children in the street among others.

1.3 Objectives of the Study

The general objectives of this study examined the effectiveness of Metacognitive Therapy and Negotiation Skills Training on sexual decision-making among in-school adolescents in Bayelsa State. Specifically, the study:

i. determine the main effect of Metacognitive Therapy and Negotiation Skills Training on sexual decision-making among in-school adolescents;
ii. find out the main effect of HIV risk-perception on sexual decision-making among in-school adolescents;
iii. assess the main effect of self-esteem on sexual decision-making among in-school adolescents;
iv. examine the interactive effect of treatment and HIV risk-perception on sexual decision-making among in-school adolescents;
v. explore the main interactive effect of treatment and self-esteem on sexual decision-making among in-school adolescents;
vi. identify the interactive effect of HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents; and
vii. explore the interactive effect (three-way) of HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents.

1.4 Hypotheses

The following null hypotheses were tested at 0.05 level of significance.

1. There is no significant main effect of treatments on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria.
2. There is no significant main effect of HIV risk-perception on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria.
3. There is no significant main effect of self-esteem on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria.
4. There is no significant interaction effect of treatments and HIV risk-perception on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria.
5. There is no significant interaction effect of treatments and self-esteem on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria.
6. There is no significant interaction effect of HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents in Bayelsa State,

Nigeria.

7. There is no significant three-way interaction effect of treatments, HIV risk-perception and self-esteem on sexual decision-making among in-schooladolescents in Bayelsa State, Nigeria.

1.5 Significance of the Study

The study would be of immense benefit for the immediate group of students who were exposed to the intensive treatments in handling diverse problems because it would provide them with a comprehensive understanding of sexual behaviour as a result of participating in the intervention programme. However, adolescents' unhealthy sexual decisions would be transformed into a more reasonable reality, thereby, safeguarding the teens' future as a warning signal to be mindful of their actions from the dangers and ill of wrong sexual decisions. The process would lead to the internalisation of instilled discipline that would foster sanity, peace and order, which would enhance the moral tone in the school as well as in the society at large.

These findings would benefit the parents, guardians, caregivers as well as communities where the adolescents were drawn, by enlightening the adolescents and confirming to them that they are the future leaders. It is expedient that when all hands are on deck, the rate of indulging in risky sexual behaviours would reduce the incidence of unwanted pregnancy, contracting of Sexually Transmitted Infections (STIs) including HIV/AIDS, unsafe abortions and ultimately death which is recently witnessed among adolescents especially in Bayelsa State, Nigeria.

The findings of this study would be useful in the successful implementation of Guidance and Counselling services when adopted in the schools in terms of handling the behavioural problem of students. Also, the counselling psychologist could tailor varied interventions using empirical data that would be generated from this study to provide a road map on how to improve healthy sexual decisions among in-school adolescents in the State.

The findings of this study would equally help the school administrator by extending to the teachers to increase the awareness as regards the high rate of deadly diseases (HIV/AIDS) among adolescents at large coverage and how it affects the adolescents both academically and psychologically. Thus, the study would also help them to know what is expected of them as a role model and this could help the administrator of schools to produce students who can contribute meaningfully towards the development of the State and the nation at large.

Furthermore, the study would equally help different stakeholders, such as community

health workers, civil societies, faith-based organizations, Non-Governmental Organizations, such as (WHO, USAID), researchers and programme designers to identify areas of weakness in the curriculum content and would be able to alleviate identified weakness with the result from this work by using the best strategies to target the in-school populations across the studied area.

Similarly, it is envisaged that the outcome of this study would attract the attention of policymakers to recognize the need to institute prevention activities in Bayelsa State in particular given that Bayelsa state is one out of the five states in Nigeria with the highest HIV/AIDS prevalence between (6-8%) which is above the national prevalence rate of (3.2%) which could be reduced through intensive action for implementation of the findings.

Finally, it is expected that the outcome of this study would expand research frontiers in the field of reproductive health education, especially with the young adolescents and equally, would be of help to prospective researchers in education to be aware of faulty sexual decision-making among adolescents and as well help in developing their research works.

1.6 Scope of the Study

This research is limited to investigating the effectiveness of Metacognitive Therapy and Negotiation Skills Training on sexual decision-making. Only in-school adolescents in Bayelsa State were targeted. Furthermore, this study was limited to two moderator variables (HIV risk perception and self-esteem). The study adhered strictly to senior secondary school (S.S.S II) students only. This class of students were chosen because SSSI students were not yet stable trying to be adjusted to fit into senior classes while SSSIII were equally preparing for their WAEC/NECO external examination which is why only SSSII students were selected for the study.

1.7 Operational Definitions of Terms

For this study, the following terms were operationalised:

Sexual decision-making: Sexual decision-making in this study refers to the choice made by adolescents in Bayelsa State to delay intercourse for sexually inexperienced as well as the choice of secondary abstinence as reported in the screening instrument.

Metacognitive therapy: Metacognitive therapy was the treatment used for experimental group one to change their faulty pattern of appraisal of information regarding the sexual

relationship.

Negotiation skills training: In this study, Negotiation skills training was the treatment adopted for experimental group two. This treatment involves empowering the participants with assertive communication and tactical empathy to enable them to achieve a win-win position in a sexual relationship.

HIV risk-perception: HIV risk-perception is used to explain the extent to which an adolescent in Bayelsa State thinks that he or she is vulnerable to STIs/HIV due to risky sexual behaviour.

Self-esteem: Self-esteem is how an adolescent in Bayelsa State assess his or her self-worth, emotions and behaviours which is categorised into three levels. In this study, self-esteem was used interchangeably as self-worth, self-regard, self-respect and self-integrity.

Adolescent: An adolescent is a person whose individuality has not yet been sufficiently recognized from the age of 10 to 18 years, which encompasses a profound physical and social change, thereby late adolescence may occur beyond the age of 18y years as described by Elliott and Feldman (1990).

In-school Adolescents: In-school Adolescents refers to a group of learners or teenagers between the ages of 12-18 years attending either public or private senior secondary school in the study area

CHAPTER TWO

REVIEW OF LITERATURE

This chapter reviewed relevant literature on the interventions necessary for improving sexual decision-making among in-school adolescents. The review was carried out both theoretically and empirically in this study.

2.1 Theoretical Review

2.1.1 Concept of Adolescent Decision-Making Process

Decision-making plays a vital role in health risk behaviours, and adolescents often lack, the ability to process information about decision-making which is necessary to change risky behaviour or to improve health outcomes (Hollen, 2008). Decision-making is poorly practised by many adolescents, in particular those under the age of 15, which is determined by the level of cognitive development of the adolescent. However, stress adversely affects decision-making, and yet high-level cognitive processes that many adolescents do not possess are necessary for quality decision-making (Deollenez, 2015). Sexual decision-making is a reality of life that involves the selection procedure of the alternative that can lead to desirable outcomes in the available choices. The possibility of using available substitutes can be determined by several factors, and the preferred substitute depends on the number of substitutes available. Making a balanced, rational decision means taking the right decision free of bias, but a choice that can lead an adolescent to do the right thing which could lead to positive results (Alliance, 2015).

Decision-making from a psychological perspective has examined individual decisions in the context of a set of needs, preferences and values that humans then seek. It is an ongoing method of integrating with environmental interaction. Decision-making is concerned with the descriptive accounts of how people go about making choices which can usually be enhanced by breaking a problem into parts, working on the parts separately, and then combining them to make a final decision. The process implies creating and appraising options and making choices among two or more alternatives and sometimes, it is difficult to make a good and

reasonable decision without relevant information needed for each phase of activity in the decision-making process. The art of making serious decisions provides individuals with useful knowledge and abilities that could be applied to different stages of decisions, large or small in everyday life. Isabel (1998) also confirmed that people's decision-making depends to a large extent on their cognitive style.

Myers and Peter (2014) also developed a set of four bipolar dimensions, called a Myers-Briggs-type indicator (MBTI). The parameters of these dimensions are thought and sentiment, extroversion and introversion, judgment and perception, and finally, sensitivity and intuition. She went further by saying that an individual's decision-making style refers to how individuals are arranged on scores on these four dimensions. For example, an individual who scored close to thought, extraction, detection and judgment would tend to have a logical, analytical, objective, critical and empirical decision-making style. Decision-making can be seen as a problem-solving activity resulting in an acceptable outcome. Reason (2012) asserts that decisions may be made under social pressure or time constraints may affect a careful consideration of the options and consequences which may be influenced by one's emotional state at the time such decision is made.

Gardner and Steinberg (2005) acknowledge that adolescents have more chances to involve in risk-taking behaviours with peers, and the reason is that this period is a time they tend to spend more time with their peers. Evans, Brown, and Killian (2012) argue that the decision-making capacities of adolescents are problematic and complicated for several reasons, including family structure, socioeconomic class, religion, race, and ethnic origin. Mann, Harmonic and Power (2009) argued for capacity development in adolescents. There are nine indicators of skills, decision-making: choice, understanding, creativity, compromise, consequences, connectivity, credibility, consistency and engagement.

Precisely, adolescents equally encountered attitudinal constraints (i.e., the beliefs about the proper age for making the right decision), peer group pressures to conformity, breakdowns in family structure and functioning, and finally restricted legal rights to make important personal decisions. Maier (2008), emphasised that the major developmental task during adolescents involves the acquisition of skills for intimate interpersonal living, such that developmental stages are directed toward the search and pursuit of a career, work and love. Moreover, if the pursuit of a stable love relationship, including the expression of her sexuality, represents a healthy and natural progression into adulthood.

2.1.2 Decision Making of Adolescence

Adolescents are prone to make bad decisions as it is a part of the adolescencedevelopmental period in life. At times adults may wonder why teens make the decisions thatthey do, and even some teens look back at the decisions they make; unfortunately, often whenit's too late. Today's youth have many decisions to make and many dilemmas to face every day,including whether or not to engage in sexual activity at a young age. "A critical issue for today'syouth is developing a healthy understanding of their sexuality, and the United States SurgeonGeneral has labeled this challenge as one of the nation's leading public health concerns"(Iowa State University, 2007)**..**Adolescents are faced with sexual exploitations daily including: music, movies,television, news, magazines, Internet, cell phones, posters, clothes, and friends. Teens have tomake the important decisions tobecome involved in sexual activity or to refrain.Adolescence sexual decision-making is a complex issue that has received muchattention in the literature.

The concept that positive self-esteem, problem-solving,and reasoning skills served as probable protective factors for a variety ofadolescent risk behaviours, including sexual activity, has been documented, as wellas the findings that lower levels of problem-solving skills, health-promotingbehaviours, and education were all possible predictors of early intercourse.(Fantasia,2008**).**Teenagers are generally impulsive in most any activity that they do. They don'tnecessarily think ahead of time why they want to do it and what the consequences are, or what therisks are. Teens sometimes just do it because they want to do it or because they cave in to peerpressure."A motivation for engaging in any sexual relationship is social enhancement to gainattention or popularity, to fit in, and to show maturity" Iowa State University, (2007). There is really norhyme nor reason and that may be why it is so hard to study adolescents and why they make thedecisions they do.

According to one study, "What's novel about this research is that we havedemonstrated that quite a bit of adolescent decision-making is not reasoned onany level.It is not because it's motivated behaviour, or they have thought about how much they want to do it.It's because they just do it" (Science Daily, 2007).Teenagers tend to experiment with risky behaviours because they are curious or they wantto know what it feels likes, what it tastes like, and/or what will happen. Just as infants arecurious when they are in new environments, teenagers are curious when they go through theadolescent stage of development. It has been said that they have raging hormones, puberty, andan urge to fulfill the "feelings of desire" deep inside them. Peers also have a high impact ondecision making.

Besides, a lot of young teenagers are still trying to figure out who they are and most ofthe time they ask their friends what they are doing, or follow in their friend's footsteps.

Thistype of action is called the Haley Effect. This can be described as, "when teenagers are mullingover a question of right or wrong, safety or danger, they take into account what others do orthink" (**Decisions, 2007**). "This type of goal for adolescents is considered unhealthybecause they are easily swayed to participate in a romantic relationship because of socialpressures" *Risky behaviours,(*2009). These types of behaviours may also lead to other unhealthyrisky behaviours.

An example of the Haley effect is, "it would be safe to put my seatbelt on, but I want tosee ifmy best friend puts her seatbelt on first." Teenagers go through a decision-making process,but they don't necessarily go through a gut-instinct making process. If they know something iswrong or bad, their decision is not necessarily based on the safety of the person doing thethinking, but they base it on what others will think or do, others meaning peers and friends.Some educators are researching ways to help adolescents during the decision-makingprocess.

In the elementary schools, educators provide programmes for students to assist them inmaking responsible sexual decisions. Providing lessons on peer pressure awareness is necessarybecause teenagers base a majority of their decisions on what their friends thinks is "cool" or "in."The main consideration for more research is that teenagers are often foreigners in their ownbodies during adolescence and puberty. They not only are confused about what is going on intheir bodies, but they are confused and trying to fit in with others around them. Watching media,TV, Internet access and listening to music may all contribute to the conflict many teensexperience about what is right and wrong about sexual decision-making.

- **Early Sexual Activity**

Teenagers are starting to engage in sexual activity at younger and younger ages.According to the article *Risk Behaviours: Sexual Activity among Teens and Teen Pregnancy*(2002), teenagers from ages 15-19 are starting to have a decrease in early sexual activity whereasages younger than 13 are having an increase. Among adolescents younger than 14 years old,27.8% have touched each other under clothing, 19.9% have touched each other's genitals, and7.6% have had sexual intercourse,Iowa State University, (2007). "Youth who develop strong self-regulatory skills in middle childhood are better equippedto avoid risky behaviour in adolescence including risky sexual behaviour" (Teen sexual behaviour, 2008)**.**

This tends to begin in early childhood with the parental regulation. Thetrend that teens are maturing faster than they used to years ago and their hormone levels are onthe rise contributes to the fact that adolescence are more likely to be pursued by older adults,which

could lead to poor decision-making skills due to peer-pressure. "Among adolescents,Affiliation with deviant and sexually active peers is linked to greater likelihood of sexualbehaviour" (Teen sexual behaviour, 2008).

The media may have a substantial impact on how males and females view themselves,which may also lead to early sexual activity. This happens because when girls go throughpuberty, adolescence and into womanhood, females are viewed as sexual objects or objects ofdesire. Girls have to be sexually attractive based on looks, and the perception is for even moresexually experienced to be an adult or be considered a "woman." Men, on the other hand, mayhave tomaintain their manhood by being involved in sexual activity. Peers may look at the guysas being "boys" if they haven't had sexual experiences and a "man" if they had (Risk Behaviours,2002).

Another factor that tends to lead to early sexual activity is the denial that oral sex or analsex is actually "sex." Adolescence are experimenting with oral and anal sex at younger agesbecause they believe it doesn't constitute as sex, and one can not get diseases if they are not havingintercourse. This thinking may in part be due to a lack of knowledge and quite possibly the"word-smithing" of a former president accused of having sex, as he challenged the definition ofsex. This rising epidemic of teens and early sexual activity is also giving rise to teens andemotional problems. Does early promiscuity cause depression? Does depression cause a teen tochoose to have numerous sexual encounters to relieve stress and anxiety or to improvepopularity? According to the article *The Emotional Risks of Early Sexual Activity* in 2002 it isstated,

It has been clear for quite some time that teen sex and emotional problems such asdepression are related. What has not been clear is if teen sex causes depression, ordepression causes teens to have sex. Recent research suggests that both may betrue. Teens, especially girls, who have sexual intercourse may be at greater riskfor depression. And depression in teens is now known to lead to risky sexualbehaviours. Royer, et al. (2009). Early sexual activity may also lead to later adulthood risky behaviour. When adolescentsare taking risks whether it is with substance abuse and early sexual activity, they "lose" manythings which can include: friends, family, education, dreams, goals, and hope. What tends tohappen is that parents think back to times when they may have felt they lost something and thisbecomes a challenge for them.

Parents may possibly refuse to refuse to talk about these riskysexual behaviours because "they will return to these moments of deprivation and loss, and in orderto repair what went wrong, they need to attempt to re-find what was lost" Royer, et al. (2009).Early sexual

activity is also contributing to more serious problems including other riskybehaviours and the onset of disease: STD's, HIV, and AIDS amongst teenagers. According to adivision of CDC, approximately 18% of all new HIV diagnoses are among young people aged13-24 and teens and young adults have the highest rates of sexually transmitted diseases (STDs)of any age group. Internet surfing, alcohol consumption, sexting, experimenting with drugs andother risky behaviour all may contribute to early sexual activity (CDC, 2009).

- **Risky Behaviours**

The onset of early sexual activity also may include teens who experiment with other riskybehaviours. These may include alcohol, drugs, smoking, dating violence, vandalism, and evenother addictions such as gaming, the Internet, and junk food consumption, extreme shopping, orgambling. According to the online website *4Parents.gov,* it is stated that one unhealthy behaviouroften leads to another. For example, teens who smoke are more likely to drink alcohol and usedrugs. Teens who drink are seven times more likely to have sex than teens who don't drink.When teens were asked in a recent survey if they were drinking or using drugs, the last time theyhad sex, almost one in four of them said yes (Risky Behaviours, 2009).

A study linking self-regulationand proneness to risky sexual behaviour in 2006 found that "self-regulation in middlechildhood influences adolescent sexual risk taking" (Moyer, & Sullivan, (2008). However, they also found that poor or low self-regulation appears to send children on down thepath of sexual risk taking by increasing their taking part of early substance use (Moyer, & Sullivan, (2008).Teens are more apt to engage in risky behaviours when they become involved with thewrong crowd. If their friends are experimenting with drugs and alcohol, more than likely thatone person will as well. If their friends are experimenting with sex and being sexually active,more than likely that person will too.

However, if the teen is not informed on how to avoid peerpressure, or if ones' self esteem and confidence is low, the teen will more than likely becomeinvolved in many different types of risky behaviour "Negative peer pressure predicted sexual risk taking both directly and indirectly, through earlysubstance abuse" Mayeux, et al (2008). Therefore, risk proneness isallowing youth to be pressured into risky behaviours such as substance abuse, which may lead toan increase in risky sexual behaviour. When adolescents are using drugs and alcohol, and thenengaging in risky sexual behaviour, it may be because their decision making skills are impairedand their inhibition is reduced which will in tum impairs their judgment making spontaneous andhazardous decisions,Mayeux, et al (2008).

Moreso, a prevention education is a critical part in reducing risky behaviour. The

media appears toadvocate for promiscuous behaviour. When reading the covers of magazines for women, readersare told how to please a man, super-charge your sex life, and break the boundaries to free sex.Unsupervised teens who read the material or watch music videos or listen to the music hearencouragement to engage in sex as "everyone is doing it, and doing it often." Kids may feel leftout or feel they are different if they are doing it and talking about it. Finding ways to prevent the mass media and technology from promotion of sexualcontent for young teens would be one way for prevention of early sexual activity and riskysexual behaviours.

According to the National Center for Chronic Disease Prevention and HealthPromotion, HIV/STD prevention education should be developed with the active involvement ofparents, be locally determined and designed to meet the age and needs of the teens, and beconsistent with community values. It should address the needs of youth who are not engaging insexual intercourse as well as youth who are currently sexually active, while ensuring that allyouth are provided with effective education to protect themselves and others from HIV infectionand STDs now and lifelong (CDC, 2009).If all parties are working together to raise awareness of the sexual epidemic, awareness ofthe increase in teens having sex at earlier ages and acknowledge that media play an importantrole in challenging the core values of the families, educators and parents can work together toinform teens about making good decisions pertaining to their wellness, health and safety.

- **Role of Parents**

Parents and guardians also have a major impact on how their child views risky behavioursand whether or not they choose to engage in risky behaviours such as substance abuse and earlysexual activity. While parents cannot make their child's decisions for them, and parents cannothold their child's hand and be there with them throughout their entire life, parents can help theirchild develop strategies to build strong character, and skills that build resilience. "Sex Educationrequires adults to consider our own perceptions of adolescents and to place the adolescent inrelation to our own views of sexuality, maturity and vague, largely articulated, beliefs about'grownupness' " National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescentand School Health. (2009).

Moreso, parents need to see their adolescents as "adults," just asthey would themselves, and conducting conversations about age-appropriate sex with maturity.There are key points that a parent can make with their child including encouragement to talk toother adults at school such as counselors or teachers, become involved with the school to helpbuild programmes or know the news of the school, and stay connected with the school by keeping

incontact with your student's teachers (CDC: Parents and Families, 2009).

2.1.3 Decision-Making Patterns or Styles in Adolescents

This process comprises high-level cognitive activities such as reasoning, critical thinking, control and cognitive processes (Santrock, 2012). For an adolescent to be safe, the following skills are essential which include: gathering the appropriate information, applying the general morals in risky situations and putting these pieces together with the right decision-making rule consistently (Parker, 2005). Decision-making is about choosing one option from many choices and accepting or rejecting current opportunities. He also stressed a mental process that is equipped with specific human features such as wisdom, thought, consciousness and the will to realize. The tendency of a teenager to choose one of the many options is regarded as the cognitive process.

In addition, for effective and healthy decision-making, these cognitive processes should be managed by (Deniz, 2011). These skills include the use of information, the evaluation of opportunities, the evaluation of the positive and negative aspects of decisions, and the evaluation of the outcomes of different choices. It is important to make appropriate and realistic decisions, collect the correct information and evaluate it (Byrness, 1994). There are several different types of decision processes. The act of making acceptable, accountable and responsible sexual decisions is very important and it requires notable skills for adolescents to learn because a good or bad decision can significantly affect an individual for the rest of his or her life. A positive social gathering, for example, may make a teenager capable of making a responsible decision that may lead to a proactive decision-making style. The following summarizes the different decision-making methods that apply to adolescents:

a) Inactive Decision-Making Style

Inactive decision-making is a method by which the youth does not make a choice, and that failure determines what happens. The inactive youth does not know what to do and takes time to make difficult decisions and therefore lacks the confidence to make an appropriate and responsible decision (Bolen, 2008).

b) Reactive Decision-Making Style

A responsive decision-making style consists of allowing others to make decisions on their behalf. Teenagers with this type of decision-making are easily influenced by what others think, do or suggest. Therefore, they lack confidence in

themselves and need to be loved by others. In other words, people who make reactive decisions do not have the will to make appropriate choices and are thus responsible for their actions.

c) Proactive Decision-Making Style

A proactive decision-making method consists of taking rational steps to move forward. It is a method in which one examines the decision to be made, identify and evaluate actions he/she might take, select an action, and take responsibility for the consequences of this action. Bolen, (2008) argues against proactive decision-making resulting in responsible decision-making and can be summarized in the following decision-making model:

a) Describe the situation which necessitates a decision.

b) List the decisions one could make.

c) Share the list of possible decisions with a trustworthy adult, such as parents or a leader.

d) Evaluate the impact of every decision.

e) Determine which decision is more responsible and appropriate.

f) Follow up on a decision and assess outcomes by accepting the views of older people.

It is important to note that there are advantages to making responsible decisions about sexuality. For example, Bolen (2008) argues that a responsible sexual decision leads to actions that promote health, protect safety, follow laws, show respect for self and others, follow guidelines set by responsible adults, and demonstrate good character.

2.1.4 Sexual Decision-Making in Teenagers

Sexual decision-making is the ability to use all available information to evaluate a situation, analyze the advantages and disadvantages, and make an informed and personal choice. The influence of emotion on decision-making will be provided, followed by a more detailed look at any specific decision-makings skills related to the components that can be impacted by one's emotional state. Djamasbi (2006) discussed how an individual's emotions may affect his or her ability to process information and make precise judgments. Sexual decision-making in adolescents is the most complicated experience. It is not enough to assess adolescents' information about sexual intimacy or their perceptions of their partners;

one has to recognize the significance of their life experience, cognitive abilities, and social environment as well as their emotional state. By contrast, “sexual negotiation” includes verbal and non-verbal interaction and dynamics among partners to decide how and when relationships will occur.

Moreover, decision-making or sex negotiation processes are influenced by conceptual and ideological factors that influence what is perceived as gender-specific behaviour. School-based sexuality education aims to improve the outcomes of adolescents' sexual behaviour by offering them information and skills to help them improve their sexual decision-making. In Nigeria today, for example, the government have approaches requesting school-based HIV guideline which consolidate information about HIV sickness and aversion while neglecting the in-school adolescents or never privileged adolescents of our society (Guttmacher Institute, 2012).

Guttmacher Institute, (2012) claimed that education policy has mandated the extend to general sex education, which varies widely with the requirements covering abstinence, contraception use, anatomy, healthy decision-making, sexual coercion, communication, sexual orientation, and consequences of teenage pregnancy. Furthermore, sexuality education in schools falls into two main categories: abstinence education and comprehensive sexuality education. For many years, extensive efforts have been made and critical, astute and practice-oriented written work has been given on whether sexuality education is working well (Kirby, 2010; Laris and Rolleri, 2012).

2.1.5 Characteristics iof Adolescents iDecision-Making

The following are the basic characteristics of adolescent efficacy of alternative approaches to prevent risky behaviours among youth. This study reveals five essential points:

Firstly, as we have noted, teenagers are sensitive to rewards that include rewarding stimuli such as social status and admiration. This increased awareness of rewards manifests itself in two different ways: (a) What adolescents care for and (b) What has particular weight when they make such decisions. Thus, when adolescents are faced with a choice between two alternative courses of action (e.g, trying versus forgoing smoking), adolescents would pay relatively greater attention to the potential rewards of each alternative (e.g, gaining the admiration of one's friends versus pleasing one's parents) than to the costs of each (e.g, potentially developing

cancer versus looking “uncool” in front of one's friends). In contrast, adults tend to pay equal attention to both rewards and costs (these age differences in what psychologists call the “risk-reward calculus” that tend to disappear after age 17 (Cauffman, 2010).

Second, in comparison to adults, adolescents are more likely to focus on the immediate consequences of a decision rather than the long-term consequences (Steinberg, 2009). This applies both to take into account the potential benefits of a choice and to take into account the potential costs. Research shows that adolescents expect the value of the future reward far more strongly than adults, opting to receive a smaller sum earlier (Steinberg, 2009). This does not appear to be due to poor impulse control but instead to the generally weak orientation to the future evinced by young people, especially during the early adolescent years (i.e, before age 16). Thus, it is not so much that adolescents are unable to delay the gratification (we could see it in a small child) that it is that they simply prefer not to do it.

Third, the weak future orientation is seen during adolescence also affects how adolescents evaluate the potential costs of a decision, in that they are more likely to pay attention to and focus on the immediate and short-term drawbacks of a choice than on the longer-term ones – although, it has stated, consideration of any negatives (long or short term) is likely to be less important than consideration of rewards (and particularly short-term rewards).

Fourth, adolescents decisions about risk-taking behaviour are more easily swayed than are adults' by the influence of their peers; susceptibility to peer influence is high during early and mid-adolescence declines steadily until about age 18, at which point it levels off (Steinberg and Monahan, 2007). In addition, peer influence tends to increase adolescents' sensitivity to awards and their preference for immediate awards (Gardner and Steinberg, 2005). As a consequence, when deciding the presence of their peers, but not adults, are more likely to show activation of the brain's reward system than when they are alone, and more likely, as a consequence, to make a riskier decision.

Fifth, due to immaturity of brain regions associated with cognitive control, adolescents are less able to regulate their behaviour than adults (Galvan, 2007; Steinberg, 2008). This is reflected in adolescents greater tendency to act before thinking and their lesser inclination to make and carry out plans, as well as the

greater difficulty adolescents have in regulating their emotions, both positive (e.g, exuberance) and negative (e.g, anger). The maturation of the regions of cognitive control of the brain, the control of impulses continues to mature well until young adults. The decision-making process of adolescents is more easily disrupted by emotional and social excitation than that of adults (Albert and Steinberg, 2016). TheWorld Health Organization, 20019), emphasised that after the 20th birthday, ones is no longer a teenager. However, neural plasticity continues, as the brain and particularly the prefrontal cortex (PFC) develop further.

2.1.6 Developmental Stages of Adolescents

Adolescent development is approximately 10 years ago, new guidelines published in Pediatrics advised that girls who start to develop breasts and pubic hair at age 6 or 7 years are not necessarily abnormal. Brindis, Sattley, and Mamo, (2005). The guidelines were based on several studies, the most important being the trial by Herman-Giddens (2009) of 17,000 girls between the ages of 3 and 12 years who were patients in more than 200 paediatricians' offices across the country. Issued in 1997, the report was based on girls assessed in 1992 and 1993. Earlier standards for puberty were based on a study of fewer than 200 girls in a British orphanage in the 1960s (Campbell, Ramey, and Pungello, 2003). The obesity epidemic has been postulated to be the probable cause of the early onset of puberty.

Similarly, Danish (2006) reported that girls were developing breasts at an earlier age than they were 15 years ago. Early puberty (as measured by breast development) was found to have increased from an average age of 10.9 years in 1991 to 9.9 years in 2006. This change was not due to obesity as girls' body mass index (BMI) remained constant for the duration of the study. However, environmental factors, socioeconomic conditions, nutrition and access to preventive health care are other potential reasons for early puberty. Girls tend to go through adolescence earlier than boys. The stages for both sexes are identical and are divided into early, mid and late adolescence.

1. **Early Adolescence Stage**

The basis of the earlier onset of puberty leads us to question whether adolescence starts with puberty because the other aspects of adolescence often are not present before the age of 10 years. In general, young people experience physical

changes that try to adapt to changes and often wonder whether they are normal. At this stage, children are preoccupied with their body image and intimacy. These privacy concerns are transforming into a sense of family separation and a greater emphasis on peer relations and group activities. Concrete thinking goes on from childhood, but abstract thinking begins to develop, especially in less personal fields, such as academics, Casey, Jones and Hare, (2008). Although young teenagers may start to experience their sexuality (particularly with sexual fantasy and masturbation), sexual intercourse is not common.

However, it is important to note that many gay teens have never had a sexual experience with someone of the same sex, and that "teens who will eventually identify as gay, lesbian or bisexual do not always do so during adolescence," (Cavazos-Rehg, Spitznagel and Schootman, 2012). Attraction occurs in late childhood/early adolescence and can precede or occur concurrently with a first romance or first sexual experience and it is uncommon for adolescents to experience same-sex attractions, most gay youth experience opposite-sex attractions, sometimes before same-sex attractions. Research has shown that over 80% of girls and 60% of boys attracted to the same sex recognize the opposite sex's appeal. In a similar vein, boys reported that the onset of heterosexual attractions happened around the same age as same-sex attractions and occurring on average 1 to 2 years earlier than girls, (Centers for Disease Control and Prevention, 2010).

2. Middle Adolescence Stage

This stage is characterized by complete identification of secondary sexual characteristics and deceleration of growth. The feelings of omnipotence and invincibility culminate (although this may also be a time of heightened feelings of vulnerability). These feelings favour the development of autonomy but can place the adolescent at increased risk of contracting Sexually Transmitted Infections (STIs) or becoming pregnant because these individuals cannot weigh the consequences of their actions appropriately. In addition, abstract thinking and other executive functions continue to develop but have not yet fully formed, and at this stage, adolescents are moving towards gender orientation and gender identity. These have led to a growing concern about whether they are attractive and attach greater importance to their peer group. Many adolescents in this phase can «fall in love» for the first time. Sexual experimentation is common, and many will have sex in the middle stage of teenage life.

3. Late Adolescence Stage

Arguably, the late teenage stage continues throughout the post-secondary period. Brain development, especially of the prefrontal cortex, may continue until the age of 22 for females and 25 for males (Checkoway and Richards-Schuster 2003). Late teens tend to focus on self-reliance and think beyond themselves. Most adolescents during this stage can think abstractly for the future and more perceptive to secure with their body image and gender role and their sexual orientation is almost secure. Teens in late adolescence work on transitioning to adult roles in relationships, school, and work and these categorises may still act impulsively as denoted as confirmed by (Centers for Disease Control and Prevention, 2010). Becoming a sexually healthy adult is an adolescent development task that involves the integration of psychological, physical, cultural, spiritual, societal and educational factors. Understanding the physical, emotional and cognitive stages of an adolescent is especially important.

2.1.7 School-based Sexuality Education for Adolescents in Nigeria

In Nigeria, a national task force developed guidelines for comprehensive sexuality education based on the Sexuality Information and Education Council (SIECUS) model of starting early skills development for adolescents, teacher training and community involvement (Finger, 2000). This initiative was orchestrated by a collaboration between Action Health International (AHI), key non-governmental organizations working in the field of reproductive health and the Nigerian government. Following the adoption of the Nigerian Public Guidelines in 1996, over 100 agencies approved and integrated these into their programmes (Brocato, 2005). A non-governmental organisation (NGO), the Association for Reproductive and Family Health (ARFH), in collaboration with the state government, first developed a curriculum based on SIECUS guidelines that were implemented in 26 secondary schools and for ten to 18years of age. From 1999 to 2003, the Department for International Development (DFID) also implemented Family Planning Education (LPE) in Nigeria.

It focused on human development, relationships, sexuality, family life and personal skills development. In addition, the Nigerian government approved a comprehensive national sex education programme, Family Life and HIV Education (FLHE), a few years after the introduction of the SIECUS guidelines. This should

be incorporated into all levels of education, from primary to higher education (Brocato, 2005). While some countries have begun to implement it, many have not done so due to financial constraints. However, the implementation of the HLIF is not always adequate, and the programmes are only active in schools supported by NGOs. However, in December 2007, the Federal Government announced the inclusion of FLHE in the curricula of two subjects. Social Studies and Integrated/Basic Science available at Nigerian high schools (Isa, 2007).

The Nigerian Educational Research and Development Council (NERDC) (2003) defines FLHE as A planned process of education that fosters the acquisition of factual information, formation of positive attitudes, beliefs and values as well as development of skills to cope with the biological, psychological, socio-cultural and spiritual aspects of human living. This definition shows that the scope goes beyond sexual intercourse and instead addresses sexuality as an integral part of the human being. This is in line with the World Health Organization's definition of sexuality. The emphasis on the social, cultural and spiritual aspects of life makes it applicable to Nigerian society with its various cultures and religions.

Moreover, it is well communicated to the different stakeholders, its implementation can be highly successful. The programme is organised around six topics, each covering the knowledge, attitudes and skills required by age:

i. Human development
ii. Personal skills
iii. Sexual health
iv. Relationships
v. Sexual behaviour
vi. Society and culture

According to NERDC (2003), it is designed to be learner-centred, with building content from each theme of the previous one so that the content is rich. Her thematic approach makes her robust and avoids unnecessarily overburdening the school's curriculum. It should be structured to achieve the desired learning outcomes through comprehensive coverage of the topics listed. Although the programme is designed to cover primary and tertiary education levels, only the lower secondary level is currently being implemented across the country.

In addition, sexual abstinence is the only STI and HIV prevention offered through the Sexual Health Curriculum. As a result, it lacks completeness because it

provides minimal options for STI/HIV prevention and ignores the needs of learners who are already sexually active. Available data (national and local) show that high proportions of adolescents are sexually experienced/active while a sizeable proportion intends to initiate sex shortly (Macro, 2003; Esimai, 2005 and Nwaorgu, 2009).

2.1.8 The Role of Emotions in Adolescents Decision-Making Process

The hope of the happy aggressor mentioned that the perpetrators will be happy after achieving the desired result by immoral actions. This also shows that moral knowledge and moral emotions are highly uncoordinated in young children. Although children can experience moral emotions such as guilt and shame at 3-4 years of age, they do not expect to experience these emotions in moral situations until about 7-8 years of age (Eisenberg, 2010). However, as adults, there seems to be a much closer connection between moral knowledge and moral emotions (Haidt, 2001). The importance of this development stems from the fact that anticipated emotions in social situations are likely to influence the behaviours that an individual chooses to adopt. The study showed the importance of emotions in decision-making (Lemerise and Arsenio, 2010).

Lemerise and Arsenio (2010) provide a social information processing model in which an individual's social information database captures both emotional memories and emotional skills. While emotion memories provide information about previous emotional experiences, the emotion-related skills allow for the activation of emotions appropriate to a given situation and also allow for accurate interpretation of social signals. Likewise, the ability to interpret and activate emotions will influence the decision-making process and the resulting behaviour. In this capacity, people who differ in their emotional skills will likely differ in the behaviours that result from these processes. Izard, (2011) similarly talked about emotion knowledge, or the ability to anticipate the emotional reaction of the self in a given situation based on social signs and to accurately interpret emotion signals.

However, it is argued that emotion knowledge facilitates appropriate social behaviour, whether this entails prosocial behaviour or the avoidance of rule transgression, as social cues are more likely to be interpreted in ways that activate the appropriate emotions. This connection between emotional awareness and behaviour resulting from the social decision-making process has been established. Izard, (2011) demonstrated that emotional awareness in preschool significantly predicts behavioural

outcomes such as assertion and cooperation in third grade. Furthermore, those children who were more skilled at recognizing and labelling emotional expressions at age 5 were more likely to display cooperative behaviours at age 9 and less likely to display negative behaviours such as hyperactivity.

Girls tend to possess more emotional knowledge than boys and, similarly, to behave more prosocially than boys (Schultz, Izard, and Ackerman, 2000). In the moral sphere specifically, it has been shown that consciousness of moral emotions refers to measures of moral behaviour. Miller, Eisenberg, Fabes, and Shell (2006) found that children's vicarious emotional responses, such as sympathy, were positively associated with the child's level of moral reasoning and a measure of peer-directed helping. In the study, children's prosocial behaviour was positively associated with self-reported negative emotions in response to distressed peers and negatively associated with self-reported positive emotions for distressed children.

2.1.9 Sexual Decision-Making Models in Teens

These are postulated models for sexual decision-making that are effective for adolescents.

1. **Decisions based on Moral Instinct**

Sexual decision-making involves the resolution of sensitive issues relating to the morality of premarital sexual relationships. Kohlberg's (1969) theory of moral development, Carroll and Rest (1998) offered a theoretical model of moral decision-making which holds the inherent complexity of sexual decision-making, outlined the major psychological components involved in behaving morally, and suggested that moral problem solving comprises an ordered advancement and combination of the following constituent procedures:

Recognition and Sensitivity: This involves translating and explaining a given social situation to be aware that a moral issue exists. It involves being sensitive enough to acknowledge that a person's well-being is at stake.

Moral Verdict: This has to do with the skills of determining what ideally ought to be done in a given situation, what one's moral ideals call for or which moral norms apply in the given situation.

Values and Influences: Devising a plan of action with one's moral ideal in mind but also taking into account non-moral values and goals which the situation may activate, as well as

the influence of situational pressures.

Performance and Implementation of Moral Action: McKinnley (2012) confirmed that behaviour follows its purpose despite distractions, obstacles and incidental adjustments; organization and maintenance of behaviour to achieve its objectives. In other words, decisions are made differently by different people, and for different reasons.

Although the end products of various decisions may appear to be identical, however, this similarity may be more apparent than real. For example, individuals can decide to engage in sexual intercourse for various reasons: for the reason that they are in love, or planning to marry; for the reason that they feel pressured by or obligated to their partner; they believe "everyone else" is doing it; the opportunity for intercourse presents itself; they are drunk or stoned or horny; it sounds like fun; or for any other reasons.

Moreso, adolescents who abstain from sexual intercourse may do so for a diversity of reasons: sometimes they have not yet formed a clear cut judgment about the moral acceptability of premarital intercourse; in other times, such individuals could believe that sexual intercourse is acceptable only within the context of marriage; they may want more security or love in their current relationship; they may fear pregnancy or disease; in fact, they may perhaps fear that their parents might find out, or for any other reasons. The crucial decision to participate or not to participate in sexual intercourse reflects widely opposing reasons which are not cheerfully apparent if one looks only at the incidence, or absence, of the sexual act itself. Carroll and Rest (2013) argued that addressing moral problems involves "interrelated processes" among which "there can sometimes be significant tensions." The study will look at the influences of these interrelated processes.

2. Decision-Making based on Moral Sensitivity

Carroll and Rest (2013) argued that moral sensitivity is a question of acknowledging that the welfare of an individual is at stake. It is the awareness that individual reputation, self-esteem or the future (or whatever) can be at risk according to the sexual decisions of such a person. Some sexual behaviours are individualized; for example, masturbating, or fantasizing or deciding whether to engage in them requires personal decision and cooperation in itself. For this reason, sexual intercourse is a social event that requires a minimum of two participants, such as Hendrick and Hendrick, (2013). However, whether or not to participate, ideally, but not necessarily, in social activities. Decisions regarding sex can be made in isolation or collaboration with another person.

Unilateral sexual relations decisions are probably the exception, not the rule of decision-making, but they do occur. Decisions about sexual intercourse can be made without

an existing interpersonal relationship. Kirkendall (1998) reported that 8% of his subjects, that is the participants had made up their minds not to engage in intercourse quite independent of any particular heterosexual association", and the decisions thus made sustained behaviour in such a way that "no later decision-requiring situation arose". Notwithstanding of the extent to which both "anticipants" participate in the decision, the decision itself represents a complex exercise in social cooperation, for the reason that sexual intercourse is, by definition, a social phenomenon. Social co-operation is managed through the exercise of the principles of equity between and within the group.

3. Decisions are based on Moral Judgment

One can reasonably ask, according to what norms do humans or individuals judge the morality of sexual behaviour? What influences the judgement on the moral question of sexual intercourse before marriage? Asking these questions are germane to the issues of moral judgment because individual standards for morally appropriate sexual behaviour are the salient source of personal influence at the moral judgment phase of decision-making about premarital sexual intercourse. These standards were first formulated and subsequently amplified or prolonged by Jurich and Jurich (2014). The traditional standard approves or does not allow pre-marriage sex for both sexes. This is the rigid norm officially advocated by most social institutions. One noteworthy example is the organized religious institution. The orientation is based on strict respect for the ethical principle of self-denial. Jurich and Jurich (2014) reported that those who held to the traditional standard were significantly more religious than any other group, and significantly more females than males endorsed the traditional standard.

Peplau, Rubin, and Hill (2007), reported that 18% of couples interviewed in the study abstained from sex in their relationships, and were therefore classified as now the traditional norm. The double standard allows sexual intercourse before marriage in the male, but not in the female. Jurich and Jurich (2014) confirmed that the double standard, two measures, differs from the traditional critically important standard. It is not total, but situational, until then, it allows sex for the male. The authors concluded that this situation produces an established model of behavioural options for the man based on his sexual norms along with those of his female partner. In each situation, the relationship needs an exclusive behavioural approach to the various participants in that relationship. Peplau, (2008) argued that their subjects, regardless of gender, overwhelmingly vetoed the double standard, but when outlooks about sex-role appropriate behaviour did differ, the attitudes were usually more accommodating for males than for females and the permissiveness with affection standard legitimizes premarital

sex happening in the context of a love relationship.

2.1.10 Factors behind Poor Sexual Decision-Making in Adolescents

Several factors can influence a young person's sexual behaviour. International Female's Health Coalition and Walker, (2014) identified some of these factors to include biological, which also concerned with such issues as gender, age, testosterone level, and pubertal timing that are mostly related to sexual activities. Social factors such as social norms or belief-system, gender roles; peer pressures, family situations, economic status and substance misuse; Personal factors such as knowledge, beliefs and perceptions; and other factors such as parental influence and input, skills, and awareness. Chambers, Wakley and Chambers, (2011) in their view, it is believed that the broader social context in which adolescents live plays a significant role in their sexual beliefs and behaviour and these could be seen from the ways they dress, behave, talk, and the likes.

1. **Psychological Factors**

Psychological factors that individuals experience include low self-esteem, psychological distress, sexual violence and depression. All of these characteristics expose various adolescents to unsafe sexual behaviour. Klein (2011) found that adolescence seems to be a stage where loneliness emerges, and evidence indicates that there is more loneliness in adolescence than in any other stage of development. This loneliness, for Klein, (2011) is linked to other personal attributes such as shyness and self-esteem that can contribute to teenage pregnancy.

In early life, adolescents are attempting to detach from their mothers and as a result, they search for mother substitutes and female adolescents sometimes, therefore, engage in sexual relationships to overcome loneliness and also to substitute their mothers (Klein, 2014). Developmental adolescents are associated with identity confusion and men or female are required to make decisions about whether they are children or adults. This period is frustrating for them and they tend to make decisions that are not appropriate because they are overwhelmed with emotions. The following factors account for poor sexual decision-making among teenagers:

Early Pubertal Development: In a study conducted in the United States it was indicated that early pubertal development, such as early age of menarche for girls and early body development and hormonal levels for boys, influence sexual initiation in adolescents (Billy and Udry, 1983). However, this depends on gender and race.

Hormonal factors significantly affect sexual behaviour in white boys, while it is not particularly evident in girls. In Blacks, the social environment has a greater effect on sexual behaviour than on physical maturity.

Age at Sexual initiation: According to Hayes (1987), more teenagers begin to have sexual intercourse at an early age. Brook, Morojele, Zhang, and Brook (2006) assert that the proportion of sexually active adolescents increases with age, and it is difficult to find young persons who have not initiated sex by the age of 20. For example, the Nigeria Demographic and Health Survey (2003) indicated that over three-quarters of females reported have initiated sex before age 20, and, by age 25, nine in ten females were sexually experienced (National Population Commission (NPC) and Macro, 2003).In addition, teen dating is likely to be positively associated with sexual experience, multiple sexual partners, and the level of sexual activity in late adolescence (Olson, 1986; Thornton, 1990).

Socio-economic Conditions: The effect of socio-economic conditions on sexual initiation has been documented. Adolescents who live in poverty, particularly females, are more vulnerable to risky sexual behaviours than their peers from wealthy homes due to their relative lack of knowledge about risky sexual behaviours, lack of access to condoms, and lack of empowerment to negotiate safe sex (Brook, 2006).

Sex: Many African studies on adolescents have demonstrated that males have more frequent sex than females Ogunniyi and Kuti (2005). Whitbeck, Hoyt, Miller and Kao (1992) stated that male teens are less likely to consider the condition necessary before engaging in sexual intimacy than females. Moreover, it has been demonstrated that men tend to believe that strategies of sexual coercion are justifiable (Feltey, Ainslie and Geib, 1991).

Nature of the Relationship with a Partner: Relationships before sex can help delay sex and thus reduce the total number of sexual relationships with partners. When sexual relations begin, attitudes toward condom use improve in long-term relationships (Lugoe and Biswalo, 1997). Manuel (2005) and Temin (1999) found that adolescents reported low condom use as unnecessary in a stable relationship based on love and trust.

Educational Achievement: The kind of association that exists between academic achievement and sexual experience of adolescents shows that girls who score low on

intelligence tests and place little value on educational attainment or have poor educational achievements and such are prone to initiate sex at an earlier age than their educationally ambitious peers (Hayes, 1987).

Risk Behaviours: For many adolescents in Nigeria, risk behaviours, especially substance use, are associated with the onset of sexual intercourse. For example, in the UK, as of 2001, the age of sexual debut was 16 years of age while, that of smoking, alcohol and drug use often occurred between 11 and 15 years of age and both alcohol and drug use are linked with multiple partners and unprotected sex, (Boreham and Shaw, 2002; Tapert, Aarons, Sedlar, and Brown, 2008).

Emotional Well-being: Adolescents who are depressed or having anxiety (especially girls) are more likely to engage in sexual intercourse early in life due to low perceived self-efficacy (Brown, Danovsky, Lourie, DiClemente, and Ponton, 1997). Furthermore, self-esteem is linked to sexual behaviour through attitudes and self-efficiency. The term is positively related to sexual experience for adolescents who believe that sexual intercourse is always right, but negatively related for those who believe that the latter is wrong (Miller, Christensen, and Olson, 1987).

Religion: Religion has played a significant role in the formation of teen sexual behaviour, which has been documented in the literature. In a study of 11-25 years of age, most of the sexually inexperienced participants scored significantly higher in reporting religion to be very important to their lives compared to their sexually active peers, and also reported more closeness to friends they considered to be religious or spiritual (Holder, 2000).

Media and Internet Exposure: Exposure to sexual content in the media has also been involved in risky sexual practices by teens over the decades. In a study of 12-17 years of age adolescents in the US, it was found that having a television in the bedroom and spending time at home unsupervised was, at baseline, associated with heavier viewing of sexual content (Kim, 2006). Moreover, this was more prevalent among Black teens, teens and younger teens, and it could lead these groups of teens to engage in early sexual activity.

Sexual Abuse: In a study of high school students', abused male respondents were four to five times more likely to report multiple partners, substance use during the last sexual encounter and involvement in pregnancy than their non-abused peers (Raj,

Silverman, and Amaro, 2000). Similarly, females who experienced violence were twice as likely as their non-violent peers to report early sexual intercourse, multiple partners, and previous pregnancy. It was concluded that secondary school adolescents found an association between multiple partners and being a victim of rape for white boys, or being a perpetrator or victim of dating violence for blacks (Valois, 1999).

Sexual Knowledge, Beliefs, Attitudes and Abilities: Teenagers had different values when it came to sexuality, personal values and attitudes. These factors influence sexual expressions for both genders which are influenced by local social norms, and sexual behaviours that are contrary to personal values that bring about low self-esteem and emotional distress (Miller, 1987). Studies to increase knowledge of sexuality are successful, but most of the time do not result in the behavioural change (Vavrus, 2006; Odu, 2007; Sallah, 1999).

2. Traditional or Cultural Elements

Many social, cultural and relational factors may affect the sexual behaviour of adolescents. Researchers on sexual behaviour indicated gender differences where men were more sexually experienced than female sexual partners. As well, gender differences occur because of men's acceptability of having multiple sexual partners in some communities than teenage girls. This implies that socio-cultural contexts point to differences in gender norms between males and females. In a study carried out in a tertiary institution in South Africa with adolescents, the results showed that the traditional construction of gender still works and imposes constraints on females (Mantell, 2014). Females are still poorly off compared to men and men are characterized as beating females if they feel like raping children, making gender-related decisions, as well as using condoms. Male retain power over females and are looked upon as heads of families. Moreover, an interview on violence prevention compiled by the World Health Organization (WHO, 2009) also confirmed the cultural and social norms that encourage gender inequalities. For instance, cultural norms exist which tolerate or accept violence.

3. Environmental/Societal Drivers

The environment in which a child grows up contributes to the influence on his development as well as his behaviour. One of the strongest psychosocial influences on adolescent sexual risk behaviour is the perception of the behaviour of their peers in their social environment (Pettifor, 2012). Proof of peer norms surrounding sexual behaviour and condom use is the main influence of at-risk sexual

behaviour. If teens and young adults find that their friends have unprotected sex or engage in risky sex, the individual may be more likely to engage in the behaviours of their friends. In the East, Khoo and Reyes (2006), highlighted that in a national survey of US adolescents, the risk of girls getting pregnant increased for each high-risk friend.

As well, overall perceptions of low levels of social support among peers were also associated with the likelihood of participating in risky sexual behaviours. Gibbons, Helweg-Larsen, and Gerrard (2005) found that peer pressure plays a crucial role among adolescent girls still attending school. For them, becoming pregnant to integrate into the community is one of their social standards or values. For some of the teenage girls in school, it was fashionable to have a child while they were in school. All of society plays a vital role in shaping a person's behaviour. Societal influences, such as inadequate community resources, poor community supervision and extreme poverty, may influence at-risk sexual behaviours (Smith, 2013). A study conducted in KwaZulu-Natal, one of the provinces in South Africa where HIV prevalence is high (Shisana, 2009), focused on teen sexual behaviour.

The study also showed that poverty, as an environmental factor, was a motivation for young females to engage in sexual activities to obtain financial assistance. For this reason, some parents are aware of such relationships, but they close their eyes to them because they are afraid of losing the provider (HSRC, 2000). That leaves adolescents, girls, at risk for HIV infection, because those older sexual partners are less likely to use condoms. Evidence from the national HIV-positive population survey carried out by HSRC showed higher HIV prevalence in informal types of localities than informal areas (Shisana, 2015).

3(a) Parenting Care and Control

The nature of parents' relationships with their young children affects their children's sexual behaviour. Parental monitoring makes adolescents delay initiating sexual intercourse (McCarty, 2004; Sieverding, and Ellen, 2005), have fewer partners and use condoms if they are sexually active (DiClemente, 2001; Huebner and Howell, 2003). The action of controlling confounding factors, parental attitudes towards pregnancy were found to be significant for females but not for men. This requires consistency in parenting attitudes regarding their sexuality. In addition, it has been shown that parental support promotes healthy sexual behaviour in adolescents because of the close connection between them.

3(b) Parent-Child Communication

Parental-child communication is not a norm in many countries. This is specifically true in West Africa (Babalola, 2005). The more traditionally inclined the parent is about discussing sexual topics with adolescents, the more difficult it is to break through the barriers to low sexuality communication that could help adolescents behave responsibly in sexual matters. For example, when there was high responsiveness from parents, sexual discussions between parents and adolescents were significantly associated with increased condom use during the adolescents most recent experience of intercourse (Whitaker; Miller, and Levin, 1999). Another study among adolescents in Nigeria documented that those with whom parents had discussed family life issues were less likely to be sexually active than those who had never had such discussions (Odimegwu, Solanke, and Adedokun, 2002).

3(c) Additional Family Features

Other factors include the composition and proximity of the family and the age of the mother in marriage. Adolescents living with both parents are less likely to begin sexual intercourse earlier than those who do not, or those living with a parent (Odimegwu, 2002). Similarly, the larger the family is, the more likely it is that the older sibling will be sexually experienced early and will serve as a negative role model to younger siblings (Hogan and Kitagawa, 1985). Additionally, Oladepo and Brieger (2000) and Slap (2003) identified a link between sexual activity and a polygamous family unit. Although there is strong evidence to support the relationship between family composition and sexual activity, there is a lack of understanding of the mechanism (Hayes, 1987).

3(d) Peer Pressure

The social environment plays a significant role in teenagers' lives. An important part of this is their peers or friends, with whom they associate, watch and turn from time to time for advice. Therefore, the influence of peers on the sexual lifestyle of teenagers is important. Peer pressure can take the form of challenges and/or daring, coercion, and a need for a social licence (Hayes, 1987). For instance, a study conducted in South Africa documented peer disapproval of condom use and peer pressure to be sexually active (MacPhail and Campbell, 2001). Another study in the US revealed that adolescents whose friendship network mostly comprised low-risk friends were half as likely to initiate sexual intercourse as those who belonged to a friendship network made up of high-risk friends (Bearman and Brückner, 1999).

2.1.11 Complexity of Sexual Decision-Making by Adolescents at School

The decision of adolescents could be influenced by many elements, among these components are the elements of decision-making; sexual decision-making; the expression of decisions through behaviour, language and strategies to deconstruct sexual risk-taking behaviour. The sub-listed elements are the elements of decision-making, based on the number of elements that contributed to the decision-making process. Each decision involves the taking of a risk or a measure that involves an uncertain result. Three broad categories of development considerations affect decision-making. Fischhoff (2012) summarises it as cognitive development, emotional development and social development.

1. **Cognitive Development**

Cognitive development is fundamental to the development of adolescents and the decision-making process. The period of formal operations allows the adolescents to begin to imagine the long-term effects of behaviour and actions, identify various problem-solving techniques involved in making choices, and develop the ability to engage in logical and rational reasoning. In the absence of formal reflection in adolescents, they are not in a position to assess the risks and potential consequences of their choices. Arising from this, Grant and Demetriou, (2008) argued that their novel cognitive abilities may not be refined or improved enough to allow for realistic cost-benefit analysis of a given situation, thereby increasing the chance that they will choose risky options.

2. **Emotional Development**

Emotions and feelings have the potential impact of changing decisions. In terms of decision-making, Clarkand Fiske, (2009) posits that emotions are with magnitude, ranging from cold to hot. A code motion refers to situations where individuals rely on their fundamental values and cognitive abilities to make a decision. Individuals explore the facts of the situation and make a well-adjusted and dispassionate choice, as in deciding when for example to study for a psychology test while a hot emotion or effect implies that there is a strong emotional undercurrent dominating a situation.

This profound state of emotional stimulation can lead individuals to an action they would not usually be able to take under less emotional conditions. The emotions that belong to the category of harmful effects are passion and fear. Situations involving sexual decisions, using contraception or consenting to sex are often filled with passionate emotions, preventing the teenager from doing a balanced assessment in the heat of the moment. It is on this premise Fischhoff, (2012) postulate that under these negative circumstances, however, the sense of

reasoning is beclouded with sentiments and thought processes are suspended and short-circuited so that choices reflect the most salient feelings, rather than a balanced appraisal.

3. Social Development

As teens grow, social beliefs and events also affect their decision-making practices. The socialization process can increase or decrease the choices associated with the risk of adolescents. The person may or may not learn the mistakes to avoid by looking at what is happening to his or her peer groups. Socialization can also not affect teens, which means that certain social values and beliefs are completely ignored. Socialisation includes not only the learning of the norms, attitudes and values of the group of an individual but also the observation of others and the learning of their experiences.

Social reactions and the consequences of decisions for BeythMarom and Fischhoff (2012) are often considered to be a far greater factor in the juvenile period than in adulthood. The vulnerability to peer-group influence, according to Steinberg and Cauffman, (2006) increase during the transition or change years from childhood to adolescents and then decline as the adolescents move into late adolescents and adulthood. Following this line of argument, Ajzenand Fishbein, (1980) posit, it seems that adolescents not only take action based on what their peers do but what individual think their peer's door what individual believe their peers think they should do. In other words, not every member of the peer group necessarily has sex, although everyone may think it does.

2.1.12 Roles of School Counselor

The school counselor role is divided into numerous categories but to help inform teensabout risky decisions, the roles of advocate, consultant, collaborator and developer areencouraged. School counselors should consider developing guidance curriculum based on thestandards and comprehensive school counseling model. One main topic that could be included isawareness of our own bodies and making decisions that help teens stay healthy and active whileavoiding risky behaviours. The parent and school counselor's roles in this topic area are vital tothe adolescence's future.

Decision making programmes may be provided by the school and the curriculum is based onthe value or mission of the school: abstinence only for example. However, the school counselormust adapt and modify the curriculum based on the students and their needs while adhering tothe district policies. Helping students to understand themselves sexually and to becomecomfortable with the idea of romantic relationships is crucial to the development of

adolescentromantic relationships in the future (Teen Health, 2008**)**

Another emphasis is placed on theimportance of "connectedness" and honesty and trust when talking about sex education **(**Conlde, (2007). When adolescents feel that they can trust an adult or advocate, or healtheducation teacher, they know that their feelings are being considered and understood **(**Conlde, (2007). Depending on the school's policy for sex education, school counselors may have tofollow that particular curriculum. Health educators, science teachers and family studieseducators can all be partners in the process. Just as lessons are modified, for different learningstyles, school counselors need to modify sex education information to the level of maturity,development and understanding for adolescents.

"Sex education would begin with a theory ofsexuality expansive enough to include experiences such as curiosity, infatuation, attraction,making friends, narcissism, losing oneself to love, becoming mad with desire, feeling unwanted,rejection, hating your parents, and being disappointed" (Gilbert, 2007, p. 57).School counselors who wish to be proactive could begin prevention strategies rather thanintervention. "Interventions that provide training in assertiveness and sexual communicationskills may help encourage safer sex" (Dittmann,2003).

Interventions can begin toopen up communicate about sex where students can freely discuss topics, risks, and riskybehaviours or consequences of those decisions. It is important for the parent at home or the adulteducator at school to know about the experiences that adolescence may go through. Adults areencouraged to bring the information down the adolescent level of understanding, but yetmaintain mature, factual and appropriate information (Sex Education, 2007).As many adolescents are often 'testing the waters' and taking chances and risks, whendoes the risk become too dangerous?

In an article on ethics and professional behaviour pertainingto school psychologists, it states that the psychologist "must make a judgment as to how thefrequency, intensity, or duration of risk-taking behaviour contributes to the potential for harm tothe adolescent or others" Rae, et al. (2009). All counselors have been trained to consultwith other colleagues, especially in cases of breaching confidentiality. The students that schoolcounselors work with are minors for the most part, but they still have to maintain the student'sright to privacy, and also the parent's rights. In its ethical code, American School CounselingAssociation (2004) guides school counselors to keep information confidential while at the same time respecting the rights of parents/guardians to care for their children(Professional School Counseling, 2008).

In summary, it is best practice for parents to be the initial and primary educators

forinforming their children regarding making good decisions, practicing a healthy lifestyle andavoiding risky behaviours. Due to peer pressure, attention in the media, and an intensiveadvertising campaign, parents often find they may need reinforcement from others to helpmaintain a safe environment for the adolescents. Training to determine how to detect onlinepredators, awareness of the impact of drugs and alcohol consumption on risky behaviour and toomuch unsupervised time alone may all be concerns of parents who want to protect their children.

Working in partnership with the community agencies, faith-based groups, and schools may allcontribute to raising awareness of ways to keep kids safe while allowing them to have some freedom to make decisions. School counselors and other educational leaders may serve as goodpartners in the process as they often spend so much time during a school day with the teens.Using health education classes and guidance curriculum to teach decision making and healthylife choices is a good starting place.

2.1.2 Metacognitive Therapy

The very concept of metacognition has been central to metacognitive education for many years. In the field of educational psychology, metacognition has been simply defined as thinking about thinking; Devine (1993) stated that metacognition is a form of cognition that includes active control over the cognitive procedure. Flavell (1976) was the first researcher to introduce and employ the term metacognitive in the field of educational and cognitive psychology. He used the term to refer to the knowledge an individual possesses about thinking and learning. Furthermore, he explains, “metacognition refers to the knowledge of a person's cognitive processes and products or anything related to them, e.g. Learning Attributes for Information or Data”. He also added: “Metacognition refers, among other things, to active monitoring and consequent regulation and orchestration of these processes with the

cognitive objects or data on which they bear, usually in the service of some concrete goal or objective". The two dimensions of metacognitive awareness are metacognitive experiences/regulations and metacognitive knowledge.

Flavell (1979) defines metacognitive experience as "any conscious cognitive or emotional experience which accompanies it and relates to any intellectual enterprise." Metacognition, also, has been appearing to be one of the essential prognosticators of learning (Wang, Haertel, and Walberg, 1990), and the benefits of metacognitive instruction have been irrefutable in areas such as listening, reading, and mathematics (Goh, 2008). About the changing historical roots of metacognition in educational psychology, study and a view of metacognition have remained enigmatic (Georghiades, 2004). The term 'metacognition' was introduced by John Flavell in the early 1970s based on the term 'meta memory' previously conceived by the same scientist (Flavell 1971). Flavell (1979) described metacognition as the knowledge learners have of their cognition, defining it as "knowledge and cognition of cognitive phenomena".

Metacognition is often called in the literature "thinking about one's own thought" or "cognitions about cognitions". It is usually related to learners' knowledge, awareness and control of the processes by which they learn (Brown 1987, Garner and Alexander 1989), and the metacognitive learner is thought to be characterized by the ability to recognize, evaluate and, where needed, reconstruct existing ideas (Gunstone 1991). Flavell's definition was followed by numerous others, often illustrating different emphases on (or different understanding of) mechanisms and processes associated with metacognition. Paris and his colleagues, for example (Paris and Jacobs 1984, Cross and Paris 1988, Paris and Winograd 1990), identified two essential features in their definition of metacognition: 'self-appraisal and 'self-management of cognition. Self-appraisal of cognitions comprises reflections about learners' understanding, abilities and affective state during the learning process, while self-management refers to 'metacognition in action'; that is, mental processes that help to 'orchestrate aspects of problem-solving (Paris and Winograd 1990).

The terms 'meta-learning, 'deutero-learning' (proto-learning process) and 'mindfulness' are also used in the literature to describe awareness of problems, situations and ways of thinking and talking about them. The number of definitions, terms and analyses of metacognitive significance has led to some confusion in the literature. Weinert (1987), for example, talked about a working definition of "vague"

and “unclear” metacognition. Adey and Shayer (1994), on the other hand, referred to confusion among science educators about not only the meaning of the term 'metacognition' but also its actual recognition. Since Flavell introduced the term, metals (e.g., 'meta listening', 'metacommunication', 'meta persuasion') have proliferated in the literature (Kluwe 1987). Watts (1998), for instance, argued that very close to the notion of metacognition stands 'meta-affection' that focuses on the affective dimension of learning, defining this as 'the conscious awareness, monitoring, regulation and evaluation of intrapersonal and interpersonal affective activity'. Interestingly, all processes referred to in the definition of 'meta-affection' are either initiated or controlled by cognitive mechanisms, suggesting the strong dependence of anything 'meta' on cognitive functions of human reasoning.

Teenagers have discretion and make decisions based on their free will that apply the inherent knowledge and experience based on their discretion as a will. The ability of teenagers to put their knowledge and experience into practice is limited (Walsh, 2015). More specifically, metacognition is a higher-level fact search applied by students to process information about their surroundings (Kozhevnikov, 2007). The contemporary research in metacognition has two parallel roots which include the cognitive psychology of the 1960s and post-Piagetian developmental psychology of the 1970s (e.g., Flavel, 1979; Perfect and Schwartz, 2014). The essence of this stream of research is that individuals can develop a cognitive mechanism in the form of self-controlling and self-monitoring abilities over their cognitive functioning (i.e., information handling) were confirmed by (Kholodnaya, 2012).

The significance of this higher-level mechanism is that it provides people with cognitive flexibility. Flexibility in this context refers to the conscious allocation of cognitive resources (i.e., knowledge and experience). Importantly, the absence of metacognition leads to automatic processing of information, whereas its presence enables individuals to consciously regulate and control the use of their knowledge and experience or balance reliance on intuitive or analytic thinking (Kholodnaya, 2012). It is therefore thought that metacognition affects the many daily behaviours of students (Schwartz and Perfect, 2014). Taking into account it is conscious and flexible functioning, metacognition plays a key role in the adaptability and cognitive flexibility of individuals. The relationship between people and their surroundings (Kozhevnikov, 2007). People have two major cognitive resources, “knowledge” and “experience”, which are used in their information processing.

2.1.2.1 Historical Background of Metacognition

By associating metacognition with the development of self-awareness and the ability to learn, metacognition has obtained a high status as a characteristic of learning. The ground for developing such an interest proved particularly fertile, especially because of a constantly changing technological world when not only it is impossible for individuals to acquire all existing knowledge, but it is also difficult to envisage what knowledge will be essential for the future. The subsequent call to include metacognition in curriculum development thus seems fully justified. Flavell (1987) suggested that good schools should be "centres of metacognitive development" because of the possibilities they provide for self-conscious learning. Similarly, Paris and Winograd (1990) have argued that students'' learning can be enhanced by becoming aware of their own thinking as they read, write, and solve personal problems in school within their psychological image and that teachers should promote this awareness directly by informing their students' about effective problem-solving strategies in sexual decision-making and discussing cognitive and motivational characteristics of thinking that would assist them.

Similar to this view, Gunstone and Northfield (1994) went further and advocated a central position of metacognitive education in teacher training. Borkowski and Muthukrishna (1992) similarly have argued that metacognitive theory has considerable potential for aiding teachers in their efforts to construct classroom environments that focus on flexible and creative strategic learning towards sexual decision-making. Those who advocate the importance of metacognitive activity in educational contexts have made metacognition a priority in educational research agendas. Reasons for the growing interest in metacognition over the past three decades relate not only to the anticipated improvement in learning outcomes, through interventions that aim at developing students'' metacognition, but also to the broader rise in interest in cognitive theories of learning.

However, as Brown (1987) points out in a review of the origins of metacognition, 'processes metacognitive' has been recognized and advocated by educational psychologists (for example, Dewey 1910, Thorndike, 1914) well before the emergence of the term 'metacognition', especially in the area of reading and writing. John Locke, for instance, used the term 'reflection' to refer to the 'perception of the state of our own minds' or 'the notice which the mind takes of its operations'

(Locke 1924). The importance of the concept of reflected abstraction of human intelligence was later discussed by Piaget (1976), who pointed out the need for making cognitions stable and available to consciousness, at which point they can be worked on and further extended (Campione 1987).

Notably, the work of Piaget was introduced to many in the US by John Flavell (1963), maintaining a profound impact on Flavell's writings and the development of his notion of metacognition. Self-reflection, a technique used by early psychologists to find answers to psychological questions, was also the first sign of interest in metacognitive processes. The definition of "introspection" as "thinking about one's own conscious experience" makes this link too evident (Butler and McManus, 1998). On the search for the origins of metacognition, others extend well beyond the twentieth to twenty-one century. Spearman emphasizes that this fact ought to be a knowledge of cognition itself has already been announced by Plato. Aristotle also placed a distinct power by which, in addition to seeing and hearing, the psyche becomes conscious of doing so. Later writers, such as Strato, Galen Alexander of Aphrodisias, and in particular Plotinus, amplified the doctrine, designating the processes of knowledge of its own cognition by several specific names. Much later, a particular focus was placed on this 'thinking' power, as it has now been called by Locke. (1923: 52–53).

It is “Hard” as it might be to pinpoint the exact origins of metacognition, it is by far easier to reach agreement over the fact that recent attention in metacognition has resulted in the reawakening of interest in the role of consciousness, awareness or understanding in thinking and problem-solving (Campione 1987). After examining the many historical roots from which metacognition developed, Brown (1987) cautioned that '. . . Metacognition is not just a monster with dark origins, but also a monster with numerous heads. The recognized complexity of the notion of metacognition is also successfully reflected in Flavell's (1987) observation that although metacognition is generally defined as knowledge and cognition of cognitive objects (i.e. concerning anything of a cognitive nature), the concept could reasonably be expanded to include anything of a psychological nature, rather than anything of a cognitive nature.

In his attempt to identify where metacognition fits in 'psychological space' Flavell (1987) suggested that concepts that may be related to metacognition include executive processes, formal operations, consciousness, social cognition, self-efficacy,

self-regulation, reflective self-awareness, and the concept of psychological self or psychological subject. The diversity of perceived meaning and the multi-dimensional nature of metacognition is therefore without question and the conclusion that was reached by numerous studies in the past and is discussed later in this study.

2.1.2.2 Metacognitive Dimension

Although the term is a piece of the specialized construction of brain science in the last few decades. So, people can reflect on their experience with intellectual capacity by looking at what meta-learning is. One reason for this misconception is that words presently used to portray a similar essential marvel (e.g., restraint, official control) or the wonder of this event (e.g., metabolic memory) rather than travelling towards it in writing. Despite some inconsistencies in all definitions, parts of the operational procedure, administration and administrative procedures. Metacognition is divided into 3 fields:

A - Metacognitive Knowledge and Consciousness

This branch of metacognitive views what people know about themselves and others as cognitive processes and knowledge that can be used to treat mental forms. In addition, Flavell (1977) the metacognitive learning division involves three composers:

Learning about Personal factors, Task factors, Strategy factors

a) Learning the factors of the person refers to general learning about how people simultaneously take the person's information for their learning procedure.
b) The factors in the "Obligations" task refer to information about the business idea and the type of preparation request that would be imposed on that person.
c) Policy factors for intellectual and metacognitive systems and information, modalities, conditions and where such techniques should be used. There are three types of learning content in metacognitive comprehension.

Declarative Knowledge: It is indicated by factual information that an individual is familiar with. It may be reported, spoken or written. One example is the knowledge of the formula to calculate momentum in a physics class (Momentum = velocity multiplied by mass)

Procedural Knowledge: Knowledge of how to do something and how to carry out the steps of a process. For example, knowing the weight of an object and its velocity rate and how to do the calculation. The process of monitoring the selection

and implementation as well as the effects of the solution processes and the regulation of the solution business stream that represents. Kluwe (1982) uses the term 'executive processes' to describe such procedural knowledge.

Conditional Knowledge: It is a kind of knowledge that is about when to use a framework, bent or system and when not to use it; why a methodology works and under what conditions; and why one strategy is better than another. For example, complementary studies must understand that an examination word question requires the calculation of vitality as part of its answer. In the theory of Anderson's Law, conditional learning is regarded as a characteristic piece of procedural data, which is treated by condition-action rules.

B - Metacognitive Regulation

Metacognitive regulation maintains that metacognitive skills include the use of systems or rules. Metacognitive methodologies come in forms that include intellectual control activities and ensure that a subjective-objective (illustration, understanding of content) has been attained (Brown, 1987). These procedures help manage to learn and include preparing and observing thought exercises, as well as checking the results of these exercises. For example, metacognitive regulation is the regulation of cognition and learning experiences through a range of activities that help people control their learning. For example, after reading a paragraph in a text, a learner can ask themselves questions about the concepts covered in the paragraph. The intellectual point is to understand the content through self-examination as a characteristic perspective of metacognitive appreciation.

C - Metacognitive Experiences

Metacognitive experiences are simply preoccupied with experiences that are linked to existing and ongoing cognitive effort. Metacognitive experiments, in some ways, typically precede or follow cognitive activity. These experiences often occur when cognitions fail, such as the recognition that an individual, for example, did not understand what he or she just read and such bottleneck is believed to activate metacognitive processes as the learner attempts to rectify the situation. In support of the debate of metacognitive, (Borokowski, 1987, Brown, 1987 and Sternberg, 1986) have argued that metacognitive, or the ability to control an individual cognitive process (self-regulation) has been linked to intelligence. Sternberg, for example, refers to these executive processes: Metacomponents in his Triarchic Theory of Control, the other cognitive components get comments from these components.

Sternberg, (1986) reveals that metacomponents as being responsible for "figuring out how to do a particular set of tasks, and then making sure that the task or set of tasks are done correctly or properly". According to him, these management processes involve planning, evaluation, monitoring and problem-solving activities. Sternberg argues that the skills needed to effectively allocate cognitive resources, such as deciding how and when a given task is to be performed, are essential to intelligence.

2.1.2.3 Flavell Cognitive Model

Flavell (1979) proposed a cognitive monitoring model consisting of four interactive sub-sections: metacognitive knowledge, metacognitive experiments, goals and strategies. According to Flavell (1979), metacognitive knowledge was defined as "that segment of your stored knowledge that has to do with people as cognitive creatures and with their diverse cognitive tasks, goals, actions, and experiences". This type of knowledge is the part of knowledge that deals with individuals as cognitive beings and considers their various cognitive tasks, goals, behaviours and experiences. Later, Wenden (1998) applied Flavell's model of metacognitive knowledge to the area of second-language learning (L2 learning). This metacognitive knowledge model breaks down into three categories: knowledge of people, knowledge of tasks and knowledge of strategies.

1. Personal knowledge included students' general knowledge of humans as organisms of thought. Person knowledge comprised judgments about one's learning abilities and knowledge about internal and external factors that influence the success or failure in one's learning process (Vandergrift., 2006).
2. Task knowledge referred to learners' knowledge of the purpose, nature and requirements of learning tasks. It also involved an understanding of the differences in difficulty between two specific tasks. Task knowledge could also enable the learners to consider factors that might be involved in the difficulty of a task, together with the features of the oral message (Vandergrift., 2006).
3. Knowledge of the strategy refers to the learner's knowledge of using strategies to achieve cognitive goals. According to Nisbet, Shuck and Smith (1986), knowledge of the strategy could be useful for achieving learning goals and helping learners to have a choice in the use and preference of their

strategy.

Flavell (1979) proposed a four-part metacognition monitoring model. The follow-up of a broad range of cognitive enterprises is carried out through actions and interactions between four classes of phenomena, which are:

1. Metacognitive knowledge
2. Metacognition experience/ Strategies.
3. Goals (Tasks)
4. Actions (Strategies)

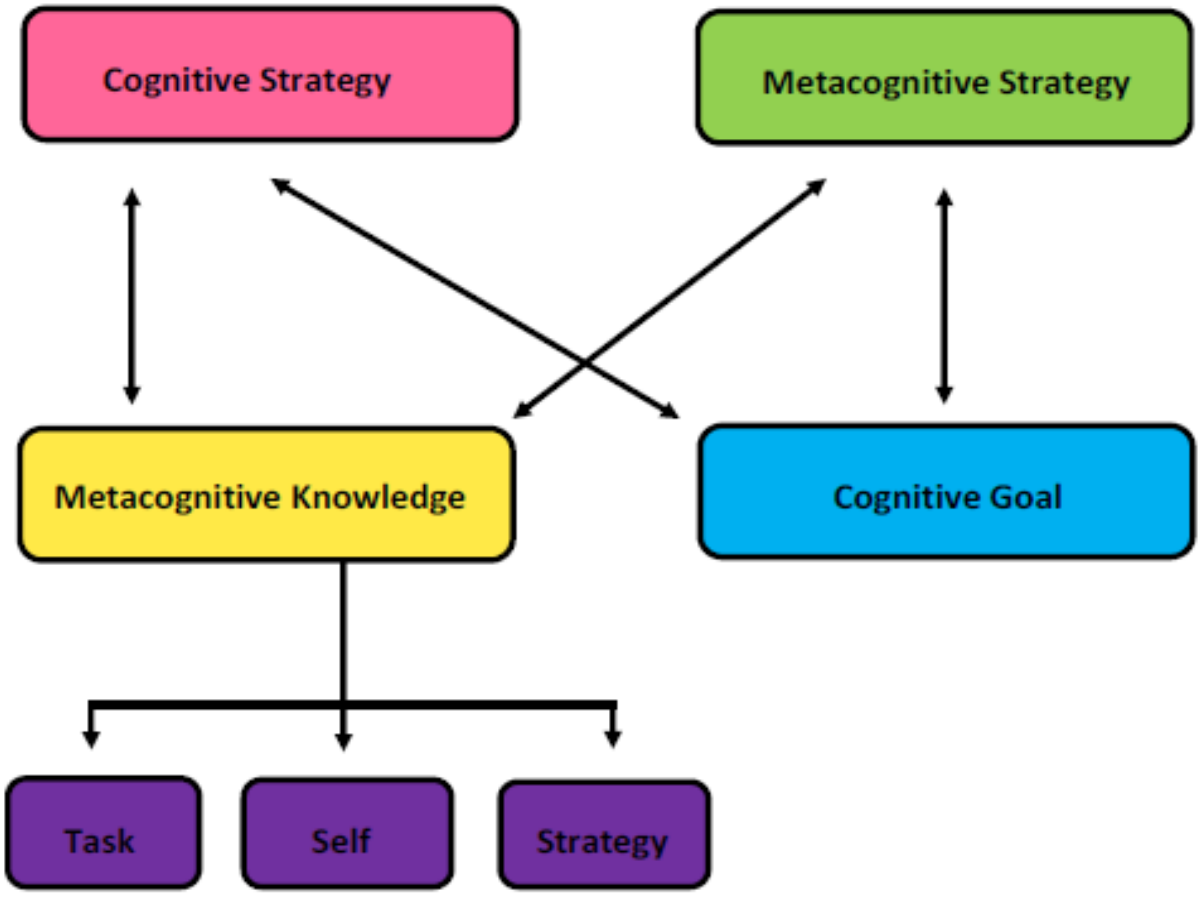


Figure 2.1 Flavell Cognitive Watch Model

Source: Adapted from the Flavell Cognitive Monitoring Model

Metacognitive Knowledge

Metacognitive knowledge refers to personal perspectives on individuals and other learning abilities. The process involved individuals stored "Learning about the World", which is identified with individuals as well-informed and different psychological businesses that include objectives, practices and encounters. It consists of an individual's knowledge or beliefs about three general factors: his or her own nature or nature of another as a cognitive processor, a task, its demands, and how those demands can be met under changing conditions;

and strategies for achieving the task (cognitive strategies that are involved to make progress toward goals and metacognitive strategies that are invoked to monitor the progress of cognitive strategies). Metacognitive knowledge can at times influence the course of cognitive enterprises through deliberate and conscious research of memory or unconscious and automatic cognitive processes. Metacognitive knowledge can lead to a wide variety of metacognitive experiences, which Flavell describes as a conscious cognitive-emotional experience that accompanies and relates to an intellectual undertaking.

a. The meta-cognitive experience is a thoughtful consideration of the intellectual experiences that accompany any success or failure in learning.
b. Metacognitive goals are the actual goals of cognitive activities, like reading and understanding a passage.
c. Metacognitive actions relate to the use of specific techniques that may help to understand.
d. Metamemory is a bipolar process. In the bipolar process, the study merely means that there are two processes. The first process monitors progress as an individual learns and the second makes changes and adopts various strategies if a person believes that he or she is not doing well, Narens, and Ridley, (1992).

Metacognitive functioning

The contribution of Martines' Metacognitive functioning identified four major categories which are: (i) Metamemory, (ii) Metacomprehension, (iii) Problem Solving and (iv) Critical Thinking Metamemory: One of the components of metacognitive, is about an individual's memory competences or know-hows and approaches that can help or give assistance to memory, as well as the processes involved in memory self-monitoring. That self-awareness of memory has important consequences for how people learn and use memories. When studying, for example, students' make judgments of whether they have fruitfully or successfully learned the assigned material and use these decisions, known as "Judgments of Learning" to assign study time. As a result, meta-memory refers to the learner's knowledge and knowledge of their own memory systems and strategies for the effective use of memory. Metamemory includes:

(a) Knowledge about different memory strategies.
b) Knowledge of the strategy that should be used for a particular memory task.
c) Knowledge of the most effective and efficient means of utilizing a given memory strategy.

Metacomprehension: The term metal comprehension refers to the learners' ability to monitor the degree to which they comprehend the information being communicated to them, to recognise failures to understand, and to employ repair strategies when failures are identified. Harris, (1988) believes that learners with poor meta-comprehension skills often end up reading passages without even being aware that they have not understood them. On the other hand, learners who are more skilful at meta-comprehension will check for inconsistency, and undertake a corrective strategy, such as re-reading, relating different parts of the passage to one another looking for topic sentences or summary paragraphs or relating the current information to prior knowledge. Metamemory and meta-comprehension skills help the learner adjust their own learning processes in response to their perception of feedback about their current state of learning. This concept is known as "self-regulation" focus on the ability of the learners themselves to monitor their own learning (without external stimuli or persuasion) and to maintain the attitudes necessary to invoke and employ these strategies on their own.

Problem-solving: This is practically and solely for human research. This term reflects its importance in the class of thinking activity. Problem-solving is practised daily, often without end, especially in a complex society where adherence to established rules and procedures is not enough to succeed. Problem-solving can simply be defined as the pursuit of a purpose when the way forward to achieve it is uncertain. In other words, this is what an individual does in a given situation, most of the time when they don't know what they're doing. Problem-solving certainly involves thinking things through.

Critical Thinking: Critical thinking has to do with a rational way of thinking about the question or idea on both sides before making a decision**.** Like problem-solving, critical thinking understands much about what human beings do or at least potentially can do. Meanwhile, problem-solving and critical thinking are separate functions that can be considered complementary. Critical thinking consists of evaluating ideas based on their quality, especially whether they are logical or not. Many metacognitive norms apply to critical thinking, for example, when assessing ideas, human beings may wonder:

i. Is it clearly spelt out?
ii. Is one idea logically derived from the other?
iii. Does that range from a premise to a conclusion or inference?
iv. Is the message logical, reasoned and consistent?
v. Does it contradict each other or make unwarranted inferences or generalizations?

Critical thinking can be very specific. The methods of inquiry used in science and those used in other disciplines can be viewed as specialised tools developed over many years to focus on a more basic and general orientation to critical thinking as portrayed in the model below:

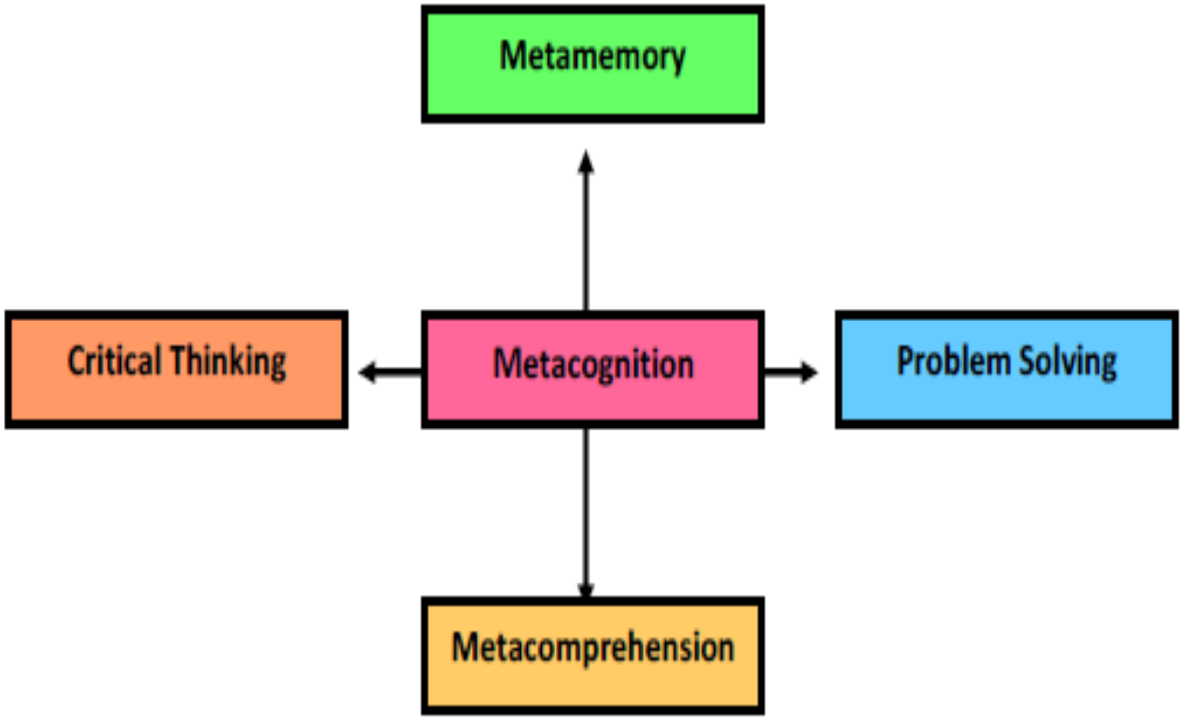


Figure 2.2: Martines's Model of Metacognitive Functioning, (1979)

Source: Adapted from the Flavell Cognitive Monitoring Model

1.2.4 Sources of Metacognitive Therapy

The sources explore in detail the origins of metacognitive theories and the study considers three factors that are believed to interact to bring about change in the behaviour of an individual (adolescent). These are cultural learning, individual building and peer-to-peer interaction.

i Cultural Learning

One possibility is that metacognitive theories are embraced from a person's culture through social learning. Social conceptions about the nature of cognition are transmitted to children through informal experience and formal education. In their study, Harris, and Marks, (1992) observe that the most obvious sort of cultural learning is direct instruction in which students are taught to use a specified set of cognitive skills and are shown how to coordinate the use of these skills. The work of Paris and her colleagues exemplifies this approach (Cross and Paris,

1988; Jacobs and Paris, 1987; Paris, Cross and Lipson, 1984). Regulation of cognition, which was defined as the ability to regulate one's learning, was measured by comparing pre-test and post-test measures of error detection proficiency, skills, ability and changes in reading comprehension. Contrary to the treatment group, there were no significant changes in control subjects.

Similar findings were reported from Kurtz and Borkowski (1987) and Palincsar and Brown (1984). Nevertheless, in these findings, it is unclear whether formal instruction using Informed Strategies for Learning (ISL) or other direct instructional approaches leads to the development of informal or formal metacognitive theories among students'. Furthermore, if such theories exist after direct teaching, they can be less useful to students than self-constructed theories. Future research should compare those that demonstrate tacit, informal or formal theory following instruction to those that do not demonstrate the theory.

ii Individual Construction

A large part of what humans know about cognition develops outside the field of formal or informal education. The study suggests that people suddenly develop metacognitive theories for at least two reasons. One is to systematise or map out their growing range of cognitive skills and strategies and their metacognitive knowledge about these strategies. The second reason is to get a sense of what it means to be an efficient and strategic learner. There is no doubt that individuals use various strategies to construct metacognitive theories. In some instances, construction may imply what Flavell et al. (1993) refer to as phenomenological bootstrapping in Beckwith, (1991), in which children and adults project their cognitive experiences onto others and/or use these experiences as a basis or foundation for general reflection on the nature of cognition.

Also, the important role of private, reflective analysis of her cognition. For example, Paris and Byrnes (1989) suggested that self-directed thinking develops among young children as part of self-regulation and takes on increasing importance as children grow up. Kamiloff-Smith (1992) shares the view that reflection leads to a restructuring of knowledge in a way that fosters an increasingly theoretical understanding of its cognition.

iii Peer Interaction

The third factor focuses on peer-to-peer social interaction (Youniss and Damon, (1992). By peers, the study means individuals who are roughly at the same

cognitive level in relevant aspects so that none can be considered an expert with cultural knowledge to be passed on to the others. Peer interaction for Brown and Palincsar, (1989) and Pressley, (1992) involves a process of social construction that differs in part from both cultural transmission and individual construction, Rogoff, (1990); Vygotsky, (1978) add, even though it also may be affected by cultural processes. In particular, this occurs when groups of individuals engage in collective reasoning. A study by Pontecorvo (1993) describes several benefits of shared collective and social reasoning processes, but more importantly, the role played in resolving group dissent.

Another example of the effect of peer interaction focuses on college students to resolve the four-card problem, Wason's (1966). This task requires a person to decide which of four cards needs to be examined further (that is, turned over) to finally determine the truth or falsity of a given hypothesis. Success on this task requires the encountered theoretical insight that all those cards and only those cards that could falsify the hypothesis must be turned over to reach a definitive conclusion. Geil and Moshman (2000) suggested that people working in groups engage in more sophisticated hypothetical tests than people working alone. A cultural learning explanation of these results would suggest that students' changed their responses for the reason that they internalized either the majority view or the view of one or more group members who were perceived as experts.

2.1.2.5 Traditional Accounts of Metacognition Ability

The accounts of metacognitive therapy make a basic difference between metacognitive knowledge (that is, an individual knows about cognition) and metacognitive control processes (that is, how an individual uses that knowledge to regulate cognition). For example, Brown and Baker (1991) make a distinction between cognitive knowledge and reasoning regulation. In this study, it was developed on the difference between metacognition and regulation as considered in the subprocesses as follows.

i Knowledge of Cognition

Knowledge of cognition simply refers to a person's knowledge of cognition or cognition in general. Brown, Jacobs, and Paris (1987) argued that cognitive knowledge typically includes three different types of metacognitive knowledge and that these forms of knowledge include declarative, procedural, and conditional

knowledge. Declarative knowledge, in a certain way, refers to "knowledge of" things. Knowledge of procedures, by contrast, means knowing “how” to do things, while conditional knowledge, in part, means knowing “why” and “when” aspects of human cognition.

a) Declarative Knowledge

Declaratory knowledge is a knowledge of oneself as a learner and the factors that affect one's performance. For example, Baker, (1989), a metamemory research (i.e., knowledge of memory processes) indicates that adults have more knowledge of memory-related cognitive processes than children. Also, Garner, (1997), Schneider and Pressley, (1989) believed good learners appear to have more knowledge about their own memory and are more likely than poor learners to use what they do know. In an illustrative study of Leal (1987), he found that several subcomponents on a metamemory questionnaire were significantly related to course performance among college students, including estimated savings (that is, estimates of how much was remembered from study episodes).

b) Procedural Knowledge

Procedural knowledge refers to knowledge of the performance of procedural competence or capacity. For example, Stanovich (1990) concluded that individuals with a high level of procedural knowledge use their skills more automatically and are more likely to order strategies efficiently. Glaser and Chi, 1988) found that these people use different qualitative strategies to solve problems. From an educational point of view, several studies report that helping young students improve their procedural knowledge improves problem-solving performance. King (1991), for instance, compared groups of Grade 5 students in which individuals solved problems using a problem-solving card or solved problems without it. Those who were explicitly trained in the procedures to know how to use the invitation card solved more problems on a paper-pen test than the comparison group. The explicit training group also achieved better results than the control group for an original computing task.

c) Conditional Knowledge

Garner (1990) and Lorch, Lorch and Klusewitz (1993) defined conditional knowledge as an act or process of knowing when and why to carry out various cognitive actions. This may be viewed as a declarative knowledge of the relative

usefulness of cognitive procedures. Lorch (1993) found that college students are distinguished from the information processing requirements of ten different types of reading situations. Students chose the different strategies most suitable for each situation to better regulate their learning. Students' beliefs about the relative seriousness of the demands on their cognitive resources were also different in the 10 situations. Recent research suggests that conditional knowledge continues to grow at least until mid-childhood.

Similarly, Reynolds, (1992) argued that older children and adults appear to be better able than younger learners to selectively pay attention to conditional task requirements. When comparing adults, Justice and Weaver-McDougall (1989) found a positive relationship between the knowledge of the relative effectiveness of strategies (i.e., conditional knowledge) and the use of strategies (such as cognitive regulation). The developmental order of Baker, Gamer and Alexander, (1989) found that when studying other types of regulatory metacognition is that older and more experienced learners possess more knowledge about cognition and use that knowledge to regulate their learning before they undertake any assignment or undertaking.

ii Monitoring

Metacognitive monitoring refers to human awareness of task understanding and performance. The ability to assess oneself periodically while learning is a good example. Glenberg, Sanocki, Epstein and Morris (1987); Pressley and Ghatala (1990) in their study indicate that surveillance capacity is growing slowly and is very low in children and even adults. However, the literature supports the link between metacognitive knowledge and the adequacy of surveillance. For example, Schraw (1994) found that adults' ability to estimate how much they would understand before reading was related to monitoring the accuracy of a post-reading comprehension test. Studies also indicate that training and practice improve supervisory capacity.

iii Evaluation

Evaluation is the assessment of products and a regulatory process for an individual's learning. Distinctive examples include the reassessment of goals and conclusions. Many studies indicate that metacognitive knowledge and regulatory competencies, such as planning, are associated with evaluation. Bereiter and Seardamalia (1987) found that poor authors were less able than good writers to take the reader's point of view and had greater difficulty in “diagnosing” and correcting text problems. These differences have been attributed to different mental writing

patterns. Good writers used what Bereiter and Scardamalia (1987) referred to as the "Knowledge Transformation" model. In contrast, poor writers used a "knowledge-telling" model numbers and types of consequences, and both adolescents and adults rated themselves as similarly vulnerable to possible negative outcomes (although both populations tended to rate themselves as slightly less vulnerable than other individuals).

From an individual difference perspective, Benthin, Slovic and Sevcrson (1993) have shown that at-risk adolescents perceive at-risk behaviours as potentially less risky and potentially more beneficial than non-participants. Even more powerfully, and with more substantive samples, Millstein and Halpern-Feisher (2002) found an opposite relationship between age (from early adolescence to young adulthood) and the concepts of invulnerability. Specifically, the study demonstrated that adolescents, in comparison to young adults (in their mid-twenties), tend to vastly miscalculate or overrate their weakness to the negative consequences of risks (for example, drinking alcohol, smoking cigarettes, and having sex).

2.1.2.6 Taxonomy of Metacognitive Therapy

The taxonomy of Flavell's metacognition (Flavell, 1971) generated widespread controversy at the start of the psychological investigation. The early studies conducted by Son and Schwarts (2002) in the context of cognitive and developmental psychology served as a springboard for new research in social-cognitive and educational psychology. Subsequent attempts to clarify the trivial, vague and imprecise nature of the concept of metacognition were successful, and the problems of exploiting metacognition were reduced. There have been significant advances in understanding the elements of metacognition. More than four decades have gone by since the introduction of the term and the contributions of various researchers have defined the concepts of metacognition and the theory of metacognition. However, metacognition is seen as a higher level of mental processes that you learn and use to control your thoughts or knowledge.

Simmerman (2010) perceived that metacognition includes information about a person and these factors that influence accomplishment. Metacognitive knowledge includes anything cognitive and psychological. It implies an awareness of an individual's knowledge of cognitive states and activities, and affective states, and control of that knowledge to achieve a specific purpose. This knowledge is called

“declaratory knowledge” “procedural knowledge” and “conditional knowledge” (Kluwe, 2002). Declarative knowledge includes knowledge of the individual's knowledge of cognitive states and activities (Brown, 2012) and affective states (Flavell, 1987). Cognitive states and activities involve knowing the world, understanding one's own knowledge and abilities, and knowing the strategy.

Moreover, emotional states relate to the knowledge of emotions, attitudes and motivation, which is an inherent characteristic of the learner. Procedural knowledge is the knowledge of how to use global knowledge, personal knowledge and strategic knowledge. Conditional knowledge simply means “when” to apply this knowledge and “why” to apply it. This knowledge also includes the assessment of the effectiveness of knowledge translation. Metacognition requires a basic assessment or monitoring of his cognitive processes and this has followed a control of his thoughts and the future treatment of ideas. In this vein, Wells, (2000) reported that metacognition involves tracking what is stored in memory and controlling future treatment. As a formulation of metacognitive monitoring and control mechanisms which are two fundamental aspects of metacognition has suggested three abstract principles of metacognition and one of which is that cognitive processes function on two inter-related levels which include 'the meta-level and the object-level.

The second principle is that the meta-level has a dynamic pattern (i.e., mental stimulation) of the object level. The third principle claims that depending on the direction of the flow of information between these levels, two relations which are called monitoring and control can be identified in figure 2.3. Nelson, (1999) confirmed the process of information flow between the object level and the meta-level known as monitoring. In addition, the meta-level is informed by the object-level of its current mindset by changing the status of the situation's meta-level model. Nelson and Narens, (1999) opinion, information circulating from meta-level to object-level is called control, and thus the meta-level notifies the object level what to do next. Therefore, metacognition for Shinamura, (2000) is directed by a meta-level system that monitors information at the object level and, depending on the information that emerged from this monitoring, controls information processing.

Nelson, (1999) and Shinamura, (2000) are accepted as the dynamic interaction between the flow of information about objects and the metalevel. Meanwhile, it has been observed that the two-level model of metacognition has stated that “if the metacognitive system exerted no control over any aspects of cognition, then

information about metacognitive monitoring would be of use only for knowing what people believe about their cognitions and would have little other use". However, people can control many aspects of their own cognitions and therefore the results of their metacognitive follow-up serve as an important input for metacognitive control.

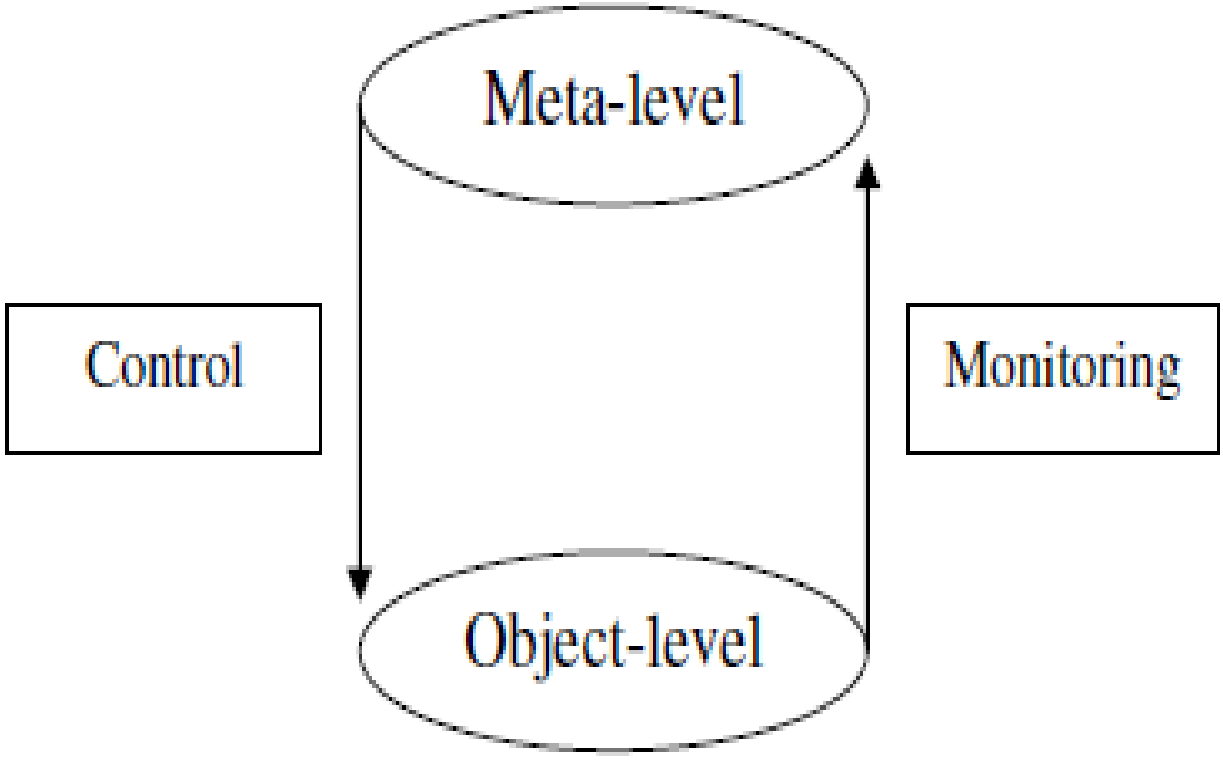


Figure 2.3: Two-Level Model of Metacognition (Nelson and Nerens, 1990)
Source: Adapted from Nelson and Nerens Model (1990)

This meta-level entry involved a combination of these two fundamental aspects of the meta-cognitive, monitoring and control processes. Wells, (2000) opines is required in all thinking. According to Nelson and Wells, (2000), both levels of metacognitive operations may contribute to the understanding of cognitive psychopathology. Monitoring, for Nelson and Narens, (1990); Wells, (2000) can be accepted as the input process for regulating self-reported information and is largely dependent on the subjective relationship of the individual. It could postulate errors or distortions in control which lead to a psychological disorder. Likewise, control processes have a role to play in changing the level of the object by using the launch of a new action, maintaining a continuous action or the end of a previous action.

2.1.3 Concept of Negotiation Skills Training

The word negotiate derives from the Latin infinitive “negotiari” meaning “to trade or do business.” Thus, this verb itself was derived from another word, “negare”, meaning “to deny” and a noun, otium, meaning “leisure”. Thus, the former Roman businessman would “refuse leisure” until the transaction was resolved (Curry, 1999). Negotiation is any activity that affects another person. McCormack (1995) defines negotiating in his book as the process of obtaining the best terms once the other party begins to act in their interest. In other words, bargaining is the process of getting what you want. It is a process of means to an end. The negotiating process involves balancing matters between two parties so that the negotiator not only get what he wants but also gets what he wants in the best possible way (Forsyth, 2009). This is the journey that leads to the destination, not the destination itself.

Negotiation is a dispute settlement process. It is a process whereby a compromise or agreement is reached and disputes are avoided. In any disagreement, individuals naturally strive to achieve the best possible result for their position. However, the principles of fairness, the pursuit of mutual benefit and the maintenance of a healthy relationship are the keys to a positive outcome. Specific forms of negotiation are used in many situations such as international affairs, the legal system, government, labour disputes or domestic relations and sexual relations. However, general negotiating skills can be learned and applied across a wide variety of activities. Negotiation skills can be a great asset in resolving differences between you and others.

Furthermore, the term negotiation is commonly used in all segments of human activity, including in social life, private and psychological involvement around the world. In other words, the ability to negotiate is usually related to sexual activity among adolescents. Negotiation skills are the result of rational thinking based on informed choices and effective communication to get one's ideas across. Therefore, to negotiate reasonably and effectively, one needs to activate thinking and social skills in the process of self-realization and development but this is facilitated by others who are mature and reasonable individuals. Adolescents need to negotiate with others for a healthy and happy lifestyle and to overcome the strong influence of peer pressure thereby avoiding the act of experimenting with drugs, alcohol and sex to be sure. However, the reason for wanting to have sex with adolescents has been identified in four key themes concerning sex, these were found to be:

1. restraining factors,

2. push factors,
3. pull factorsand;
4. coercive factors.

Restraining factors: These factors were those that motivated adolescents to delay early sexual initiation.

Push factors: These factors were defined as any enabling factors that were internal, i.e that originated in the adolescent or the immediate family.

Pull factors: These factors provided attractions to engage in the first sex; these came from an external source such as community, school, friendship and peer issues.

Coercive factors: These factors were found to be beyond the control of the youth and bordered the illegal sexual offence (Forsyth, 2009).

Importantly, the pull factors were identified in the role that environment and socio-cultural beliefs, customs and practices play on young adolescents concerning their sex choices. The media would have both a positive and a negative influence, in particular television, as it presents educational programmes on sex and sexuality. However, movies, as well as movies, have been identified as a key catalyst for engagement in the first gender, particularly for men. The natural libido is made hard to control by what is watched on TV, movies and movies and sticking to its resolution is made even harder. Whereas there are customs and cultural practices that favour delayed sexual debut, many more myths and misconceptions provided some justification for early sex and such views are strongly held by adolescents, for example, it was believed that failure to have sex early would make one develop pimples, grow fat, become infertile in the future, or could even result in death.

Push factors were found in the role that parents and close relatives played. Parents were considered to be the most important elements of their children's behaviour, including sexual behaviour. They have great influence over whether their wards abstain or otherwise. Parents could have a negative or positive effect on their children's sexual activity. Children of “good” parents have good home training and would grow up to be youth who abstain until marriage, while children (especially females) of “bad” parents stand a higher chance of being pushed consciously or unconsciously by their mothers into early sexual initiation.

When parents did not seem interested in what the adolescents were doing, sexual initiation was often earlier. Such a family environment has greatly contributed to young people engaging in early sexual relationships by breaking down any

resistance or resolve they may have. Parents or close family members, mainly as a result of poverty, expose female adolescents to early sex by asking them to engage in street trading or hawking goods in the neighbourhood. A “bad” mother will punish her daughter if she is not successful in selling enough. This risky situation was exacerbated by the fact that many parents were unable or did not want to direct their children to refrain from sexual intercourse. Parents were not always clear when providing advice, which ultimately baffled teenagers.

A major incentive to engage in early sex is rewarding, both financial and material, which can be gained by first trading and later sexual interactions for money or gifts. The awards included money, gifts and, in academic institutions, admission and exam benefits. Some viewed sex as a way of “surviving,” so abstinence was not an option for them. The constraining factors were the ability to concentrate and determine. We need to have a clear reason why they abstained, and they need to have something in their head that they were pursuing. The need to be determined and focused must not be left “within”, to be successful, friends and peers must know so that men “leave you alone”. There was the necessity to let men know that you are not interested in sex and you like it that way. We should not give the males the opportunity to make progress.

2.1.3.1 Types of Negotiation Competencies

Each negotiating situation varies according to the individuals involved. Competencies, attitudes and styles are important. Moreover, the context or context of the negotiation process, time constraints and the issue under discussion influence the nature of a negotiation. There are two types of negotiations: competition and cooperative negotiation skills.

i Competitive Negotiation Skills

A competitive form of negotiation skill often has a cold atmosphere and both parties are doing everything to get the very best deal for themselves which usually means that both party's objectives do not come into the equation of reality, (Black, 2009). The relationship between people is of no importance. They don't care about each other or how other people think about them. To the extent possible, it is preferable to avoid such negotiations. In competitive negotiations, it is important to avoid making the initial offer because it provides a great deal of information to the other party.

In these situations, less is more, and it does not care about the other party and not saying too much can provide an advantage in the circumstances. Competitive negotiation is as same as

any competition that is to be won or lost but there is always a possibility to just walk away (assertiveness) if the situation runs out of hands. The result of competitive negotiation is either win-lose or if the conflict ends unsuccessfully. Normally, the negotiating process is seen as a battle where the strongest party beats the weakest party where there is one winner and one loser.

ii Co-operative Negotiation Skill

The capacity for cooperative negotiation is minimized and the idea is to come up with a solution that benefits everyone (Black, 2009). This approach generally works best mainly because there is much better communication (assertiveness) among the parties. They gather as much information as they can, but they also reveal information. This will result in a conclusion that is acceptable to both sides. Cooperative negotiation is good for the long term. The best way to obtain as much information as possible from the other side is to ask open-ended questions. Open-ended questions do not have “yes” or “no” responses and, because of this individual, will provide more specific information. In cooperative negotiation, both parties aim for a win-win outcome and, in general, they will succeed because they are working together.

2.1.3.2 Stages of Negotiation Skills

To arrive at a desirable outcome in the negotiating process, it would be useful to follow a structured approach. For example, in a work situation or sexually related view such could be meeting the need to be arranged in which all parties involved can come together to act as a voice. The negotiating process involves the following steps:

1. Preparation
2. Discussion
3. Clarification of goals
4. Negotiate toward a win-win result/ or be a sexually accepted result.
5. Agreement
6. Implementing an action plan.

2.1.3.3 Basic Competencies for Adolescents Sexual Negotiation

Abstaining from sexual intercourse has practical skills that teens should use to stay abstinent. They (teenagers) seemed more confident, with a greater determination to stay that way, when they are under the pressure of their peers. Some females mentioned that a key strategy was to avoid visiting

males since men “cannot come and meet you and have sex with you in your father's house”. Ankomah (2011) found that self-esteem is a key determinant of sexual refusal abilities, delaying initial sexual intercourse. Moreso, it was stated that female adolescent participants emphasized that the need to be determined and focused should not be left within, pointing out that if it is dormant it will not work. The researcher stressed that to be successful, females need to let their friends and peers know that they are determined so that men “leave you alone.” They mentioned the necessity of letting men know that they are not interested in sex and that they love it that way. Adolescent girls were advised not to allow men to make advances.

Although the study by Ankomah, (2011) provided data on understanding the reasons for early sexual initiation and why some adolescents continue to remain abstinent, as a qualitative study, the results were not representative and therefore cannot be generalized to apply to all adolescents. It is important to note that poor sexual refusal and negotiation skills among adolescents could lead to pregnancy. Ghana Demographic and Health Survey (2008) confirmed that adolescent procreation has potentially negative medical and social consequences. Births to teenage mothers (age 15-19 years) have been found to have the highest infant and child mortality and this may be due to the young mothers being more likely to experience complications during pregnancy and delivery when compared with older mothers.

This leads to greater morbidity and mortality for themselves and their children. Also, early childbearing may truncate a teenager's capacity to pursue educational opportunities as 10% of teenagers in Ghana have already had a child and another 3% are pregnant with their first child. It was also clear that reproduction decreases considerably as educational attainment increases. About 31% of adolescents without education started having children, compared to only 1% of adolescents with secondary or higher education. According to wealth, fertility among adolescents decreased from 21 per cent in the second quintile of wealth to 4 per cent in the highest quintile of wealth. This finding suggests that poverty is an important factor in understanding the procreation of adolescents and other parts of the world as outlined in the report of the Demographic and Health Survey in Ghana (2008). Below are

the basic skills for the sexual negotiation process among adolescents.

A lot of teenagers are not able to communicate with their parents about their sexual health issues.

The silence of a family about sex education can indirectly send the message that sexuality is wrong and should not be discussed. Without a clear source of knowledge and values, adolescents frequently turn to popular media and their peers for information. Family involvement in adolescent sexual health can create more opportunities for dialogue between adolescents and adults and help refute the myths about sexuality that young people often hear from the media and their peers. Schools that complement family education can also help adults overcome the challenges they face when they are the only providers of information and guidance. The following is considered an impact on the ability of teens to negotiate sexually.

i Access to and Use of Protection

Condoms have been identified as a particularly important form of contraception because they are currently the only form of contraception that prevents the transmission of most STDs. Although many adolescents have used condoms at a certain point in time, comparatively little use them during each act of sexual intercourse. According to SIECUS (2001), in 1995, only 44% of men aged 15 to 19 in the United States used a condom each time they had sex in the previous 12 months. It is believed that uniform condom use will be achieved among adolescents who are skilled in sexual negotiation.

ii Availability of Information

Good negotiation skills and the decision-making process require the individual to identify and use truly reliable and available information. The person should make the distinction between what they know emotionally and what is relevant. When individuals evaluate information options, they often pay attention to some facts but ignore others. The individual events encountered most often are easily remembered and are more available in individual memory. In the negotiation process, Umphrey (2013) objects to persons presenting information emotionally having a far greater impact on decisions than persons presenting less information.

iii Bias in Perceptions

The youth often behaves unpredictably in his or her own best interests. One of the common mistakes is to remain irrationally engaged in an initial line of conduct. When a

person for example commits himself or herself to a course of action, this commitment brings biases to his/her perception and judgment and causes him/her to make irrational decisions. Contributing to the debate on factors influencing negotiation skill, Sherblom, (2007) argues that people must recognize that this bias and search watchfully for disconfirming information, as well as confirming data that individual intuitively seeks people not only perceive information but they also selectively provide information to others.

iv Goals as Anchors in Negotiation

The initial position taken by a young person at the beginning of negotiation serves as an anchor and, in this capacity, influences the individual perception of possible results. If a first offer is too extreme, it is necessary to restart the process. Just as initial offers may affect an individual's perception of what is possible, objectives also affect what someone thinks is feasible or even acceptable. Setting targets for Mill and Anarfi (2012) only helps if targets are set appropriately. The goals themselves may also become anchors, which may either hinder or enhance the way a person negotiates.

v Overconfidence and Negotiator Behaviour

Excess of confidence is an important factor that affects making a good decision. People distort their perceptions of such situations to make themselves feel more competent and secure during decision-making. These distortions give rise to “illusions based on need” which lead to irrational behaviour. Illusions based on the needs of Mill and Anarfi (2012) are motivational and influence decision-making and negotiation. There exist three illusions based on need: the illusion of superiority, the illusion of optimism and the illusion of control. These need-based illusions bring people to view the world not as it is, but as they would like it to be.

vi Parent-adolescents Communication

Communication on sexuality in many African cultures for Muyinda, (2010) and as well as Mullen, (2011) is considered taboo, allowing only ceremonial rites or authorised persons such as paternal aunts and uncles to discuss the subject with young people. However, Ndyanabangi and Kipp (2010) stated that in many countries these traditional ways of communicating sexual issues among generations have collapsed as a result of lifestyle changes. Bohmer, (2000) argued that teenage girls are traditionally educated by aunts about how to sexually behave in marriage, but that aunts no longer play that role.

A study carried out in Kenya by Nyamwaya, (1996) indicated that discussion on sexuality matters among most cultures is rare and that only when mothers (parents) is open

and receptive to discussions about sex with their adolescents. However, in the African context, when discussing sex as a taboo subject, the process can be negatively influenced by fear. A study conducted in Uganda by Ndyanabangi and Kipp, (2001) revealed that young people fear that if they raise the topic of sexuality for discussion, their parents would interpret it as actual evidence of sexual involvement. As a result, they tend to ignore it or discourage their wards from becoming involved.

vii Communicating Skills to Reject Sex

Adolescents face different situations where the need for social and communication skills is critical to their success. A lack of these skills appears to pervade a range of high-risk behaviours, including violence, poor peer relationships and suicide, Thompson, (2002). Social and communication skills around sex are often underdeveloped among teens, making communication about sex difficult and awkward for teens. In Nigerian culture, for example, Thompson (2002) argues against making sex jokes frequently, but serious conversations are less common. Social skills that can promote positive interactions about sex (and in all situations) that can be developed in adolescents include conveying your message clearly and assertively, listening more effectively, and proper negotiating process. Pluhar and Thrasher, (2001) adolescents will require practice in skills development to communicate a preference to wait or an expectation for contraceptive use.

2.1.3.4 Adolescents Adoption of Life Skills

Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome Barta, (2014) confirming that life skills were identified during the regional conference in Bangkok to address HIV/AIDS-related situations. How to make sound decisions about relationships and sexual interactions and stand up for those decisions (thinking skills); relationship, how to negotiate for protected sex or other forms of safer sex; how to deal with pressures for unwanted sex or drugs (thinking skills); how to recognize a situation that might turn risky or violent (thinking skills); how and where to ask for help and support (social skills); when an individual is ready for a sexual relationship (negotiation skills); how to show compassion and solidarity towards people with HIV/AIDS (social skills)and how to care for people with AIDS in the family and community (social skills).

Communicating with a sexual partner about individual sex preferences for Whitaker (2010) is an important self-protection behaviour that the teenager should be encouraged to adopt. Many adolescents (including African American female adolescents) who

communicated about their sexual preferences such as condoms, birth control, STDs, HIV/AIDS, pregnancy, and abstinence with their partners (Whitaker and Widman, 2014) argue that they also used condoms more consistently. Sheeran and Colleagues (2009), showed that meta-analysis of sexual communication was more predictive of condom use than over 40 other variables, including sexual refusal self-efficacy, barriers to condom use, and intentions to use condoms. Crosby, (2002) strongly believes that infrequent partner-to-partner communication was significantly associated with a lower likelihood of condom use in a sample of African-American teenagers.

Some of the differences in condom usage among groups can be explained by difficulties in sexual negotiation. However, it is indicated that there are differences between the various trust groups. Male were most likely to feel confident, with nearly three-quarters of respondents saying they were very confident in their ability to convince their partner to use a condom. However, more than a quarter (26.5%) of females lacked confidence in this ability. This may not be surprising, because men need to wear condoms. According to South Africa Wood (1998), the violence that characterizes many sexual relations could also explain why young females feel less confident in negotiating the use of condoms. There are also substantial differences between the confidence levels of various racial groups, with coloured and Africans being the least likely to feel very confident in their ability to induce their mate to use condoms.

An investigation of Ankomah, (2011) explored the key factors motivating some unmarried adolescents to engage in early sexual intercourse and the reasons for some delays. , (2011) explored the main factors that motivate some unmarried teenagers to have early sexual intercourse and the reasons for some delays. The *"push"* factors included situations in which parents exposed young teenage girls to street trade and the *"pull"* factors, particularly for males, included the pervasive viewing of locally produced movies, peer pressure and, for females, transactional sex (where adolescent females exchange sex for gifts, cash, or other favours).

There were also obvious coercive factors, including rape. Myths and misconceptions have been put forward to justify early initiation into sexuality. These reasons were cited for a delay that included religious restriction against intercourse before marriage, prevention of disease and fear of pregnancy (in particular HIV and AIDS). The differences observed between sexually active and abstinent adolescents were that they were more confident and had a higher determination, and especially, refusal skills deployed to delay the first sex. As such, health promoters must focus

on educating adolescents on the skills necessary to delay adolescents' sexual beginnings.

2.1.3.5 Negotiation Strategies: A Sexual Perspective of Teenagers

The ability of adolescents to communicate and negotiate effectively regarding their sexual desires and intentions is necessary for their sexual health and satisfactory sexual experiences. Failure to do so can expose them to the risk of involuntary pregnancy, STD, sexual violence and other negative sexual experiences (Rickert, 2012). It was argued that the communication and negotiation strategies of adolescents with their partners also significantly affect their safe sex practices, such as the use of condoms. This is supported by some previous researchers (Holschneider and Alexander, Manlove, 2014). The ability to negotiate in sexual relations differs from general communication. In the process of sexual negotiation, two partners try to find a solution to a concrete issue, like sexual activity and try to harmonize their intentions.

Negotiation skill includes reciprocity and a clear statement of personal intentions, which means letting the partner know what is desired and discussing the issue with them. A person's intention in acting in his/her specific purpose in doing so, the goal he/she is aiming for or intends to accomplish; this element distinguishes negotiation from communication, dialogue, and discussion. Negotiation on sexual issues is a complex social interaction where the individual, along with the dynamics of the partner, must be taken into account with the specific circumstances. It requires special skills and knowledge, like assertiveness, it contains impression management, and it requires constant effort, even among those who have made the most progress in incorporating it according to (Ridge, 2007). Negotiation is especially needed when sexual partners are not aware of each other's intentions or when they have different intentions, such as contraception (DeVisser, 2004).

However, negotiating on sex issues is often (yet) dominated by traditional gender roles. Traditionally, females are not expected to affirm their own needs in sexual relationships. Females who are openly sexually active, reveal sexual needs and desires, and seek their own sexual pleasure are easily defined as “slags.” If a girl is too sexually active, her reputation may be called into question because she breaks expectations for socially accepted and gendered behaviours (Aaltonen, Honkatukia, 2002 and Aaltonen, 2006). Similarly, females may lack trust in sexual issues and may feel incapable of asking what they want. The reason may be their embarrassment or their assumption that men are better sex players. They may also avoid discussion, such as suggesting the use of condoms, because the discussion

itself can be interpreted as consent to sexual intercourse (Holland, 1990; Holland and Ramazanoglu, 1992; DeVisser, 2004). The girl may also believe she does not have the right to communicate about her sexual desires and wishes, refuse to have intercourse, or make decisions about contraception, regardless of her partner's wishes (WHO, 2011).

2.1.3.6 Parenting: Communication between Parent and Child

At-risk behaviours and bargaining skills do not go hand in hand, and we still live in a society and culture where gender remains taboo. Parents do not like talking about things such as condoms, sex, or STIs with their pupils/children or peers. Sex is also a sign of power and a mark of physical value in a relationship. The ability to negotiate sexually refers to the actions and knowledge involved in mitigating the risks to oneself concerning sex. Let's be honest, the risk perception levels for teenagers in any situation are not always high, and when it comes to gender, that perception level may be even lower. The sexual experiences and expectations of teenagers help shape our sexual process and sexual decision-making. A myriad of factors enter into satisfying sex life, and negotiation skills are an important factor in this process. In addition, a good number of teenagers do not know how to do this. Some can even equate sexual negotiating skills with prostitution. Although it may seem logical to some, it holds no such significance in sexual health practices. Being able to negotiate for your desires, needs and security in sex are crucial for your sexual satisfaction and well-being.

However, it is a skill that lays the groundwork to ensure and maintain safety in any sexual situation, regardless of the sexual partner or relationship. Negotiating sexually means taking responsibility. Safe and enjoyable sex is (teens) right, without coercion and threat. It's also about solving problems if it doesn't work, and then getting out, saying no, or changing the situation, depending on what solves the problem. Be aware of what you love, what you want and who, where and how you want is a good thing. Make this clear and listen to your partner. They also have important needs and desires. Mental, emotional and physical awareness must also be developed when negotiating for sex. If the negotiating skills are not part of your repertoire or practical function for sex, whether you are married, single, or just in it for the sex, some things to be aware of for sexual negotiation are:

a. Be assertive - ask for and get what you want, and also give back.
b. Make yourself at ease with your sexuality.
c. To hold strong and defend them.
d. Harm reduction - understanding who you have sex with (STI status, predator status).
e. Where you have sexual relations is important for your safety as well.

f. Harm reduction is also about what you use, which is not contaminated or addictive at all.
g. Make safe sexual decisions - Know/trust your sexual partner, ensure consent is given and received, always have condoms available and ensure they are used properly and consistently.

As well, parent-adolescent communication and sexual behaviour are considerations. The teenager is born into a family and, more broadly, into a society that determines socialization and standards. The family as the first unit of contact with the teenager has a large influence on attitude, behaviour and perception, including those of initiation to sexual activity. A parental condition such as socioeconomic status and social relation with the adolescent such as communication and level of monitoring and supervision is known to have a great influence on the decisions adolescents make concerning their sexuality (Adu-Mireku, 2003; Asampong, 2013; Stephenson, 2014). Parental attitudes, societal norms and values about sex may influence teens' choices about their sexuality (Awusabo-Asare, 2004; Lefkowitz and Stoppa, 2006). These may include family religious beliefs, academic status, and gender norms. These values are typically absorbed into the child unconsciously during the socialization process.

Most parents believe that their children are too innocent and as such not matured enough to think about or engage in any form of sexual activity while some other parents perceive their children to be “good” and not possibly sexual (Elliot, 2014). Moreover, the thinking process and assumptions tend to encourage parents to avoid any discussion of gender, thus relegating this responsibility to their peers and perhaps to school. Parent-adolescent communication about sexuality is an ongoing process rather than a one-time conversation, and one that focuses on what information is sent, what information is heard, and what messages are understood. These messages or information can be direct or indirect, and the timing, frequency, and ways in which messages are delivered can all affect how adolescents internalize and respond to parental communication about sex (Guilamo-Ramos and Bouris, 2008). Most parents communicate with their teen children on a wide range of topics, including puberty, romantic relationships, sexual abstinence values and expectations, marriage, pregnancy and contraception.

Research suggests that, in general, most parents often talk about puberty, the negative effect of sexual behaviour and sexual morals, attitudes and values (Ancheta, 2005; Raffaelli and Ontai, 2001; Guilamo-Ramos, 2007). Concerning values and attitudes, parents often emphasize the need to abstain from sex until marriage or until adolescents finish school and

establish a meaningful career (Guilamo-Ramos and Bouris, 2008). Furthermore, parents discuss how having sexual relations would be morally wrong, a message that teenagers seem to internalize. According to Guilamo-Ramos and Bouris (2008), studies show that parental gender disapproval is linked to lower-risk sexual behaviours in adolescence and adulthood. Despite this, a literature review shows that parents have difficulty speaking about the technical aspects of sexuality, including contraceptives and birth control (Guilamo-Ramos and Bouris, 2008). Perhaps it is because many parents believe that they do not have the knowledge to discuss these issues or that talking about contraception can encourage teen sexual activity.

Most parents tend to discuss sex with their daughters more than with their sons, which should never be the case since male adolescents also need to be educated about sex. Guilamo-Ramos and Bouris (2008) also confirmed that the way parents transmit sexuality education messages influences the responsiveness of adolescents to the message itself. Thus, the context of communication indicates that greater levels of perceived parental openness, responsiveness, comfort, and confidence in discussions about sexual and reproductive issues are associated with lower levels of adolescent sexual risk behaviour implying that adolescents' perceptions of the quality of communication may influence the effectiveness of parental messages about sex. Guilamo-Ramos and Bouris (2008), suggest that adolescents want their parents to talk to them openly; being an expert on sexual issues; being accessible or available to them; parents who trust and love them no matter the issue; listen to them; stay calm while talking to them about sexual issues and giving them full attention. The time at which parents communicate with teenagers about sex is crucial.

Studies suggest that parents should begin talking to their children about sex, love, and relationships before their adolescents start dating or become sexually active (Guzmán, 2003; O'Donnell, 2006 cited in Guilamo-Ramos and Bouris, 2008). This means that parents should socialize their children about acceptable sexual behaviours before they end up in situations that increase their risk of sexual activity (before going out). The frequency of communication between parents and children is a direct measure of the sexual socialization that adolescents receive from parents (Sue and Sue, 2003 cited in Guilamo-Ramos and Bouris, 2008). That is, the more that parents talk about sex, the more opportunities adolescents or youth have to be exposed to parental messages and values that reduce the risk of pregnancy and STDs. However, parents and teens have always disagreed on the frequency of communicating about gender. For instance, a review of the literature shows that when parents and adolescents report how often they have talked about sex, parents report a greater frequency of conversations than

do adolescents (Raffaelli and Green, 2003 cited in Guilamo-Ramos and Bouris, 2008).

However, this form of disconnect may be due to differences in context as parents may initiate a discussion on sex whereas adolescents may not know that the discussion is about sexual issues. As a result, parent-adolescent communication on sex should occur throughout adolescence. Guilamo-Ramos and Bouris (2008) report that studies with Latino youth show that the more parents talk about specific sexuality-related topics, the more likely it is that adolescents will share similar views with their parents on that topic. This means that adolescents are effectively listening to parents and that a higher frequency of parental communication about sex affects adolescents' sexual decision-making. Parental initiation of sexual communication and involvement in the sexuality of wards is very crucial as many young people see their parents as the most or main important authority in their lives. Nikken's and deGraaf (2013) argued that parents avoid or frown on talking to their children about sex due to factors like embarrassment, poor communication skills or even ignorance of its importance or purpose in the development of their adolescents.

2.1.3.7Standard Negotiation Practices for Adolescents and Gender

There is a fact that responsible sex bargaining leads to a responsible sex decision. This process is possible as a result of critical thinking. To address issues effectively and also to avoid the dangers of life changes, it is therefore imperative for a teenager to make a rational decision. A sound decision through logical thinking allows adolescents to avoid sex traps. DiClemente, (2001) avers that adolescents sometimes face many contradictory messages, expectations and demands from teachers, guardians and peers as well as from media and the adolescents need to be able to figure things out themselves. The need to analyze these messages to make decisions about what is best for them is paramount. An individual should be able to think about any situation and weigh the options, pros and cons to make an informed decision.

Decision-making refers to the ability to make an informed and personal choice that can affect individual life and destiny. Decision-making for Noar, (2006) is a day-to-day activity and there is a need to analyse information and experiences accurately to make an appropriate decision concerning an individual sexual life and possible consequences of the choices made, hence, the need for skilfulness in evaluating the future consequences of one's present actions and the actions of others using the following as a tool for self-guard in the journey of life.

A. Tools to Make the Right Decisions

1. Self-awareness: It has to do with the ability to have a high level of self-esteem that would help make good life decisions.
2. Values clarified: It's about understanding what personal, family and societal values would be, which is important for a good decision-making process.
3. Information: Adequate information and facts on all aspects of a particular opportunity to assess options and make an informed decision.
4. Clear Values: Clear values are important for determining the effective use of other people's opinions and values.

Typical examples of this phenomenon are religion, family, society, culture, public policy, environment, climate, foreign influence and the media. All of that has had an impact on decision-making.

B. Steps in Decision-Making: "DECIDE" is an acronym that means:

1. Define the problem and come up with the facts.
2. Explore available alternatives and options.
3. Examine the implications by assessing the pros and cons of each option chosen.
4. Learn about your values and goals.
5. Choose an option (solution).
6. Perform and assume responsibility for the action.

C. Ground Rules of Negotiation Process

1. Know what someone wants and why.
2. Think about what someone will say.
3. Be truthful and,
4. Do not give up.

2.1.4 Concept of HIV-Risk Perception

The word risk is what most people have as their basic understanding of the significance of the risk. A risk to the National Safety Council (2013) is "a measure of the likelihood and seriousness of adverse reactions". In other words, the risk is a calculation of the probability of an incident occurring and taking into account the occurrence or consequences. Risk-taking for Furby and Beyth-Marom (2002) is defined in the development literature as involvement in behaviours associated with a certain likelihood of adverse outcomes. Most of the studies reviewed were quantitative and focused on the increasing number of adolescents engaging in high-risk behaviour and some of its consequences. Risk perception is the ability of an individual to discern a certain amount of unpredicted

occurrence, and risk tolerance defined as a person's capacity to accept a certain amount of risk. The perception of HIV risk is called risk attitude or how people produce decisions based on situational assessments, is a significant predictor of future life events.

A study conducted by Quadrel (2011) demonstrated that there is no universal understanding of the risk or amount of risk inherent in some activities. The vast collection of opinions about what is and what is not high risk means that some people are more inclined to put themselves in dangerous situations. Perception of HIV risk Brady, (2012) has been used in the past to examine people's perceptions of life events such as terrorist attacks, diseases, crime and natural disasters. In addition, the perception of HIV risk in Weber, Blais and Betz (2012) determines how people will make decisions on behaviours related to ethical, financial, health, recreational and social issues. With the start of the new Millennium, it is appropriate to review the impact of adolescents with high-risk behaviour, specifically on sexual health matters such as teen pregnancies, a slower increase in HIV Infection, less gonorrhoea and syphilis infections (Edelman and Mandle, 1998).

A long-term concern is that adolescents may survive the here and now, but the habits of high-risk behaviours established during adolescence may encourage major health problems that affect these adolescents as adults. Adolescent risk behaviours may be predicted by the mediating effects of perceived HIV risk and peer group characteristics. How adolescents perceive risk is essential to understanding the ultimate route to risk-taking. Irwin, (2005) reviewed a sample of adolescents who reported high, moderate or low-risk behaviours. The same behaviour has been perceived differently by many adolescents, and this supports a qualitative approach to learning more about adolescents who make sexual health decisions.

Irwin found that a decrease in cognitive competence was generally associated with the onset of high-risk behaviours. This perception makes it clear that many factors could affect a youth's entry into high-risk behaviours. However, the clinician needs to recognize that a single behaviour can be used as an indicator to allow the clinician to ask questions about other risk behaviours. Since the intention to engage in a behaviour is one of the most accurate predictors of initiation that basic questions about intention need to become a routine part of the clinician's assessment for all adolescents.

From a cognitive-behavioural point of view, an effective intervention involves at least two key ingredients. First, youth should be “educated” about the risks associated with his or her behaviour. It is proposed that this goal be achieved through risk education designed to increase the accuracy of the personal vulnerability assessment. Secondly, once adolescents are educated, they need to learn how to change behaviours that put them at risk. Kelly and

Murphy (1992), confirmed that behavioural change is facilitated by the direct training of skills, such as safer sex practices; assertiveness to communicate safer sex; commitments to sexual partners or resistance to peer pressure to engage in high-risk behaviour; and self-management and problem-solving skills to avoid high-risk situations. Despite the crucial role of heterosocial competencies, the current literature does not address the social competencies required for sexual interactions between adolescents at school (Nangle and Hansen, 1998).

2.1.4.1 Factors Influencing the Perception of HIV Risk in Adolescents

Below are factors that could affect HIV Risk perception in adolescents can be categorized as macro, meso or micro. This level identified the component in terms of:

i. structural or institutional (macro) measures,
ii. at a peer-to-peer or community level (meso), and
iii. Personal psychological level (micro).

Figure 2.4: HIV Risk-Perception Model

Source: Adapted from Tenkorang and Matika-Tyndale (2008)

I. Macro-level Factors

One of the macro-level factors, the culture of safety and level of safety leadership within an organization or community, can have a profound effect on individual levels of HIV Risk-perception and tolerance. A study conducted by Weyman and Kelly, (2009) suggested a need to go beyond mere psychological analyses of individual HIV risk-perception and take into account broader social, cultural, and environmental explanations of risk behaviour. Regarding safety leadership, the approach to safety from the broader construct, the leaders and the adolescents can have a significant effect on the perception of safety in the reduction of risk among adolescents. When leaders demonstrate a commitment to safety adolescents' perception of the safety management system is positively influenced, resulting in less risk-taking behaviour in the reduction of injury rates, O'Toole (2012).

A similar study conducted by Fleming and Buchan, (2012) established that workers employed by an organization with a positive safety culture, an environment with a high emphasis on safe work procedures and commitment to employee health and safety were less likely to take risks than workers employed by an organization without a positive safety culture. In a related study, Garcial (2014) found that workers exposed themselves to more risks and were less likely to comply with safety rules that are related to the safety climate of their organization poorly. Safety culture is also more applicable across the workplace.

Academics have explored the concept of traffic safety culture, or how the predominant ideas and beliefs surrounding road safety and driving in a community, state or country influences individual driving behaviour and society's attitudes towards motor vehicle accidents. The argument here as postulated by Moeckli and Lee, (2007) is that U.S. drivers, for example, are conditioned to believe that car crashes are not preventable and occur purely due to others' poor driving rather than to larger institutional factors that could have prevented the crash (example, laws prohibiting cell phone use while driving, car manufacturing regulations, road maintenance, and so on). Research on distracted driving Cosgrove, (2011) found that high-visibility enforcement on the part of local police forces resulted in a 45% average decrease in drivers using cell phones and a 52% average decrease in texting while driving. Increased enforcement and the more rapid consequences of dangerous driving tend to reduce risky behaviours.

II. Meso-level Factors

This entails pressure from the peer group or community. A meso level factor affects the way people perceive and accept risk. Peer stress, both inside and outside of

school, can result in people taking risks that go against their best judgment. For instance, Davey, (2008) found that young drivers habitually drive around railway crossing barriers despite individual's beliefs such actions are dangerous but because the perception of the community and peers was that such behaviour was acceptable. Teens that are exposed to the unsafe driving habits of friends, siblings and parents Sarkar and Andreas, (2004) believe that such adolescents are more likely to view these behaviours as not high-risk and the likelihood of a crash and a fatality resulting from a motor vehicle accident increases when a teen driver is accompanied by peer passengers, Shope and Bingham, (2008) argued that cars are important modes of teen socialization. Moreso, adolescents drive with peers supported the fact that they are constantly trying to maintain and negotiate peer relationships, which make them susceptible to high-risk actions, such as speeding to overtake a car at a peer's request or turning up the volume of the music. The desire to please teens at school (peers) often goes beyond the commitment to their safety.

III. Micro-level Factors

Micro-factor influencing risk tolerance is an individual's level of familiarity with a situation. It is a fact that adolescents who are less informed of a situation are less likely to take risks, while teens with more knowledge are more likely to have higher levels of risk tolerance. The warning here is that it focuses solely on the perception of the knowledge of the individual, which may not be a real objective assessment. The reason for illustrating this point, Huang, (2013) found that a group of surveyed participants with a perceived higher knowledge of ecological hazards tended to have a higher risk tolerance for adolescents whose hazards than those who professed to have little or no knowledge of ecological hazards.

However, the sense of personal control over a situation, assumptions may reduce anxiety and lead adolescents to become more relaxed to adopt unsafe behaviours. Optimism bias is another commonly cited concept in risk research and is another micro-level factor influencing risk perception, Weyman and Kelly, (2009). Optimism bias is a person's tendency to believe that a negative event is less likely to occur to him /her than other groups of injured people, and the person's perception that he/she is more adept at averting negative events. McCool, (2009) argue that those who took more risks and had higher risk tolerance levels were more likely to (1) underestimate the severity of an event and one's vulnerability to the threat, and (2) overestimate the efficacy of protective measuresand one's own ability to cope with risk.

2.1.4.2 Determinants of Risky Behaviours among Adolescents

Adolescents are overrepresented in all categories of at-risk behaviours and, therefore, adolescents also suffer disproportionately from the negative effects of these behaviours. These effects can include: premature death, addiction, criminal incarceration, sexually transmitted diseases, and underachievement, and they carry a considerable societal stigma in addition to the devastating effects suffered by the adolescents, Arnett (1992). Adolescents Risk Behaviour Surveillance (2001) reports indicate that approximately 75% of all deaths in adolescents aged 10 to 24 years are attributed to risk behaviours in adolescents. Colder and Chassin (2003) study found that rebelliousness and dispositional negative effect (using a composite score of internalizing symptomatology of anxiety, depression, and social withdrawal) directly predicted alcohol use and that negative effect also partially mediated the relationship between stress and alcohol use among adolescents.

1) Impact on Risk Perception

Risk perception has been found to influence students' with higher scores on positive affect which measures often overestimate the likelihood of positive (versus negative) consequences, while the opposite was true for individuals with higher negative affect scores. The relevant literature indicates that differences in perception of HIV risk may be related not only to affective valence but also to the specific type of effect within a given affective valence. Lerner and Keltner (2000) investigated the effects of more specific negative emotions on young adults' judgment and choice; findings revealed that differential effects of anger and fear of individuals who scored higher on a scale of anger made more optimistic decisions of risk, whereas those who scored higher on a scale of fear made more pessimistic judgments and the result suggests that effect (at least negative effect) can have a moderating effect on decision-making through risk perception.

2) The Adult Emerges Invincible

The characteristics of a sub-population of adolescents labelled the "invulnerable teen" Albert's, Elkind, and Ginsberg, (2007), are now being attributed to the emerging adult population as researchers learn more about emerging adults. Perceived invulnerability is the belief that there is a risk to others, that someone is immune or that harm cannot be done to them. Furthermore, research on risk perception has begun to include emerging adult populations, particularly college students, to explain teens and emerging adult behaviours, Ravert, (2009). Peaks in subjective invulnerability, Alberts (2007) confirmed that teens stay around the age of 13, that

invulnerability reappears in late teens, and then gradually decreases as adults emerge. Moreover, patterns of subjective invulnerability have been consistent from adolescence to emerging adulthood, showing little progression over time. However, the sense of invulnerability, Millstein and Halpem-Felsher (2012) speculate on decreases as adults, hence the need for further research on perceived invulnerability in emerging adult populations.

3) Autonomous and Risk-taking

The relationship between autonomy and risk-taking is well established in the literature, autonomy is still measured as a parent "autonomy-granting" rather than asking the adolescents directly about the autonomous feelings they experience. Adolescent perception of the parent's granting independence, say is associated with maternal autonomy-granting across three waves of adolescents into emerging adulthood, autonomy-granting and parental responsiveness predicted sexual risk-behaviour later in life, Lanza, (2012). In particular, adolescents who reported moderate levels of empowerment coupled with high levels of parental responsiveness reported the lowest levels of at-risk sexual behaviour. This technique makes it possible to better understand autonomy and risk-taking among adolescents, but it may not work with older populations, Pavlova, (2011). However, the timing of teen autonomy is important to predict developmental pathways at a later stage of life.

4) Independence and Risk Perception

Concepts of self-reliance such as independence and self-efficacy for risk perception. Risk assessment, attitude and management were thoroughly investigated concerning autonomy. In a study of self-reliance and openness to neutral or at-risk information about smoking compared to people with lower autonomy, Pavey and Sparks (2008) responded defensively when they found risk information. Furthermore, more self-reliant participants responded more to health risk information than neutral information, which meant they were more open to quitting smoking and accepting health information. It was further emphasised that autonomy is a powerful determinant of response to information that could be challenging while examining the relationship between autonomy and HIV risk-perception which could also increase the understanding of approaches to intervention programmes that might use that relationship to adjust behaviours.

5) HIV Risk-perception and Risk-taking

In a study of Shulman and Cauffman, (2013) who examined participants

ranging from ages 10-30 years on risk favourability, the idea that something risky is either a good or bad idea, finding revealed that it did not peak in adolescents but rather at the beginning of adulthood, specifically around age 20 or 21years. As well, Stacy, Bentler and Flay (2004) in the past behaviour of emerging adults predict current attitudes and perceptions of different risk behaviours. The judgment of the risky behaviours of Lapsley and Hill, (2009) arguments impacted by the relationship status specifically, if there is a dependency relationship (someone depends on you); risk favourability is lower, meaning a lower propensity to be involved in risky behaviours. Subjective invulnerability and the idea that one is immune to the consequences, in college students, was also associated with delinquency and drug use.

6) Classic Judgment and Decision-Making

The process of adopting a cognitive framework traditionally assumed that a decision-making situation entailed an estimation of the likely costs and benefits of a given behaviour. In a landmark analysis, Bernoulli (2012) suggested that the utility of a gamble, which differs from more universally aimed financial value, is relative to current assets which might be used to summarize the gains that one might hope to achieve through risk. The ideas were incorporated into psychological theory in the 20th century, when von-Neumann and Morgenstern (2004) and Savage (2006), presented axiomatic theories of expected utility. The axiom approach stipulated that to maximize expected utility, people must abide by certain axioms of behaviour (example, transitivity of preferences, reduction of compound gambles to parts, substitutability, monotonicity of preference, and independence of probabilities and outcomes).

2.1.4.3 Adolescents Attitude about HIV Risk-perception

According to the National Agency for the Control of Aids (NACA) in Nigeria, young people from the ages of 15-24 account for more than half of all new HIV infections (NACA, 2012). Recent literature has highlighted sexual risk behaviours such as the early onset of sexual engagement, having more than one sexual partner and unprotected intercourse to be linked to the increased rates of HIV/AIDS among African youths (Buseh., 2001; Negash, Gebre, Benti and Bejiga, 2003). Furthermore, according to a study by Hladik, Shabbir, Jelaludin, Woldu, Tsehaynesh, and Tadesse (2006), they reported younger adults were 60% less likely to use a condom in comparison to their older counterparts. The correlation between

high-risk behaviours and knowledge about HIV/AIDS is closely related in the literature (Taffa, Klepp, Sundby, and Bjune, 2002; Ukwuani, Tsui, and Suchindran, 2003). For instance, a benchmarking study confirmed that educational initiatives such as school-based HIV transmission awareness programmes have improved condom use among high school students (Ukwuani, Tsui, and Suchindran, 2003).

Despite these educational initiatives, young Africans continue to account for over half of all new HIV infections and still lack factual knowledge on HIV transmission (UNAIDS, 2008). However, several descriptive studies have identified increased rates of risk behaviour in this target population, making their exposure to HIV/AIDS even worse. Remarkably, a range of researchers also illustrates the lower knowledge rates among young Africans and the need for further awareness programmes (Buseh., 2001; Negash, 2003). Some qualitative studies have examined the background to HIV/AIDS awareness among university students. Yet, few studies have looked at the reported gender differences in HIV knowledge levels among this target population (Ragnarsson., 2009; Terry, 2005). In particular, a qualitative study explored knowledge about HIV/AIDS transmissionamong college students in Tanzania (Maswanya, Brown, and Merriman, 2009).

The thematic analysis revealed misinformation among students about HIV transmission, where several students believe that HIV transmission is through water and saliva. Students also felt that they were less likely to get HIV. However, despite these important findings, there is still a dearth of high-quality studies that explore the specific barriers and facilitators of HIV transmission among male and female post-secondary students' (Alene., 2004; Yerdaw, 2002). Accurate insights into these barriers and facilitators would provide important insights and future guidance on how to implement gender-specific HIV/AIDS awareness programmes in Nigerian schools.

2.1.5 Concept of Self-esteem

Self-esteem is the panacea for modern life. Considered the key to financial success, health and personal growth, it is considered the antidote to under-performance, crime and drug abuse. Self-esteem is popular in academic circles and also predominates in the fields of personality and social psychology. Leary and Baumeister (2010) suggested that self-esteem is an internal and personal observation of the value of an individual. Self-esteem according to Mruk (2006), who commented that self-esteem was initially discussed by William James since then, the

field of self-esteem study has continued to grow rapidly and with this growth came an increase in the understanding of self-esteem as a complex and intricate facet in psychology. Teenagers who engage in selective social comparison processes, comparing themselves to others when they are confident that the comparison will be favourable.

Baumeister (2008) stated that self-esteem is the evaluative element of thinking about oneself that identifies with a general view of oneself as worthy or unworthy. The construct comes to life in Coopersmith's (1999), a classic definition of self-esteem which is concerned with the evaluation which the individual makes and typically maintains concerning himself: it expresses an attitude of approval and indicates the extent to which an individual believes himself to be capable, significant, successful and worthy. In this regard, self-esteem is a personal judgment of the worthiness that is expressed in the attitudes the individual holds towards himself and this is an attitude about the self and is related to personal beliefs about skills, abilities, social relationships, and future outcomes. It is important to distinguish between self-esteem and the more general concept of self since the two terms are often used interchangeably.

Self-concept refers to the totality of cognitive beliefs that people have about themselves; it is everything that is known about the self and includes things such as name, race, likes, dislikes, beliefs, values, and appearance descriptions, such as height and weight. In contrast to Baumeister, (2008), self-esteem is the emotional response that people experience as they contemplate and evaluate different things about themselves. Although self-esteem is linked to the concept of self, people can objectively believe positive things (such as recognition of skills in education, athletics or the arts), but continue to dislike one another. Conversely, it is possible for people to like themselves and therefore have high self-esteem, despite their lack, objective indicators that support such positive opinions. Even though this is influenced by the substance of personal thought, certainty is not the same thing. Throughout the history of self-esteem research, Blascovich and Tomaka (1991) thought that the concept was poorly defined and thus poorly measured.

Self-esteem is one of the most popular psychological concepts. It is used as a predictor variable (some researchers study whether high self-esteem people think, feel, and behave differently than do low self-esteem people), an outcome variable (some researchers study how various experiences affect the way people feel about themselves), and a mediating variable (self-esteem needs are presumed to motivate a wide variety of psychological processes). The general attractiveness of self-esteem reflects its importance, but this popularity has had an

undesirable consequence. Self-esteem for Brown and Dutton (2008) has evolved into a protein concept so capable of changing shape that its value is at risk of being undermined. One needs to explore the nature and functions of self-esteem to pay particular attention to the relation between self-esteem and the way people evaluate themselves in specific domains and to set the stage for this research, the researcher begins by distinguishing three ways in which the term self-esteem is used. The study highlighted three measures of self-esteem described below.

i Global Self-esteem

In most cases, the term self-esteem is used to assess a personality variable that captures how people generally feel. It is worth noting that this form of self-esteem is called overall self-esteem or trait self-esteem, since it is relatively enduring, both through time and situations. An attempt by Kernberg, (2005) to define self-esteem varied from a focus on early libidinal impulses to the perception that one is a valuable member of a significant universe. It took a resolutely less exotic approach from Brown and Dutton (2008) to define self-esteem in terms of feelings of affection for oneself. In normal populations, high self-esteem is characterized by general affection or love of self; low self-esteem is characterized by slightly positive or ambivalent feelings towards self. In one extreme case, Baumeister, Tice and Hutton (2009) say that people with low self-esteem hate each other, but such disgust occurs in clinical populations, not in normal populations.

ii Self-evaluations

The word self-esteem is also used to estimate how people evaluate different skills and attributes. For example, a person who doubts his ability in school is sometimes said to have low academic self-esteem, and a person who thinks he or she is popular and well-liked is said to have high social self-esteem. Similarly, people talk about high self-esteem in the workplace and low confidence in sport. The terms dauntlessness and self-awareness for Flynn (2008) have also been used for these beliefs, and many people equate self-confidence to self-esteem. A person may prefer to call these beliefs self-evaluations because it involves how people assess or evaluate individual abilities and personality characteristics. The construct of self-esteem and self-evaluations are related to people with high self-esteem who think they have many more positive qualities than do individuals with low assurance in any case they are not a similar thing. Conversely, a person who believes she is attractive and popular might not feel good about her. Sadly, psychologists do not always make this distinction, often using terms such as self-esteem and

interchangeable self-assessments. **iii Feelings of Self-worth**

The term self-esteem is seen as momentary emotional states, especially those resulting from a positive or negative outcome. This is what people mean when they speak about experiences that strengthen their self-esteem or threaten their self-esteem. For example, a person might say that his self-esteem was very high after receiving a large promotion or a person might say that his self-esteem was low after a divorce. William, (2000), inferred that such emotions are considered feelings of self-esteem. Feeling proud or pleased with oneself (on the positive side), or humiliated and ashamed of an individual (on the negative side) are examples of what it means by feelings of self-worth. It is because they involve feelings toward oneself, some researchers like Leary, Tambor, Terdal, and Downs, (2005) use the term self-esteem as a concept of emotions thereby feelings of self-worth, and trait self-esteem to people generally feel about themselves.

It is significant to look at the relation between the three constructions (self-esteem). The theoretical distinction about the word "self-esteem" raises the question of how individuals are linked. While several possibilities may come to mind, the research by Brown and Marshall, (2015) asserted the guideline through an affective model of self-esteem functioning. In a summary, the affective model assumes that: (a) self-esteem develops early in life in response to relational and temperamental factors, and (b) once formed, endows high self-esteem people with the ability to promote, protect, and restore high feelings of self-worth. This ability seems particularly when people are confronted with negative results, such as failure in the field of achievement. Brown and Dutton (2012), provides support to this assertion that high certainty individuals and low confidence individuals were randomly assigned to receive either success or failure feedback on an alleged test of their intellectual ability. As a result, all participants completed an eight-point emotional scale. Four of the items assessed general feelings of happiness and sadness (happy, sad, glad, and unhappy) and four of the items assessed feelings of self-worth (proud, pleased with one's self, humiliated, ashamed).

2.1.5.1 Self-esteem among Teenagers

Self-esteem is a Greek word that means "self-respect". The 'self' is part of personal respect and identifies with our values, beliefs and attitudes toward ourselves. The "estimate" part of self-esteem is a description of the value you give yourself. In counselling psychology

and other behavioural sciences, the term self-esteem is used to describe the general feeling of self-esteem or the personal worth of an individual. It is often considered a personality trait, which means it tends to be stable and long-lasting. Self-esteem may involve a variety of beliefs about oneself, such as assessing one's appearance, beliefs, emotions and behaviours. Rubino (2013) sees self-esteem as competent and able to deal with the challenges of life and to be happy, satisfied and productive.

Carrie (2002) observes self-esteem as individuals' mentality towards themselves and identifies with individual convictions about abilities, abilities, social relationships and future performance. It is important to separate self-esteem from the overall idea since both terms are frequently used in reverse. Self-idea alludes to the totality of subjective relics that individuals have about themselves. Your name, race, tastes, hatreds, beliefs, qualities and representations of an individual appearance (stature, weight, etc.) are your own. Similarly, self-assurance is a passionate response to meeting individuals when they contemplate themselves. Individuals may confide in impartially positive things (e.g., school diversions, sports, or recognition of skills in the craft), but still they do not care about themselves. As well, individuals can love each other and in this way have high self-esteem, despite the lack of target markers to help positive self-esteem. It is influenced by the substance of the idea itself, but the certainty is different.

Self-esteem has to do with feelings about one's positive or negative ways, dignity, competence and kindness, or accepting oneself as human or self-respecting (Rosenberg 1965). William (1990) described self-esteem as a measurable process of evaluating one's success rate against one's own wishes. Self-esteem is important in a wide range of lifestyles. Self-esteem is a consistent characteristic of personality and has a significant impact on a person's life from adolescence to early adulthood (Elfhag, 2010). A person with great self-esteem accepts himself, finds himself worthy and believes in himself, assesses himself positively, departs from aggressive attitudes and feels good about himself (Avşaroğlu, 2007).

More so, the individual with high Self-esteem is good at decision-making, eager to try new things, sensitive to others' needs, and has healthy and respectful relationships with others (Dalgas-Pelish, 2006; Griffin and 2005). In addition, these people with high self-esteem have high academic success, good health and are productive (Dalgas-Pelish, 2006). On the other hand, an individual with low self-esteem has negative perceptions about himself, sees himself as unsuccessful, insufficient and worthless, and is more helpless against the effects of unpleasant and harmful feedback (Dere, 2015). People with low self-esteem run away from difficult tasks or drop these tasks and tend to protect themselves.

2.1.5.2 Sources of Self-esteem for Adolescents

Numerous theories have attempted to fully describe and indicate the source of self-esteem. For instance, William, (2000) argued that self-esteem developed from the accumulation of experiences in which people's outcomes exceeded their goals on some important dimension, under the general rule that self-esteem is equal to success or pretensions. From this perspective, an evaluation needs to examine potential gaps between current evaluations and personal objectives and motives. It is also important to assess the self-perceived skills that help people achieve their goals. As a result, the measures should include some reference to personal beliefs about competency and capacity. Some popular theories of self-esteem are based on the self-reflection notion of Cooley (2006), in which self-assessments are regarded as inseparable from the social context. In fact, individuals come to respond to themselves in a manner consistent with the ways of those around them. Low self-esteem may result when key numbers reject, ignore, belittle or devalue the individual.

The subsequent reflection of Coppersmith (2012) and Rosenberg (2009), as well as most contemporary self-esteem research, is well in line with the basic principles of symbolic interaction. From this point of view, it is important to evaluate how people perceive themselves to be perceived by others, such as friends, classmates, family, etc. Some theories of self-worth have focused on the norms and values of the cultures and societies in which people are raised. For instance, Crocker and Luhtanen (2013) have argued that some people experience collective self-esteem because such individuals are likely to base their self-esteem on their social identities as belonging to certain groups. The theory of sociometer, Baumeister and Leary, (1995) proceeds from the assumption that humans have a fundamental need to belong which is rooted in evolutionary history. For most human evolution, survival and reproduction were dependent upon belonging to a group. Those who were part of social groups were more likely to survive and reproduce than those who were excluded from such groups.

In this context of sociometric theory, self-esteem is used to monitor the probability of social exclusion. When people behave in ways that increase the probability of being rejected, and such an experience has a decrease in the state of self-esteem. Therefore, self-esteem acts as a monitor, or sociometer, of social acceptance or rejection. At the trait level, Luhtanen and Crocker, (2013) argue that those with high self-esteem have sociometer that indicate a low

probability of rejection, and therefore such individuals do not worry about how an individual is being perceived by others in the society. On the other hand, those who have low self-esteem have a sociometer that indicates the imminent possibility of rejection, and therefore they are very motivated to manage their public impressions. There is an abundance of evidence to support the theory of sociometry, including the conclusion that low self-esteem is strongly correlated with social anxiety. Although the sociometer links self-esteem to an evolved need to belong rather than to symbolic interactions, it shares with the earlier theories the idea that social situations need to be examined to assess self-esteem.

2.1.5.3 Dimensions of Self-esteem

The construct of self-esteem is an overview of a specific aspect of the self, such as how people feel about their social standing, racial or ethnic group, physical features, athletic skills, job or school performance, and so on. An important question in the literature on self-esteem is whether self-esteem is better conceptualised as a unitary global trait or as a multidimensional trait with independent sub-components. The global approach believes that self-esteem is considered a global attitude that pervades all aspects of people's lives. In this regard, Robins, Hendin and Trzesniewski (2011) developed a unique measure of self-esteem globally. This is simply the statement “I have high self-esteem” with a 5-point scale. An individual found that this single item correlated to a similar extent as the most widely used trait scale with a variety of measures, including domain-specific evaluations, personality factors, and psychological well-being. Self-esteem can also be conceptualised as a hierarchical construction so that it can be broken down into its constituent parts.

From this perspective, Heatherton and Polivy (2012) determined that there are three main components: self-esteem in performance, social self-esteem, and physical self-esteem. Each of these components, in turn, may be divided into increasingly smaller sub-components. Self-esteem in performance means a sense of general competence and this includes intellectual abilities, academic performance, self-regulatory abilities, self-confidence, effectiveness and agency. Social self-esteem might be seen as people think others perceive it. Interestingly, this is an individual perception rather than a more critical reality. Social stratification could be seen as an individual's belief about the way others perceive him/her If people, for example, believe that others, especially significant others, value and respect them, they will

experience high social self-esteem. This happens even though others despise them. People who have low social self-esteem often experience social anxiety and are highly conscious of their self-awareness. They are very attentive to their image and worry about how other people perceive them.

Similarly, physical self-esteem refers to how people view their physical bodies and includes such things as athletic skills, physical attractiveness, body image, as well as physical stigmas and feelings about race and ethnicity. How do these self-esteem sub-components relate to global self-esteem? William (1892) suggested that global self-esteem is the sum of specific components of self-esteem, each of which is considered important to the concept of self. In other words, people have a lot of self-esteem to the extent that they feel good about those things that matter to them.

Not being good at tennis, for example, Steele, (1997) says is irrelevant to the self-concept of the non-athlete, whereas doing poorly in school may have little impact on some inner-city youth who have dis-identified from mainstream values. In this regard, Brett Pelham (1995) and Herbert Marsh (1995) debated the value of global models versus individual component models. Pelham's research has generally supported the Jamesian view that the centrality of self-views is an important predictor of the emotional response to self, for example, one's feelings of self-esteem, whereas Marsh has claimed that realm importance does not relate strongly to self-esteem. Although the jury is still on this issue, the concept of the importance of the field is a central characteristic of most theories of self-esteem.

2.1.5.4 Differences in Male and Female Self-esteem among Adolescents

Many studies suggest that boys and girls differ in their main source of self-esteem, with girls being more influenced by relationships and boys more influenced by objective success. Stein, Neweomb and Bentler (1992) investigated participants in an eight-year study on adolescent development. In adolescence, an agency orientation predicted higher self-esteem among men but not among females, whereas a community orientation predicted higher self-esteem among females but not among male. Males and females exhibit the same tendency. Josephs, Markus, and Tafarodi (1992) exposed males and females to false feedback indicating that they had deficits either on a performance dimension, for example, competition, individual thinking or on a social dimension, for example, nurturance, interpersonal integration. Consistent with predictions, men high in self-esteem enhanced their estimates at being able to

engage successfully in future performance behaviours, whereas females high in self-esteem enhanced their estimates at being able to engage successfully in future social behaviours.

In general, then, it seems like males gain self-esteem by going forward while females gain self-esteem by getting along. For, gender differences in feelings about oneself throughout life, Heatherton, (2001) argues that females tend to be less satisfied with body image than males. Females are more likely to evaluate specific body features negatively, attempt weight loss, report anxiety about the evaluation of their physical appearance, and have cosmetic surgery than men. Dissatisfaction with body image in females is generally associated with the perception of being overweight. More than three-quarters of American females want to lose weight and almost none want to gain weight. Believing oneself to be overweight, whether it is or not, is closely related to the dissatisfaction of the body image. As early as adolescence, females compare their body and weight to their beliefs about cultural ideals. A departure from the ideal often motivates people to follow a diet to reach a more attractive size.

The Technology Assessment Conference Panel, (1993) reported that it is rarely successful, with less than 1% of the ability of individuals to maintain weight loss over five years. Repeated failures can exacerbate unsatisfactory body image and low self-esteem (Heatherton and Polivy, 1992). Females with perfectionist tendencies and low self-esteem Vohs, Bardone, Joiner, Abramson and Heatherton, (1999) assert are particularly affected by dissatisfaction, such that these personality traits in combination have been linked to increased bulimia symptoms. Black females are less likely to consider themselves obese and are more satisfied with their weight than are 'white females' even though Black females are twice as likely to be obese. Unlike the female, Franzoi (1995) noted that men are more likely to regard their bodies as instruments of action and to derive self-esteem from their perceived physical strength.

2.1.5.5 Sexual Self-esteem among Adolescents

The research fields of psychology are expanding to integrate quantitative and qualitative research on a variety of issues surrounding sexual self-esteem. Sexual self-esteem refers to the value given to oneself as a sexual being, including gender identity and perceptions of sexual acceptability (Mayer, 2008). While sexual self-esteem is linked to self-esteem in that it is one of the many components of the global concept of self-esteem, sexual self-esteem attempts to isolate and illuminate those feelings, thoughts, and

experiences that an individual has about his or her sexual self. Sexual self-esteem is a way in which individuals treat and explore the sexual aspects of their lives. Significantly, the research studies deal with both male and females, as well as diverse populations and their sexual self-esteem. Despite the extensive research base, the concept has not yet been well represented in the literature.

Various approaches have been taken in studying sexual self-esteem in different populations such as studies on sexual self-esteem and body image in spinal cord injury patients (Potgieter and Khan, 2005), surviving cancer patients and the importance of sexual self-concept. Andersen, (1999), sexual self-esteem as a predictor of sexual and psychological adjustment following a spinal cord injury Mona, (1998), date rape and its relationships to trauma symptoms and sexual self-esteem (Shapiro and Schwarz, 1997), sexual victimization and the role of sexual self-esteem and dysfunctional sexual behaviours (Van-Bruggen, Runtz, and Kadlec, 2006), or sexual self-concept and sexual risk-taking in 16-19-year-olds. These studies have helped to advance the concept of sexual self-esteem, as the findings relate to very specific populations. Sexual self-esteem has also been investigated in the use of condoms by students (Squiers, 1998). Mayer and her colleagues have completed qualitative research into the question of damaged sexual self-esteem.

2.1.5.6 Relevance of Self-esteem for Teenagers

As with many aspects of human development, not everyone has the same sense of self-esteem and competence. However, the education system has important advantages for students with high self-esteem (Canadian Education Association, 2004). Allan and Nairne (2002) stated in their book that the emphasis on self-esteem has been increased because of the impact of poor self-esteem on students and school climate. For this reason, low self-esteem was attributed to:

i. poor interpersonal abilities,
ii. low academic performance,
iii. ability to manage anger and conflict;
iv. inability to deal with personal issues,
v. unreasonable expectations and,
vi. inability to make a practical sexual decision that might affect his destiny.

The authors suggest that teenagers who cannot understand and manage their emotions or interact successfully with their peers and adults face serious problems in college. These adolescents will not be able to pay full attention to school work and learning and will thus be

less well off socially and academically than their classmates. McFadden (2003), an Ontario secondary school teacher, noted in his discussion paper that students' with high self-esteem did better in school work and found it easier to resist peer pressure, they were also more sociable and more willing to try new things and take risks. Students with high self-esteem were more responsive to the educational process and responded more positively to the teacher, work and school in general.

Clemes and Bean (2011) suggested that adolescents with high self-esteem acted positively, assumed responsibility, tolerated frustration, felt able to influence their environments, and we are proud of their actions. Mehaffey and Sandbergrs (2004) felt that teens with low self-esteem seemed to need a lot of support and lacked the skills to communicate with their peers. Battle, (2012) mentioned in her book that teens with low self-esteem are more likely to do so.

(a) below under the initiative,
(b) be non-assertive,
(c) be pessimistic,
(d) use projection and repression defences;
(e) be indecisive,
(f) give self-destructive responses;
(g) comply more readily with social pressure.

He further stated that children with lower self-esteem tend to display an unhappy disposition, are timid and shy, they typically feel that parents and other significant others do not love and prize them as much as they should and usually experience difficulties in their interpersonal interactions with peers. In a report developed by the Canadian Education Association (1994), it was suggested that children whose parents conveyed to them that they were loved and accepted, felt valued and supported and developed healthy self-esteem. The study argued that stress at home and in society played a significant role in how students perceived each other. Other factors considered to influence self-esteem include lack of parental education, poverty, violence and abuse, feelings of rejection, repeated criticism, a sense of incompetence and being unattractive.

2.2 Theoretical Framework

The Theory of Planned Behaviour (TPB) and the Health Belief Model (HBM) theories explained adolescent sexual decision-making in the school environment. However, this study is grounded in the Theory of Planned Behaviour (TPB) which is an extension of The Theory of Reasoned Action as presented below.

2.2.1 The Theory of Planned Behaviour (TPB)

History of TPB

The Theory of Planned Behaviour (TPB), deriving from theory of multi-attribute attitude (TMA) and Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1973), is a social-psychological theory that explains behavioural decision-making processes of human beings with aiming at understanding and predicting the behaviour of individuals, advocating that the successful completion of human behaviours are mainly controlled by individual will. According to TRA, the behaviour intention of individuals is determined by two factors of attitude and subjective norm, in which the subjective norm is influence by normative beliefs in the society and the attitudecan be divided into positive or negativeaspects.

The proponent of the Theory of Reasoned Action was developed by Martin Fishbein and Icek Ajzen in 1975 as an improvement over the information integration theory. Fishbein and Ajzen formulated the theory after trying to determine the differences between attitude and behaviour. The first change from the integration theory is behavioural intention. This theory also acknowledges that there are factors that can limit the influence of attitude on behaviour. For example, if our attitude leads us to want to go out clubbing but our bank account is suffering, the lack of money will change that attitude to staying in for the night. Therefore, Theory of Reasoned Action predicts behavioural intention, an in between for stopping at attitude predictions and actually predicting behaviour because it separates behavioural intention from behaviour.

Another improvement to the TRA is that it has two new elements, attitude and the expectations of other people (norms) to predict behavioural intent. So, when our attitude wants us to do one thing, the expectations of other people influence us to do something else. For example, Melissa's attitudes may encourage her to wear High School Musical t- shirts to Pub 320, but the students in her class may think that she is weird and make fun of her. Lastly, subjective norms have two factors: normative beliefs (what I think others expect me to do) and willingness or the motivation to comply with norms (how much do I care about what others think of me).

Nature of TPB

The nature of the Theory of Reasoned Action (Fishbein and Ajzen, 1975) is an extension of the earlier The Theory of Planned Behaviour which focuses on a person's intent to behave in a certain way. The basic assumption of this theory is that beliefs are the fundamental determinants of any behaviour and, therefore, risky behaviours can be altered by

altering the underlying beliefs. Behavioural intent and action are two specific concepts that may be relevant to teenagers/ adolescents in this study. The intent and action are influenced by two important factors: one's attitude toward the positive and negative aspects of a particular behaviour, and one's perception of social norms, or what others think about engaging in the behaviour. Attitudes are people's lifelong beliefs, and some beliefs are formed from direct experiences, some from external information, and others are inferred or self-generated (Ajzen, 1988).

However, only a few of these beliefs are salient beliefs and are believed to be the immediate determinants of a person's attitudes (Ajzen and Fishbein, 1980). An attitude is a person's belief as to whether the result of their activities will be positive or negative. If the person has strong positive beliefs about the outcome of individual behaviour, it is said that they have a positive attitude about the behaviour and vice versa. The beliefs are rated based on the probability that the behaviour will produce the assumed outcome. Perceived social norms, or what one person believes others are doing or would approve of, play an important role in health behaviour (Perkins and Berkowitz, 1986). For example, if adolescents perceive condomless sex as the social norm among peer groups, this could influence their behavioural intent to have unprotected sex.

Relevance/ Goals of TPB

The Theory of planned behaviour by (Ajzen, 2002), which may be relevant to explaining some of the behaviours of adolescents, is the concept of ‘other important. Prescriptive beliefs and subjective norms can be relevant to this group in terms of peer pressure to have sex with as many teenagers as possible. A sexual decision can influence the use of condoms or test behaviour and family members like fathers and brothers can influence patterns of their beliefs.

The Theory of Planned Behaviour is predicting the strength of intentions to use condoms to engage in risky sexual behaviours and to initiate sexual behaviours Simms and Byers, 2013), and to determine intentions to test for chlamydia (Booth, Norman and Harris, 2013). Although the theory of planned behaviour is broadly supported, it is not without criticism. For example, there may be a large gap between the assessment of behavioural intent and the actual assessment of behaviour. At that time, a person's intention could have changed (Werner, 2004).

This isan importantconsideration as teens/ adolescents mayhavestrong intentions,butdue to elapsed time and other factors, they may not change their

behaviour.The impact ofbehaviouralintent and actual behaviour change in adolescents wasstudied through follow-up interviews after diagnosis.Importantly,behaviouris apowerful predictor of intent and behaviour, which explainsthevarianceinadditiontothevariables in the theory of expected behaviour (Ajzen, 1991). Forinstance, past behaviourcan influence a person's beliefs about the current behaviour, which determines future behaviour.Any residual effectsofprior behaviour indicatethat the model isnot sufficient and that other cognitive socialvariables need to be con sidered(Ajzen, 2002).

TPB covers people's volitional behaviour that cannot be explained by TRA. An individual's behavioural intention cannot be the exclusive determinant of behaviour where an individual's control over the behaviour is incomplete. By adding "perceived behavioural control," TPB can explain the relationship between behavioural intention and actual behaviour.

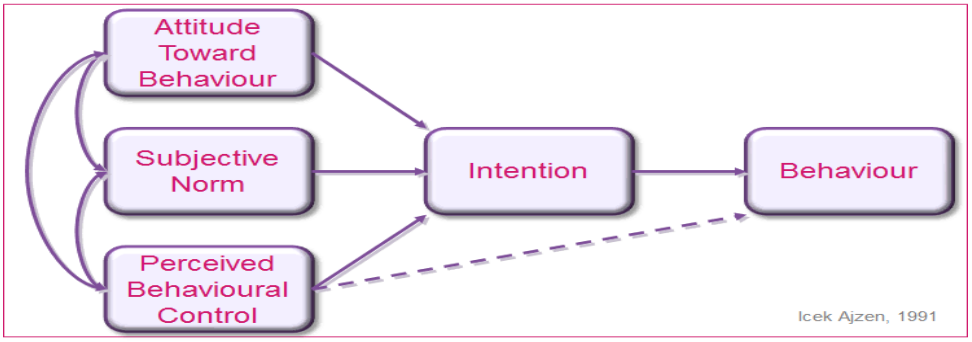


Figure 2.5a: The Theory of Planned Behaviour (Ajzen 1988, 1991, 2002)

Several studies found that, compared to TRA, TPB better predicts health-related behavioural intentions. Stern, (2005) TPB has improved the predictability of intention in various health-related areas, including condom use, leisure, exercise, diet, etc. In addition, TPB (and TRA) have helped to explain the individual's social behaviour by including social norms as an important contributing explanatory factor.

Components of TPB

The Theory of Planned Behaviour (TPB) started as the Theory of Reasoned Action in 1980 to predict an individual's intention to engage in a behaviour at a specific time and place. The theory was intended to explain all behaviours over which people have the ability to exert self-control. The key component to this model is behavioural intent; behavioural intentions are influenced by the attitude about the likelihood that the behaviour will have the expected outcome and the subjective evaluation of the risks and benefits of that outcome.

The TPB has been used successfully to predict and explain a wide range of health behaviours and intentions including smoking, drinking, health services utilization, breastfeeding, and substance use, among others. The TPB states that behavioural achievement depends on both motivation (intention) and ability (behavioural control). It distinguishes between three types of beliefs - behavioural, normative, and control. The TPB is comprised of six constructs that collectively represent a person's actual control over the behaviour.

Attitudes - This refers to the degree to which a person has a favorable or unfavorable evaluation of the behaviour of interest. It entails a consideration of the outcomes of performing the behaviour.

Behavioural intention - This refers to the motivational factors that influence a given behaviour where the stronger the intention to perform the behaviour, the more likely the behaviour will be performed.

Subjective norms - This refers to the belief about whether most people approve or disapprove of the behaviour. It relates to a person's beliefs about whether peers and people of importance to the person think he or she should engage in the behaviour.

Social norms - This refers to the customary codes of behaviour in a group or people or larger cultural context. Social norms are considered normative, or standard, in a group of people.

Perceived power - This refers to the perceived presence of factors that may facilitate or impede performance of a behaviour. Perceived power contributes to a person's perceived behavioural control over each of those factors.

Perceived behavioural control - This refers to a person's perception of the ease or difficulty of performing the behaviour of interest. Perceived behavioural control varies across situations and actions, which results in a person having varying perceptions of behavioural control depending on the situation. This construct of the theory was added later, and created the shift from the Theory of Reasoned Action to the Theory of Planned Behaviour.

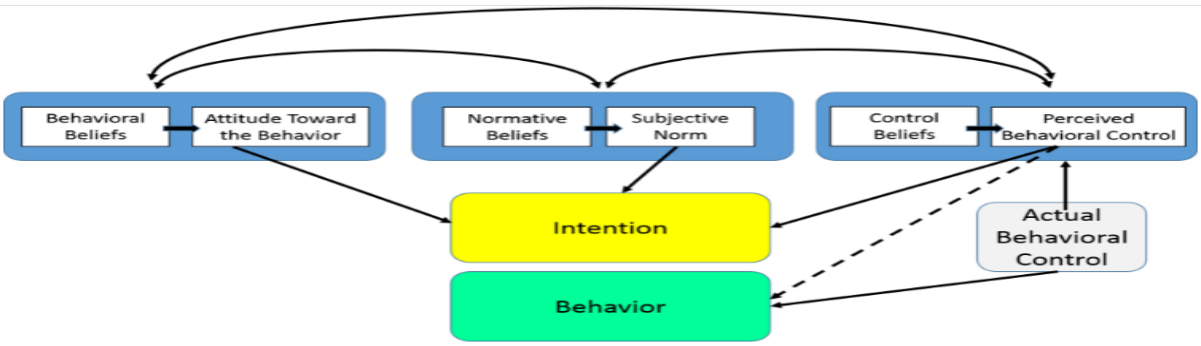


Figure 2.5b: The Theory of Planned Behaviour (Ajzen 1988, 1991, 2002)

Applications of TPB

The theory of planned behaviour has been applied to a number research areas including health-related behaviours, environmental psychology, and voting behaviour. This is animportant consideration for this study as it is likely that the past sexualbehaviours of young adolescents will affect their future behaviour. A studycarriedout by Kasima, Gallois and McCamish (1993) on sexual behaviorsrelevant toHIV transmission found that the Theory of Planned Behaviour didan adequatejobof predicting intentions, condom use was predicted by theinteraction betweenintentions and past behaviour.

Sexual behaviour is complicatedbecause two persons are involved and theindividuals may change their minds due tothe influence of their partner or forother reasons. Behavioural intentions thatare supported by previous behaviour maybe stronger than those that conflictwith previous behaviour (Kasima, Gallois, andMcCamish, 1993). Fishbein andAjzen (1980) acknowledge that the theory ofplanned behaviour works best forbehaviours that are under the voluntary controlof the individual. As sexualintercourse involves two people the behaviour inquestion and not fully underthe control of the person and, therefore, must betaken into consideration.

2.2.2 The Health Belief Model (HBM)

History and Nature of (HBM)

The Health Belief Model (HBM) was developed in the early 1950s by social scientists at the U.S. Public Health Service in order to understand the failure of people to adopt disease prevention strategies or screening tests for the early detection of disease. Later uses of HBM were for patients' responses to symptoms and compliance with medical treatments. The HBM suggests that a person's belief in a personal threat of an illness or disease together with a person's belief in the effectiveness of the recommended health behaviour or action will predict the likelihood the person will adopt the behaviour.

The HBM derives from psychological and behavioural theory with the foundation that the two components of health-related behaviour are (1) the desire to avoid illness, or conversely get well if already ill; and, (2) the belief that a specific health action will prevent, or cure, illness. Ultimately, an individual's course of action often depends on the person's perceptions of the benefits and barriers related to health behaviour. There are six constructs of the HBM. The first four constructs were developed as the original tenets of the HBM. The last two were added as research about the HBM evolved.

Perceived susceptibility - This refers to a person's subjective perception of the risk of acquiring an illness or disease. There is wide variation in a person's feelings of personal vulnerability to an illness or disease.

Perceived severity - This refers to a person's feelings on the seriousness of contracting an illness or disease (or leaving the illness or disease untreated). There is wide variation in a person's feelings of severity, and often a person considers the medical consequences (e.g., death, disability) and social consequences (e.g., family life, social relationships) when evaluating the severity.

Perceived benefits - This refers to a person's perception of the effectiveness of various actions available to reduce the threat of illness or disease (or to cure illness or disease). The course of action a person takes in preventing (or curing) illness or disease relies on consideration and evaluation of both perceived susceptibility and perceived benefit, such that the person would accept the recommended health action if it was perceived as beneficial.

Perceived barriers - This refers to a person's feelings on the obstacles to performing a recommended health action. There is wide variation in a person's feelings of barriers, or impediments, which lead to a cost/benefit analysis. The person weighs the effectiveness of the actions against the perceptions that it may be expensive, dangerous (e.g., side effects), unpleasant (e.g., painful), time-consuming, or inconvenient.

Cue to action - This is the stimulus needed to trigger the decision-making process to accept a recommended health action. These cues can be internal (e.g., chest pains, wheezing, etc.) or external (e.g., advice from others, illness of family member, newspaper article, etc.).

Self-efficacy - This refers to the level of a person's confidence in his or her ability to successfully perform a behaviour. This construct was added to the model most recently in mid-1980. Self-efficacy is a construct in many behavioural theories as it directly relates to whether a person performs the desired behaviour.

The Health Belief Model (HBM)

The Health Belief Model (Rosenstock, 1966), focuses on the impact of a person's beliefs on his or her behaviour (Conner and Norman, 2005). Themajorproposition that this model makes is that, if an individual perceives a diseaseor negative health outcome to be a threat, then an individual will bemotivatedto take action to avoid that threat. The perceived threat consists oftwoconstructions: perceived susceptibility and perceived severity (see Figure 2.6).Aprecondition for taking action involves a strong perceived susceptibility

andseriousness to the negative health outcome (Janz and Becker, 1984). Perceivedsusceptibility is unique to the health belief model and may help determine theperceived susceptibility of adolescents to chlamydia infection.

In addition, adolescents may feel susceptible to chlamydia through previousinfection or unprotected sex. Downing-Matibag and Geisinger (2009) used thehealth belief model to understand the connection and sexual risk-taking ofcollege youth. The results showed that adolescent evaluations of their ownvulnerability to STIs and that of their peers are often misinformed. Results alsoshowed that self-efficacy was affected by situational factors such as spontaneityand therefore some of these constructs may provide a useful framework forexplaining some of the risk-taking behaviours. Perceived advantages and obstaclesare also important determinants of healthy behaviour. Also, cues to action, a further component of this model, refer to stimuli in the environment that may trigger behaviour, for example, media information, or the influence of partners, peers or health professionals.

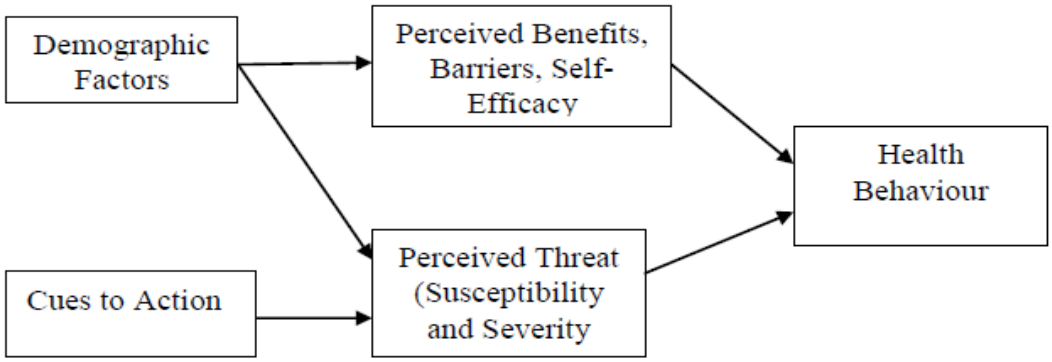


Figure 2.6: A Health Beliefs Model (Conner and Norman, 2005)

Source: Adapted from A Health Beliefs Model of Conner and Norman, (2005)

Besides, this may be another useful concept to determine if external influences impact screening behaviour. Self-efficacy was a concept that was subsequently added to the health belief model (Rosenstock, 1988). Self-efficacy is a term used to describe beliefs about one's ability to conduct oneself (Bandura, 1977). The perception of protective behaviour has been emphasized as a key predictor of healthy behaviours (Bandura, 1986). For example, condom self-efficacy is a significant predictor for engaging in safe sex behaviours and may be useful in determining the adolescents' self-efficacy to change their behaviour, (Basen-Engquist and Parcel, 1992).

The Health Belief Model has received empirical support for predicting a wide range of

health behaviours including breast screening (Breners and Skinner, 1999), contraception behaviours (Hall, 2012) and risky sexual behaviour (Hingson, Strunin and Berlin, 1990; Basen-Engqist and Parcel, 1992; Bakker, Buunk and Siero, 1997) and may therefore help explain some of the adolescent's attitudes and beliefs about unprotected sex, or screening behaviour. However, Sheeran and Abraham (1998) also emphasize that this model does not address the important role of intent to behave, only behaviour itself. Therefore, several constructs within this model may help to explain some of the behaviour of the men in the study, alternative models and theories are needed to ensure other variables such as behavioural intent, irrational determinants, social norms, motivation and pleasure are considered for explaining adolescents sexual health decision-making.

The role of emotion is a significant factor that may be relevant to adolescent health behaviours in this study. For example, the difference in the emotional state between the context in which the interviews for this study took place, and the one in which the behaviour was performed (Albarracin, Johnson and Fishbein, 2001) is an important consideration. Adolescents will likely have different emotional states at different stages. This is especially important when it comes to sexual behaviour, as the adolescent's sexual decisions may have been influenced before sex by mood-altering substances such as alcohol or drugs. during sex, decisions may have been affected by the "heat of the moment" when individuals were sexually aroused (Ariely and Lowenstein, 2006) and after sexual intercourse their emotional state may have been influenced by regret or male bravado, depending upon the context in which the sexual behaviour took place and therefore, this needs to be taken into consideration.

Studies have demonstrated that sexual arousal acts as an internal cue that interacts with alcohol intoxication to enhance attitudes and intentions towards risky sexual behaviours, even when these behaviours contradict their "sober" attitudes and intentions (MacDonald, Fong and Zanna, 2000; Davis, Hendershot and George, 2007). Like sexual risk-taking discussed above, the adoption of particular health-related behaviours such as "drinking alcohol" may also be understood as a way of "doing gender" (De Visser and Smith, 2007; O'Brien, Hunt and Hart, 2009). Therefore, alcohol theories can help explain any at-risk behaviour that is reported in the context of alcohol.

The relationship between alcohol and sexual health is increasingly cited in the literature as an issue of concern (BASHH, 2011). Although a causal link has not been established, there is strong evidence to suggest that excessive alcohol consumption is associated with poor sexual health outcomes such as unplanned pregnancies, STIs and sexual assault (BASHH, 2011). A British National Probability Survey Data (2000) analysis found

that alcohol consumption is an important determinant of early sexual activity (Aicken, Nardone, and Mercer, 2010). Those who usually drank more than recommended limits were more likely to report unprotected sex with multiple partners and poor contraceptive choices (Aicken, Nardone and Mercer, 2010).

Alcohol Myopia Theory (Steele and Josephs, 1990) states that alcohol intoxication limits attentional farthest point with the objective that people are highly influenced by the most salient cues in their environment. In the case of sexual situations, impelling cues, such as sexual arousal, tend to be immediate, whereas cues that would inhibit sexual behaviour such as STI risk are more remote or abstract (Cooper, 2002), thus resulting in risky behaviour. Alternatively, Alcohol Expectancy Theory by George, Stoner and Norris, (2000) postulates that individuals who think drinking alcohol will cause them to become less nervous, more sexually immoral, and thus at greater ease in potentially sexual situations are more likely to drink before a possible sexual encounter, such as at a party or on a night out as the case may be.

Moreso, several other factors need to be taken into consideration in understanding adolescent sexual behaviour. For example, the state of physical arousal in the "heat of the moment" may have a potentially important role in rationalisation tendencies since high levels of arousal severely diminish the ability to judge future consequences of current behaviours (Tiedens and Linton, 2001; Loewenstein and Lerner, 2003). An alternative explanation that may apply to some of the teenagers in this study may be related to the concept of rationality. This means that condoms are used with occasional sex as opposed to long-term partners to prevent the possibility of being caught by contracting a sexually transmitted infection.

Motivational factors such as pleasure and sex are also important factors in understanding human behaviour. Katz, Peberdy and Douglas (2000) explored the sexual risk-taking activity of young people and suggested that the pursuit of pleasure and short-term gratification may seem more attractive to an individual than the longer-term goals of good health. This may apply to adolescents in this study who may be more concerned about the instant gratification from sexual intercourse as opposed to the possible long-term consequences of a chlamydia infection.

2.3 Empirical Review

The following empirical studies have received substantial support for the study.

2.3.1 Metacognitive Therapy and Sexual Decision-Making among Adolescents

A study by Olugbenga-Bello et. al (2019) on Sexual Risk Behaviour Among In-

School Adolescents in Public Secondary Schools in a Southwestern City in Nigeria based on a descriptive cross sectional survey revealed that Many adolescents studied were sexually active, and taking a lot of risky sexual behaviours that could facilitate transmission of HIV. it was concluded that There are still many risky sexual behaviour common among adolescents among public secondary school students in Osogbo local government area of Osun State. Sexual risk behaviour could be reduced by increasing awareness to the deadly infection, encouragement of disease screening and voluntary confidential counseling and testing, reproductive health education in schools and parents modeling adolescents at hope and predisposing them to better sexual orientation, quality information on sex and its implications.

Mercy and Peter (2014) the study adopted descriptive survey design of ex post type to examine the extent to which self-esteem, parental involvement and religiosity predicted risky sexual behaviours among female in school adolescents in Delta state, Nigeria, the study provided empirical evidence that adolescents' sexual behaviour is influenced by a variety of personal (selfesteem), social factors (parental involvement) and institutions factors (religion). Given that self-esteem has been found to be a 'social vaccine' that can inoculate young people against vulnerability to wide range of social illnesses, the need for enhancement of the adolescents self-esteem to at least moderate level was emphasized. Moreover, since religion directly and indirectly is reported to affect sexual decisions through religious norms and sanctions for noncompliance, the need to ensure that adolescents are affiliated to a religious group was suggested. The study further the study has also confirmed that parental involvement in the lives of their children is linked with lower levels of sexual experimentation. It was recommended that any programme designed to delay sexual debut include parental involvement component. In addition, workshops and seminars should be organised to train parents on how to provide quality monitoring activities for their children.

Esbjørn et, al (2015) studied adapting Metacognitive Therapy (MCT) to children with generalised anxiety disorder the metacognitive model and therapy has proven to be a promising theory and intervention for emotional disorders in adults. The model has also received empirical support in normal and clinical child samples and the developmental limitations of children were taken into account. For instance, therapy was aided with worksheets, practical exercises and delivered in a group format. Overall, the intervention relied heavily on practising MCT techniques in vivo with therapist assistance. it was concluded that Findings indicate that the adapted version of the metacognitive techniques and manual for children is feasible.

A study by Ahna and Claire (2015) base on Adolescent Sexual Decision Making and

Sex Education: Using developmental neuroscience to guide new directions for policy and practice reconganise that While impact. The cognitive, hormonal, emotional, and physical changes that accompany the onset of puberty and occur throughout the teenage years play a significant role in aspects of adolescent sexual risk taking. Thus, one approach to advancing current understanding of these complex issues is to leverage emerging knowledge in developmental affective neuroscience over the past 15 years, which suggests some potentially promising innovations that may inform new educational directions to improve adolescent sexual health. Exploring the conceptual and empirical advances in understanding adolescent brain development through the lens of the conceptualization, implementation, and evaluation of sex education, this article provides new perspectives that encourage the testing of innovative approaches to sex education policy and practice. As neuroscience continues to provide a better understanding of adolescent decision making, we can take steps now to improve sex education policies and practices.

Everson and Tobias (1998) investigated metacognitive analysis of knowledge and performance in colleges. The study reported that investigations have endeavoured to quantify metacognitive in a way that is more applicable to the school college students and the studies revealed that metacognitive ability accurately estimated one's knowledge related to sexual decision-making in college. Maqsud (1997) also investigated the effects of metacognitive and non-verbal abilities on the educational performance of high school students. The study reports the findings of two experiments conducted with South African senior high school students to examine the relationships of metacognitive strategies and nonverbal reasoning ability to test performance in mathematics and English comprehension. The study suggests that teaching metacognitive strategies to students without these skills can improve their school performance.

Shannon (2008) enquired on which metacognitive strategies would be the most effective for a student'' specific learning styles in decision-making that would help students to become self-directed learners by determining specific learning styles. Results from the study revealed that teaching metacognitive strategies is a valuable skill that helps students become more independent learners. Fried and Reppucci (2001) researched the sexual decision-making of 56 adolescents between the ages of 13 to 18 and reported several roles of psychosocial factors such as temporal perspective, peer influence, and HIV risk-perception using the sexual decision-making questionnaire which was designed to reduce the unassertive measure for acceptance to do even when not ready. Berndt's (2013) reported that adolescents who were detained were more likely to think of future-oriented consequences of engaging in the

depicted delinquent act and less likely to anticipate pressure from their friends than adolescents who were not detained.

Gardner and Steinberg (2005) reported that a single previous study focused on the effect of peer pressure on risk orientation. In their study of 306 adolescents and young adults, they wanted to determine whether peers influenced decision-making among adolescents compared to adults. Ciascai and Haiduc (2011) concluded that adolescents have average metacognitive skills to effectively use decision-making about sex matters. It was recommended that if adolescents are to benefit fully from the information in textbooks, teachers should help them use this resource more constructively. In the same vein, Shokrpour and Nasiri (2015) asked if there was no significant difference between good and poor readers in using cognitive strategies. However, these two groups had significant differences in the use of meta-cognitive strategies. In other words, good readers have outdone poor readers by using metacognitive strategies. Analysis of the data within the group indicated that in both groups there was a significant positive correlation between the use of cognitive and metacognitive strategies.

Arani and Mobarakeh (2012) investigated that logical/mathematical intelligence had an important relationship to metacognitive strategies in the context. Moreover, males and females, except for the use of logical/mathematical intelligence, did not have a significant difference in the application of metacognitive strategies. Additionally, Stewart, Cooper and Moulding (2014) examined metacognitive development among professional educators. For example, the study examined the metacognitive abilities of adults who develop naturally with age. 214 pre-service and experienced teachers completed the metacognitive awareness inventory and the results indicated that metacognitive improves significantly with age and with years of teaching experience that influences adolescent sexual decision-making. The results showed that both male and female participants had no significant differences in metacognition and that there were no significant metacognitive differences between preschool and postsecondary teachers.

Akyol (2010) reported an important difference in the level of cognitive and metacognitive strategy of students. Furthermore, the metacognitive development, organisation and self-regulation strategy used were found to make a significant contribution to the scientific achievement of the students. Brown and Smiley (1978) argued that an element of shared knowledge is observable, verifiable and measurable, and is directional for cognitive activities. The idea that humans have conscious

access to their thought processes and that an individual can control one's thoughts is an idea that has developed over time. Bondy (2008) also pointed out that metacognitive abilities do not magically appear in a teenager's development. Rather, these capabilities interact with task requirements and situations leading to a responsible decision. The significance of this is that even adults may not engage in metacognitive therapy if confronted with a difficult task. Bondy (2008) expressed that metacognitive abilities of self-regulation, self-control and self-direction are critical to success in the future and such skills could promote the independence and discipline needed for lifelong learning and self-renewal of an adolescent (Bondy, 1999).

Tuckman (1994) studied the fact that college students may already have acquired metacognitive strategies adapted to the study of a text, but are less likely to use them unless they are sufficiently motivated. Dominik and Brian (2007) investigated Metacognitive of Problem-Solving Strategies in Brazil, India, and the United States that every cultural group showed a different preference regarding what metacognitive strategy was most effective for. However, Indian participants found the free production strategy more efficient, and Indian and Brazilian participants found the combined strategy more efficient compared to US participants. Shannon (2008), enquired which metacognitive strategies would be the most effective for a student's specific learning styles that help students to become self-directed learners through positive decision-making by adopting a specific learning style. The findings of the study revealed that teaching students' metacognitive strategies is a valuable skill that helps students become more self-reliant learners.

2.3.2 Negotiation Skills Training and Sexual Decision-Making among Adolescents

Ayalew et al. (2014) examined adolescent - parent communication on sexual and reproductive health issues among high school students in Dire Dawa, Eastern Ethiopia using a cross sectional study among high school students in Dire Dawa administrative council. The result revealed that thirty seven percent of students had ever discussed on at least two sexual and reproductive health topics with their parents. Of which, majority of student preferred to discuss with their peers than parent. Condom use during first intercourse was associated with having communication about sexual and reproductive health. Cultural taboo, shame and lack of communication skill were reasons that hinder communication between parent and adolescent about sexual matters. It was concluded that Communication on sexual and reproductive health issue between adolescent and their parent was low. School based education is important to improve adolescent parent communication about sexual and reproductive health issues.

The study has showed that there were low communication about sexual and reproductive health issues between parent and adolescent. Adolescents discussed about sexual matters more with peers than parent. Condom use during first intercourse was associated with having communication about sexual and reproductive health. Cultural taboo, feel ashamed and lack of communication skill affect adolescent-parent communication on sexual matters. Parents mainly focused on the negative consequence sexual intercourse. Communications about sexual matters depend on same sex basis. Promote parent-adolescent communication on sexuality and improve peer to peer sexuality education programmeme incorporating in to school curriculum, promoting school sexual and reproductive health clubs to enhance parent-adolescent communication and providing information education communication and behavioural change communication materials.

Isiugo-Abanihe et al. (2015) examined adolescent sexuality and life skills education in Nigeria the study investigated the extent to which out-of-school adolescents have been reached with sexuality education in Nigeria and it involved out-of-school adolescents, Non-Governmental Organizations, and community leaders. The qualitative research approaches were employed. It was discovered that most of the youths had been exposed to sexuality education through seminars, trainings and workshops organized by different organizations. However, states in the south were better served than those in the north. Sexually Transmitted Infections including HIV/AIDS prevention accounted for more than 40% of the content of sexuality and life skills education received by out-of-school adolescents. Based on the findings of this study, it is concluded that virtually all the states in the federation have NGOs working among out-of-school adolescents, although the level of geographical coverage nationally and within each state varies considerably. This suggests that out-of-school sexuality programmes are not evenly obtainable or accessible in all the states and across the country. It is evident that many adolescents in most of the states may not have been reached. In terms of national coverage, states in the north-central and southwest zones reported the highest coverage of sexuality education among out-of-school adolescents; the south-south and southeast zones were moderately covered, while the northeast and northwest zones recorded the least coverage. It is evident that current sexuality and life skill education among out-of-schools places much emphasis on HIV prevention issues.

In Worth's study (2012), condom use was stigmatized by unfaithfulness and lack of confidence. For many females, the nature of the social connection with a partner seems to have an impact on sexual decision-making. Occasional sex and sex for economic purposes can be considered superficial and not be threatened by problems such as condom use.

Similarly, the use of condoms with a stable personal partner would introduce an element of distrust and unbalance into an intimate relationship (Sibthorpe, 2002; Kline, 2000; Varga, 2007). Power inequalities and the emotional and financial dependence of females on their partners also appear to present significant barriers to sexual decision-making. In one study, conjugal relationships were referred to as “adult-child relationships” (Pivnick, 1993). Female described their long-term partners as behaving more like fathers than husbands, reducing their status and decision-making authority in the relationship. Perception of HIV risk can also significantly influence sexual decisions and practices.

Sobo (2005) found that female's self-esteem and social status can be strongly linked to participation in what they see as committed and monogamous relationships. In such circumstances, the use of condoms is interpreted as insulting, and suggestive of infidelity, lack of love and disrespect of partners. Such research reminds us of the need to carefully reassess the acceptance of models linking female's impotence and gender stereotypes to low use of condoms. Several studies have found that teens possess the cognitive abilities to make rational decisions (Harris, 2002; Jacobs and Klaczynski, 2002), whether teens have the cognitive abilities to make rational decisions is not as important as whether they choose to use those abilities.

Similarly, Reyna (2014) argues that adolescents possess a bias in overestimation of reduction of sexual risk with certain behaviours; therefore, some teens may think they are engaging in safe sex behaviours, when, according to adult standards, they are not. It could also be argued that because adolescents' goals are more likely to maximize immediate pleasure; decisions to engage in some unhealthy behaviour (such as drug use or sexual activity) could be deemed “rational” (Reyna and Farley, 2006). Furthermore, the immediacy of these decisions should not be neglected in youth decision-making processes. They suggest that interventions designed to discourage teens from deliberately weighing risks and benefits may ultimately prove more effective and enduring, because mature adults who resist risks do not do so out of deliberation, but because they “intuitively grasp the gist of risky situations and retrieve appropriate risk-avoidant values” (Reyna and Farley, 2006).

Some recent studies have looked at sexual decision-making and negotiation related to HIV/AIDS in an African context. In West Africa, Orubuloye (1993) explored the sexual empowerment of Nigerian (Yoruba) female. Importantly, the apparent success of females in denying unwanted sex has been attributed to their economic independence and strong filiation. In Central Africa, McGrath (1993)

worked with females in Uganda (Baganda). Despite a high level of AIDS awareness, females accepted multiple sexual partners due to economic needs or sexual satisfaction. While willing to change their sexual behaviour, Baganda females felt defenceless against HIV infection because of partners' culturally sanctioned high-risk behaviour and the belief that partners would not respond to safe-sex messages. Schoepf (2012) examined decision-making and sexual behaviour related to HIV/AIDS among females in Zaire. In this study, it was unusual to examine sexual decision-making among African and European females in Zaire who do not fit conventional notions of "high-risk" individuals.

Moreover, modest relationships, in the intended direction, were found between decision-making self-esteem and the three decision-making styles (vigilance, defensive avoidance and hypervigilance). Specific aspects of the concept of self were found to be associated with self-reported decision-making behaviours. Radford, Mann, Ohta, and Nakane (2011) examined the significance of cultural influences on self-reported decision-making styles, with a particular emphasis on the dominant cultural model (group orientation vs. individual orientation). Sarah Manickaraj, Suresh and Sabesan (2013) sought to find the difference between males and females in decision-making. Leon Mann's decision-making questionnaire was used to collect data from 87 (55 men and 32 postgraduate psychology students). The results revealed that males and females were not significantly different in vigilant decision-making styles.

However, males and females exhibited significant differences in the non-Indigenous decision-making styles of adolescents. Amalor (1993) attempted to study decision styles following certain personality characteristics. In a related manner, Gerrard, Breda, and Gibbons (1990) reported that while male partners tended to be more influential than female partners in general decision-making, females held the most power over contraceptive decision-making. It may be the case that men tend to hold the most power in general decision-making domains but females tend to be more influential than men when it comes to sexual and contraceptive decision-making (Miller and Pasta, 1996). However, the research also found either an adverse effect or no such effect on sexual decision-making. In a study by Clark and Hatfield (1989), males and females were given a sexual encounter by a relatively attractive member of the opposite sex. Overall, females refused sexual intercourse, while only 25% of men refused to engage in sexual activity.

Many studies have also shown links between "traditional" male norms and risky HIV behaviours (Belgrave and Nasim, 2008, Harpalani and Seaton, 2004;

Wood and Jewkes, 2011). Decker and Colleagues (2010), in a study with 312 university students' (89% White; ages 18-20 years), findings suggested that higher endorsement of masculine ideology was related to more negative condom use attitude and accounted for 10% of the variance in condom attitude. Likewise, in a large sample of 46,961 sexually active Indian men, Decker and Colleagues, found that traditional masculine ideologies supported the men's high-risk sexual behaviours as a gendered form of HIV risk. Early initiation into sexuality remains a key factor in the HIV epidemic. The early sexual initiation of boys serves to prove that they are not homosexual. Findings from Figueroa and Colleagues (2008) reported that while condom use has grown significantly among Jamaican adolescents, 75% of males and more than half (65%) of the females reported they did not use a condom during their first experience of sexual intercourse.

A combined quantitative and qualitative study was conducted by Kocken, van Dorst, and Schaalma (2006) with a random sample of 1,012 Dutch Antilleans ages 15 to 50 years which was drawn from the Rotterdam registrar's office. These studies suggested a strong and consistent link between support for men's ideology and condom use. For instance, a classic study conducted by Pleck (1993) with a sample of 1,069 sexually active Black, White, and Latino adolescents ages 15 to 19 found that male adolescents with high levels of masculine ideology were more likely to endorse high-risk sexual activity and to inconsistently use condoms. Similarly, researchers found in a sample of 1,600 Latin American men that masculine ideology was negatively associated with condom use (Marin, 2007).

More recently, in a study conducted by Harrison and Colleagues (2006) with a sample of 101 male and 199 female young adults (ages 18-24) in Northern KwaZulu/Natal province, the association between gender role in the context of masculinity and HIV risk outcomes suggested similar results. Moreover, men in the study with more egalitarian relations standards were more likely to engage in the use of inconsistent condoms than men with less egalitarian relations standards. In total, 346 individuals participated (56.4% female). Kocken and Colleagues (2015) used a structured, self-administered questionnaire to collect participant data. Surprisingly, the number of participants who reported having had sex with more than one partner (8.9%) was below expectations. Another positive conclusion was that 66.2% of participants planned to use condoms with a new sex partner in the future.

Similarly, negotiating safer sex and communicating about sexual risks with partners has been linked to the reduction of sexual risks. For example, Bertens, Schaalma Wolfers, and van derBorne (2008) examined safer sex and negotiation behaviour and the correlates of negotiation with partners in 128 females of Surinamese and Dutch Antillean descent in the Netherlands. The key findings were that half (50%) of the participants had negotiated sexual risk reduction with their partner, yet only 40% of the female who negotiated safer sex claimed practising safe sex. In this study, Dixon, Saul, and Peters (2010) examined correlates of HIV sexual behaviour among 187 Puerto Rican females and found that increased condom use with primary partners was associated with higher levels of mastery and HIV prevention self-efficacy.

The lack of assertiveness that heterosexual individuals need to insist on using condoms to protect themselves was found to be a reason for not using condoms among a sample of 1,290 Swiss heterosexuals ages 16-24 years. Furthermore, sexual decision-making and sexual negotiation processes are strongly influenced by conceptual and ideological factors that influence what is perceived as gender-responsive behaviour. The difference between these two terms is important for understanding the determinants of sexual behaviour. Individual decisions, although important to reflect beliefs and intentions about sexual practices, are not necessarily implemented once a person has entered into a sexual partnership. Varga and Makubalo (2006) found that AIDS was a minor problem among adolescent girls, with violence being a predominant factor in their sexual decision-making.

2.3.3 HIV Risk Perception and Sexual Decision-Making among Adolescents

A study by Nomcebo (2015) on HIV/AIDS knowledge, attitudes and risky sexual behaviours of college students at Nazarene teacher training college in Swaziland based on descriptive study utilizing a quantitative research method, a self-administered questionnaire was used to collect data on the knowledge, attitudes, and risky sexual behaviours of the college students, with the aim to identify risky sexual practices of the college students as well, which may require redress in order to enhance their effectiveness in combating the spread of HIV. The research findings recognized gaps, doubts or lack of confidence in the knowledge of HIV/AIDS of the college students. It was revealed that their attitudes were fatalistic and in denial of the risk of infection, with negative attitudes displayed towards people living with AIDS, with most of the students displaying fear in communicating HIV issues and attitudes

towards condom use were negative, possibly due to religious orientation, and those who used condoms were inconsistent. Their self-esteem rated very low, leading to uncertainty on their perceived risk of contracting the virus with a pockets of high-risk sexual behaviours displayed by a minority and concluded that Risky sexual behaviours of college students include inconsistent use of condoms, not knowing their serostatus, and the risky sexual behaviours of their partners.

Oladepo and Fayemi (2017) examined Perceptions about sexual abstinence and knowledge of HIV/AIDS prevention among in-school adolescents in a western Nigerian city, the study was a descriptive cross-sectional survey of students in Ibadan South-West Local Government Area. A total of 420 respondents (52% males and 48% females), selected through a multistage sampling technique, completed a semi-structured questionnaire. It was discoverd that Twelve percent of the entire sample had ever had sex. Overall, knowledge of HIV transmission and prevention was high and most respondents favoured the promotion of abstinence as an HIV prevention strategy. A smaller proportion of male respondents (79%) abstained compared with the females (98%). Major predictors of sexual abstinence were being a female, not having a boyfriend or girlfriend, not using alcohol and having a positive attitude towards abstinence ($P < 0.05$). Sexual abstinence was also significantly associated with perceived self efficacy to refuse sex and negative perception of peers who engage in sexual behaviours ($P < 0.05$).

Besides, majority of the FGD discussants suggested the involvement of parents, media, schools, faith-based institutions and non governmental organizations in promoting the adoption of abstinence. It was concluded that the sexual abstinence behaviour of young persons is influenced by multiple factors and should be considered in determining the effectiveness of interventions targeting this behaviour. Coherent sexuality education interventions to promote the adoption of abstinence among young people are urgently needed. Given that sexual behaviour of in-school adolescents are influenced by multiple factors, the researchers hereby recommend an integrated multi-sectoral approach involving all stakeholders in providing comprehensive abstinence sexuality education to young persons.

A study by James and Maame E. (2019) examined association between risky sexual behaviour and HIV risk perception among in-school adolescents in a municipality in Ghana, a cross sectional study was conducted among 706 students, using a questionnaire. Logistic regression analyses were used to assess the association between HIV risk perception and risky sexual behaviour. It was revealed that 27.7% of the respondents were sexually active, 51.8 % had sexual intercourse below 14 years, 65.4% did not used condom at their last sexual

intercourse, and 37.2% had multiple sexual partners. Only 20.5% of the adolescents perceived themselves to be at risk of HIV infection. Being sexually active was independently associated with having HIV risk perception, it was concluded that only few of the adolescents in the study perceived themselves to be at risk of HIV infection. Those who were sexually active were more likely to have some HIV risk perception than those who were not sexually active. Among sexually active adolescents, a risky sexual behaviour in term of multiple sexual partners was also found to be associated with HIV risk perception. Adolescents with multiple sexual partners were more likely to have some HIV risk perception than adolescents with single sexual partners, those with multiple sexual partners, the adolescents generally did not perceive themselves to be at risk of HIV infection despite their involvement in risky sexual behaviour. Interventions that help adolescents to correctly assess their HIV risk perception and build on their susceptibility to HIV infection are needed.

Numerous studies have been conducted on decision-making and HIV risk-perception although, researchers generally agree that there is a relationship between HIV risk-perception and adolescent's decision-making (Keyes, 1995; Bromily and Curley, 2002; Krueger and Dickson, 1994), there are inconsistencies concerning the nature of the relationship. One would expect that as the level of perceived risk increases, a person is less likely to engage in risk-taking behaviour but there is evidence indicating that this is not always the case (March and Shapira, 2008; Dunegan, 1992). For instance, Kahneman and Tversky (2009) have found that under negative problem framing, decision-makers perceiving high levels of risk respond with risk-seeking behaviour, the exact nature of the relationship between HIV risk perception and decision-making is not known for the following reasons. The propensity of a person to take or avoid risks may have a significant impact on decision-making in conditions of risk and uncertainty.

In addition, a risk-resistant decision-maker will weigh more heavily on negative outcomes, resulting in an increased perception of risk (Schneider and Lopes, 1996). There is a lack of understanding of the exact nature of the relationship between risk perception, risk propensity and decision-making. Prior research has examined the effects of HIV risk-perception on decision-making and the relationship between risk propensity and decision-making, it is known of a particular study that has examined all three constructs together (Sitkin and Weingart, 2005). In a laboratory study conducted by Sitkin and Weingart (2000), they manipulated outcome history and problem management while measuring risk propensity, risk perception and decision-making. The findings of their study suggest that risk propensity is inversely related to the perception of HIV risk, which in turn is inversely related to the

tendency to make risky decisions.

Similarly, Garmezy (Modrcin-Talbott, 1998) maintains that a high level of self-esteem is a protective factor against participation in risk. To support this argument, low self-esteem has been associated with a variety of risky behaviours among adolescents, including smoking, drug use and sexual activity. Similarly, in a study of alcoholic children, one of the personality characteristics found there is low self-esteem (Modrcin-Talbott, 2008). In addition, low self-esteem has been significantly associated with substance use (Gordon and Caltabiano, 2013), alcohol consumption and problematic alcohol use (Flisher, Bhana and Lombard, 2004) and smoking (Höfler and Wild, 2004). A longitudinal study by Jessor, Donovan and Costa (1991) examined the role of certain socio-economic and personality variables, including self-esteem, in explaining risk-taking in terms of problematic behaviour. The study participants were 384 secondary school students and 184 middle school students. They found that predisposition to problem behaviour in adolescents was significantly related to problem behaviour in young adults.

In Gonzales and Field's (1994), study adolescents perceptions of risk-taking behaviours (sports and danger) and their relationships with other risk and protective factors including parents and peers, social support, family responsibilities, self-esteem, depression; and drug use were examined. More specifically, 440 adolescents were assessed based on differences in sport risk-taking, risk-taking and other personality variables. The results of this study showed that people who take sport-related risks reported greater risk-taking and drug use, but more self-esteem than people who do not take risks. Comer and Nemeroff (2000) conducted a study to evaluate how individuals perceive risk in casual versus monogamous relationships. Participants were asked to evaluate the level of risk in three scenarios: sex with a casual partner, sex with a main partner who was emotionally safe but for whom no risk information was given, and sex with the main partner who was described as low risk (information was given about previous partners, HIV negative status).

Indeed, even talking about STI risk can be considered a breach of trust in relationships (Bowen and Michal-Johnson, 2009; Cline, 1990). Cline and Colleagues (2009), reported that few college-age couples talked about HIV/AIDS risk, and when they did, it tended to be very general rather than specifics about the potential risk or how to reduce risk in the relationship. Given this lack of discussion and practice of safer sex in intimate relationships, it has been suggested that long-term romantic relationships represent an unrecognized risk of STI infection in both industrialized and developing countries (Emmers-Sommer and Allen, 2005; Misovich, 1997). Of particular interest in connection with understanding issues of safer and

risky sex within relationships are the potential influences of gender and power on safer sex decision-making (Agnew, 1999; Harvey, 2006; Pulerwitz, 2002). In a study of 411 teens (average age 17.3), most participants reported using condoms 50% of the time while 28%reported never using a condom, and 33% reported no fewer than two sexual assistants already (Kershaw, Ethier, Niccolai, Lewis, and Ickovics, 2003).

Most reports of sexual coercion involved verbal pressure from a dating partner, friend or acquaintance, illuminating the role of poor sexual communication in unwanted sexual experiences and the importance of clear communication and respect for sexual boundaries. Similarly, Hlavka (2014) argues that it is not enough to change policies because some wider underlying cultural practices and debates act as barriers. Hickman and Muehlenhard (2007) found that females are more likely to fear rape from strangers because of the perception of having less control in these situations. As a result, females have less fear of knowing situations because they perceive that they have more control (Hughes, 2013). This perception poses a problem because it leads to a false feeling of control. Murnen, (2015) examined coping strategies for dealing with unwanted sexual activity and found that "while females felt they had control, this control did not translate into dealing with unwanted sexual activity". If the woman perceives control without actual control for her safety, this hinders the development of effective strategies.

Kirby (2002) adds that a variety of programmes that are not designed for sexual education have influenced sexually risky behaviours. For example, a programme to increase student connection at their school has reduced teen pregnancy (Hawkins, Catalano, Kosterman, Abbott, and Hill, 2009). In addition, DiCenso and Colleagues (2010) explored teens' perceptions of sexual health education, and participants indicated that the focus was too much on the physiological aspects of sex. Students suggested that information on the emotional aspects of sexuality, relationship issues, partner communication and gender differences be added to sex education classes (DiCenso, 2000).

DiCenso and Colleagues (2010), explore ethnic differences using a comprehensive sexual education has resulted in the reduction of some sexually risky behaviour, adolescents have indicated that more programme on health education is needed that could incorporate the aspects of the relationship context in which sex might occur and that classes should be mixed gender. DiCenso and Colleagues (2012), stated that sexual education programmes are not a clear solution to the problems connected with adolescents risky sexual behaviour and further recommended programme designed based on adolescents suggestions to include negotiation

skills in sexual relationships through communication.

2.3.4 Self-esteem and Sexual Decision-Making in Teenagers

A study by Jennifer et al 2016, based on self-esteem and adolescent sexual behaviour among students at an Elite Bolivian school shows relationship between self- esteem and the sexual behaviour and intended sexual behaviour of adolescents in Bolivia. Students (189) completed a questionnaire designed to elicit information regarding self-esteem, sexual behaviour and intended sexual behaviour. Results indicated higher home self-esteem for those evidencing greater sexual conservativeness relative to virgin status and sexual situation. Peer self-esteem was higher for those intending to have sexual intercourse before marriage. School self-esteem was higher for those reporting participation in sexual intercourse in the last month. Significant variable x gender x grade interactions were noted for both school and home self-esteem relative to intent to have intercourse before marriage. Significant variable x gender, variable x grade, and variable x gender x grade interactions were noted for home self-esteem and sexual situation. Results highlight the role of the home, school, and peer group in influencing adolescent sexual behaviour.

Minev M., et al.(2018) examined self-esteem in adolescents, it was discovered that Self-esteem is an overall evaluation of the person's value, expressed in a positive or negative orientation towards himself. Its development starts from birth and is constantly changing under the influence of experience. Especially important is the role of self-esteem in the process of adolescence. During this period, it correlates with both academic achievement and mental health. This study further analyzes the correlation between academic achievement and self-esteem among teenagers. Forty 14-year-old students (20 boys and 20 girls) with excellent, very good and good results in school were examined, with Self-Esteem Scale (RSE) (2). The results show that girls have significantly more negative attitudes towards themselves comparing with boys these results support the need for further research to explore how individual and contextual factors affect the development of self-esteem over the school years and concluded that the level of self-esteem differs according to gender. Boys have a higher self-esteem than girls.

Catherine O and Ololade O (2020) examined self-esteem and assertiveness as predictors of intentions to practice safe sexual behaviours among adolescents in selected secondary schools in Ibadan, Oyo State. It was revealed that adolescents are vulnerable to negative outcomes of sexual-risk behaviours because of their curiosity and impulsivity with the main objective to determine the relationship between self-esteem and assertiveness with

intention to practice safe sexual behaviours, descriptive cross-sectional, sampling technique were employed in 4 local government areas of the city. It was concluded that self-esteem significantly influence the intentions of adolescents to practice safe sexual behaviours and also that sexual assertiveness had no relationship with the intention of adolescents to practice safe sexual behaviours.

Spencer, Zimet, Aalsma, and Orr (2002) investigated gender differences in self-esteem among adolescents and their potential impact on sexual behaviour. In their longitudinal study, a sample of 188 adolescents was used and tested initially in the seventh year and later in the ninth year. Of the 188 participants, 43% were male and 57% were female. All 188 participants were blank during the trial period in year seven. The researchers had the students' complete a questionnaire that included the Rosenberg Self-esteem Scale (RSES) and a single question concerning coital status, whether or not the participant had ever had sexual intercourse. Thus, the relevance of this study to the current study and research is that it looked at self-esteem based on gender and how self-esteem based on gender affects the change in coital status from virginal to non-virginal contest in human relationships.

Young, Denny, and Spear (2009) dismantled the association between youth certainty and sexual exposure of 1,659 youth and high school students in grades seven to twelve. The study showed that peer self-esteem was positively correlated with the teenager's past and future sexual behaviour. On the other hand, there was a negative correlation between sexual behaviour and both family and school self-esteem, meaning the higher home and school self-esteem was in the participants, the less likely they were to engage in sexual behaviour. This study provided information about individual factors that affect self-esteem and, as a result, sexual behaviour. Although it is important to realize multiple things factor into our self-esteem development, the study came across a problem when combining all three types of self-esteem into an integrated model of overall self-esteem. He did not discuss the probability of sexual behaviour given the various combinations of the three domains of self-esteem.

Breakwell and Millward (2013) conducted a study of the sexual self-concept of an older adolescent, and sexual risk-taking was reviewed to examine the relationship between the sexual self-concept and sex-based sexual activities. 474 participants were between the ages of 16 and 19, the majority of whom were female. The study was conducted by mailing questionnaires to participants. Breakwell and Millward's (2013), study suggested that the concept of sexual self is formed in different ways depending on sex and that sexual risk-taking is thus expressed in different ways in adolescents. For example, responsibility for the use of contraceptives was considered relatively irrelevant for men, but it was a central element

of a sexual concept of self in females and opposite. It was concluded that there was no meaningful correlation between the concept of sexual self and the traditional roles of men/females in sexual relations.

A study by Rosenthal, Moore and Flynn (2011) examines male's and female's sexual self-esteem and self-esteem and the relationship between sexual risk-taking and these perceptions of self. It was noted that the study assessed 1,008 post-secondary students, mostly females between the ages of 17 and 20. All respondents had had had sexual intercourse, that is, oral, anal or vaginal intercourse, or withdrawal. Participants completed questionnaires on sexual self-efficacy, sexual self-esteem, and sexual conduct and risk. Sexual self-efficacy measured participants' confidence and willingness to perform multiple types of sexual activities. Sexual self-esteem has measured a person's perceptions and attitudes about his or her sexual suitability and relationships. Sexual behaviour and risk were examined to determine whether sexual activities were conducted with a casual partner versus a regular partner and whether condoms were used in each scenario.

In a similar view, Rosenthal (2001) study was considered gender differences in sexual self-efficacy that in general, males are more confident in their condom use, masturbation, seeking out potential partners, watching pornographic movies without embarrassment, and being able to get sexual needs met. At the same time, females were more confident about saying 'no' to sexual activity. The remainder of the study was carried out in partnership, occasionally or regularly. It was observed that regular partners increased participants' sexual self-esteem. Hollar and Snizek (2015) conducted a study on the links between self-esteem levels, sexual behaviour and knowledge of HIV/AIDS. The study drew on 353 university students, 49.7% of whom were female and 50.3% men. The majority of students were in their first or second year of secondary school. Instruments used in the study included a 14-item True/False HIV questionnaire with two (2) additional HIV/AIDS multiple-choice questions, the Rosenberg Self-esteem Scale (RSES), and a multiple-choice questionnaire regarding forms of sexual behaviour they have participated in.

DeGaston and Weed (2012) indicated that males were twice as sexually active as females. The study found that females were more abstinent and had less permissive attitudes about gender before marriage. The commitment to abstinence included female beliefs that birth control and love are not sex grounds. Despite the results, the female generally views love and sex together more than males and females view teenage sexual activity as an obstacle to achieving future goals. Seal and Agostelli (2013) conducted a study on perceptions of the prevalence of at-risk sexual behaviour amongst peers of college students. The study was

attended by 217 participants, including 96 males and 121 females. The subjects were between the ages of 18 and 25 and all participants completed a questionnaire that evaluated their sexual behaviour and safe sex practices. At the end of the evaluation, they were asked to provide separate assessments of the prevalence of sexual behaviours of male and female peers upon whom they were evaluated.

In addition, a study used 386 graduate students from the Netherlands with experience in heterosexual relationships and participants were 275 female and 111 men. The demographic characteristics of male and female participants were similar, allowing for comparability. The questionnaire included questions on interaction behaviour, sexual significance and sex-related attitude. The 55 questions on interactive behaviours assessed emotions and behaviours during heterosexual experiences. The 31 questions on sexual significance focused on sensational sexual behaviour, sexual compulsion, anxiety and beliefs about the level of relationship between love and sex. Vanwesenbeeck (2008), the study revealed gender differences in interactive behaviours and competencies. In particular, females were found to have more defensive control over sexual situations and to have more anxiety about the lack of control over the situation. Men have proven themselves more proactive in controlling what they want and getting into a sexual position. In terms of sexual meaning, men scored higher to be sexually compulsive and seeking sensations than females.

There are consistent findings that there are gender differences in sexual behaviour and permissive levels of at-risk sexual behaviour. There are also consistent findings that many males and characters having masculine traits of either gender are associated with higher levels of risky sexual behaviour (DeGaston and Weed, 1998 and Lucke, 2011). Traditional beliefs about the role of males and females are also considered an aggravation of risky sexual behaviour. However, there are also varying results in this research area, such as how sexual self-esteem affects sex-based sexual behaviour. Zimet, (2002) found that high levels of self-esteem among boys, but low levels of self-esteem among girls, increased at-risk sexual behaviour. Rosenthal (2001) found a small gap in sexual behaviour when examining sexual self-esteem.

2.4 Conceptual Model for the Study

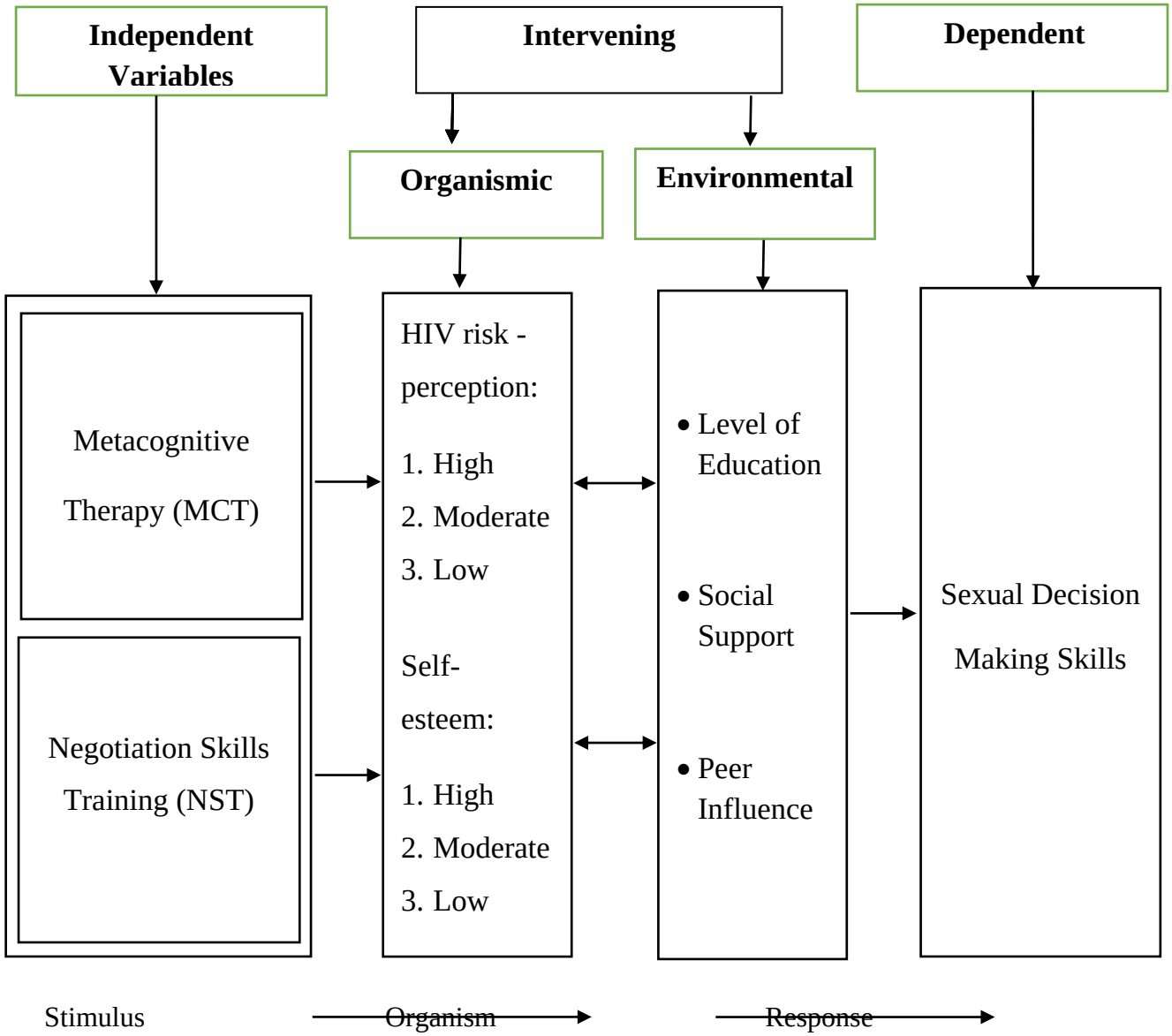


Figure 2.7: Conceptual model explaining the relationship between the independents, the intervention variables and the dependent variable in the study.
Source: Alakeme, Nestor Johnson, 2021.

2.4.1 Explanation of Conceptual Model

In this study, a conceptual framework is developed around interventions to advance sexual decision-making among teenagers at school in the state of Bayelsa, Nigeria. From the conceptual model, metacognitive therapy and negotiation skills training are the two

interventions with treatment packages used in this study. These interventions were referred to as independent variables in the conceptual model because the treatments are to be manipulated by the researcher in other to determine their effectiveness on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria.

Intermediate variables are factors inherent to participants that are not observable and can affect treatment outcomes. These variables are divided into two groups: organismic (internal) and environmental (external) variables. Internal variables include HIV risk perception and self-esteem, while external factors include educational attainment, social supports and peer influence that were used in the model. Consequently, the literature on HIV risk perception and self-esteem actively affects sexual decision-making in adolescents. Based on these premises, the perception of HIV risk and self-esteem as moderators were taken into account.

Nonetheless, the S-O-R behavioural equation represents an overall equation (total interactions) of the study variables (Kanfer and Philips, 1970).

S - Stimulus (the independent variables)

O - Organism (the intervening variables inherent in the organism).

R - Response (the dependent variable as the effect of the independent variables).

CHAPTER THREE

METHODOLOGY

This chapter presents the method of conducting this study. Specifically, the following sub-topics were covered: design, population, sampling and sampling techniques, inclusion criteria, instrumentation, data collection procedure, and method of data analysis.

3.1 Design

The study employed pretest-posttest, control group, quasi-experimental design with 3x3x3 factorial matrix. The column consisted of two treatments Metacognitive Therapy (A1) and Negotiation Skills Training (A2) and a control group (A3), while the row was webbed with the moderating variables HIV risk-perception at three levels (high, moderate and low) and self-esteem varied at three levels (high, moderate and low). The factorial matrix of the study is presented in Table 3.1

Table 3.1: 3X3X3 Factorial Matrix for Sexual Decision-Making Among in-school Adolescents in Bayelsa State, Nigeria

Treatment	HIV Risk-perception (B)								
	High (B_1)			Moderate (B_2)			Low (B_3)		
	Self-esteem (C)								
	High (C_1)	Moderate (C_2)	Low (C_3)	High (C_1)	Moderate (C_2)	Low (C_3)	High (C_1)	Moderate (C_2)	Low (C_3)
MCT (A_1)	2	3	2	3	2	2	2	2	3
NST (A_2)	2	4	3	5	2	4	3	2	3
CGP (A_3)	3	2	5	2	6	2	2	2	2
Total	n=7	n=9	n=10	n=10	n=10	n=8	n=7	n=6	n=8

Key:

A1 = Metacognitive Therapy

A2 = Negotiation Skills Training

A3 = Control Group

B1 = Participants with high HIV risk-perception

B2 = Participants with moderate HIV risk-perception

B3 = Participants with lower HIV risk-perception

C1 = Participants with high self-esteem

C2 = Participants with moderate self-esteem

C3 = Participants with low self-esteem

Schematical representation

The schematic representation of the treatment is shown in this way;

01 XA1 04

02 XA2 05

03 06

Where, 01, 02 and 03 are pretests.

04, 05 and 06 are posttests.

XA1 = Treatment with Metacognitive Therapy

XA2 = Treatment Negotiation Skills Training

Control group = Compensation lecture on Emotional Intelligence (EI)

3.2 Population

The population for the study comprised of all senior secondary school students' (S.S. II) in Bayelsa State. As at the time this study was carried out, the enrolment data for 2019 Bayelsa State public secondary schools was 108, the number of registered students' were 36,841 for boys while, 35,391 for girls, given a total sum of 72,232 students' which spread across the eight (8) Local Government Areas of Bayelsa State (Bayelsa State Ministry of Education, 2019). Bayelsa is a state in southern Nigeria situated in the heart of the Niger Delta region. Bayelsa State was established from Rivers State on ***1st ofOctober 1996*** by the military government of Sani Abacha. His name was derived from the early letters of the names of the main local government areas from which he was formed-Brass LGA (BALGA), Yenagoa (YELGA) and Sagbama (SALGA). As a result, BAYELSA has been derived from BA + YEL + SA.

3.3 Sample and Sampling Techniques

A representative sample of seventy-five (75) participants made up of 43 males (57.3%) and 32 females (42.7%) aged 10 to 18 years participated in the study. The sample was drawn using a multistage sampling procedure at various stages. In the first stage, a simple random sampling technique (ballot method) was used to select three (3) Local Government Areas out of the eight (8) LGAs that made up Bayelsa State (Brass, Ekeremor, Kolokuma/Opokuma, Nembe, Ogbia, Sagbama, Southern Ijaw and Yenagoa) respectively. The three (3) LGAs retained were Sagbama, Southern-Ijaw and Yenagoa). In the second stage, one school was selected from each of the three previously selected LGAs in the State.

In the third stage, Students' in S.S. It was randomly selected from all three schools, regardless of age, gender and educational background. Thereafter, the purposive sampling technique was used in the fourth stage, which involved an initial random selection of 30 participants per school based on the criteria for inclusion which in whole, lead to the recruitment of 90 participants in all. Upon completion of the experiment, only 75 participants completed the study, which became the substantial sample of the study. A key requirement is that the student who achieved a lower score (40%) in the At-Risk Sexual Behaviour (RSBQ) questionnaires be properly engaged in the study. The sampled schools were presented in Table 3.2below.

Table 3.2: Distribution of Secondary Schools according to Municipality

S/N	LGAs	Names of Institutions.	Number of Participants	Percentage (%)	Cumulative Percent (%)
1	Sagbama	Community Secondary School, Sagbama	21	28.0	28.0
2	Southern-Ijaw	Government Secondary School, Amassoma – SILGA, Wilberforce Island	28	37.3	65.3
3	Yenagoa	Epie National High School, Kpansia-Epie, Yenagoa	26	34.7	100.0
	Total		**75**	**100**	

3.4 Instrumentation

The following four research instruments were employed for data collection. The instruments were sectionalised as follows.

i. Sexual Decision-making Scale for screening
ii. Risky Sexual Behaviour Questionnaire
iii. HIV Risk-perception Questionnaire
iv. Rosenberg Self-esteem Scale

3.4:1 Section A: Bio-Data Information of the Participants

This section contains the demographic information of the students' such as gender, age and departments of study.

3.4:2 Section B: Sexual Decision-Making Scale (SDMS)

Sexual Decision-making Scale (SDMS) was developed by Carey and Steinberg, (1996)has been adapted to provide basic information on adolescent sexual decisions at school. The scale was accepted to measure in-students' (poor sexual decision-making skills in the course of their relationship with peers over time) in their capacity for making an appropriate sexual decision of life. It is a self-reported tool to assess students' sexual decision-making skills among adolescents at school. The scale consists of 21 essentials items that demonstrated the level of competence of adolescents in sexual decision-making. Each item was responded to using a four-point Likert scale ranging from Strongly Agree = SA, Strongly Agree = A, Disagree = D and Strongly Disagree = SD.

A typical illustration of the items was presented as follows: "At your adolescent's age right now, having sexual intercourse would create problems or would make life difficult"; "Consistently refuses to have sex if the partner(s) wants sex without a condom"; "The

sexuality education I received in school helped me to become better aware of the dangers"; "The sexuality education I received in school made me aware that I am responsible for making my own sexual decisions of sexually transmitted diseases"; "Before making sexual decisions I usually think about the consequences (goals) I want to achieve "among others in the study.

The items of the scale are negatively worded and the scoring is easy. The higher the scores, the higher the probability that the respondent did not make bad sex decisions among respondents. Meanwhile, the lower the score, the lower the chance of the person experiencing poor sexual decisions among participants. The highest rating is 68, while the lowest is 17. Also, those who scored 15 and 39 were used for the study because they reached the threshold of those with poor sexual decision-making for the study. The authors reported $\alpha = 0.93$ However, to ensure that the instrument is culturally relevant because it was pilot tested on a randomly selected group of students' from Ibadan North, Oyo State using thirty-five (35) sampled in-school adolescents who were not part of the study. The reliability of the test-test, after one week, $\alpha = 0.87$. This instrument was therefore considered stable to measure the construction of interest. The instrument is attached as Appendix A (1) to this study.

3.4.3 Section C: Risky Sexual Behaviour Questionnaire (RSBQ)

Risky sexual behaviour (RSBQ) questionnaire is to be used in obtaining basic information on the criterion variable for the intervention. This questionnaire was developed by Fessler, Pillsworth and Flamson (2004**).** The original scale consists of 35 items that were adopted and reduced to 19 items, which measure adolescent at-risk sexual behaviour and were adapted for the present study. The instrument adopted to test for sexual decision among in-school adolescents because it has the capacity of making an individual being assertive towards sexual expression with a closest or best same-sex friend (that is, a female, would describe her sexual communication level with another female and a male would describe his sexual communication level with another male with a cross-section interpersonal relationship) whom they are by no means related. The participant who scores below 40% was only considered to have low sexual decision-making skills while participants who score 41% to 70% and above was considered to have a moderate sexual decision skill and (61%) and above was considered to have high sexual decision-making skills. This implies that any participants (students') who scored below (40%) was included in the training while 40% and above were excluded to have good sexual decision-making skills among the adolescents.

The scale was classified into two levels of risky sexual behaviour, namely;

high and low. The items were on a four (4) Likert scale format ranging from Strongly Agree = SA, Agree = A, Disagree = D and Strongly Disagree = SD. Typical examples of the items include: “If a friend knew that I might have sex on a date, he/she would ask me whether I was carrying a condom”; “If my partner wanted me to participate in risky sex and I suggested a lower-risk alternative, we would have the harmless sex instead”; “My sexual experiences do not put me at risk for HIV/AIDS”; “It is right to manipulate someone into having sex as long as no future promises are made”; “Involving in an extensive pre-marital sexual experience is not lawful as both partners are in love”; “I will feel comfortable having intercourse with my partner in the presence of other friends”; “I usually worry about making a good sexual impression on others to gain friends intention to fall in love” among others in the study. This scale has been widely used by Nigerian researchers who reported a high-reliability index, for example, Uba and Oluwatelure (2016) used it to examined sexual decision-making, he obtained α = 0.92 showing a good internal consistency using the Nigerian sample for cultural integration. In the present study, the Cronbach alpha coefficient was used to assess the degree of the internal coherence of the measurements obtained. This overall coefficient reflects the degree of covariance between the items, serving as an index of internal consistency of the instrument and the result obtained was α = 0.89. This instrument is attached in Appendix A (2) to the study.

3.4.4 Section D: HIV Risk-Perception Questionnaire (HIV R-PQ)

HIV risk perception questionnaire developed by Gomez and Marin (1998) was used. The scale was an adapted format of the Centre for HIV/AIDS Prevention Studies located in San Francisco in measuring adolescents, HIV risk-perception regarding sexual activities that could be shortened or reduced the life span of an adolescent. Originally, the scale was 38 items after a thorough review of the instrument but has been reduced to 27 items that are effective in measuring the perception of HIV risk among adolescents in school. However, the researcher modified certain parts of the instrument to adapt them to the target population. All items were answered on a four-point Likert scale ranging from 1 – not at all risky to 4 – extremely risky.

More so, a typical example of the items was presented as: “I can minimize the consequences of risk-taking by planning and preparing for each outcome”; “When things get crazy in my environment, 1 stop obsessing over what could go wrong” among others in the

study. This scale has been widely used by Nigerian researchers who reported a high-reliability index, for example, Uba and Oluwatelure (2016) used it to examine HIV risk-perception and they obtained α = 0.92 showing good internal consistency using the Nigerian sample for cultural integration. In this study, Cronbach alpha was used to assess the degree of internal consistency of the measurements obtained. This overall coefficient reflects the degree of covariance between the items, serving as an index of internal consistency of the instrument and the result obtained was α = 0.86. This instrument is attached in Appendix A (3) to the study.

3.4.5 Section E: Rosenberg Self-esteem Scale (RSES)

Rosenberg's Self-worth Scale (RSES) was developed by Rosenberg (1965). The scale was classified into 3 levels of self-esteem: high, moderate and low. The original scale (RSES) consists of 63 items and 12 sub-scales. In the current study, one of the sub-scales of the scale was adopted. The scale was a self-reported instrument for assessing youth self-esteem to sexual life decisions. The scale measures the overall value of oneself by measuring positive and negative feelings towards oneself. The scale is believed to have a uni-dimensional model for grades items responses as fit to the data. An appraisal of the effects of self-esteem is complicated by several factors. However, high self-esteem is also a heterogeneous category, encompassing people who honestly accept their good qualities with narcissistic, defensive and conceited individuals. All items were answered with a four-point Likert scale ranging from Strongly Agree to Strongly Disagree. RSES evaluates attitudes to self-esteem and measures self-esteem worldwide.

The sample items of the scale are; “I can work like most other individuals.”, “I think I am a commendable individual, at least on an equal plane with others”, “On the whole, I am satisfied with myself”, “I certainly feel useless at times” and “I take a positive attitude toward myself” among others. The rating of the items as follows: 2, 5, 6, 8 and 9 are noted in reversed form. Taking into account that “Strongly disagree” 1 point, “Disagree” 2 points, “Agree” 3 points and “Strongly agree” 4 points. Sum scores for all ten items and keep all scores on a continuous scale. This scale has been widely used by Nigerian researchers who reported a high-reliability index, for example, Uba and Oluwatelure (2016) used it to examine self-esteem and they obtained α = 0.92 showing good internal consistency using the Nigerian sample for cultural integration. In this study, the Cronbach alpha coefficient was used to evaluate the internal consistency of the measurements obtained. This

overall coefficient reflects the degree of covariance between the items, serving as an index of internal consistency of the instrument and the result obtained was α = 0.79. This instrument is appended to Appendix A (4) of the study.

3.5 Inclusion Criteria

The inclusion criteria for this study were:

i. Participants who are duly registered in the selected schools.
ii. Participants who were in senior secondary school (S.S.S. II)
iii. Participants who returned the parental consent form
iv. Participants who scored less than 40% in the screening instrument; and
v. Participants who agreed to take part in all sessions.

3.6 Procedures

The study consisted of three systematic stages:

3.6.1 Pre-treatment

At this point, the researcher collected a letter of introduction from the Head of the Department of Guidance and Counselling at the University of Ibadan, Ibadan. With the letter of introduction, the researcher was able to obtain approval from the Bayelsa State Ministry of Education and the chosen secondary school. The researcher then tested the instruments in certain secondary schools outside the sampled population. Knowing that the instruments were reliable. Three research assistants from the Department of Guidance and Counselling, the University of Ibadan, who qualified for the exercise were recruited and trained for the study. Training objectives include presenting research assistants on how to contact each participant. In addition, they became familiar with the instruments. One of the instruments was administered by the researchers after careful consideration before treatment. After that, the randomization and selection of centres as well as participants followed and finally, at the pre-treatment phase, the intact centres used for the intervention were randomly assigned into treatment conditions as follows; Group one (Metacognitive Therapy); Group two (Negotiation Skills Training) and Group three (Control Group). The baseline information was then collected from each participant.

3.6.2 Treatment Phase

During the treatment stage, both experimental groups were treated. Metacognitive Therapy was used in treating participants in group 1. While negotiation skills training was administered in group 2. The training days assigned by the vice-principals of the schools were Tuesday and Thursday for the study, based on the approval obtained from them. The

treatments lasted 10 weeks and each session lasted 50 minutes, and the treatment package developed for this study was used. Participatory methodologies including role-playing, dramatics, brainstorming sessions and videos were used during the session. Participants were also given home assignments and behaviour rehearsals to support behaviour change. The control group was not treated but received the instrument for the study. To compensate for this, they were given a course on Emotional Intelligence (EI). The treatment package appears in Appendix B (1 and 2) of the study.

3.6.3 Post-treatment Phase

Three main activities took place in the post-processing phase. First, in addition to the daily summary, the investigator summarized all the sessions. Secondly, the post-intervention data were collected and thirdly, the participants were appreciated for being active, they were entertained and a token of ₦400 was given to each of them for devoting their valuable time. As a result, the therapy ended.

3.7 Control of Extraneous Variables

The extraneous variables in this study were controlled through appropriate sample and sampling methods; randomisation of the participants into the two intervention groups and control group; adherence to inclusion criteria; effective use of 3X3X3 factorial matrix design and the Analysis of Covariance (ANCOVA) statistical tools.

3.8 Ethical Clearance

In order to adhere to ethical standard of confidentiality of responses, the researchers did not include any identifier information such as name,address, phone number on the questionnaire. To ensure voluntaryparticipation, the researchers explained the purpose of the research and madethe option for participations to be either '*opt in or opt out'*. In this regard, each participant was also given an informed consent form to request their consent for participation in the study. Only those who returned consent forms were included in the study. To further guarantee anonymity of each participant, the researchers employedcodes on the questionnairewhich were used throughout to collect the respective data from the respondents while the inform consent form is attached as appendix B.

3.9 Summary of Treatment Packages

3.9.1 Treatment Package for Experimental Group I: Metacognitive Therapy (MT)

Session One: General orientation and administration of baseline data

Session Two: Teaching the meaning of metacognitive therapy

Session Three: Teaching the concept of sexual decision-making.

Session Four: Discuss metacognition for effective sexual decision-making.

Session Five: The importance and role of decision-making in human life.

Session Six: Barriers to effective sexual decision making for teenagers in school.

Session Seven: Teaching the components of metacognitive therapy

Session Eight: Regulation of meta-cognitive processes.

Session Nine: Knowledge-based competencies in metacognitive therapy.

Session Ten: Summary of sessions, collection of post-intervention data and termination of therapy.

3.9.2 Treatment Package for Experimental Group II: Negotiation Skills Training (NST)

Session One: General orientation and administration of baseline data

Session Two: Teaching the concept of sexual decision-making

Session Three: Teaching safer sexual principles using negotiation techniques.

Session Four: Adolescents thinking style using negotiation skills

Session Five: Role Play: Teaching the Basic Principles of Assertiveness.

Session Six: Teaching Sexual abstinence among adolescents

Session Seven: Discuss refusal techniques through delaying tactics.

Session Eight: Teaching effective sexual negotiating skills to adolescents.

Session Nine: Teaching Negotiating Techniques: Your Sexual Responsibility.

Session Ten: Summary of sessions, collection of post-intervention data and termination of therapy

3.9.3 Treatment Package for Experimental Group III: Control

Session 1: General orientation and administration of preliminary test of the instruments.

Session 2: Administration of the post-intervention scales and completion of treatment.

Session 3: Talk on emotional intelligence (EI).

3.10 Treatment Packages (MT, NST and Control Group)

TREATMENT PACKAGE FOR GROUP ONE: METACOGNITIVE THERAPY (MT)

Treatment Procedures

The first treatment package for this study was metacognitive therapy. There was a pre-test administration before the treatment package, treatment and post-test administration after the whole treatment for the study. The training for experimental group one was subdivided into ten (10) lessons for ten (10) weeks. Each session lasted for (50) minutes. The pre-test and post-test instruments were meant to validate the results arising from the training.

Treatment Goal

This training programme intends to improve the cognitive level of adolescents after the whole session. The participants would be able to have optimum total control over their cognition (reasoning) using metacognitive therapy, which would produce a positive mental image among the adolescents under the training.

SESSION ONE

Topic: General Orientation and Administration of Baseline Data

Objectives: At the end of the session, the researcher should be able to:

i. Establish rapport with the participants
ii. Set the ground rules
iii. Discuss the benefits of participants in the group
iv. Obtain baseline data from the participants

ACTIVITIES:

STEP I: Establishment of Rapport

The researcher introduced himself warmly to the participants and established a report using a questioning method that all participants were aware of as introductory techniques. This process involves asking participants to identify themselves and their names to be more familiar with each other in the experimental group. A baseline assessment process was conducted to provide feedback and take appropriate precautions for the meeting place between the participants and the facilitator, respectively.

STEP 2: Setting of Ground Rules

The researcher facilitated the establishment of the ground rules that formed the training session to maintain a time free from distraction from a peaceful relationship. Here are a few of the basic rules:

a) All electronics are expected, i.e. The GSM should remain silent or vibrate during the training period.
b) Punctuality in every session is greatly appreciated.
c) It is expected that the facilitator will ensure proper time management.
d) There is no room for shouting out to contributors. However, if you have a superior idea, please raise your hand for the acknowledgement of being taken in charge.
e) No side discussion is allowed for all participants
f) Participants were advised that there would be ten (10) sessions of 40 minutes each for ten (10) weeks.
g) The researcher explained the reasons for the training and the benefits related to the completion of the programme.

STAGE 3: Advantages of Participating in Therapy.

The researcher informed the participants that they would acquire basic knowledge, skills to cope with life, health-related issues, cognitive awareness and informed decision-making skill that would enhance individual participants to function effectively during and after the training session. The researcher added that the training would enhance the

knowledge of each participant on HIV/AIDS-related issues.

STAGE 4: Administration of the Questionnaires.

The researcher, assisted by the research assistants, distributed copies of the questionnaire to the participants. In addition, participants were properly instructed on how to complete the protocol questionnaire. As well, completed questionnaires were retrieved from participants in Experimental Group I, respectively.

STEP 5: Homework and Daily Evaluation

In conclusion, participants were asked the following questions:

1. Discuss what you accomplished in this meeting.
2. What would be your basic expectations concerning cognitive metacognition training?

STAGE 6: End of session.

The researcher valued all participants for their active participation and subsequently the selection was completed.

SESSION TWO

Topic: Teaching the Meaning of Metacognitive Therapy

Objectives: At the end of the session, the researcher should have the ability to:

i. Review the participant's assignments and provide feedback.
ii. Define what metacognitive therapy is.
iii. Discuss the components of Metacognitive therapy

ACTIVITIES:

STAGE 1: Review of Assignments.

The researcher reviewed the previous session by asking the participants to discuss their experiences from what they had achieved in the last meeting and to provide basic feedback from the whole session. In addition, he commended the participants who made a useful contribution to the group based on the assignment.

STEP 2: Meaning of Metacognitive Therapy

The researcher started by giving a background history to facilitate the mindset of the

learners by drawing the attention of each participant to know the meaning of Metacognitive Therapy. Metacognitive therapy is one of the recent innovative therapies developed to improve treatment outcomes for varieties of psychological problems in different areas of human life. Metacognition is defined as cognitive control of human thought and the appropriate decision by dismissing irrelevant thoughts rather than sinking into the prolonged distress of life.

Metacognitive refers to a person's cognition about reasoning or their knowledge of cognitive processes such as memory, attention, knowledge, conjecture and illusion. Students' recognises the ability to analyse his/her learning process. This usually involves paying detailed attention to what you are thinking, reading or writing and learning. Cognitive metacognition is a psychological conversation method based on the information-handling model that is widely supported by scientific evidence. The researcher added that metacognition helps individuals with control through human thought towards an appropriate knowledge about making decisions of life (e.g., sex and sexuality).

STEP 3: Components of Metacognitive Therapy

The researcher explained the main components of metacognition that allow participants to better understand the core areas of training. These components involve.

i) metacognitive knowledge and
ii) Metacognitive regulation.

The researcher explains metacognitive knowledge as knowledge of human cognition and such knowledge include the skills and practices that work best for the learner, on how and when to use such skills and strategies in his/her daily life such as sexual decision.

Metacognitive knowledge is also adolescents' own cognitive process and the ability to control processes through the organization, monitoring and modification as a function of learning. Metacognitive regulations refer to activities that control thinking and learning, such as planning, monitoring comprehension, and evaluation of an event.

STEP 4: Homework and Daily Evaluation

The researcher closed with the following questions for participants:

1. Discuss what you understand by metacognitive therapy?
2. Discuss the components of metacognitive therapy?

STEP 5: Closing of the Session

The researcher valued the active participation of participants in the training programme.

SESSION THREE

Topic: Teaching the Concept of Sexual Decision-Making Process.

Objectives: At the end of the session, the researcher should be able to:

1. Review participants homework and provide feedback.
2. Define the meaning of decision-making
3. Discuss the characteristics of decision-making

ACTIVITIES:

STEP 1: Revision of Homework

The researcher reviewed the previous session by asking the participants to discuss their experiences from what they had achieved in the last meeting and to provide basic feedback from the whole session. In addition, he commended the participants who made a useful contribution to the group based on the assignment.

STEP 2: Teaching of the Concept of Decision-Making Process

Decision-making is the essence of the self-management process. Decisions are
The term "decision-making" has been defined as a process of judging various options available and restricting choices to a particular situation. Decision-making is a conscious and a human process involving both individual and social phenomena based on factual and value premises which conclude with a choice of one behavioural activity from among one or more alternatives to move towards a desired state of affairs.

STEP 3: Characteristics of Decision-Making Process

Based on the different definitions above concerning several aspects of decision-making, the following characteristics may be derived:

1. Decision-making is part of the planning process. Every planner has to choose an appropriate solution or alternative among the available options.
2. It aims at choosing a suitable course of action by weighing and weeding out several available alternatives.
3. It involves the judgment and discretion of the decision-maker. It is not an entirely rational process because decisions are bound to be affected and

coloured by the personal likes, dislikes and whims of the manager who makes them.

4. Decisions made by managers involve an organization's commitment to a specific recourse and use of resources in a particular manner.
5. Decision-making like managing is a human and social process implying the interference of individual as well as social factors.
6. Decision-making is a purposeful activity because it is directed towards the achievement of a goal and objectives.
7. Decisions are made by managers to solve problems, resolve crises and conflicts and tackle the situation.
8. Decisions made by managers may sometimes hurt a short time.
9. Decision-making requires enough liberty to be given to managers so that they can also make use of their experience, skill and judgment.
10. The pervasiveness of decision-making: Decision-making is not only at the core of planning but is also an important managerial activity.
11. Decision-making is the choice of the best course among alternatives.
12. Decision-making is a mental process because the final selection is made after thoughtful consideration.

STEP 4: Homework and Daily Evaluation

The researcher concluded by asking the participants the following questions:

1. What is decision-making?
2. Discuss the characteristics of decision-making?

STEP 5: Closing of the Session

The researcher appreciates the participants for active involvement in the training programme.

SESSION FOUR

Topic: Discuss Metacognition for Effective Sexual Decision-Making.

Objectives: At the end of the session, the researcher should be able to:

i. Review participants' homework and provide appropriate feedback.
ii. Know the meaning of decision-making and its effectiveness in a social life
iii. Describe the stage of the problem-solving process

ACTIVITIES:

STEP 1: Revision of Homework

The researcher reviewed the previous session by asking the participants to discuss their experiences and provided feedback to the participants. Also, gave commendation to the participants who made a useful contribution to the group based on the assignment given.

STEP 2: Decision-Making and Its Effectiveness

The researcher explained what decision-making is all about. Decision-making is the process of identifying and choosing alternatives based on the values, preferences and beliefs of the decision-maker. Every decision-making process produces a final choice, which may or may not prompt action. The decision to engage in sexual activity with others is very personal and is usually influenced by many social factors such as personal values, cultural beliefs, and self-esteem. There are many reasons why people have sex.

Sometimes it is a conscious choice and sometimes things happen at the moment. Decision-making using metacognitive processes include: solving problems, setting goals and evaluating alternative actions. Decision-making has to do with problem-solving practice. The aim of making decisions is to evaluate the solutions that could be realized and to attain positive results by implementing them. Decision-making using metacognitive therapy has a special way of solving problems that are already known.

STEP 3: Stages of Problem-Solving Process

The act of making decisions involves identifying the goals to meet the need by gathering the necessary information related to the goals, formulating alternatives by considering the evaluation of such information provided, and selecting the appropriate one that best fits the goals. These processes include:

a) Identifying problems,
b) Generating alternatives,
c) Considering the possible consequences of every decision,
d) Gathering information to be able to evaluate the alternatives better,
e) Evaluating the data that relate to the alternatives,
f) Identifying the suitable alternative
g) Implementing the decision given and evaluating the consequences by making the necessary answers.

When an individual considers the above-mentioned processes in making a

decision and such behaviour is attentive information processing. The stress experienced in the decision-making process directly influences the decision-making behaviour and that increase the stress when the possible risks are considered after the decision given. This, in turn, causes an individual to give less inappropriate decisions. When the risks are neglected, the alternatives might not be evaluated sufficiently and such an individual would give inappropriate decisions.

STEP 4: Homework and Daily Evaluation

The researcher asked the participants the following questions:

1. Mention and explain the effectiveness of decision-making using metacognitive therapy?
2. List the stages involved in the problem-solving process?

STEP 5: Closing of the Session

The researcher gladly appreciated all the participants for their active involvement in the training programme.

SESSION FIVE

Topic: The Importance and Role of Decision-Making in Human Life.

Objectives: At the end of the session, the researcher should be able to:

I. Review participants' homework and provide appropriate feedback.
II. Know the meaning of decision-making and its effectiveness in a social life
III. Describe the stage of the problem-solving process

ACTIVITIES:

STEP 1: Revision of Homework

The researcher reviewed the previous session by asking the participants to discuss their experiences and provided feedback. Also, gave commendation to the participants who made a useful contribution to the group based on the assignment given.

STEP 2: Decision-Making and Its Effectiveness

The researcher explained what decision-making is all about. Decision-making is the process of identifying and choosing alternatives based on the values, preferences

and beliefs of the decision-maker. Every decision-making process produces a final choice, which may or may not prompt action. The decision to engage in sexual activity with others is very personal and is usually influenced by many social factors such as personal values, cultural beliefs, and self-esteem. There are many reasons why people have sex.

Sometimes it is a conscious choice and sometimes things happen at the moment. Decision-making using metacognitive processes include: solving problems, setting goals and evaluating alternative actions. Decision-making has to do with problem-solving practice etc. The aim of making decisions is to evaluate the solutions that could be realized and to attain positive results by implementing them. Decision-making using metacognitive therapy has a special way of solving problems that are already known.

STEP 3: Importance and Role of Decision-Making in Human Life

Decision-making plays a definite role in life which is used to achieve goals, assess standards, and aid in attaining your desired quality of life. The decision made, reflects value hierarchy (Swanson, 1981). He further stated that decision-making serves many different purposes in managing.

Decision-making is used to set the goals and their priorities; to determine which resources should be used, or whether one resource will be used instead of another. The courses of action have resulted from the decision made. From the earlier decisions, the habits and routines are followed regularly. When there are different ways of performing the task, it becomes necessary to find out the best way and that is what decision-making is all about.

1. Decision-making makes it possible to adopt the best course of action in carrying out a given task. When there are different ways of performing a task, it becomes necessary to find out the best way and that is what decision is all about.
2. By choosing the best method of doing any work, decision-making ensures optimum use of the enterprise resources, namely men, machines, materials, money. Resources are always scarce and therefore, it is necessary to make proper use of them.
3. Decision-making helps to find a solution to any problem in the workplace.
4. Decision-making helps to identify the best course of action in each given situation and thereby promotes efficiency.

STEP 4: Homework and Daily Evaluation

The researcher asked the participants the following questions:

1. Mention and explain the effectiveness of decision-making?
2. Highlight the importance and role of decision-making in human life?

STEP 5: Closing of the Session

The researcher gladly appreciates all the participants for their active involvement in the training programme.

SESSION SIX

Topic: Barriers to Effective Sexual Decision Making for Teenagers in School.

Objectives: At the end of the session, the researcher should be able to:

i. Review participants' homework and provide appropriate feedback.
ii. Know the meaning of decision-making and its effectiveness in a social life
iii Describe the stage of the problem-solving process

ACTIVITIES:

STEP 1: Revision of Homework

The researcher reviewed the previous session by asking the participants to discuss their experiences and provided feedback. Also, gave commendation to the participants who made a useful contribution to the group based on the assignment given.

STEP 2: Barriers to an Effective Sexual Decision among Adolescents

1. Barriers to SRH information, family planning, STI and HIV/AIDS and free condoms.

Barriers to promoting SRH education and information also include the reluctance of parents and teachers to talk about youth sexuality. The researchers asked, how effective is sex education in schools? The sexual health curriculum has been in place since the early 1980s (Pardiwala, 1985). Yet our earlier review of secondary data and reports shows little change with

2. Right for pregnant adolescents to continue their schooling

Within the right of adolescents to SRH information and education, the 1994 ICPD affirms that “Countries should take affirmative steps to keep girls adolescents

in schools. Pregnant adolescents should be enabled to continue their schooling". This programme will allow pregnant students' to return to school after the delivery of the child. The key barriers faced by pregnant adolescents to return to schools include lack of adequate information on the policy, lack of motivation, finance, shame and embarrassment, and expectation of motherhood.

3. The right to youth-friendly and confidential SRH services and facilities

The ICPD Programme of Action recognizes that reproductive health care services for youth should be provided in a "youth-friendly environment" to meet the educational and service needs of adolescents and to enable them to make responsible and positive choices concerning their SRH Barriers to the Promotion and Fulfilment of the needs. SRH services should safeguard the rights of adolescents to privacy, confidentiality, informed consent, respecting their cultural values and religious beliefs and in conformity with relevant existing international agreements and conventions, including the Conventions on the Rights of the Child and the Women's Convention (Woods, 2005).

4. Availability

Availability coverage relates to the resources available for delivering the intervention and the sufficiency of those resources; for example, the number or density of health facilities and personnel, or the availability of necessary materials such as drugs or equipment. Availability coverage measures the capacity of a health system to the size of the population in need. The literature review and data mining exercise revealed a range of availability barriers. Some barriers were related to the weak capacity of the health system in general in some parts of the country, particularly in the North and in humanitarian crisis zones outside of internally displaced person camps.

5. Accessibility

Accessibility barriers include geographic barriers (distance and availability of transport) and financial barriers (direct out-of-pocket expenditures, such as for medicines, as well as indirect costs such as missing school, lost work and child care). Accessibility barriers can also be organized or information, such as those related to inconvenient opening times, waiting times and schedules. The literature review and data mining exercise highlighted the need to address accessibility barriers, with the most critical being financial barriers, transport-related barriers, and barriers linked to information accessibility.

6. Acceptability

Acceptability barriers relate to the perceived responsiveness of the provider and perceptions of the quality of care. Examples of possible acceptability barriers include cultural beliefs that are in tension with the service provided; gender responsiveness of services or gender norms, roles and relations that inhibit access; perceptions of service quality; perceived and actual corruption among health providers; and discriminatory attitudes by providers (based on sex, ethnicity, marital status, religion, caste, sexual orientation and so on).

STEP 3: Homework and Daily Evaluation

The researcher asked the participants the following questions:

i. Mention and explain the effectiveness of decision-making using metacognitive therapy?

ii. List the stages involved in the problem-solving process?

iii. Highlight the Importance and Role of Decision-making in Human Life?

STEP4: Closing of the Session

The researcher gladly appreciates all the participants for their active involvement in the training programme.

SESSION SEVEN

Topic: Teaching the Components of Metacognitive Therapy

Objectives: At the end of the session, the researcher should be able to:

i. Review participants' homework and provide feedback.

ii. Equip the participants with basic elements of Metacognitive Therapy.

ACTIVITIES:

STEP 1: Revision of the Previous Session

The researcher reviewed the previous session by asking the participants to discuss their experiences and provided feedback. Also, by giving commendation to the participants who made a positive contribution to the group based on the assignment given. The researcher further made the previous session more interesting to ensure a better understanding of what was taught.

STEP 2: Elements of Metacognitive Therapy

All the elements of metacognitive therapy were identified. However, the researcher divided the participants into four groups and each group discussed one element of metacognitive therapy, as being presented below and these elements include;

1. Meta-memory
2. Meta – comprehension
3. Self–regulation
4. Schema training

STEP 3: Basic Elements of Metacognitive Therapy

The researcher explained these elements to the students' for proper understanding as listed below.

1. Meta-Memory: Metamemory refers to the learner's awareness of which strategies are to solve certain tasks. It is used for storing information about a cognitive task.
2. Meta-Comprehension: It is used for detecting and rectifying errors. This helps adolescents to improve their performance across any endeavours of life.
3. Self-regulation: Self-regulation refers to metacognitive adjustive agents make concerning errors.
4. Schema Training: Schema trainer is a meaningful learning experience for generating one's cognitive structures or frameworks.

STEP 4: Behavioural Class Activities.

The researcher asked the participants to list and explains major elements of metacognitive therapy to various situations of learning and how such elements are to them (practically).

STEP 5: Closing of the Session

The researcher appreciated the participants for active participation in the training programme.

SESSION EIGHT

Topic: Regulation of Meta-Cognitive Processes.

Objectives: At the end of the session, the researcher should be able to:

i. Review of participants' homework and appropriately provides feedback.
ii. Explain what is the regulation of control in metacognitive processes
iii. Clarify the essential regulatory skills in metacognitive processes

ACTIVITIES:

STEP 1: Revision of Homework.

The researcher reviewed the previous session by asking the participants to discuss their experiences. The researcher also provided adjustment on the participants' feedback and recommended the participants who made a positive contribution to the group based on the assignment given. The researcher further made the previous session more detailed to ensure better understanding to reinforce support based on the last lecture as refreshment.

STEP 2: How to Regulation of Control

The researcher facilitated the background of the topic "regulation of control" to the participants during the training session. Regulation of cognition refers to metacognitive activities that help control one's thinking or learning skills to take a responsible decision that would affect one's future. Although several regulatory skills have been described in the literature, three essential skills would be discussed in this training which includes: planning, monitoring, and evaluation.

STEP 3: Regulatory of Recognition Skills

The researcher explained these skills to the participants by using three essential skills as described under the regulation of control in the training.

1. **Planning:** Planning includes the selection of suitable approaches and allocation of resources that affect performance and these skills include making predictions before reading, strategy sequencing, and allocating time before beginning a task. This is an in-depth analysis of how good and poor a student plans to achieve in the journey of life.
2. **Monitoring:** Monitoring refers to one's awareness of comprehension and task performance. The ability to engage in periodic self-testing is essential for participants while the learning process continues. For instance, monitoring ability develops slowly and is quite poor in students' and even adults. The student's ability to estimate how well he/she would understand a passage before reading was related to monitoring

accuracy on a post-reading comprehension test.

3. **Evaluation:** Evaluation refers to evaluating the products and a regulatory process of one's learning process and it is agreed that regulatory competence improves performance in several ways, including better use of cognitive resources such as attention, better use of strategies, and a greater awareness of comprehension breakdowns.

STEP 4: Homework and Daily Evaluation

The researcher asked the participants the following questions:

1. Mention and explain the essential regulatory skills in metacognitive processes

STEP 5: Closing of the Session

The researcher appreciates the participants for active involvement in the training programme.

SESSION NINE

Topic: Knowledge-Based Competencies in Metacognitive Therapy.

Objectives: At the end of the session, the researcher should be able to:

i. Establish rapport with the participants
ii. Explain the types of knowledge-based skills in metacognitive therapy.
iii. Evaluate knowledge-based skills using metacognitive.

ACTIVITIES:

STEP 1: Review of Homework

The researcher reviewed the participant's homework and provided appropriate feedback. Participants' efforts were commended and the learner was also encouraged to be punctual at the training ground as earlier stipulated in the introductory session of the programme.

STEP 2: Types of Knowledge-Based Skills

The researcher explained that metacognitive has three major types of knowledge-based skills to increase learners reasoning abilities and these knowledge-based skills include: (a) declarative knowledge, (b) procedural knowledge and (c) conditional knowledge.

1. **Declarative Knowledge:** This kind of knowledge suggests the true information

somebody knows and what you can articulate very well. For instance, it is known that the recipe for ascertaining energy at the physical layer. (Torque = mass time/speed)

2. **Procedural Information:** This kind of information in knowing how to accomplish something effortlessly. For instance, knowing the mass and speed of a question and knowing how to do it.
3. **Contingent Knowledge:** This kind of knowledge enhances knowing when to utilize procedural expertise in which conditions one system is superior to all. For instance, the student must recognize that the test questions must be considered a motivation as a feature of the negotiation process. Therefore, these three kinds of information, ideas apply to learning for success.

STEP 3: Homework and Daily Activities

The researcher asked the participants to list and explain the three types of knowledge base skills in terms of their interpretation and the new situation?

SESSION TEN

Topic: Administration of Post Intervention Questionnaires and Termination of Therapy

Objectives: At the end of the session, the researcher should be able to:

i. Review all the sessions, obtain the post-intervention data for evaluation.
ii. Appreciate all participants and formal termination of the therapy

ACTIVITIES:

STEP 1: Revision of the Previous Session

The researcher received all the participants warmly in the last session and summarized all sessions, elicited questions were provided with answers and clarifications were made on general issues raised by the participants. The researcher taught the participants some key strategies to adopt to enable them to maintain the knowledge gains from the therapy by following the revision process.

- Welcome the participants
- Collection and reviewing of take-home assignments
- The business of the day

Review of the following topic:

1. General Orientation and Administration of Baseline Questionnaires
2. Meaning of Metacognitive Therapy

3. Metacognitive Therapy for Effective Decision-making
4. Principles of Metacognitive Therapy
5. Metacognitive Levels and Processes in Decision-making
6. Element of Metacognitive Therapy
7. Regulation of Metacognitive Processes
8. Types of Awareness using Metacognitive Therapy
9. Knowledge-based Skills in Metacognitive Therapy.
10. Administration of Post Intervention Questionnaires and Termination of Therapy

- Questions and answers
- Post-test
- Filling of the evaluation forms

STEP 2: Appreciation to all Participants and Termination of Therapy

The researcher applauded all the participants, appreciated the role each participant took and commended the participants' efforts for being active throughout the sessions. They were entertained with snacks and soft drinks. The researcher encouraged them to maintain the gain of the therapy and he formally terminated the therapy.

TREATMENT PACKAGE FOR GROUP II: NEGOTIATION SKILLS TRAINING

Treatment Procedures

The second treatment package for this study was negotiation skill training. There was a pre-test administration before the treatment package, treatment and post-test administration after the whole treatment for the study. The training for experimental group two was sub-divided into ten (10) lessons over ten (10) weeks. Each session lasted (50) minutes. The pre-test and post-test instruments were meant to validate the results arising from the training.

Treatment Goal

This programme intends to improve adolescent sexual negotiation skills during and after the training. Participants would be able to have a better understanding of various sexual negotiation skills with a positive reasoning ability in them to decide appropriately.

SESSION ONE

Topic: General Orientation and Administration of Baseline Data

Objectives: At the end of the session, the researcher should be able to:

i. Establish rapport with the participants
ii. Atmosphere setting (ground rules for participants)
iii. Obtain baseline data from the participants

ACTIVITIES:

STEP I: Atmosphere Setting

The researcher warmly introduced himself to the participants and established rapport using a questioning method that the whole participants were aware of as introductory techniques. This process involves asking participants to identify themselves by mentioning their names to be more familiarized with one another in the group. There will be a basic evaluation to provide feedback and to take appropriate care for the venue, respectively among the participants and the facilitator.

STEP 2: Setting of Ground Rules

The researcher facilitated the setting of the ground rules that made up the training session to maintain a distraction-free moment of a peaceful relationship. Some of the ground rules include:

a) It is expected that all electronic devices i.e. GSM to be in silence or vibration during the

training period

b) Punctuality to every session is highly appreciated
c) Good time management is quite expected to be enforced by the facilitator
d) There is NO room for shouting down on contributors i.e. if you have any superior idea, please raise your hand for recognition to be attended to
e) No side discussion is allowed for all participants
f) Participants were informed that they would be having ten (10) sessions of one hour and twenty minutes each for ten (10) weeks.
g) The researcher explained the reasons for and benefits attached at the end of the programme.

STEP 3: Administration of Questionnaires

The researcher, distributed copies of the questionnaire along with the research assistants to the participants in the training centre. Also, adequate instructions on how to fill in the protocol questionnaire were provided. Similarly, the completed copies of the questionnaire were thereafter retrieved from the participants in the experimental group.

STEP 4: Concluding Remarks

Reflect your thoughts and your feelings at home to your parents and initiate communication. The researcher thanked all the participants for a well-done task and encouraged the students to be punctual for the training starts fully by next week.

SESSION TWO

Topic: Teaching the Concept of Sexual Decision-Making

Objectives: At the end of the session, the researcher should be able to:

i. Review participants' homework and provide feedback.
ii. Define the meaning of decision-making
iii. Discuss the characteristics of decision-making

ACTIVITIES:

STEP 1: Revision of Homework

The researcher reviewed the previous session by asking the participants to discuss their experiences from what they had achieved in the last meeting and to provide basic feedback from the whole session. Also, gave commendation to the participants who made a

useful contribution to the group based on the assignment given.

STEP 2: Teaching of the Concept of Decision-Making Process

Decision-making is the essence of the self-management process. Decisions are made to solving problems, tackling situations, handling crises and resolving inevitable conflicts. Decision-making is at the core of planning which involves defining the problem, finding, comparing and choosing a course of action. It is a process or activity of choosing an appropriate course of action from several alternative courses.

The term "decision-making" has been defined as a process of judging various available options and narrowing down choices to a situation. Decision-making is a conscious and a human process involving both individual and social phenomena based on factual and value premises which concluded with a choice of one behavioural activity from among one or more alternatives to move towards a desired state of affairs.

STEP 3: Characteristics of Decision-Making Process

Based on various definitions made above regarding several aspects of Decision-making, the following characteristics may be derived:

1) Decision-making is an integral part of planning. Every planner has to choose an appropriate solution or alternative among the available options.
2) It aims at choosing a suitable course of action by weighing and weeding out several available alternatives.
3) It involves the judgment and discretion of the decision-maker. It is not an entirely rational process because decisions are bound to be affected and coloured by the personal likes, dislikes and whims of the manager who makes them.
4) Decisions made by managers involve the commitment of the organization to adopt a specific recourse of action and utilize resources in a particular manner.
5) Decision-making like managing is a human and social process implying the interference of individual as well as social factors.
6) Decision-making is a purposeful activity because it is directed towards the achievement of a goal and objectives.

7) Decisions are made by managers to solve problems, resolve crises and conflicts and tackle the situation.
8) Decisions made by managers may sometimes harm a short period.
9) Decision-making requires enough liberty to be given to managers so that they can also make use of their experience, skill and judgment.
10) Pervasiveness of decision-making: Decision-making is not only at the core of planning but is also an important managerial activity.
11) Decision-making is the choice of the best course among alternatives.
12) Decision-making is a mental process because the final selection is made after thoughtful consideration. However, through critical appraisal, one can know the best alternatives.

STEP 4: Home-work and Daily Evaluation

The researcher concluded by asking the participants the following questions.

i. What is decision-making?
ii. Discuss the characteristics of decision-making?

STEP 5: Closing of the Session

The researcher appreciated the participants for active involvement in the training programme.

SESSION THREE

Topic: Teaching Safer Sexual Principles using Negotiation Techniques.

Objectives: At the end of the session, the researcher should be able to:

i. Review participants homework and provide feedback.
ii. Explain the meaning of sexual negotiation skills
iii. State the principles of successful negotiation
iv. List negotiation techniques
v. State consequences of negotiating safer sex with a partner

ACTIVITIES:

STEP 1: Revision of Homework

The researcher reviewed the previous session by asking the participants to discuss their experiences and provided feedback to the participants. Also, gave commendation to the

participants who made a useful contribution to the group based on the assignment given.

STEP 2: Meaning of Sexual Negotiation Skills

Sexual negotiation can be inferred as the ability to communicate with a fellow partner for a desire to have sexual intercourse or the ability to communicate effectively about sexual wishes and the intentions necessary for satisfying sexual experiences. Sexual negotiation equally refers to direct verbal exchanges aimed at reaching an agreement about the sexual wishes and the intentions necessary for satisfying sexual pleasures or experiences. Negotiation is necessary, particularly when sexual partners are unaware of each other's intentions or when they have different intentions, for example, concerning contraception and the likes. Negotiation about sexual issues is a complex social interaction. It requires special skills and knowledge, like assertiveness, it contains impression management, and it requires constant effort, even among those who have made the most progress in incorporating the required methods in it.

STEP 3: Principles of Successful Negotiation

An individual before starting with the negotiation must be very clear with the agenda based especially matters on sexual issues leading to the negotiation process. The following are identified skills as discussed below:

- **BeReact sensibly -** A good negotiator about sexual discussion must react sensibly. The adolescent should never lose his temper or overreact. If such adolescents are unhappy with the sexual discussion, show your displeasure. Do not keep things to yourself or assume that others will understand them on their own.
- **BePatience -** One needs to be patient enough for a good negotiation. It is not always that the other person will accept your suggestions in the first attempt itself. You need to convince him and it needs patience.
- **BeConfident -** One needs to be confident enough for effective negotiation. You might need something but never show your desperation to anyone. They will take undue advantage of your helplessness. Take care of your facial expressions. Never be nervous in front of a second party. Do not start

sweating.

STEP 4: Negotiation Techniques

Negotiation is referred to as the style of discussing sexual issues among individuals to come to a conclusion satisfying each party involved. Discussions should be on an open forum for everyone to not only participate but also express their views and reach an alternative acceptable to all. It is important to know how we can negotiate with each other. One must know the difference between negotiating and begging. Do not stoop too low to get a deal closed. Negotiation must be in a dignified way. One has to be extremely patient and also understand the second party's needs and interests as well. Never impose your ideas on anyone. Let everyone speak their mind and decide something which would favour one and all.

Let us go, through some negotiation techniques in detail:

- The first and foremost technique for an effective negotiation is that one should be well informed about everything related to the deal. Find out even the minutest detail you think is important and you might require at the time of negotiation. Be prepared for everything. Remember the second party might ask you anything.
- Take good care of your posture as well as your body movements. Look confident. While speaking, do not look around or play with things. It is just a discussion; no one will kill you if you are not able to close the deal.
- Be very focused. One should be very specific about what he wants. First, ask yourself what is the purpose of this negotiation? What do you want? What is an affordable price for you? Be firm and stick to it. Be very specific and clear.
- Never keep things to yourself and crib later. Do not assume that the other person can read your mind on his own. One needs to ask for what he wants.

- Communication is also important in negotiation. Speak clearly and precisely. One should not confuse others. Playing with words is one of the biggest threats to negotiation. Do not use derogatory, or lewd remarks against anyone.

STEP 5: Consequences of Negotiating Safer Sex with Partner

s/n	Advantages	Disadvantages

1	It protects from AIDS	Make him angry and be expensive
2	It does protect from other Sexually Transmitted Diseases (STDs)	Cause him to walk out on me
3	It does protect from pregnancy	Break our relationship
4	It helps him change his behaviour	Make him have sex with dozens
5	It led him to look for more information before taking action	Make him think deeply with other men
6	It helps to convince him/her to have only one partner	Make him think that I am unfaithful
7	It helps to convince him/her to use condoms thereby make us closer at all time	Make him think that I am suspicious of him/ her
8	It helps to see each other better in our future relationship	Make me think that I am safe when I am not unto the future
9	It helps us to attain a long and happy life relationship	Make him complain of less sexual satisfaction get jammed inside

Source: Training Resources, 2018

Step 6: Homework and Daily Evaluation

The researcher asked the participants the following questions:

i. What are sexual negotiation skills?
ii. What are the principles of a successful negotiation?
iii. What are the negotiation techniques you know?
iv. Consequences of negotiating safer sex with a partner

SESSION FOUR

Topic: Adolescents Thinking Style using Negotiation Skills

Objectives: At the end of the session, the researcher should be able to:

i. Review participants homework and provide feedback
ii. Define thinking style, characteristics and types of thinking style
iii. Explain decision-making through negotiation skill
iv. State tools for good sexual decisions making for adolescents

ACTIVITIES:

STEP 1: Revision of Homework.

The researcher reviewed the previous session by asking the participants to discuss their experiences and provided feedback. Also, recommended the participants who made a useful contribution to the group based on the assignment given and also appreciate the

participants for being punctual to the training programme.

STEP 2: Meaning of Adolescents Thinking Styles, Characteristics and their types

Thinking is one of the important aspects of one's cognitive behaviour. Most often, comments like to think before you act, or think before you feel indicates that thinking provides the base on which not only our cognitive but also affective and cognitive behaviour depends. The thinking has a definite end or purpose. Therefore, the thinking styles of adolescents are described as patterns of behaviour or methods of accomplishing consistent tasks. Thinking styles are equal or more important than abilities. It exists at the interface between cognition and personality traits. Thinking styles are preferred ways of applying one's intellectual abilities and knowledge to solve a problem. Meanwhile, two people may have equal levels of intelligence but differ on how they focus their abilities on a task.

A Characteristics of an adolescent thinking view

Characteristics of young adolescent physical development include:

i. Restlessness and fatigue due to hormonal changes.
ii. A need for physical activity because of increased energy.
iii. Developing sexual awareness, and often touching and bumping into others.

B What are the Three (3) types of adolescent thinking style

There are three types of thought that our brains produce:

i. Insightful thinking (used for problem-solving) or to do long-range planning and problem solving
ii. Experiential thinking (focused on the task at hand), and
iii. Incessant thinking (chatter).

STEP 3: Responsible Decision-Making through Negotiation Skills

Negotiation skills involved thinking about responsible decision-making in adolescents. To deal with life's problems effectively and avoid danger, an adolescent need to make good sexual decisions. Adolescents face many contradictory messages, expectations and demands from teachers, guardians and peers as well as from social media. Adolescents need to be able to figure things out themselves. Individual adolescents need to analyse the messages when deciding which is best as an option. Adolescents should think of the situation adequately, weighing the prone and coin as to make an informed and personal choice.

a) Decision-making is a day-to-day activity.
b) There is a need to analyse information and experiences objectively to make an appropriate decision concerning the future ahead
c) Be aware of the possible consequences of the choices an individual make.
d) You must be skilled at evaluating the future consequences of the present actions and the actions of others.
e) You need to determine alternative solutions.
f) You need to analyse the influence of your values and the values of those around you.

STEP 4: Tools for Good Sexual Decision Skills

The following tools are used for making a responsible decision such as.

a) Self-awareness: Having high self-esteem helps you in making good sexual decisions.
b) Clarified values: Understanding and being sure of personal and family values which are important for good decision
c) Information: Adequate information and facts about all aspects of sexual issues allow adolescents to weigh the options available to make an informed decision.
d) Clear values: Clear values are important for determining how to effectively use the opinions and values of others. Other factors such as religion, family, society, culture, government, policy, environment, climate, foreign influence and media have influenced decision-making.

STEP 5: Homework and Daily Evaluation

The researcher asked the participants the following questions:

1. What are adolescents thinking styles?
2. List two characteristics of adolescents thinking styles
3. Mention three tools for effective decision-making through sexual negotiation?

SESSION FIVE

Topic: Role Play: Teaching the Basic Principles of Assertiveness.

Objectives: At the end of the session, the researcher should be able to:

i. Review participants' homework and provide feedback.
ii. Explain the meaning of assertiveness and persistence skills in the journey of negotiation
iii. State role-play on assertiveness skills: Scene I and II

iv. Explain non-verbal refusal skills: The teen's diet to resist sexual pressure

ACTIVITIES:

STEP 1: Revision of Homework

The researcher reviewed the previous session by asking the participants to discuss their experiences and provided feedback. Also, give commendation to the participants who made a useful contribution to the group based on the assignment given.

STEP 2: Meaning of Assertiveness and Persistence Skills

The process of acquiring assertiveness skills would enable adolescents to communicate effectively based on what individuals want in life, thereby standing up for their rights. Assertiveness training is about developing the ability to participate quickly and spontaneously in a group talk. Assertiveness training is about making your need clear, being vocal and humbly present your rejection piece of information with the utmost respect while at the same time, acknowledging the needs of other people. Most unassertive adolescents do not know how to communicate their needs. This can lead to over-dependency. The fundamental skills in assertiveness training emphasised the usefulness in the acquisition of high self-esteem among adolescents.

Importantly, the main technique used to practice the art of persistence is called a broken record. A broken record is a skill of being able to repeat over and over again in an assertive and relaxed manner, what you want or need until the other person gives in or agrees to negotiate sexually with you. Coping with situations where you are likely to be diverted by clever, articulate but irrelevant arguments. A broken record is a self-protective skill, useful in situations where your time and energy is precious. When a friend of the opposite sex is insisting he wants to have sex with you and you do not want that when a stranger meets you on the way and wants to manipulate you into having sex, and especially unscrupulous young adolescent with young girls hawking goods about. However, this is done by mastering, practising and conveying the same message, but using slightly different words, for instance, the continuation from the 1st role-play using different names here to capture the scene.

STEP 3: Role-play on Assertiveness Skills

This section of role play is sub-divided into two scenes emphasising the role of communication and persistence that eventually led to a practical demonstration of refusal techniques which is the primary goal of sexual negotiation skill training following the primary objectives as presented below:

- This will help the participants to know when to say No
- Help in the acquisition of self-esteem and improve the relationship with other people. Thereby helping adolescents in determining their rights

Introductory remark

- Welcome all the participants
- Collection and review of all the take-home assignments
- The business of the day

Scene I

The Role of Communication

Two young adolescents are friends on a platonic level. They read together; the girl brings a mathematical problem for them to solve together. As time goes on, Joseph has developed a sexual interest in Tombra.

Joseph: I want us to be together for a longer period.

Tombra: Why should we be together for a longer period?

Joseph: I just feel like that way.

Tombra: There must be a reason for every action.

Joseph: Tombra, I love you and want to give myself to you.

Tombra: No Joseph, I do not want that. It is very risky at this age.

It could result in pregnancy, more importantly, sexually transmitted diseases and AIDS are around. Moreover, you cannot love me like your mother. The two loves are different filia for your mother and platonic for me; that is, correctly speaking. But now you are talking of neither, but about heroes, which in itself is wrong for you to develop for either of us! Let us just be good playtime friends. The role-play showed that Joseph and Tombra communicated their needs adequately. Adequate communication involves listening well, speaking concisely.

- Initiating and maintaining a conversation
- Disclosing thoughts and feelings with ease
- Being aware of non-verbal communication

- ❖ Having the ability to be calm and relaxed

Stage 1

All these will be achieved by the participants dividing into pairs. Spend about five minutes with each other, sharing information about either yourself or an exciting holiday or anything you want, each to be summarised on paper about what you and your partner said. The researcher read each other's summaries and discusses the differences and similarities among them.

Stage 2

Each member stands or sits in front of the crowd and talk for five minutes on any topic. The group can then give feedback about the way the person communicated both verbally and non-verbally, a role plays e.g. A man, who told a girl to be his lover, I love you, I will buy you many things. He dips his hand into his pocket and brought out five hundred naira's, you see I have money. The girl started laughing saying No, I do not want to. The smiling indicates that she wants that. Both verbal and non-verbal expressions should correlate adequately. Make sure the feedback is constructive and specific e.g. Your voice was not loud not that your voice was not right.

Stage 3:

The group should move around the room, a person will take responsibility for giving a talk on a good look in pairs. At the end of these sections, they will require skills in initiating a talk and replying. Note the following, at the end of each of these stages, a version of aggressive and unassertive behaviour was roleplayed.

Scene II

The Role of Persistence

Is a fundamental skill in assertiveness training, it is very useful in the acquisition of high self-esteem. The main technique used to practice the art of persistence is called BROKEN RECORD. A broken Record is a skill of being able to repeat over and over again in an assertive and relaxed manner, what you want or need, until the other person gives in or agrees to negotiate sexually with you. Coping with situations where you are likely to be diverted by clever, articulate but irrelevant arguments. A broken Record is a self-protective skill, useful in situations where your time and energy is precious. When a friend of the opposite sex is insisting, he wants to have sex with you and you do not want that when a stranger meets you on the way and wants to manipulate you into having sex, especially

unscrupulous young adolescents with young girls hawking goods about. However, this is done by mastering, practising and conveying the same message, but using slightly different words, for instance, the continuation from the 1st role-play using different names here to capture the scene.

Joseph: If I have fun with you, you will enjoy it. I have a lot of experience in this act.

Tombra: No Joseph, I do not want to have that fun now?

Joseph: If you do not have sex now, you will not be able to marry an educated person like lecturers, professionals like doctors and lawyers.

Tombra: Why won't I?

Joseph: This is because they do not have the energy. They only read books. Then you will end up marrying a farmer because it is only a farmer that can break your hymen by then.

Tombra: No, I have already told you I do not want to. Do not try to convince me. As for your stories, I will clarify them from my mother, father or school counsellor. I will equally tell them you said so. Thank you and bye for now

Joseph: Do not mention my name to anybody ooooooooooooooo.

Tombra: Ok, bye-bye.

In the short play, Tombra has successfully put down Joseph. Being assertive helps you to acquire problem-solving skills. Tombra should reward herself for a job well done. Start your answer with No, because if you don't, you may end up saying maybe yes.

- ❖ Speak in a firm voice. For example, if you say a whispered, hesitant 'NO' your voice one thing and your action another. The other person may seize the opportunity and pounce on you.
- ❖ Keep your answers short and clear, focus your attention on the action you want to do. You will achieve this by not making a long explanation; you may become apologetic or defensive and start giving in. Aim for clarity and honesty.
- ❖ Deep breathing exercises

A version of aggressive and assertiveness was also roleplayed.

The therapist comments on the behaviour of the subjects during role-plays and offer suggestions about the improvements such as facial expression, posture gait, arm movement tone of voice and eye contact.

STEP 4: Nonverbal Refusals Skills:The Teens Diet to Resist Sexual Pressure

Teens are more likely to have sex if they:

- ❖ Entered puberty early
- ❖ Socialize with youngsters who approve and encourage sexual activity
- ❖ Place little value on education
- ❖ Have a poor relationship with their parents, particularly their father
- ❖ Rarely attend religious instruction or services

Nonverbal Refusals: The researcher explains that "body language" (such as tone of voice, gestures, the look on your face and the way you sit or stand) is an important way to communicate with or without talking. Ask the class to describe body language that says no to sex and generate a list. Write the list on the board and demonstrate each behaviour to reinforce the concept of nonverbal communication.

- ❖ Hands off – throwing up hands in a "get off of me" gesture or using hands for emphasis.
- ❖ Soldier Body – sit up or stand up stiffly like a soldier at attention and March away from the other person if you need to.
- ❖ Firm voice – strong and business-like voice.
- ❖ Gestures-hand and arm movements that emphasize your point.
- ❖ Fight back at times, if everything else fails, you might have to use your strength to push away and protect yourself.

STEP 5: Concluding Remarks

Reflect your thoughts and your feelings at home to your parents and initiate communication and practice refusal skills with your friends regularly.

- ❖ Thank the participants for a well-done task
- ❖ Discuss questions and answers related to the scene
- ❖ Remind them of the next meeting and serve light refreshment as usual

STEP 6: Homework and Daily Evaluation

1. What are assertiveness skills and persistence skills?
2. Explain what you learned in the role-play on assertiveness and persistence skills
3. How can you enforce nonverbal refusal skills to resist sexual pressure?

SESSION SIX

Topic: Teaching Sexual Abstinence among adolescents

Objectives: At the end of the session, the researcher should be able to:

i. Review participants' homework and provide feedback.

ii. Give reasons for postponing sexual activity
iii. State qualities to maintain abstinence
iv. Explain reasons why abstinent might fail

ACTIVITIES:

STEP 1: Revision of Homework

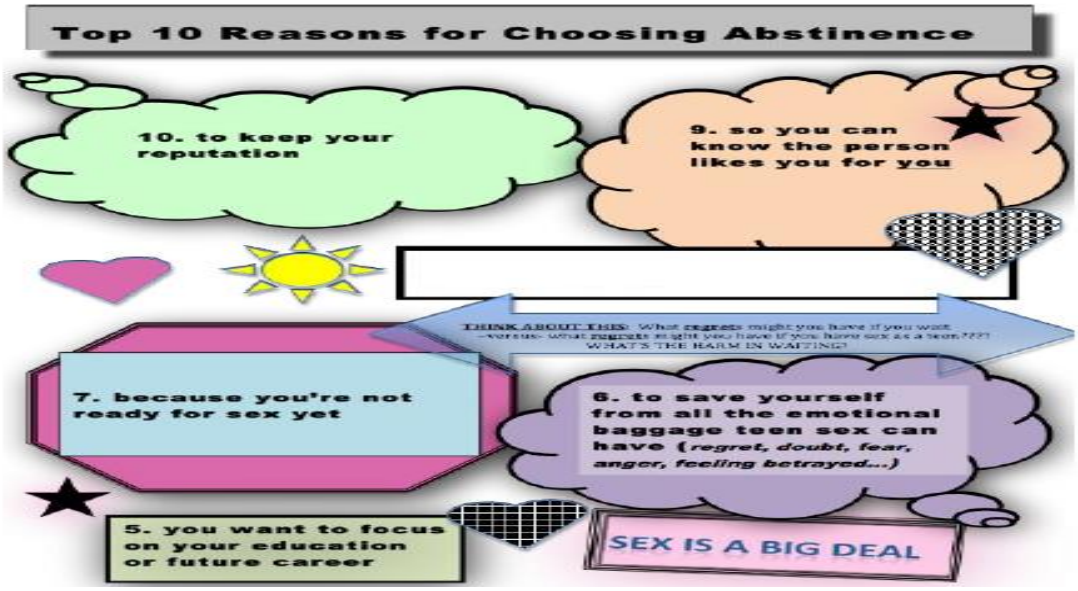
The researcher reviewed the previous session by asking the participants to discuss their experiences and provided feedback. Also, gave commendation to the participants who made a useful contribution to the group based on the assignment given.

STEP 2: Sexual Abstinence

Abstinence can mean different things to different people. For some, it means having no physical contact with other people. For others, it could mean having limited contact, allowing some activities, but not sexual intercourse. Abstaining from sexual activity that involves the exchange of bodily fluids and/or genital to the genital or skin to genital contact is the only 100% way of avoiding the risk of pregnancy or Sexually Transmitted Infections (STIs). Postponement of initial sexual activity, adherence to one sexual partner and protected sexual intercourse are sequentially offered as the next best alternatives.

Pregnancy can occur without intercourse if sperm is ejaculated near the entrance of the vagina or on an area that comes into contact with the vagina. STIs such as herpes and genital warts can be passed through skin-to-skin genital contact. The overwhelming majority of adolescents practice abstinence. Why do you think that adolescents are important to know this? Below are ten scaled chat that for choosing a perfect abstinence

Top Ten (10) Reasons for Choosing A Perfect Abstinence for Adolescents



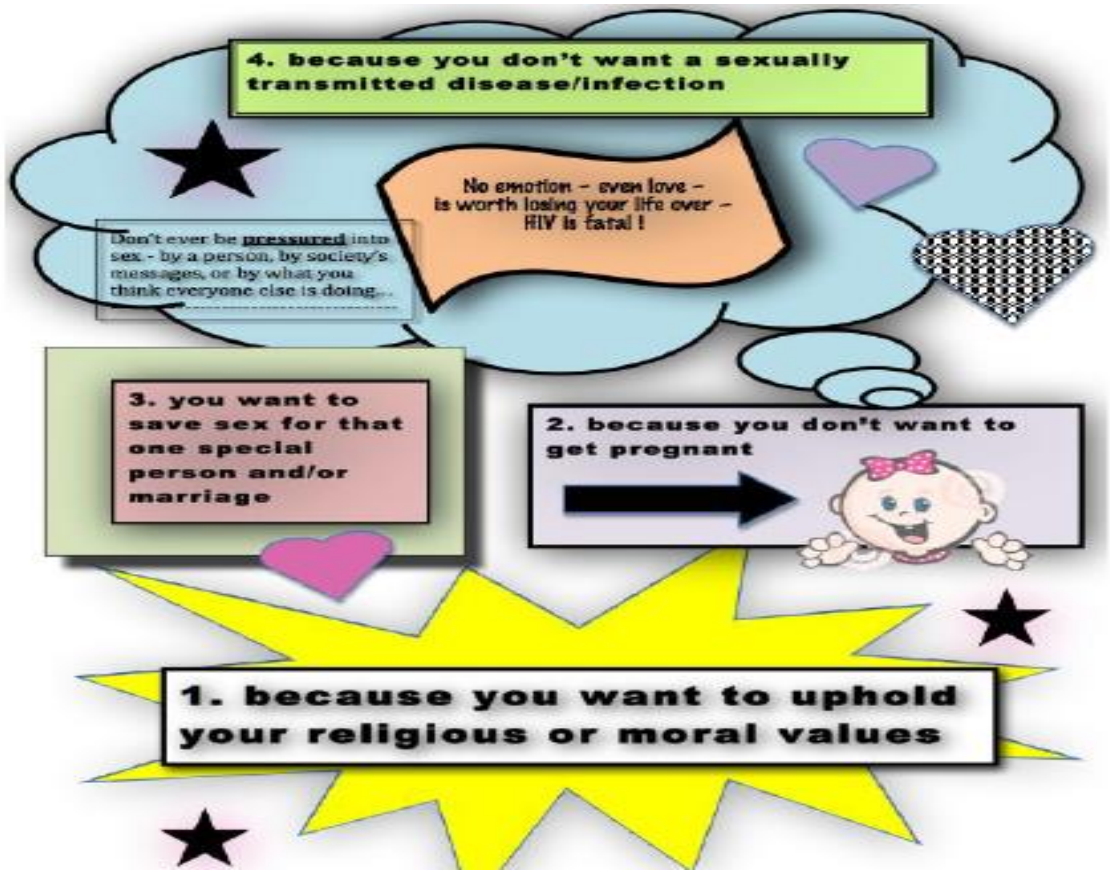


Figure 3.1: *Sexual Abstinence Model for Secondary Schools (CDCP, 2014)*

Source: Adapted from Centers for Disease Control and Prevention, 2014

STEP 3: Reasons to Postpone Sexual Activity

The followings are some of the reasons young people choose to be abstinence or to postpone a sexual activity:

Personal:

1. Personal values or religious/moral beliefs
2. Not ready yet
3. To avoid guilt, fear or disappointment

Medical:

1. Fear of pregnancy
2. Fear of HIV/AIDS or other STIs
3. Health and protection against disease.

For instance, risk factors for cervical cancer include early age of first intercourse, a

higher number of sexual partners, and younger age at first pregnancy.

Relational:

1. I have not met the right person
2. To strengthen a relationship.

Abstaining or postponing sexual activity may allow time to develop a deeper friendship and establish intimacy that is not sexual. A couple may spend more time talking, building mutual interests, and sharing good times with friends.

STEP 4: Qualities to Maintain Abstinence

The followings are some qualities that will help maintain abstinence or postpone sexual activity

1. Ability to resist pressure
2. Respect for another person's feelings
3. High degree of self-control

STEP 5: Reasons why Abstinent Might Fail

The followings are some reasons that a commitment to be abstinent or postpone sexual activity might fail

1. Fear of saying no
2. Pressure from your partner
3. Peer pressure – “everyone is doing it”
4. Wanting to be loved
5. Use of alcohol or drugs

STEP 6: Homework and Daily Evaluation

The researcher asked the participants the following questions:

1. What is sexual abstinence?
2. What are the reasons for postponing sexual activity?
3. What are the qualities to maintain abstinence?
4. What are the reasons why abstinence might fail?

SESSION SEVEN

Topic: Discuss Refusal Techniques through Delaying Tactics.

Objectives: At the end of the session, the researcher should be able to:

i. Review participants' homework and provide feedback.

ii. Explain the meaning of refusal skills
iii. Elucidate various techniques of refusal skills
iv. State way of controlling personal health

ACTIVITIES:

STEP 1: Revision of Homework

The researcher reviewed the previous session by asking the participants to discuss their experiences and provided feedback. Also, gave commendation to the participants who made a useful contribution to the group based on the assignment given.

STEP 2: Meaning of Refusal Skills

Refusal skills are a set of skills designed to help students' avoid participating in high-risk behaviours. This is a programme designed to discourage faulty sexual activity among adolescents to help students' resist sexual peer pressure while maintaining self-respect. It focuses on offering alternative activities, saying "NO" and being honest when the need arises. Although the overwhelming majority of adolescents are not having sex, however many of the adolescents are experiencing crashes or sexual feelings at this age. Everyone can make the decision not to have sex, or to be abstinent, even when adolescents are older. Once you make this decision, it is important to be able to communicate your decision to the person you are dating, see figure 3.2 below.

Top Twelve (12) Reasons for Refusal Skills for Adolescents

Figure3.2: *Family Planning Perspectives, 2000*

Source: Changing Emphases in Sexuality Education, 2000

STEP 3: Techniques of Refusal Skills

The following techniques were adopted for practical preview.

1. Say 'NO'. Clearly state that you do not want to have sex.
2. Explain why. For example, I'm not ready to have sex. I do not want to risk pregnancy. It is against the law.
3. Suggest an alternative. Suggest something else you both can do instead.
4. Leave if you need or want to. Sometimes if the other person is not respecting your response which is saying no. At that point, you might need to get out of the situation or get help from someone else.

STEP 4: Personal Control of your Health

You are in control of your health and general well-being.

1. Be educated about your health and what can put you at risk.
2. Know the laws, along with your guardian's guidelines and expectations.

3. Good communication is important in any relationship.
4. Go to a trusted adult with your questions or concerns.

Who can you talk to if you have questions?

Refusal Skills

1. If you are in a situation where someone pressurizes you to do something that you do not want to do, how would you respond?
2. You must have a plan for how you want to respond in high-pressure situations.
3. Refusal skills take practice!

Stop and Say "No!"

1. STOP – It is a good idea to STOP when you start to feel uncomfortable. If you STOP, you have time to take a deep breath and think clearly about what is happening.
2. STOPPING – This is a good first step towards an effective conversation.
3. SAY NO – Do not assume your partner can read your mind. You need to say NO and say it as you mean it. Do not laugh, send mixed signals (by continuing to be sexual while saying NO) or pretend like it is "no big deal".
4. Your partner should respect you as soon as you STOP and SAY NO. If he/she continues to pressurize you, you have every right to leave.

Give a Reason Why

WHY – After you say NO you can be prepared to give your partner a reason WHY. Some examples could be:

1. I am not just ready.
2. I am not ready to be a parent.
3. I am worried about STDs.
4. My relationship is fine without sex.
5. I want to wait.

REMEMBER – It is always ok to just simply say, "I do not want to!" That is enough of a reason and your partner should respect it!

Give a Reason Why. . . You Want to Wait

- WAIT – If you have decided you should WAIT, this is a decision you must stick to, and your partner must respect.
- You might discuss how long you plan to stay abstinent and what your

boundaries are. (For instance, “I do not mind kissing, but I am waiting to have sex till I am older and more ready. I hope you can respect that.”)

Avoid the Situation

- ❖ AVOID – If possible, it is best to AVOID situations where you might be tempted to have sex (for instance, high-pressure times like being alone with your partner or drinking/using drugs, which can lower your inhibitions).
- ❖ By AVOIDING risky situations, you are less likely to end up doing something you'll regret.

Go Do Something Fun

Doing something fun can lighten the mood! You could go out to eat, see a funny movie or just go on a walk together.

S - Stop and Say No

W - Give a reason Why you want to Wait

A - Avoid the situation and offer Alternatives

G - Get out of an unsafe situation or Go and do something fun

If you get into a high-pressure situation, just remember “SWAG”. Using SWAG in non-sexual situations. Remember – you can use SWAG to negotiate non-sexual situations out of any high pressure/risky scenario. However, you can use SWAG to say no to drinking, drugs, smoking, skipping school or anything!

STEP 5: Homework and Daily Evaluation

The researcher asked the participants the following questions:

1. What are refusal skills?
2. What are the techniques of refusal skills?
3. Explain how you control your health?

SESSION EIGHT

Topic: Teaching Effective Sexual Negotiating Skills to adolescents.

Objectives: At the end of the session, the researcher should be able to:

i. Review participants' homework and provide feedback.

ii. Explain successful sexual negotiation skills among adolescents

iii. Give qualities that support negotiation successes

iv. Explain the rules of negotiation skills

ACTIVITIES:

STEP 1: Revision of Homework

The researcher reviewed the previous session by asking the participants to discuss their experiences and provided feedback. Also, gave commendation to the participants who made a useful contribution to the group based on the assignment given.

STEP 2: Points to consider for Successful Sexual Negotiation among Adolescents

The following are the points to consider for successful negotiation as listed below.

i. Good negotiation should result in both individuals gaining something new.

ii. Good negotiation involves putting yourself in the place of others and understanding their point of view.

iii. This implies that you appreciate and respect the other person's point of view.

iv. This reduces the risk that you will say something that causes conflict and hurt thereby obtain a win-win outcome. So, it is necessary to understand both your own beliefs, values, objectives and those of the other party.

STEP 3: Qualities that Support Negotiation Successes

The qualities that support negotiation success are important social life skills, include:

i. Listening

ii. Seeing things from other people's points of view.

iii. Checking out beliefs and assumptions of both sides

iv. Identifying areas of agreement

v. Identifying points of leverage and blockages/agreement or disagreement

vi. Lateral thinking to find other ways of achieving the objective through flexibility and sensitivity

STEP 4: Rules of Negotiation Skills

The following are basic rules that guide, negotiation skills as follows:

1. Know what you want and why.
2. Plan what you will say.

3. Be truthful.
4. Do not give up.

The researcher gives further details about the rules stated above.

STEP 5: Brief Summary

1. Young people often need negotiation skills as much as facts. They need to learn how to deal with other people (including older people) for reducing risky behaviour.
2. Young people need negotiation skills as a means of a compelling alternative to social and sexual matters.
3 Effective negotiation skills provide the adolescent with opportunities to develop critical interpersonal and intrapersonal skills for a win-win solution to all matters of life.

Step 6: Homework and Daily Evaluation

The researcher asked the participants the following questions:

1. What are the points considered for successful sexual negotiation?
2. What are the qualities that support sexual negotiation successes?
3. List and explain the basic rules of negotiation skills

SESSION NINE

Topic: Teaching Negotiating Techniques: Your Sexual Responsibility.

Objectives: At the end of the session, the researcher should be able to:

i. Review participants' homework and provide feedback.
ii. Relate what decision-making skills are through negotiation
iii. Explain the critical role of sexual decision skills for adolescents

ACTIVITIES:

STEP 1: Revision of the Previous Session

The researcher reviewed the previous session by asking the participants to discuss their experiences and provide feedback. Also, recommended the participants who made a useful contribution to the group based on the assignment given and also appreciate the participants for punctuality to the training programme.

STEP 2: Decision-making Skills

Students' can observe and practice ways to:

a) seek and find reliable sources of information about human anatomy; puberty; conception and pregnancy; STIs, HIV/AIDS, and local prevailing rates; and available methods of contraception
b) analyse a variety of potential situations of sexual interaction and determine a variety of actions adolescents may take and the consequences of such actions
c) information-gathering skills
d) evaluating future consequences of present actions for self and others determining alternative solutions to problems
e) analysis skills regarding the influence of values and attitudes about self and other forms of motivation
f) make and sustain a decision to stop using tobacco or other drugs and seek help to do so

STEP 3: The Role of Sexual Decision Making Process

Students' can observe and practice ways to:

a) Analyse myths and misconceptions about HIV/ AIDS, contraceptives, gender roles, and body image that is perpetuated by the media
b) Analyse social-cultural influences regarding sexual behaviours
c) Analysing peer and media influences
d) Analysing attitudes, values, social norms, beliefs, and other factors affecting them
e) Identifying relevant information and sources of information available to them

In efforts to achieve specific behavioural outcomes, programmes aimed at developing adolescent life skills without a particular context, such as health, a behavioural programme that overtly focus on applying life skills to specific health choices and behaviours changes.

To influence adolescent behaviour effectively, skills must be applied to a particular topic, such as a prevalent health issue. However, it is important to build life skills in adolescents to equip young people in other aspects such as maintaining a positive interpersonal relationship with instructors, peers, and family members and so on.

STEP 4: Behavioural Class Activities.

The researcher asked the participants the following questions:

1. Explain the basic decision-making skills through negotiation
2. How does critical thinking improve adolescents' negotiation skills?

SESSION TEN

Topic: Summary of Sessions, Collection of Post Intervention Data and Termination of Therapy

Objectives: At the end of the session, the researcher should be able to:

i. Review all the sessions, obtain the post-intervention data for evaluation.
ii. Appreciate all participants and formally terminate the therapy

ACTIVITIES:

STEP 1: Revision of the Previous Session

The researcher received all the participants warmly in the last session and summarized all sessions, elicited questions were provided with answers and clarifications were made on general issues raised by the participants. The researcher taught the participants some key strategies to adopt to enable them to maintain the knowledge gains from the therapy by following the revision process.

- Welcome the participants
- Collection and reviewing of take-home assignments
- The business of the day

Review of the following topic:

1. General Orientation and Administration of Baseline Questionnaire
2. Teaching the concept of sexual decision-making
3. Teaching safer sexual principles using negotiation techniques.
4. Adolescents thinking style using negotiation skills
5. Role Play: Teaching the Basic Principles of Assertiveness.
6. Teaching Sexual abstinence among adolescents
7. Discuss refusal techniques through delaying tactics.
8. Teaching effective sexual negotiating skills to adolescents.
9. Teaching Negotiating Techniques: Your Sexual Responsibility.
10. Administration of Post Intervention Scale and Termination of Therapy

- Questions and answers
- Post-test
- Filling of the evaluation forms

STEP 2: Appreciation to all Participants and Formal Termination of Therapy

The researcher applauded all the participants, appreciated the role each participant took and commended the participants' efforts for being active throughout the sessions. They were entertained with snacks and soft drinks. The researcher encourages them to maintain the gain of the therapy and he formally terminated the therapy.

TREATMENT PACKAGE FOR GROUPIII: CONTROL

The control group was not exposed to any form of treatment. However, the participants in this group were exposed to pre-test at the beginning of the training while, the post-test data collection was executed towards the tail end of the training. Though, the researcher compensated the participants with a motivational talk on Emotional Intelligent (EI).

3.11 Method of Data Analysis

The data generated for the study were analysed using simple percentages and Covariance analysis (ANCOVA), which were the primary statistical tools used at the 0.05 significance level.An ANCOVAwas used to monitor initial differences among experimental and control group participants. Bonferroni Pairwise Comparison Analysis was also used to determine the directions of differences and meaning which were identified in this study.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents the results derived from the data analyses. The result is presented in Tables as follows;

4.1 Socio-Demographic Profiles of the Participants

This section presents the frequency distribution of socio-demographic characteristics of the participants as follows in table 4.1.1:

4.1.1 Distribution of Respondents.

Table 4.1.1. Frequency Distribution of Participants

Variables	Categories	Frequency (F)	Percentage (%)
Gender	Male	44	58.0
	Female	31	42.0
	Total	**75**	**100.0**
Age-range	12 - 14 years	15	20.0
	15 - 16 years	33	44.0
	17 - 18 years	27	36.0
	Total	**75**	**100.0**
Course of Study	Science Class	27	36.0
	Art Class	18	24.0
	Commercial Class	30	40.0
	Total	**75**	**100.0**

Source: Field Survey, 2018

The results presented in Table 4.1 revealed gender participation in the study, forty-four (58%) were male and thirty-one (42%) were females participated in the study. The result suggests that most participants were male in the distribution.

The table also reveals the age range of the participants that, 33 of (44%) were participants between 15 - 16 years of age; 27 of (36%) were participants between 17 - 18 years of age, and lastly, 15 of (20%) were participants between 12 - 14 years of age in the distribution. The result implies that, majority of students were between the ages of 15 and 16 respectively.

Finally, course of study was revealedthat 30 of (40%) were from Commercial class, 27 (36%) were from Science class while, 18 (24%) were from Art class respectively. This implies that there were more Commercial class students than other academic departments in the study.

4.2 Testing of Research Hypotheses

This section provides the inferential statistical results of seven (7) null hypotheses tested as follows:

4.2.1 Hypothesis One:

There is no significant main effect of treatments on sexual decision-making among in-school students'.

To test this hypothesis, Analysis of Covariance (ANCOVA) was adopted to analyse the post-test scores of the participants on their sexual decision-making using the pretest scores as a covariate to ascertain if the post-experimental differences were statistically significant. The summary of the analysis is presented in Table 4.2:1.

Table 4.2.1 Summary of 3x3x3 Analysis of Variance (ANCOVA) showing the main effect of treatment groups on sexual decision-making post-test score of in-school adolescents

Source	**Type III Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**	**Partial Eta Squared**	**Remarks**
Corrected Model	21178.267[a]	18	1176.570	105.861	.000	.971	
Intercept	17434.833	1	17434.833	1568.688	.000	.966	
Pretest Sexual Decision	97.682	1	97.682	8.789	.004	.136	
Main Effect							
Treatment	8832.377	2	4416.189	397.344	.000	.934	S
HIV risk-perception	163.569	2	81.784	7.358	.001	.208	S
Self esteem	711.665	2	355.833	32.016	.000	.533	S
2-Way Interactions							
Treatment * HIV risk-perception	95.577	4	23.894	2.150	.087	.133	NS
Treatment * self-esteem	122.321	4	30.580	2.751	.037	.164	S
HIV Risk-perception * self esteem	11.418	2	5.709	.514	.601	.018	NS
3-Way Interactions							
Treatment * HIV risk-perception * self esteem	27.985	1	27.985	2.518	.118	.043	NS
Error	622.399	56	11.114				
Total	216366.000	75					
Corrected Total	21800.667	74					

a. R Squared = .971 (Adjusted R Squared =. 962) *Significant at 0.05

Key: S = Significant, NS = Not Significant

Table 4.2:1 reveals that there was a significant main effect of treatments on sexual decision-making of in-school adolescents; $F(2,56) = 397.344$, $p < 0.05$, $\eta 2 = 0.934$. Hence, the null hypothesis was rejected. As a result, treatment has had a significant impact on sexual decision-making among adolescents. Size of effect reveals that treatment accounted for 93.4% ($\eta 2 = 0.934$) change in adolescents sexual decision-making skills. To determine the margin of difference between the treatment groups and the control group, the pairwise comparison using Bonferroni was computed and the result is shown in Table 4.2:2.

Table 4.2:2 Bonferonni Pairwise Comparison shows the significant differences among various treatment groups and control group

(I) treatment	**(J) treatment**	**Mean Difference (I-J)**	**Std. Error**	**Sig**
Control group ($\bar{x}$= 30.24)	Metacognitive group	-31.694^{*,b,c}	1.114	.000
	Negotiation skills group	-27.333^{*,b,c}	1.166	.000
Metacognitive group ($\bar{x}$= 61.93)	Control group	31.694^{*,b,c}	1.114	.000
	Negotiation skills group	4.362^{*,b,c}	1.142	.001
Negotiation skills group ($\bar{x}$= 57.57)	Control group	27.333^{*,b,c}	1.166	.000
	Metacognitive group	-4.362^{*,b,c}	1.142	.001

Table 4.7 reveals that after controlling for the effect of pre-sexual decision-making among in-school adolescents, experimental group I (Metacognitive therapy) ($\bar{x}$ = 61.93) displayed the highest sexual decision-making, followed by experimental group II (Negotiation skills training) ($\bar{x}$ = 57.57) and control group (mean = 30.24). By implication, Metacognitive therapy ($\bar{x}$ = 61.93) is more potent in improving sexual decision-making among in-school adolescents than negotiation skills training ($\bar{x}$ = 57.57). The coefficient of determination (Adjusted R-squared =. 962) overall indicates that the differences that exist in the group account for (96.2%) in the variation of in-school adolescents sexual decision-making.

4.2.2 Hypothesis Two

There is no significant main effect of HIV risk-perception on sexual decision-making among in-school adolescents.

Table 4.2:1 further shows that there was a significant main effect of HIV risk perception on in-school adolescents sexual decision-making; F (2,56) = 7.358, $p<0.01$, $\eta 2$ = 0.208. Hence the null hypothesis was rejected. This implies that in-school adolescent's HIV risk perception impacts their sexual decision-making. The Table further reveals that adolescents' level of HIV risk perception accounts for a 20.8% change in their sexual decision-making among adolescents. To further clarify where the difference lies, a pairwise comparison was computed using Bonferroni, and the result is shown in Table

4.2:3.

Table 4.2.3 Bonferonni pairwise comparison showing the main effect of HIV risk-perception on sexual decision-making among in-school adolescents

(I) HIV risk-perception	(J) HIV risk-perception	Mean Difference (I-J)	Std. Error	Sig.[d]
Moderate HIV risk-perception ($\bar{x} = 45.74$)	Low HIV risk-perception	-11.715[*,b,c]	1.034	.000
	High HIV risk-perception	6.694[*,b,c]	1.371	.000
High HIV risk-perception ($\bar{x} = 57.45$)	Low HIV risk-perception	11.715[*,b,c]	1.034	.000
	Moderate risk-perception	18.409[*,b,c]	1.297	.000
Low HIV risk-perception ($\bar{x} = 39.04$)	High HIV risk-perception	-6.694[*,b,c]	1.371	.000
	Moderate HIV risk-perception	-18.409[*,b,c]	1.297	.000

Table 4.2:3 reveals that after controlling for the effect of pretest sexual decision-making among in-school adolescents, participants with high HIV risk-perception ($\bar{x}$ = 57.45) had the highest sexual decision-making than those with moderate HIV risk-perception ($\bar{x}$ = 45.74) and low HIV risk-perception ($\bar{x}$ = 39.04). It implies that higher HIV risk-perception improves the likelihood of in-school adolescent sexual decision-making.

4.2.3 Hypothesis Three

There is no significant main effect of self-esteem on sexual decision-making among in-school adolescents.

Table 4.2:1 further shows that there was a significant main effect of self-esteem on in-school adolescents sexual decision-making; F (2, 56) = 32.016, $p<0.01$, $\eta 2 = 0.533$. Hence the null hypothesis was rejected. This implies that in-school adolescents' self-esteem moderates their achievement in sexual decision-making intervention. The Table further reveals that adolescents' level of self-esteem accounts for 53.3% change in their sexual decision-making among adolescents. To further clarify where the difference lies, a pairwise comparison was computed using Bonferroni, and the result is shown in Table 4.2.4

Table 4.2:4 Bonferonni pairwise comparison showing the significant difference between levels of self-esteem

(I) Self-esteem	(J) Self-esteem	Mean Difference (I-J)	Std. Error	Sig.[d]
High self-esteem ($\bar{x}$= 53.18)	Moderate Self-esteem	2.019[a,b]	1.215	.306
	Low Self-esteem	12.719[a,b,*]	1.217	.000
Moderate self-esteem ($\bar{x}$= 51.16)	High Self-esteem	-2.019[a,b]	1.215	.306
	Low Self-esteem	10.700[a,b,*]	1.125	.000
Low self-esteem ($\bar{x}$= 40.46)	High Self-esteem	-12.719[a,b,*]	1.217	.000
	Moderate Self-esteem	-10.700[a,b,*]	1.125	.000

Table 4.2:4 reveals that after controlling for the effect of pretest sexual decision-making among in-school adolescents, participants with high self-esteem ($\bar{x}$ = 53.18) had the highest sexual decision-making than those with moderate self-esteem ($\bar{x}$ = 51.16) and low self-esteem ($\bar{x}$ = 40.46). For further clarification, higher self-esteem improves the likelihood of adolescent sexual decision-making.

4.2.4 Hypothesis Four

There is no significant interaction effect of treatments and HIV risk-perception on sexual decision-making among in-school adolescents.

Table 4. 2: 1 further shows that there was no significant interaction effect of treatment and HIV Risk-perception on adolescents sexual decision-making; $F(4,56) = 2.150$, $p>0.05$, $\eta 2 = 0.133$. Hence the null hypothesis was accepted. This implies that HIV risk-perception does not significantly moderate the effect of treatments on sexual decision-making among in-school adolescents.

4.2.5 Hypothesis Five

There is no significant interaction effect of treatments and self-esteem

on sexual decision-making among in-school adolescents.

Table 4.2:1 further shows that there was a significant interaction effect of treatments and self-esteem on in-school adolescent sexual decision-making; F (4,56) = 2.751, $p<0.05$, $\eta 2 = 0.164$. Hence the null hypothesis was rejected.This implies that self-esteem significantly moderated the effect of treatment on sexual decision-making among in-school adolescents. The Table further reveals that the effect of self-esteem on treatments accounted for a 26.9% change in participants' sexual decision-making; that is the interaction of treatments and self-esteem had a large effect on the variation of participants sexual decision-making scores. To further clarify where the difference lies, a pairwise comparison using Bonferroni was computed. The result is shown in Table 4.2.5.

Table 4.2:5 Bonferonni pairwise comparison showing the interaction effect of treatments and self-esteem on sexual decision-making among adolescents

Treatments	Self-esteem	Mean	Std. Error
Control group	High self-esteem	35.349[a,b]	1.302
	Moderate self-esteem	33.099[a]	1.385
	Low self-esteem	20.841[a,b]	1.416
Metacognitive group	High self-esteem	73.570[a,b]	1.506
	Moderate self-esteem	65.831[a,b]	1.340
	Low self-esteem	52.218[a,b]	1.186
Negotiation skills group	High self-esteem	60.814[a,b]	1.808
	Moderate self-esteem	63.581[a,b]	.978
	Low self-esteem	48.321[a,b]	1.528

Table 4.2:5 reveals that after controlling for the effect of pre-test sexual decision-making among adolescents, experimental group I (Metacognitive Therapy) was more moderated by self-esteem than experimental group II (Negotiation Skills Training) and control group. Participants in the experimental group I displayed a varying level of sexual decision-making based on the self-esteem exhibited. Metacognitive therapy intervention was more effective in improving sexual decision-making among participants with high self-esteem ($\bar{x}$ = 73.57) than those with moderate ($\bar{x}$ = 65.83) and low self-esteem (mean = 52.22). While negotiation skills intervention was moderately effective in improving the sexual decision-making of participants with high self-esteem ($\bar{x}$ = 60.81), moderate self-esteem ($\bar{x}$ = 63.58), low self-esteem ($\bar{x}$ =48.32).

Interaction Effect of Treatments on Sexual Decision-making Among Adolescents

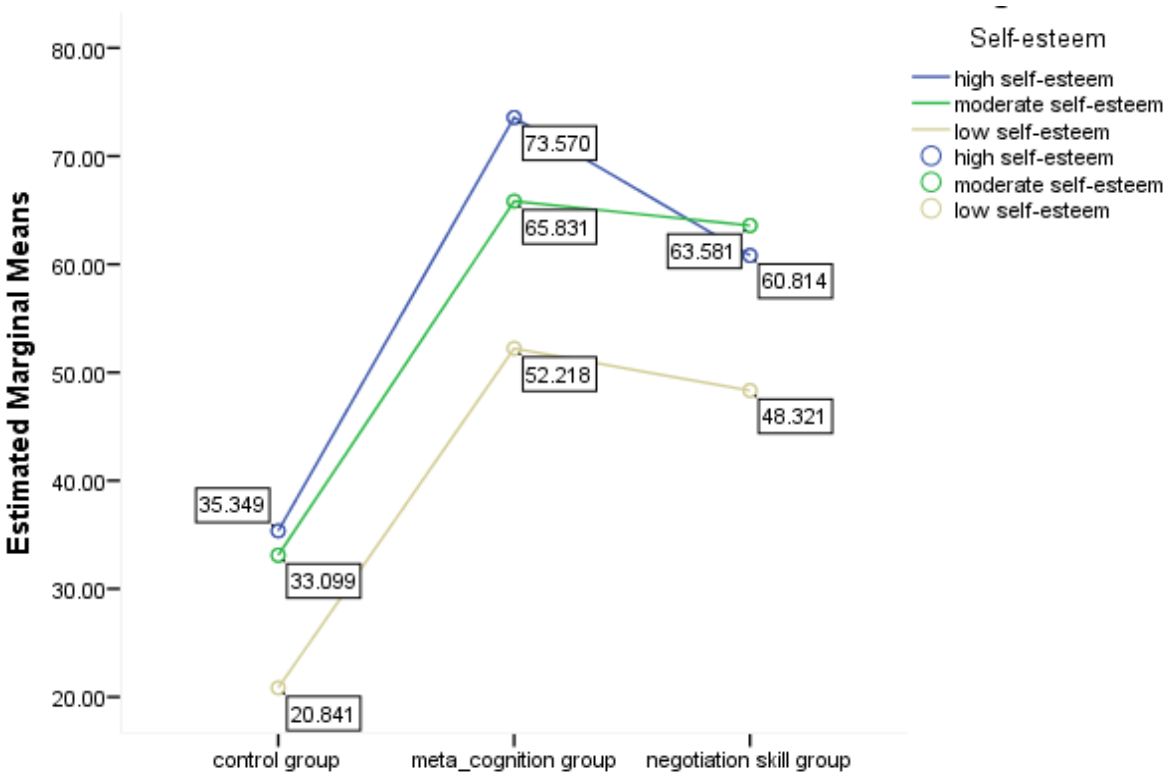


Figure 4.1: Line-graph showing the interaction effect of treatments and self-esteem.

4.2.6 Hypothesis Six

There is no significant interaction effect of HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents.

Table 4.2:1 further shows that there was no significant interaction effect of HIV risk-perception and self-esteem on in-school adolescent sexual decision-making; $F(2,56) = .514$, $p > 0.05$, $\eta 2 = 0.018$. Hence the null hypothesis was accepted. This implies that HIV risk-perception does not significantly moderate the effect of self-esteem on sexual decision-making among in-school adolescents.

4.2.7 Hypothesis Seven

There is no significant three-way interaction effect of treatments, HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents.

Table 4.2:1 further shows that there was no significant three-way interaction effect of treatment, HIV risk-perception and self-esteem in adolescents sexual decision-making; $F(1,56) = 2.518$, $p > 0.05$, $\eta 2 = 0.043$. Hence, the null hypothesis was not rejected. This implies that HIV risk-perception and self-

esteem could not significantly moderate the effect of treatment on sexual decision-making among the participants.

4.3 Discussion of findings

The study investigated the effectiveness of Metacognitive Therapy and Negotiation Skills Training on sexual decision-making among in-school adolescents in Bayelsa State. To this effect, ANOVA as a statistical tool was used to analyse the data collected and the findings were discussed as presented below.

4.3.1 There is no significant main effect of treatments on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria

The first hypothesis stated that there is no significant main effect of treatments on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. This hypothesis was rejected at the 0.05 level of significance. The results as shown in Table 4.2.1 reveals a significant difference in reducing faulty sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. This implies that there is a remarkable effect of both treatments (Metacognitive Therapy and Negotiation Skills Training) in reducing faulty sexual decision-making among the participants of the study. The participants exposed to Negotiation Skills Training displayed a lower level of sexual decision-making skills, thereby showing that the participants benefitted more from Metacognitive Therapy (treatments) as reveals by Bonferonni Pairwise Comparison. The result also shows that both test groups were higher than the control group.

A study by Olugbenga-Bello et. al (2019) on Sexual Risk Behaviour Among In-School Adolescents in Public Secondary Schools in a Southwestern City in Nigeria based on a descriptive cross sectional survey revealed that Many adolescents studied were sexually active, and taking a lot of risky sexual behaviours that could facilitate transmission of HIV. it was concluded that There are still many risky sexual behaviour common among adolescents among public secondary school students in Osogbo local government area of Osun State. Sexual risk behaviour could be reduced by increasing awareness to the deadly infection, encouragement of disease screening and voluntary confidential counseling and testing, reproductive health education in schools and parents modeling adolescents at hope and predisposing them to better sexual orientation, quality information on sex and its implications.

Evidence abound to the potency of current findings of this research revolves around the fundamental goal of metacognitive therapy, which was proven by Bondy

(2008), who confirmed that metacognitive abilities of self-regulation, self-control and self-direction are a critical point to students'' success in the future. These competencies foster the freedom and discipline necessary for life-long learning and self-renewal (Bondy, 1999). Also, the findings of this research align with the outcome of Tuckmale (1994), who investigated that college students' may already have acquired metacognitive strategies suitable for studying a text but are less likely to use them unless sufficiently motivated to do pro-active life-threatening issues. Dominik and Brian (2007) investigated metacognition of problem-solving strategies in Brazil, India, and the United States that every cultural group showed a different preference regarding what metacognitive strategy was most effective.

This is consistent with the findings of Shannon (2008), who confirmed that metacognitive strategies would be the most effective for a student's specific learning styles that help students to become self-directed learners through positive decision-making by adopting a specific learning style. This is also substantiated evidence that Shokrpour and Nasiri (2015) enquired that there was no significant difference between boys and girls using cognitive strategies. These groups, however, do not differ significantly in using metacognitive strategies in practical decision-making skills based on the health information that would aid the participants to live an appropriate lifestyle. Similar findings were carried out by Shannon (2008) whose findings reveal that metacognitive strategies would be the most effective strategies for a student's specific learning styles in making the appropriate decision for learning that would help students to become self-directed learners by determining specific learning styles. The results further revealed that teaching students'' metacognitive strategies are a valuable skill that helps students become more self-directed learners and decision-maker.

In the same vein, Maqsud (1997) studied the effects of metacognitive skills and non-verbal ability on risky sexual behaviour among high school students. The study reported the findings of two experiments conducted with South African senior high school students to examine the relationships of metacognitive strategies and verbal reasoning ability to test individual decisions about sexual negotiation. The study suggests that teaching metacognitive strategies to students who lack such competencies, improve their cognitive approaches to life problems. Similarly, Ciascai and Haiduc (2011) concluded in their findings that adolescents have average metacognitive skills to effectively use sexual substance decision-making. It was

argued that for adolescents to fully benefit from the information contained in textbooks, teachers must help them use this thinking resource more constructively.

These findings support comparative discoveries of Kuruvilla and Mukhopadhyay (2008) in their investigation that the Creative Learning Processes (CLP) model evolved after the study was found to be very useful in fostering creative talents among engineering students' to the teachers as well as students' for evaluation of creative higher-order learning domains. To start with, controlled research has demonstrated that this approach also made complex concepts easy and simple for knowledge assimilation for students'' last long achievement of purpose through perceived thinking patterns of life.

4.3.2 There is no significant main effect of HIV risk-perception on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria

The second hypothesis established that there is no significant main effect of HIVrisk-perception on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. This hypothesis is rejected at the 0.05 level of significance. The result, as shown in Table 4.2.1, shows that there was a significant effect of HIV risk perception on sexual decision-making among adolescents at school in Bayelsa State. This suggests that HIV risk-perception moderated the influence of the treatments (Metacognitive Therapy and Negotiation Skills Training) on the sexual decision-making of the participants. By implication, adolescent's HIV risk-perception among the group (low, moderate and high) may have access to the relative amount of education on sexually transmitted diseases (STD) which could have served as a support for the outcome of the result.

This findings is inline with the study of Mercy and Peter (2014) the study adopted descriptive survey design of ex post type to examine the extent to which self-esteem, parental involvement and religiosity predicted risky sexual behaviours among female in school adolescents in Delta state, Nigeria, the study provided empirical evidence that adolescents' sexual behaviour is influenced by a variety of personal (selfesteem), social factors (parental involvement) and institutions factors (religion). Given that self-esteem has been found to be a 'social vaccine' that can inoculate young people against vulnerability to wide range of social illnesses, the need for enhancement of the adolescents self-esteem to at least moderate level was emphasized. Moreover, since religion directly and indirectly is reported to affect sexual decisions through religious norms and sanctions for noncompliance, the need to ensure that adolescents are affiliated to a religious group was suggested. The study further the study has

also confirmed that parental involvement in the lives of their children is linked with lower levels of sexual experimentation. It was recommended that any programmeme designed to delay sexual debut include parental involvement component. In addition, workshops and seminars should be organised to train parents on how to provide quality monitoring activities for their children.

Esbjørn et, al (2015) studied adapting Metacognitive Therapy (MCT) to children with generalised anxiety disorder the metacognitive model and therapy has proven to be a promising theory and intervention for emotional disorders in adults. The model has also received empirical support in normal and clinical child samples and the developmental limitations of children were taken into account. For instance, therapy was aided with worksheets, practical exercises and delivered in a group format. Overall, the intervention relied heavily on practising MCT techniques in vivo with therapist assistance. it was concluded that Findings indicate that the adapted version of the metacognitive techniques and manual for children is feasible.

These findings corroborate previous empirical studies that reported the effectiveness of the work of Bertens, Schaalma Wolfers, and van-derBorne (2008) who examined safer sex and negotiation behaviour and the correlates of negotiation with partners in 128 adolescents of Surinamese and Dutch Antillean descent in the Netherlands. It was further revealed that half (50%) of the participants had negotiated sexual risk reduction with their partner, while only 40% of the adolescents who negotiated safer sex claimed to practise safe sex. This finding is in line with the above outcome of Dixon, Saul, and Peters (2010) who examined the effectiveness of HIV risky sexual behaviour among 187 Puerto Rican females and found that increased condom use with primary partners was associated with higher levels of mastery and HIV prevention self-efficacy. By implication, the studied group of having had learnt about risk prevention to avert sexually transmitted infections (STIs) as a measure to safeguard their future heritage.

Consequently, the lack of assertiveness that heterosexual individuals need to insist on using condoms to protect themselves was found to be a reason for not using condoms among a sample of 1,290 Swiss heterosexuals ages 16-24 years. Furthermore, sexual decision-making and sexual negotiation processes are strongly influenced by conceptual and ideological factors that influence what is perceived to be gender-appropriate behaviour, without bias. Moreso, the outcome of this study was surprising given that researcher reported the findings of Varga and Makubalo (2006), who found out in his study that AIDS is a minor issue among teenage girls, with

violence and over-riding factor in their sexual decision-making. In a similar vein, Tanzania, (Nnkoand Poole 1997) and Zambia (Nzovu and Lwanga, 2013) investigated sociocultural factors influencing sexual decision-making and negotiation among adolescents that African-American girl's non-traditional gender roles (platonic or egalitarian relationships with men).

Besides, sexual negotiation and gender-related power issues among American teenagers have to do with sociocultural issues surrounding sexual behaviour among individuals at risk for HIV/AIDS infection (Kaloff, 1995; Tolmale, 1994; and Fullilove, 1990). This is also substantiated evidence by the result of Gonzales and Field's (1994), that adolescents' perceptions of risk-taking behaviours (sports and danger) and their relationships with other risk and protective factors including parents and peers, social support, family responsibilities, self-esteem, depression; and drug use were examined. Specifically, 440 adolescents were assessed in terms of the differences between high and low sports risk-taking, danger risk-taking and other personality variables. The results of this study showed that people who take sport-related risks reported greater risk-taking and drug use, but more self-esteem than people who do not take risks.

Comer and Nemeroff (2000) conducted a study to evaluate how individuals perceive risk in casual versus monogamous relationships. Participants were asked to evaluate the level of risk in three scenarios: sex with a casual partner, sex with a main partner who was emotionally safe, but for whom no risk information was given, and sex with the main partner who was described as low risk (information was given about previous partners, HIV negative status, etc.). Additionally, a risk-averse decision-maker will weigh negative outcomes more highly, leading to a heightened perception of risk (Schneider and Lopes, 1996). There is a lack of understanding of the exact nature of the relationship between risk perception, risk propensity and decision-making.

Prior research has examined the effects of HIV risk-perception on decision-making and the relationship between risk propensity and decision-making, it is known of a particular study that has examined all three constructs together (Sitkin and Weingart, 2005). In a laboratory study conducted by Sitkin and Weingart (2000), they manipulated outcome history and problem framing while measuring risk propensity, risk perception, and decision-making. The findings of their study suggest that risk propensity is inversely related to the perception of HIV risk, which in turn

is inversely related to the tendency to make risky decisions.

Cline and Colleagues (2009), reported that few college-age couples talked about HIV/AIDS risk, and when they did, it was intended to be very general rather than specifically about the potential risk or how to reduce risk in the relationship. Given this lack of discussion and practice of safer sex in intimate relationships, it has been suggested that long-term romantic relationships represent an unrecognized risk of STI infection in both industrialized and developing countries (Emmers-Sommer and Allen, 2005; Misovich, 1997). Of particular interest in connection with understanding issues of safer and risky sex within relationships are the potential influences of gender and power on safer sex decision-making (Agnew, 1999; Harvey, 2006; Pulerwitz, 2002).

4.3.3 There is no significant main effect of self-esteem on sexual decision-making among schooled adolescents in Bayelsa State, Nigeria

The third hypothesis indicates that there is no significant main effect of self-esteem on sexual decision-making among schooled adolescents in Bayelsa State, Nigeria. This hypothesis is rejected at 0.05 level of significance. The result, as shown in Table4.2.1, shows that there was a significant effect of self-esteem on sexual decision-making among adolescents at school. As a result, the result showed a positive and significant impact of adolescent self-esteem on adolescent sexual decision-making at school in the state of Bayelsa, Nigeria. The outcome of this result lends credence to the study of Gerrard, Breda, and Gibbons (1990) whose reported that male partners tended to be more influential than their female partners in the general decision-making process, females held the most power over contraceptive decision-making while, male tend to hold the most power in general decision-making domains but the female tends to be more influential than male when it comes to sexual decision-making using contraceptive (Miller and Pasta, 1996).

Essentially, in a study by Ahna and Claire (2015) whose finding was based on Adolescent Sexual Decision Making and Sex Education: Using developmental neuroscience to guide new directions for policy and practice reconganise that While impact. The cognitive, hormonal, emotional, and physical changes that accompany the onset of puberty and occur throughout the teenage years play a significant role in aspects of adolescent sexual risk taking. Thus, one approach to advancing current understanding of these complex issues is to leverage emerging knowledge in developmental affective neuroscience over the past 15 years, which

suggests some potentially promising innovations that may inform new educational directions to improve adolescent sexual health. Exploring the conceptual and empirical advances in understanding adolescent brain development through the lens of the conceptualization, implementation, and evaluation of sex education, this article provides new perspectives that encourage the testing of innovative approaches to sex education policy and practice. As neuroscience continues to provide a better understanding of adolescent decision making, we can take steps now to improve sex education policies and practices.

Isiugo-Abanihe et al. (2015) examined adolescent sexuality and life skills education in Nigeria the study investigated the extent to which out-of-school adolescents have been reached with sexuality education in Nigeria and it involved out-of-school adolescents, Non-Governmental Organizations, and community leaders. The qualitative research approaches were employed. It was discovered that most of the youths had been exposed to sexuality education through seminars, trainings and workshops organized by different organizations. However, states in the south were better served than those in the north. Sexually Transmitted Infections including HIV/AIDS prevention accounted for more than 40% of the content of sexuality and life skills education received by out-of-school adolescents. Based on the findings of this study, it is concluded that virtually all the states in the federation have NGOs working among out-of-school adolescents, although the level of geographical coverage nationally and within each state varies considerably. This suggests that out-of-school sexuality programmemes are not evenly obtainable or accessible in all the states and across the country. It is evident that many adolescents in most of the states may not have been reached. In terms of national coverage, states in the north-central and southwest zones reported the highest coverage of sexuality education among out-of-school adolescents; the south-south and southeast zones were moderately covered, while the northeast and northwest zones recorded the least coverage. It is evident that current sexuality and life skill education among out-of-schools places much emphasis on HIV prevention issues.

According to Clark and Hatfield (1989), adolescents were offered a sexual encounter by a fairly attractive member of the opposite sex. It was concluded that all-female refused intercourse, whereas only 25% of men refused to engage in sexual activity. This implies that gender decision-making is an individual state of mind common to all forms of approaches. The findings corroborate previous empirical studies of Sobo's (2005) who revealed that female's self-esteem and social status may be strongly connected to involvement in what they perceive to be committed, monogamous relationships in such circumstances, condom use is interpreted as

insulting, and suggestive of infidelity, lack of love and disrespect from partners. Such research reminds us of the need to carefully re-evaluate the acceptance of models linking female powerlessness and gender stereotypes to low condom use. Several studies have found that teens possess the cognitive abilities to make rational decisions (Harris, 2002; Jacobs and Klaczynski, 2002), whether teens have the cognitive abilities to make rational decisions is not as important as whether they choose to use those inner abilities in them.

The findings contradicted the empirical study of Reyna (2014), who argues that adolescents possess a bias in overestimation of reduction of sexual risk with certain behaviours; therefore, some teens may think they are engaging in safer sex behaviours when according to adult standards, they are not. It could also be argued that, because adolescent goals are more likely to maximize immediate pleasure; decisions to engage in some unhealthy behaviour (such as drug use or sexual activity) could be deemed rational (Reyna and Farley, 2006). Furthermore, the immediacy of these decisions should not be neglected in youth decision-making processes. It was suggested that the interventions were to discourage teens from deliberately weighing risks and benefits that may ultimately prove more effective and enduring will to overcome because mature adults who resist risks does not do it out of deliberation, but because it is intuitively grasping the gist of risky situations and retrieve appropriate risk-avoidant values to stay healthy which adolescents lack (Reyna and Farley, 2006).

Similarly, Garmezy (Modrcin-Talbott, 1998) argued that a high level of self-esteem is a factor to protect against participation in risk. In support of this argument, low self-esteem has been associated with a variety of risk-taking behaviours in adolescents, such as smoking, drug use and sexual activity. In a similar vein, a study of alcoholic children found that one of their personality characteristics was low self-esteem (Modrcin-Talbott, 2008). In addition, low self-esteem has been significantly associated with substance use (Gordon and Caltabiano, 2013), alcohol consumption and problematic alcohol use (Flisher, Bhana and Lombard, 2004) and smoking (Höfler and Wild, 2004). In a longitudinal study of Jessor, Donovan, and Costa (1991) that examined the role of some social-environmental and personality variables, including self-esteem in explaining risk-taking from a problem behaviour perspective. The participants in the study were 384 high school and 184 college students. They found that predisposition to problem behaviour in adolescents was

significantly related to problem behaviour in young adults.

Breakwell and Millward (2013) conducted a study on the concept of sexual self and risk-taking sexual behaviour of older adolescents to examine the relationship between the concept of sexual self and sex-based sexual activities. It was revealed that 474 participants were between 16 and 19 years old, with the majority being female. The study was conducted by mailing questionnaires to participants. According to a study by Breakwell and Millward's (2013), the concept of sexual self is formed in different ways based on gender and thus sexual risk-taking is expressed in different ways among adolescents. For example, responsibility for the use of contraceptives was considered relatively irrelevant for men, but it was a central element of a sexual concept of self in females and apparently opposite. In conclusion, it was found that there were no significant correlations between sexual self-concept and traditional male/female roles in sexual relationships.

A similar study was conducted in Central Africa, McGrath, (1993) who worked with females from Uganda (Baganda). Despite a high level of HIV/ AIDS awareness, females accepted multiple sex partners for economic need or sexual satisfaction purposes while willing to change their sexual behaviour with their heartfelt desire. Baganda females felt helpless against HIV/AIDS infection due to the culturally sanctioned behaviour of high-risk partners and the belief that partners would not respond to safer sex messaging.

4.3.4 There is no significant two-way interaction effect of treatments on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria

On the account of the fourth hypothesis, there is no significant two-way interaction effect of treatments on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. This hypothesis was accepted at 0.05 level of significance. The result, as shown in Table 4.2.1, reveals that there is no significant interaction main effect of treatments on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. My suggestion, that HIV risk-perception does not significantly moderate the influence of the intervention on sexual decision-making among in-school adolescents. The findings of the study corroborate the work of Jennifer et al 2016, based on self-esteem and adolescent sexual behaviour among students at an Elite Bolivian school shows relationship between self- esteem and the sexual behaviour and intended sexual behaviour of adolescents in Bolivia. Students (189) completed a questionnaire designed to elicit information regarding self-esteem, sexual behaviour and intended sexual behaviour.

The results indicated higher home self-esteem for those evidencing greater sexual conservativeness relative to virgin status and sexual situation. Peer self-esteem was higher for those intending to have sexual intercourse before marriage. School self-esteem was higher for those reporting participation in sexual intercourse in the last month. Significant variable x gender x grade interactions were noted for both school and home self-esteem relative to intent to have intercourse before marriage. Significant variable x gender, variable x grade, and variable x gender x grade interactions were noted for home self-esteem and sexual situation. Results highlight the role of the home, school, and peer group in influencing adolescent sexual behaviour. Also, Sandra (2011), who has been researching sexual communication for more than 30 years. Her findings have consistently demonstrated that sexual communication is important to sexual satisfaction and sexual well-being and that individuals who self-disclose more about their sexual likes and dislikes to their partner report greater sexual well-being. Self-reporting and sexual satisfaction are connected by two pathways, an instrumental pathway and an expressive pathway (MacNeil and Byers, 2009).

Fried and Reppucci (2001) researched the sexual decision-making with 56 adolescents between the ages of 13 to 18 and reported several roles of psychosocial factors such as temporal perspective, peer influence, and HIV risk-perception using the sexual decision-making questionnaire which was designed to reduce the unassertive measure for acceptance to do even when not ready. Berndt's (2013) reported that adolescents who were detained were more likely to think of future-oriented consequences of engaging in the depicted delinquent act and less likely to anticipate pressure from their friends than adolescents who were not detained. Gardner and Steinberg (2005) reported that a single previous study focused on the effect of peer pressure on risk orientation. In their study of 306 adolescents and young adults, they wanted to determine whether peers influenced decision-making among adolescents compared to adults.

Sobo (2005) found that female's self-esteem and social status can be strongly linked to participation in what they see as committed and monogamous relationships. In such circumstances, the use of condoms is interpreted as insulting, suggestive of unfaithfulness, lack of love and respect on the part of partners. Such research provides a reminder of the need to carefully re-evaluate the acceptance of models linking female's powerlessness and gender-role stereotypes to low condom use. Several studies have found that teens possess the cognitive abilities to make rational decisions (Harris, 2002; Jacobs and Klaczynski, 2002), whether teens have the cognitive abilities to make rational decisions is not as important as whether they

choose to use those abilities.

In West Africa, Orubuloye (1993) explored the sexual empowerment of Nigerian (Yoruba) female. Importantly, the apparent success of females in denying unwanted sex has been attributed to their economic independence and strong filiation. In Central Africa, McGrath, (1993) worked with Ugandan (Baganda) females. Despite a high level of AIDS awareness, females accepted multiple sexual partners due to economic needs or sexual satisfaction. While willing to change their sexual behaviour, Baganda females felt defenceless against HIV infection because of partners' culturally sanctioned high-risk behaviour and the belief that partners would not respond to safe-sex messages. Schoepf (2012) examined decision-making and sexual behaviour related to HIV/AIDS among females in Zaire. In this study, it was unusual to examine sexual decision-making among African and European females in Zaire who do not fit conventional notions of high-risk individuals.

The outcome of this study is encouraging from the result of the CDC (2004), whose outcome denoted that HIV/ AIDS diagnosis among African Americans, both male and female, was nearly 11 times the rate of Whites, and African American females had a 23 times greater diagnosis rate than their White counterparts. African American females represent the ethnic group with the fastest rising HIV/AIDS prevalence numbers while the heterosexual male is found to be in control of choices and application of condoms in relationships. Shannon (2008) enquired about which metacognitive strategies would be the most effective for a students' specific learning styles in decision-making that would help students to become self-directed learners by determining specific learning styles. The results of the study revealed that teaching students' metacognitive strategies is a valuable skill that helps students become more self-directed learners.

Moreover, Dominik and Brian (2007) investigated Metacognitive of Problem-Solving Strategies in Brazil, India, and the United States that every cultural group showed a different preference regarding what metacognitive strategy was most effective for. However, Indian participants found the free production strategy more efficient, and Indian and Brazilian participants found the combined strategy more efficient compared to US participants. Shannon (2008), enquired which metacognitive strategies would be the most effective for a student's specific learning styles that help students to become self-directed learners through positive decision-making by adopting a specific learning style.

Also, Minev M., et al.(2018) examined self-esteem in adolescents, it was discovered that Self-esteem is an overall evaluation of the person's value, expressed in a positive or negative orientation towards himself. Its development starts from birth and is constantly changing under the influence of experience. Especially important is the role of self-esteem in the process of adolescence. During this period, it correlates with both academic achievement and mental health. This study further analyzes the correlation between academic achievement and self-esteem among teenagers. Forty 14-year-old students (20 boys and 20 girls) with excellent, very good and good results in school were examined, with Self-Esteem Scale (RSE) (2). The results show that girls have significantly more negative attitudes towards themselves comparing with boys these results support the need for further research to explore how individual and contextual factors affect the development of self-esteem over the school years and concluded that the level of self-esteem differs according to gender. Boys have a higher self-esteem than girls.

4.3.5 There is no significant two-way interaction effect of treatments and self-esteem on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria

Hypothesis five predicted that there is no significant two-way interaction effect of treatments and self-esteem on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. This hypothesis was rejected at 0.05 level of significance. The result, as shown in Table4.2.1, reveals that there is a significant interaction main effect of treatments and self-esteem on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. This suggests that self-esteem has moderated the effectiveness of treatment in sexual decision-making among school-aged adolescents. These findings support the pieces of evidence of (Keyes, 1995; Bromily and Curley, 2002; Krueger and Dickson, 1994), that HIV risk-perception and adolescents decision-making skills are uniforms concerning the nature of their relationship with the opposite sex. One would expect that the level of perceived risk increases, a person is less likely to engage in risk-taking behaviour, but there is evidence indicating that this is not always the case as it may. Similarly, Kahnemale and Tversky (2009) found that, in negative problem management, policymakers perceive high levels of risk response to risk-seeking behaviours.

The researcher suggested that the exact nature of the humble relationship between risk perception and decision-making is unknown for two reasons. From this

point of view, the propensity of adolescents to take or avoid risks may have a significant impact on the decision-making process in risky and uncertain conditions. However, a contrary assertion holds that of Sitkin and Weingart (2000) who conducted laboratory experiments in which they manipulated outcome history and problem framing while measuring risk propensity, risk-perception, and Decision-making. The findings suggest that risk propensity is inversely related to the perception of risk that is inversely related to the tendency to make risky decisions.

This findings is in consonate with Catherine O and Ololade O (2020) examined self-esteem and assertiveness as predictors of intentions to practice safe sexual behaviours among adolescents in selected secondary schools in Ibadan, Oyo State. It was revealed that adolescents are vulnerable to negative outcomes of sexual-risk behaviours because of their curiosity and impulsivity with the main objective to determine the relationship between self-esteem and assertiveness with intention to practice safe sexual behaviours, descriptive cross-sectional, sampling technique were employed in 4 local government areas of the city. It was concluded that self-esteem significantly influence the intentions of adolescents to practice safe sexual behaviours and also that sexual assertiveness had no relationship with the intention of adolescents to practice safe sexual behaviours.

This is contrary to the findings of Brown and Smiley (1978), who asserted that shared knowledge is observable, verifiable and measurable and oriented towards cognitive activities. The idea is to have conscious access to one's thoughts and processes that propel an individual to be able to control ones' thoughts is based on what one has developed over time. This finding supports the study by Garmezy, Modrcin-Talbott, (1998), which believed that high self-esteem is a protective factor against participation in risk and its previous consequences. To support this argument, low self-esteem has been associated with various risky behaviours among adolescents, such as smoking, drug use and sexual activity. In the same vein, Modrcin-Talbott, (2008) in a study with alcoholic adolescents, one of their personality characteristics was found as low self-esteem and it has been significantly associated with substance abuse, alcohol use and problematic drinking and smoking.

A study by Nomcebo (2015) on HIV/AIDS knowledge, attitudes and risky sexual behaviours of college students at Nazarene teacher training college in Swaziland based on descriptive study utilizing a quantitative research method, a self-administered questionnaire was used to collect data on the knowledge, attitudes, and risky sexual behaviours of the college students, with the aim to identify risky sexual practices of the college students as well,

which may require redress in order to enhance their effectiveness in combating the spread of HIV. The research findings recognized gaps, doubts or lack of confidence in the knowledge of HIV/AIDS of the college students. It was revealed that their attitudes were fatalistic and in denial of the risk of infection, with negative attitudes displayed towards people living with AIDS, with most of the students displaying fear in communicating HIV issues and attitudes towards condom use were negative, possibly due to religious orientation, and those who used condoms were inconsistent. Their self-esteem rated very low, leading to uncertainty on their perceived risk of contracting the virus with a pockets of high-risk sexual behaviours displayed by a minority and concluded that Risky sexual behaviours of college students include inconsistent use of condoms, not knowing their serostatus, and the risky sexual behaviours of their partners.

More recently, in a study conducted by Harrison and Colleagues (2006) with a sample of 101 male and 199 female, young adults (ages 18-24) in Northern KwaZulu/Natal province, the association between gender role in the context of masculinity and HIV risk outcomes suggested similar results. Furthermore, males in the study with more egalitarian relationship norms were more likely to engage in the use of inconsistent condoms than males with less egalitarian relationship norms. In total, 346 individuals participated (56.4% female). Kocken and Colleagues (2015) used a structured, self-administered questionnaire to collect participant data. Surprisingly, the number of participants who reported having had sex with more than one partner (8.9%) was below expectations. Another positive conclusion was that 66.2% of participants planned to use condoms with a new sex partner in the future.

On the other hand, there was a negative correlation between sexual behaviour and both family and school self-esteem, meaning the higher home and school self-esteem was in the participants, the less likely they were to engage in sexual behaviour. This study provided information about individual factors that affect self-esteem and, as a result, sexual behaviour. Although it is important to realize multiple things factor into our self-esteem development, the study came across a problem when combining all three types of self-esteem into an integrated model of overall self-esteem.

Amalor (1993) attempted to study decision-making styles with certain personality features. In a related manner, Gerrard, Breda, and Gibbons (1990) reported that while male partners tended to be more influential than their female

partners in general decision-making, females held the most power over contraceptive decision-making. It was further explained that men tend to hold the most power in general decision-making domains, but females tend to be more influential than men when it comes to sexual and contraceptive decision-making. Miller and Pasta, 1996) found that traditional male ideologies support men's high-risk sex behaviours as a form of gender-based HIV risk and early sexual initiation continues to be a major factor that drives the HIV epidemic. The early sexual initiation of boys serves to «prove» that they are not homosexual.

4.3.6 There is no significant two-way interaction effect of HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria

Hypothesis six predicted that there is no significant two-way interaction effect of HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. This hypothesis was accepted at 0.05 level of significance. The result, as shown in Table4.2.1, reveals that there is no significant interaction main effect of HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. By inference, there was no main interaction effect of HIV risk-perception and self-esteem in reducing faulty sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. These findings corroborate a previous empirical study reported by morning, (2015) who examined coping strategies for dealing with unwanted sexual activity and found that female adolescents felt they had control, this control did not translate into dealing with unwanted sexual activity. If female adolescents perceive control without actual control of their safety, it hinders the development of effective strategies for appropriate sexual decisions in life.

Similarly, Oladepo and Fayemi (2017) examined Perceptions about sexual abstinence and knowledge of HIV/AIDS prevention among in-school adolescents in a western Nigerian city, the study was a descriptive cross-sectional survey of students in Ibadan South-West Local Government Area. A total of 420 respondents (52% males and 48% females), selected through a multistage sampling technique, completed a semi-structured questionnaire. It was discoverd that Twelve percent of the entire sample had ever had sex. Overall, knowledge of HIV transmission and prevention was high and most respondents favoured the promotion of abstinence as an HIV prevention strategy. A smaller proportion of male

respondents (79%) abstained compared with the females (98%). Major predictors of sexual abstinence were being a female, not having a boyfriend or girlfriend, not using alcohol and having a positive attitude towards abstinence ($P < 0.05$). Sexual abstinence was also significantly associated with perceived self efficacy to refuse sex and negative perception of peers who engage in sexual behaviours ($P < 0.05$).

Besides, majority of the FGD discussants suggested the involvement of parents, media, schools, faith-based institutions and non governmental organizations in promoting the adoption of abstinence. It was concluded that the sexual abstinence behaviour of young persons is influenced by multiple factors and should be considered in determining the effectiveness of interventions targeting this behaviour. Coherent sexuality education interventions to promote the adoption of abstinence among young people are urgently needed. Given that sexual behaviour of in-school adolescents are influenced by multiple factors, the researchers hereby recommend an integrated multi-sectoral approach involving all stakeholders in providing comprehensive abstinence sexuality education to young persons.

Kirby (2002) that sexual education has influenced sexually risky behaviours and this programme aim to increase student connections in their schools to reduce adolescent pregnancy in society. The study has further supported the findings of DiCenso and Colleagues (2000) who explored adolescents' perceptions of sexual health education, the participants indicated too much focus on their physiological aspects of sex and sexuality. Students suggested that information about the emotional aspects of sexuality, relationship problems, communication with partners and gender differences be added to sex education courses (DiCenso, 2000). There is a comprehensive sexuality education which has resulted in the reduction of some sexually risky behaviour of adolescents that has led to more programmer meme on education which is needed that incorporates the aspects of the relationship context which might occur and that class should be mixed gender.

Hickmale and Muehlenhard (2007) found that females are more likely to fear rape from strangers because of the perception of having less control in these situations. Therefore, females are less afraid of knowing situations because they perceive that they have more control (Hughes, 2013). The problem with this perception is that it leads to a false sense of control. Murnen, (2015) examined coping strategies for dealing with unwanted sexual activity and found that “while females felt they had control, this control did not translate into dealing with unwanted sexual activity”. If females perceive control without actual control of their

safety, it hinders the development of effective strategies.

DiCenso and Colleagues (2010), using comprehensive sexual education have resulted in the reduction of some sexually risky behaviour adolescents have indicated that more programmes of health education are needed that could incorporate the aspects of the relationship context in which sex might occur and that classes should be mixed gender. DiCenso and Colleagues (2012), stated that sexual education programmes are not a clear solution to the problems connected with adolescents risky sexual behaviour and further recommended programmes designed based on adolescents suggestions to include negotiation skills in sexual relationships through communication.

A study by Rosenthal, Moore, and Flynn (2011), which investigates sexual self-efficacy and sexual self-esteem of males and females and the relation between sexual risk-taking and these self-perceptions. It was noted that the study assessed 1,008 post-secondary students, primarily female, aged 17 to 20. All respondents had engaged in sexual activity, meaning they had engaged in oral, anal, or vaginal sex, or withdrawal. Participants completed questionnaires on sexual self-efficacy, sexual self-esteem, and sexual conduct and risk. Sexual self-efficacy measured the trust of participants and their willingness to engage in multiple types of sexual activities.

According to the Vanwesenbeeck (2008) study, gender differences in teaching behaviour and competency. In particular, it was found that female-controlled sexual situations more defensively and were more anxious about the lack of control of the situation. Men have proven themselves more proactive in controlling what they want and getting into a sexual position. Regarding sexual meaning, men obtained a higher score for being sexually compulsive and seeking sensations than females. Moreso, there are also consistent findings that male characters having masculine traits of either gender are associated with higher levels of risky sexual behaviour (DeGaston and Weed, 1998 and Lucke, 2011). Traditional beliefs about the role of males and females are also considered to exacerbate at-risk sexual behaviour. However, there are also varying results in this research area, such as how sexual self-esteem affects sex-based sexual behaviour. Zimet, (2002) noted that high levels of self-esteem for boys, but low levels of self-esteem for girls, increased amounts of risky sexual behaviours.

4.3.7 There is no significant three-way interaction effect of treatments, HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria

The seventh suggested thatthere is no significant three-way interaction effect of treatments, HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. This hypothesis was accepted based on the findings of the study as revealed in Table 4.2.1, implying that there is no significant three-way interaction effect of treatments, HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. The three-way interaction effect, the treatments and control, HIV risk-perception and self-esteem had no significant interaction effect on sexual decision-making between the participants. This finding contradicted numerous empirical studies conducted by Pleck (1993) with a sample of 1,069 sexually active Black, White, and Latino adolescents ages 15 to 19 found that male adolescents with high levels of masculine ideology were more likely to endorse high-risk sexual activity and to inconsistently use condoms. As well, researchers found in a sample of 1,600 Latin American men that male ideology was negatively associated with condom use (Marin, 2007).

A study by James and Maame E. (2019) examined association between risky sexual behaviour and HIV risk perception among in-school adolescents in a municipality in Ghana, a cross sectional study was conducted among 706 students, using a questionnaire. Logistic regression analyses were used to assess the association between HIV risk perception and risky sexual behaviour. It was revealed that 27.7% of the respondents were sexually active, 51.8 % had sexual intercourse below 14 years, 65.4% did not used condom at their last sexual intercourse, and 37.2% had multiple sexual partners. Only 20.5% of the adolescents perceived themselves to be at risk of HIV infection. Being sexually active was independently associated with having HIV risk perception, it was concluded that only few of the adolescents in the study perceived themselves to be at risk of HIV infection. Those who were sexually active were more likely to have some HIV risk perception than those who were not sexually active. Among sexually active adolescents, a risky sexual behaviour in term of multiple sexual partners was also found to be associated with HIV risk perception. Adolescents with multiple sexual partners were more likely to have some HIV risk perception than adolescents with single sexual partners, those with multiple sexual partners, the adolescents generally did not perceive themselves to be at risk of HIV infection despite their involvement in risky sexual behaviour. Interventions that help adolescents to correctly assess their HIV risk perception

and build on their susceptibility to HIV infection are needed.

Bertens, Schaalma Wolfers, and van derBorne (2008) examined safer sex and negotiation behaviour and the correlates of negotiation with partners in 128 females of Surinamese and Dutch Antillean descent in the Netherlands. The key findings were that half (50%) of the participants had negotiated sexual risk reduction with their partner, yet only 40% of the female who negotiated safer sex claimed practising safe sex. In this study, Dixon, Saul, and Peters (2010) examined correlates of HIV sexual behaviour among 187 Puerto Rican females and found that increased condom use with primary partners was associated with higher levels of mastery and HIV prevention self-efficacy.

Similarly, this discovery supported the findings of Rosenthal, Moore, and Flynn (2011), who investigated sexual self-efficacy and sexual self-esteem of males and females and their relations between sexual risk-taking and these self-perceptions. This study evaluated 1,008 primarily female post-secondary students between the ages of 17 and 20. All respondents had engaged in sexual activity, meaning they had engaged in oral, anal, or vaginal sex, or withdrawal. Participants filled out questionnaires on sexual self-efficacy, sexual self-esteem, and sexual risk behaviour. Sexual self-efficacy measured participants' confidence and willingness to perform multiple types of sexual activities. Sexual self-esteem has measured a person's perceptions and attitudes about his or her sexual suitability and relationships.

This contradicts previous statements by Hollar and Snizek (2015), who conducted a study on the relationship between self-esteem levels, sexual behaviour and knowledge of HIV/AIDS. The study involved 353 university students, 49.7 per cent of whom were female and 50.3 per cent men. It was revealed that the majority of the students were in their first or second year of college with the age range from 18 to 25 years. All participants completed a questionnaire that assessed their sexual behaviours and safe sex practices. Once the assessment was completed, they were asked to give separate percentages of the prevalence of sexual behaviours of male and female peers on which they had scored.

Maqsud (1997) studied the effects of metacognitive and non-verbal skills on secondary school achievement. The study reports the findings of two experiments conducted with South African senior high school students to examine the relationships of metacognitive strategies and nonverbal reasoning ability to test performance in mathematics and English comprehension. For example, the study looked more closely at the metacognitive abilities of adults as they develop naturally with age. 214 pre-service and experienced teachers completed the metacognitive awareness inventory and the results indicated that metacognitive improves

significantly with age and with years of teaching experience that influences adolescent sexual decision-making.

Ayalew et al. (2014) examined adolescent - parent communication on sexual and reproductive health issues among high school students in Dire Dawa, Eastern Ethiopia using a cross sectional study among high school students in Dire Dawa administrative council. The result revealed that thirty seven percent of students had ever discussed on at least two sexual and reproductive health topics with their parents. Of which, majority of student preferred to discuss with their peers than parent. Condom use during first intercourse was associated with having communication about sexual and reproductive health. Cultural taboo, shame and lack of communication skill were reasons that hinder communication between parent and adolescent about sexual matters. It was concluded that Communication on sexual and reproductive health issue between adolescent and their parent was low. School based education is important to improve adolescent parent communication about sexual and reproductive health issues.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary, conclusion, recommendations and contribution to knowledge as well as limitations to the study and suggestions for further studies.

5.1 Summary ofFindings

This study focused on investigating the effectiveness of Metacognitive Therapy and Negotiation Skills Training on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria.

Sexual decision-making is a major challenge among adolescents globally. Reports have shown that adolescents in Nigeria, including Bayelsa State, encounter numerous life-threatening adverse effects due to wrong sexual decision-making which resulted into unwanted pregnancy, sexually transmitted infections such as HIV/AIDS and Sexually Transmitted Diseases (STDs). Moreso, adolescent pregnancy also have negative social and economic effects on girls, their families and the society at large. With regards to education, an estimated 5% to 33% of girls ages 15 to 24 years who drop out of school in some countries do so because of early pregnancy or marriage. It is anticipated that approximately 16 million girls aged 15 to 19 years and 2.5 million girls less than 16 years old give birth each year in developing regions, including Nigeria and finally, complications during pregnancy and childbirth are the leading cause of death for 15 to 19-year-old girls globally (UNFPA, 2015).

The research study was presented in five chapters focusing on the general introduction, the Background to the study, Statement of Problem, Objectives of the study, Research hypotheses, Significance of the study, Scope of the study and finally operational definition of concepts as used in the study. Seven null research hypotheses were raised to quide the study at 0.05 level of significance for the study.

The present study is anchored on the evolutionary theory of Planned Behaviour. The theory holds the assumption that beliefs are the fundamental determinants of any behaviour and, therefore, risky behaviours can be changed by altering the underlying beliefs. Behavioural intent and action are two specific concepts that may be relevant to teenagers in this study. The intent and action are basically influenced by two important factors: one's attitude toward the positive and negative aspects of a particular behaviour, and one's perception of social norms, or what others think about engaging in the behaviour. Attitudes are people's lifelong beliefs, and some beliefs are formed from direct experiences, some from external information, and others are inferred or self-generated (Ajzen, 1988).

This is an important consideration as adolescents may have strong intentions, but due

to elapsed time and other factors, they may not change their behaviour. The impact of behavioural intent and actual behaviour change in adolescents was studied through follow-up interviews after diagnosis. This is an important consideration for this study as it is likely that the past sexual behaviours of young adolescents will affect their future behaviour. Behavioural intentions that are supported by previous behaviour may be stronger than those that conflict with previous behaviour. The theory acknowledges that the theory of planned behaviour works best for behaviours that are under the voluntary control of the individual. As sexual intercourse involves two people behaviour in question and not fully under the control of the person and, therefore, must be taken into consideration. Empirically, depth of empirical studies was reviewed and a conceptual framework was also developed for the study.

The study adopted apretest-posttest, control group, quasi-experimental design with 3x3x3 factorial matrix. Descriptive Statistics and Analysis of Covariance (ANCOVA), were the major statistical tools used in the study. Simple percentage was used to analyse the demographic characteristics of the respondents, while ANCOVA was used to test the seven null hypotheses on the main effects and interaction of treatments and moderating variables at 0.05 significance level. Also, Bonferroni Pairwise Comparison Analysis was also used to determine the directions of initial differences among experimental and control group participants in this study. The result of the findings of the study includes the following among others:

1. There was a significant main effect of treatments on sexual decision-making among in-school adolescents ($F(2,56) = 397.344$, $p < 0.05$, $\eta 2 = 0.934$).
2. There was a significant main effect of HIV risk-perception on sexual decision-making among in-school adolescents ($F(2,56) = 7.358$, $p<0.01$, $\eta 2 = 0.208$).
3. There was a significant main effect of self-esteem on sexual decision-making among in-school adolescents ($F(2,56) = 32.016$, $p<0.01$, $\eta 2 = 0.533$).
4. There was no significant two-way interaction effect of treatments and HIV risk-perception on sexual decision-making among in-school adolescents ($F(4,56) = 2.150$, $p>0.05$, $\eta 2 = 0.133$).
5. There was a significant two-way interaction effect of treatments and self-esteem on sexual decision-making among in-school adolescents ($F(4,56) = 2.751$, $p<0.05$, $\eta 2 = 0.164$).

6. There was no significant two-way interaction effect of HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents (F (2,56) =. 514, p >0.05, η2 = 0.018).
7. There was no significant three-way interaction effect of treatments HIV risk-perception and self-esteem on sexual decision-making among in-school adolescents (F (1,56) = 2.518, p>0.05, η2 = 0.043).

5.2 Conclusion

The study investigated the effectiveness of Metacognitive Therapy and Negotiation Skills Training on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. HIV risk-perception and self-esteem were moderating variables. The findings showed that four hypotheses were significant while three were not significant in the study. The study also revealed that Metacognitive Therapy and Negotiation Skills Training were effective in reducing poorly made sexual decisions among in-school adolescents in Bayelsa State, Nigeria.

Lastly, Metacognitive Therapy is more effective than negotiation skills training in reducing poorly made sexual decisions of life. HIV risk-perception and self-esteem were found to significantly moderate the effect of treatments on sexual decision-making among in-school adolescents in Bayelsa State, Nigeria.

5.3 Recommendations of the Study

In light of the conclusions of this study, it is recommended that:

1. Metacognitive therapy was more effective in reducing faulty sexual decisions; hence, the therapy should be incorporated by stakeholders in the education and health sectors to improve the overall well-being of adolescents.
2. Parents and guardians should be well educated (during PTA meetings) to overcome cultural barriers to providing adolescents with early sex education for their children in different homes.
3. Psychotherapists and school counsellors should be informed regularly to adopt effective health education programmes that focus adolescents on sexual issues, thereby promoting abstinence and motivating positive behaviours. In addition, when abstinence may not be enough, improve contraceptive advice to reduce at-risk sexual behaviours.
4. Community health workers working with adolescents should be trained regularly on sexual issues in others to help adolescents reach their greatest potential in life.

5. Counselling psychologists must promote positive self-esteem to encourage adolescents to live in rural, semi-urban or urban areas. The special need for adolescents is an aversion to at-risk sexual behaviour.
6. Faith-based organizations (religious organizations) should use their positions as leverage to encourage adolescents to abstain from premarital sexual activities, thus encouraging moral development. It has been established that adolescents who value religious and Congregational activities are less involved in high-risk sexual behaviour.
7. Non-Governmental Organisations initiatives should advocate community mobilisation to increase the awareness towards the need for inclusion of sex education in the school curriculum by promoting sexual abstinence and motivating positive behaviours to reduce risky sexual behaviour among adolescents.
8. The State Government should embark on a relevant educational policy to support the two therapeutic interventions in helping in-school adolescents using modern techniques in the reduction of risky sexual behaviour in society.

5.4 Contributions to Knowledge

The research was intended to strengthen, expand and improve existing knowledge on adolescent decision-making and risk behaviours. The study contributed to the existing body of knowledge on the following areas:

1. This study has proven the relevance of therapeutic interventions (Metacognitive Therapy and Negotiation Skills Training). This work adds a voice to the evolving discussion on the sexual decision-making process through the application of the interventions in reducing faulty sexual decisions among adolescents in Bayelsa State, Nigeria.
2. The finding contributed a positive prevention strategy, pledges attitudinal advocacy and control for interventions through behavioural modification in reducing faulty sexual decision-making among adolescents.
3. The study added literature to the field of sexual decision-making, which was expanded to strengthen, expand and improve existing knowledge on adolescent decision-making and risk behaviours.
4. Metacognitive therapy was more effective in reducing the false sexual decisions of adolescents. By implication, this therapy affects both the cognitive and affective domain of every adolescent through self-control for sexual decisions of life.
5. This study has provided an opportunity to link the gaps of the past research works on

the use of therapeutic intervention to reposition adolescent sexual urge through the process of sexuality education in senior secondary schools.

6. The provision of empirical data would also assist the school counsellors, the developmental and clinical psychologist as well as mental health professionals to have a better understanding of adolescents to recognise it early and intervene appropriately.

5.5 Implications of the Study

The results of this study have a huge impact on adolescents, school counsellors, counselling psychologists, health care workers, government and non-governmental organizations, stakeholders and policy makers. The study proved that Metacognitive Therapy and Negotiation Skills Training were effective in reducing faulty sexual decision-making among in-school adolescents in Bayelsa State, Nigeria. The results of the study reveal that it would be highly beneficial for schooled adolescents about the dangers of poor sexual decision-making.

The adolescent sexual health issues should be paramount concerns to the school counsellor by adopting the treatments for counselling practices because, students' with low self-esteem and HIV risk-perception could be taught how to embrace assertive skills as a matter of urgency in handle sexual decisions while limiting the future rate of transactional sex in Bayelsa State, Nigeria.

The school counsellor should be empowered to utilise the theoretical tactics by practising Metacognitive Therapy and Negotiation Skills Training in the reduction of faulty sexual decision-making as an approach to behavioural modification by addressing sexual health care issues through self-exploration of sexual health beliefs as a practice to re-orientate the in-school adolescents to make sound sexual decisions.

Counselling psychologists ensure that gender-based issues such as attitudes, beliefs and social norms are explored to disintegrate any myths and to safeguard the adolescents to have good access to quality sex education even beyond secondary -schools. The use of positive reinforcement as well would improve the confidence in the adolescents thereby creating positive mindsets and feelings in other to dispel irrational thoughts and faulty imagination which consequently led to wrong sexual decisions.

Health workers are urged to improve the informed sexual decisions of teenagers when they visit hospitals. Public health workers are ensured that adolescents are given the correct information on a visit to avoid misinterpretation of health-related messages by providing appropriate sexual tips on abstinence techniques through negotiation (assertive skills).

The Government and Non-governmental Organizations should make reproductive health education a compulsory part of secondary schools in the state by training appropriate agencies (Trained Counsellor and Counselling Psychologist) to bridge the gap by using the treatments to investigates (Metacognitive Therapy and Negotiation Skills Training) and to make an informed sexual choice of life.

Stakeholders and policymakers are enjoined to make policies that would be integrated as part of the National Development Planning Programme such as secondary school curriculum and teachers across the state for effective control in general wellbeing (health) in prevention for unwanted pregnancies and social miscreants in the state of Bayelsa, Nigeria.

5.6 Limitations of the Study

The study focused on senior secondary school students' (S.S. II) in Bayelsa State. The study initially started with ninety (90) participants, during the training period, the study encountered a mortality rate of fifteen students' leading to the final sample of seventy-five (75) participants only.

5.7 Suggestions for Further Studies

The study established the effectiveness of Metacognitive Therapy and Negotiation Skills Training on sexual decision-making among adolescents at schools in Bayelsa, Nigeria.Nevertheless, to further extend the frontier of knowledge, the following suggestions have been made. The effectiveness of the two interventions on sexual decision-making among in-school adolescents can be replicated in other states or geopolitical zones rather than Bayelsa State, using the therapeutic strategies adopted for the study in reducing faulty sexual decision-making.

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APPENDIX A

DEPARTMENT OF GUIDANCE AND COUNSELLING

FACULTY OF EDUCATION, UNIVERSITY OF IBADAN

Dear Respondents,

I am a PhD student of the above Department. I am conducting an experimental study titled: "Metacognitive Therapy and Negotiation Skills Training on Sexual Decision-Making among in-School Adolescents in Bayelsa State, Nigeria". The scales are purely designed and validated strictly for research purposes only.

Kindly act neutrally and honest in responding to the items presented. All information will be treated with the utmost confidentiality and extreme secrecy. The scale /questionnaires utilised consisted of several words that describe your feeling and emotions about your relationship with your sexual partner. Please, endeavour to read and understand each item and mark appropriately based on your knowledge about the sentence(s).

Put a tick (√)in the column that best describes your intent. Use the following Likert format to record your answer(s). Key format: SA = Strongly Agree; A = Agree, D = Disagree and E = Strongly Disagree.

Thank you for your maximum cooperation.

Signed:

Alakeme, Nestor Johnson

SECTION A: Demographic Information

1. Gender: Female ( ), Male ( )
2. Age: 10-12 ( ), 13-15 ( ), 16-18 ( ).
3. Course of study: Science class ( ), Art class ( ), Commercial class ( ).

SECTION B: Sexual Decision-making Scale (SDMS)

Kindly put a tick (√) in the column that best describes your behaviour as it relates to you with the items presented using the Likert format below: SA - Strongly Agree, A – Agree, D – Disagree and SD - Strongly disagree

S/n	Items	SA	A	D	SD
1	It is against my values (conscience) as an adolescent to have sexual intercourse before marriage.				
2	Having sexual intercourse is something only married people should do,				
3	In my adolescent age right now, having sexual intercourse would create problems or would make life difficult – (reversed).				
4	It would be okay for your adolescent to have sexual intercourse before he/she leaves high school.				
5	Young people should not engage in sexual intercourse until they are in a relationship with someone, they feel they would like to marry.				
6	Young people should not engage in sexual intercourse until they have, at least, finished high school.				
7	It's okay for young people to engage in sexual intercourse as long as condoms are used to protect against sexually transmitted diseases and pregnancy.				
8	Adolescent participation in programme teaching about waiting to have sex until marriage is an acceptable value norm in our society (parent report).				
9	Consistently refuses to have sex if the partner(s) wants sex without a condom.				
10	The sexuality education I received in school helped me to delay becoming sexually active.				

11	The sexuality education I received in school helped me to become better aware of the dangers of sexually transmitted diseases.				
12	The sexuality education I received in school made me aware that I am responsible for making my own sexual decisions.				
13	I am a more responsible person today regarding my sexual health because of the sexuality education I received in school.				
14	Before making sexual decisions, I usually think about the consequences (goals) I want to achieve.				
15	I am not very good at solving problems that require careful logical analysis of the sexual decision of life.				
16	Thinking hard and for a long time about something gives me a little satisfaction.				
17	I will keep on insisting not to have sex after my partner says “yes” as his personal opinions				
18	My friends' opinions about my sexuality do not matter very much to me.				
19	I am assertive about the sexual aspects of my life.				
20	I am somewhat passive about expressing my sexual desire				
21	I am the type of person who insists on having my sexual needs met at all costs.				

SECTION C: Risky Sexual Behaviour Questionnaire (RSBQ)

Kindly put a tick (√) in the column that best describes your behaviour as it relates to you with the items presented using the Likert format below: SA - Strongly Agree, A – Agree, D – Disagree and SD - Strongly disagree

S/n	Items	SA	A	D	SD
1	I may have had sex with someone who was at risk for HIV/AIDS unknowingly.				
2	If I were going to have sex, I would take precautions to reduce my risk of HIV/AIDS.				
3	If a friend knew that I might have sex on a date, he/she would ask me whether I was carrying a condom.				
4	The idea of using a condom doesn't appeal to me.				
5	If my partner wanted me to participate in risky sex and I suggested a lower-risk alternative, we would have safer sex instead				
6	The sensory aspects (smell, touch, etc.) of condoms make them unpleasant.				
7	My sexual experiences do not put me at risk for HIV/AIDS.				
8	When I socialize, I usually drink alcohol or use drugs.				
9	If I were going to have sex in the next year, I would use condoms.				
10	It is right to manipulate someone into having sex as long as no future promises are made.				
11	It is alright to pressurise trusted friends into having sex (forcefully)				
12	Involving in an extensive pre-marital sexual experience is not lawful as both partners are in love.				

13	Having multiple affairs is alright as long as one's partner doesn't know about the other partner.				
14	I will feel comfortable having intercourse with my partner in the presence of other friends.				
15	I am very aware of the way my mind works when I am sexually aroused.				
16	I do not hesitate to ask for what I want in a sexual relationship.				
17	I don't think about my sexual motivations rather most people do.				
18	I am somewhat active in expressing my sexual desires.				
19	I usually worry about making a good sexual impression on others to gain friends intention to fall in love.				

SECTION D: HIV Risk Perception Scale (HIV-RPQ).

Kindly put a tick (√) in the column that best describes your behaviour as it relates to you with the items presented using the Likert format below: SA - Strongly Agree, A – Agree, D – Disagree and SD - Strongly disagree

S/n	Items	SA	A	D	SD
1	I feel I am unlikely to get infected with HIV/AIDs				
2	At its best, sex seems to be the merging of two souls therefore, I found it easy to engage in it.				
3	Sex is usually an intensive, almost overwhelming experience I enjoy.				
4	Sex is the closest form of communication between two people (sexual partner).				
5	I will like to have sex with so many partners at will.				
6	I do not need to be committed to a person to have continual sexual intercourse with him.				
7	The main purpose of sex is to enjoy myself at a regular interval in my neighbourhood.				
8	I am afraid of getting HIV/AIDs if I risk having sex with whom I am pleased with				
9	HIV/AIDs can transfer by drinking from the same cup that someone who has AIDS had drunk from.				
10	The HIV / AIDS virus can transfer by sharing needles while injecting drugs with someone who has HIV/AIDS.				
11	I will feel vulnerable if I am infected with HIV/AIDS.				

12	I can easily go in for free sex (casual) if my emotion (self-will) permits me.				
13	Having a farewell for my partner is the prime factor in a fulfilling life.				
14	Having a sexual relationship with a loved partner is the best when you let yourself go into it voluntarily				
15	Sex is usually an intensive, almost overwhelming experience to share with my lovers				
16	I find it extremely difficult to negotiate condom use with a partner for fear of being abandoned.				
17	Boredom in a long-term relationship compels me to have more than one sex partner.				
18	Sex partners' familiarity and positive assessment of good health influence my attitude in having frequent sex with him/her without protection				
19	I do not maintain only one sex partner.				
20	I accept unprotected sex for fear of rejection or termination of a relationship with my partner.				
21	I feel very ashamed procuring condoms for use so I do not use them.				
22	By taking the new drug combinations, an HIV-positive man decreases the chances that he will infect his partner with HIV AIDS				
23	I get worried about getting infected with HIV/AIDS				
24	I find it difficult to tell my sex partner I would not have anal intercourse without a condom.				
25	My family will not treat me as a full family member if the family gets to know that I have the AIDS virus.				
26	My community will treat me like a social outcast if any of the community members get to know that I have the AIDS virus.				
27	My friends encourage me to practise safer sex (use of a condom) rather than flesh to flesh.				

SECTION E: Rosenberg Self-esteem Scale (RSES)

Kindly put a tick (√) in the column that best describes your behaviour as it relates to you with the items presented using the Likert format below: SA - Strongly Agree, A – Agree, D – Disagree and SD - Strongly disagree

S/n	Items	SA	A	D	SD
1	On the whole, I am satisfied with myself.				
2	At times I think I am no good at all				
3	I feel that I have several good qualities.				
4	I can do things as well as most other people.				
5	I feel I do not have much to be proud of.				
6	I certainly feel useless at times.				
7	I feel that I am a person of worth, at least on an equal plane with others.				
8	I wish I could have more respect for myself.				
9	I take a positive attitude toward myself.				
10	I take a positive attitude toward myself.				

APPENDIX B

CONSENT FORM (STUDENTS')

Dear Participant

You are being invited to take part in a research study. Before you decide to participate in this study, I strongly encourage you to read and understand the purpose and procedures of the study. Thus, you are free to withdraw at any stage from participating in the study. But, once signed, you are compelled to remain steadfast till the end of the training programme. Also, reading through this consent form, I understand that I am invited to take part as an adolescent in a "psychological research" that involved in-school adolescents. The research topic is titled: "Metacognitive Therapy and Negotiation Skill Training on Sexual Decision-making among in-school adolescents in Bayelsa State, Nigeria".

Equally, the research was conducted by students, studying Counselling Psychology and Health promotion from the Premier University of Ibadan, Ibadan under the supervision of Dr Mercy N. Ofole. The training was organized to be carried out in my school to improve student's mental capability to take an appropriate and responsible sexual decisions that would place adolescents to be morally sound in this 21st century. The training period was fixed for ten (10) weeks as stipulated in the training manual. As an eligible participant(s) for the training, I, therefore, promise to abide by the rules and regulations guiding the exercise.

More so, for an enquiry, you are welcome to ask the researcher any question (s) that occur to you during the training and if you have a further question (s) once the training is completed, you are free to contact the researcher using the contact information given below for further and long term support, you are welcome to contact: Alakeme, Nestor Johnson via email: at *nestor.alakem@gmail.com*

I hereby agree to participate in the research training that my responses will be kept anonymous using a personalised code.

Participant Code……

Signature of the participant……. Date……..

Name of the researcher…….

Signature of the researcher …….Date…….

APPENDIX C

RESULTS OF PILOT TEST

Reliability

Scale: Sexual Decision-making

Reliability Statistics

Cronbach's Alpha	N of Items
.867	26

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
VAR00001	51.0286	122.911	.732	.855
VAR00002	50.8857	123.810	.587	.858
VAR00003	50.8571	123.185	.597	.857
VAR00004	50.4571	118.314	.686	.853
VAR00005	49.9714	116.440	.597	.856
VAR00006	50.8571	129.008	.421	.863
VAR00007	50.7429	131.961	.243	.866
VAR00008	50.0857	125.551	.442	.861
VAR00009	50.5143	125.551	.526	.859
VAR00010	50.4000	128.776	.369	.864
VAR00011	49.5429	135.667	-.025	.876
VAR00012	49.7429	138.314	-.132	.880
VAR00013	50.3143	138.634	-.158	.877
VAR00014	50.9143	127.787	.496	.861
VAR00015	49.7714	122.887	.577	.857
VAR00016	51.0286	122.911	.732	.855

VAR00017	50.8857	123.810	.587	.858
VAR00018	50.8571	123.185	.597	.857
VAR00019	50.4571	118.314	.686	.853
VAR00020	49.9714	116.440	.597	.856
VAR00021	50.8571	129.008	.421	.863
VAR00022	50.7429	131.961	.243	.866
VAR00023	50.0857	125.551	.442	.861
VAR00024	50.5143	125.551	.526	.859
VAR00025	50.4000	128.776	.369	.864
VAR00026	49.5429	135.667	-.025	.876

Reliability

Scale: Risky Sexual Behaviour Questionnaire

Reliability Statistics

Cronbach's Alpha	N of Items
.839	19

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
VAR00001	35.9429	69.526	.766	.817
VAR00002	35.8000	69.929	.633	.821
VAR00003	35.7714	69.182	.661	.820
VAR00004	35.3714	66.770	.664	.817
VAR00005	34.8857	65.928	.546	.825
VAR00006	35.7714	75.005	.380	.833
VAR00007	35.6571	77.291	.198	.839
VAR00008	35.0000	73.529	.335	.835
VAR00009	35.4286	72.664	.469	.829
VAR00010	35.3143	75.516	.280	.837
VAR00011	34.4571	80.785	-.096	.857
VAR00012	34.6571	80.585	-.087	.858
VAR00013	35.2286	81.711	-.152	.856
VAR00014	35.8286	73.323	.521	.828

VAR00015	34.6857	70.398	.541	.825
VAR00016	35.9429	69.526	.766	.817
VAR00017	35.8000	69.929	.633	.821
VAR00018	35.7714	69.182	.661	.820
VAR00019	35.3714	66.770	.664	.817

Reliability

Scale: HIV Risk-perception Questionnaire

Reliability Statistics

Cronbach's Alpha	N of Items
.857	27

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
VAR00001	53.7429	123.255	.718	.844
VAR00002	53.6000	124.071	.579	.847
VAR00003	53.5714	123.311	.597	.846
VAR00004	53.1714	118.382	.688	.842
VAR00005	52.6857	116.281	.607	.844
VAR00006	53.5714	129.487	.398	.853
VAR00007	53.4571	132.432	.220	.856
VAR00008	52.8000	126.047	.424	.851
VAR00009	53.2286	125.887	.514	.849
VAR00010	53.1143	128.869	.371	.853
VAR00011	52.2571	136.491	-.054	.867
VAR00012	52.4571	136.138	-.041	.867
VAR00013	53.0286	138.264	-.134	.867
VAR00014	53.6286	128.064	.486	.851
VAR00015	52.4857	122.787	.588	.846

VAR00016	53.7429	123.255	.718	.844
VAR00017	53.6000	124.071	.579	.847
VAR00018	53.5714	123.311	.597	.846
VAR00019	53.1714	118.382	.688	.842
VAR00020	52.6857	116.281	.607	.844
VAR00021	53.5714	129.487	.398	.853
VAR00022	53.4571	132.432	.220	.856
VAR00023	52.8000	126.047	.424	.851
VAR00024	53.2286	125.887	.514	.849
VAR00025	53.1143	128.869	.371	.853
VAR00026	52.2571	136.491	-.054	.867
VAR00027	52.4571	136.138	-.041	.867

Reliability

Scale: Self-esteem

Reliability Statistics

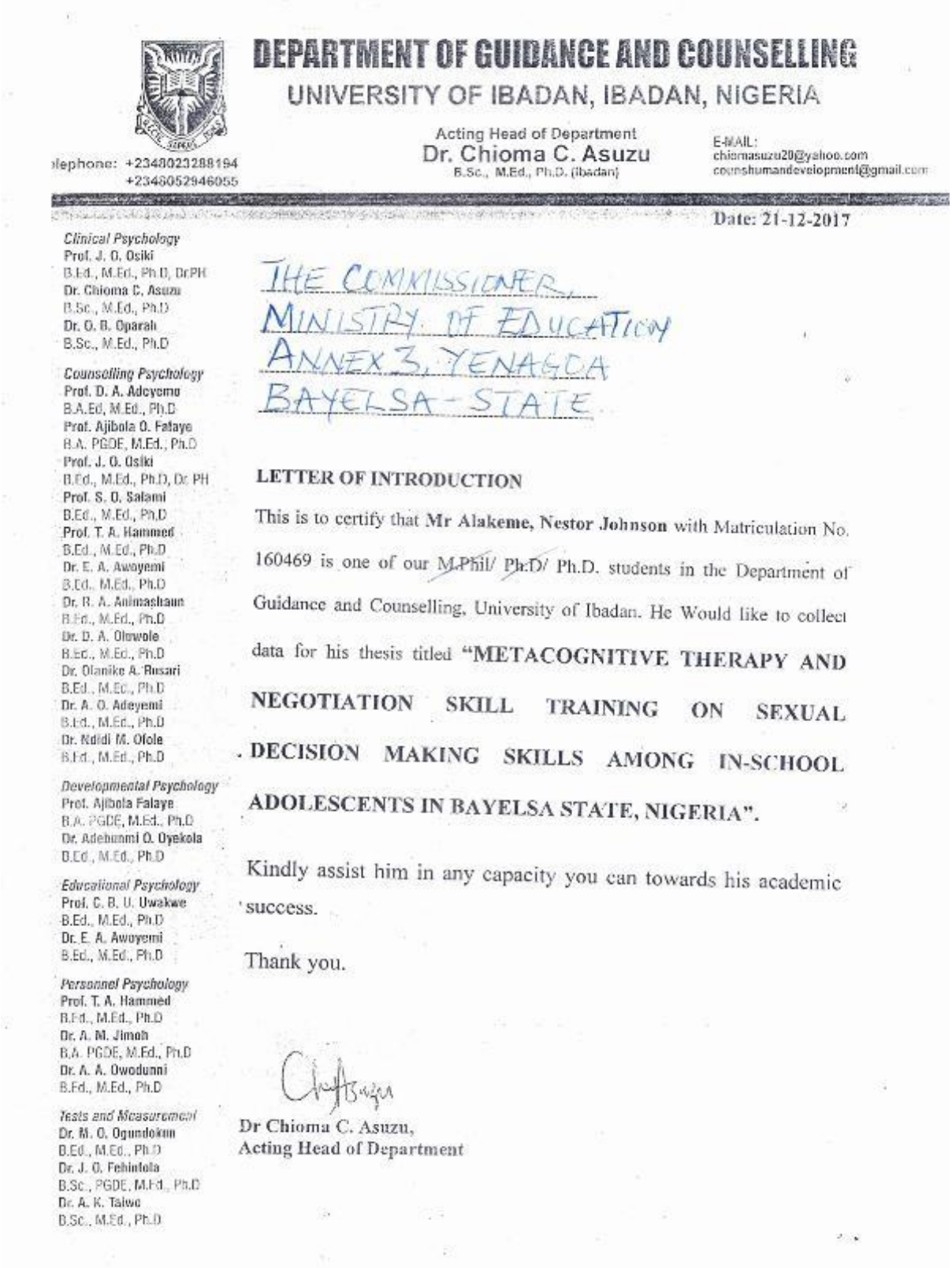
Cronbach's Alpha	N of Items
.793	10

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
VAR00001	17.3429	24.232	.690	.755
VAR00002	17.2000	24.400	.566	.765
VAR00003	17.1714	24.617	.515	.771
VAR00004	16.7714	22.299	.628	.754
VAR00005	16.2857	22.092	.472	.785
VAR00006	17.1714	26.499	.439	.781
VAR00007	17.0571	27.820	.264	.796
VAR00008	16.4000	25.188	.408	.784

VAR00009	16.8286	25.617	.448	.779
VAR00010	16.7143	26.798	.323	.792

APPENDIX D



DEPARTMENT OF GUIDANCE AND COUNSELLING
UNIVERSITY OF IBADAN, IBADAN, NIGERIA

Acting Head of Department
Dr. Chioma C. Asuzu
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Date: 21-12-2017

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B.Ed., M.Ed., Ph.D, DrPH
Dr. Chioma C. Asuzu
B.Sc., M.Ed., Ph.D
Dr. O. B. Oparah
B.Sc., M.Ed., Ph.D

Counselling Psychology
Prof. D. A. Adeyemo
B.A.Ed, M.Ed., Ph.D
Prof. Ajibola O. Falaye
B.A. PGDE, M.Ed., Ph.D
Prof. J. O. Osiki
B.Ed., M.Ed., Ph.D, Dr. PH
Prof. S. O. Salami
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Prof. T. A. Hammed
B.Ed., M.Ed., Ph.D
Dr. E. A. Awoyemi
B.Ed., M.Ed., Ph.D
Dr. R. A. Animashaun
B.Ed., M.Ed., Ph.D
Dr. D. A. Olowole
B.Ed., M.Ed., Ph.D
Dr. Olanike A. Rusari
B.Ed., M.Ed., Ph.D
Dr. A. O. Adeyemi
B.Ed., M.Ed., Ph.D
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Prof. Ajibola Falaye
B.A. PGDE, M.Ed., Ph.D
Dr. Adebunmi O. Oyekola
B.Ed., M.Ed., Ph.D

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Dr. A. A. Owodunni
B.Ed., M.Ed., Ph.D

Tests and Measurement
Dr. M. O. Ogundokun
B.Ed., M.Ed., Ph.D
Dr. J. O. Fehintola
B.Sc., PGDE, M.Ed., Ph.D
Dr. A. K. Taiwo
B.Sc., M.Ed., Ph.D

THE COMMISSIONER,
MINISTRY OF EDUCATION
ANNEX 3, YENAGOA
BAYELSA - STATE

LETTER OF INTRODUCTION

This is to certify that **Mr Alakeme, Nestor Johnson** with Matriculation No. 160469 is one of our M.Phil/ Ph.D/ Ph.D. students in the Department of Guidance and Counselling, University of Ibadan. He Would like to collect data for his thesis titled **"METACOGNITIVE THERAPY AND NEGOTIATION SKILL TRAINING ON SEXUAL DECISION MAKING SKILLS AMONG IN-SCHOOL ADOLESCENTS IN BAYELSA STATE, NIGERIA".**

Kindly assist him in any capacity you can towards his academic success.

Thank you.

Dr Chioma C. Asuzu,
Acting Head of Department

APPENDIX E

GOVERNMENT OF BAYELSA STATE OF NIGERIA
MINISTRY OF EDUCATION

Our Ref: _____ Your Ref: _____

02/02/2018

The Ph.D Coordinator,
Dept of Guidance and Counselling,
Faculty of Education,
University of Ibadan.

PERMISSION TO CONDUCT RESEARCH PROGRAMME

I am directed to inform you that the bearer Mr. Alakeme Nestor Johnson, who is a Ph.D student from the Department of Guidance and Counselling, Faculty of Education, University of Ibadan, Oyo State, Nigeria is carrying out a research for his Thesis titled: "Metacognitive Therapy and Negotiation Skill Training on Sexual Decision Making Skills Among In-school Adolescents in Bayelsa State, Nigeria"

For the purpose of the above, he will train and administer questionnaires to three randomly selected senior secondary schools from Sagbama, Yenagoa and Southern-Ijaw Local Government Areas in the state.

Kindly accord him every necessary assistance and unfettered access to your school.

Thank you for your kind cooperation.

EAllagoa

Allagoa E.E (Mrs.)
Director, Secondary Education Dept.
For: Permanent Secretary.

Wing C Annex 3, State Secretariat Complex, Road Safety Road, Yenagoa, P.M.B. 17 Yenagoa, Bayelsa State.
+234 803 373 3712 www.bayelsagov.com edubayelsa@yahoo.co.uk

APPENDIX F


MAP OF BAYELSA STATE
Sagbama
Kolokuma/Opokuma
Yenegoa
Ogbia
Southern Ijaw
Nembe
Brass

APPENDIX G

EPIE NATIONAL HIGH SCHOOL

KPANSIA-EPIE, YENAGOA

BAYELSA STATE

*Our Ref:*_____ *Your Ref:*_____ *Date:*_____

The PhD Coordinator,
Department of Guidance and Counselling,
Faculty of Education,
University of Ibadan.
Ibadan, Oyo State.

Dear Sir,

LETTER OF ACCEPTANCE

The bearer, **ALAKEME, NESTOR JOHNSON** is a student from the University of Ibadan, Ibadan, Nigeria who is conducting a research in our school.

The title of his research thesis is "Metacognitive Therapy and Negotiation Skill Training on Sexual Decision Making Skills among in-school adolescents in Bayelsa State, Nigeria".

We would give him maximum support during the course of the training programme in the school.

Yours faithfully,

EPIE NATIONAL H G S
LUCY JOSHUA
V.P. Administration
KPANSIA

EPIE NATIONAL HIGH SCHOOL
VICE PRINCIPAL ADMIN
DATE 08/03/18
KPANSIA

APPENDIX H

GOVERNMENT SECONDARY SCHOOL

AMASSOMA - SILGA, WILBERFORCE ISLAND
NO. 2 OBORO ROAD, P. O. BOX 1703 YENAGOA, BAYELSA STATE
email: gssamassoma@yahoo.com

7th March, 2018.

The P.H.D Coordinator,
Department of Guidance and Counselling,
Faculty of Education,
University of Ibadan.
Oyo State.

Dear Sir,

RE: PERMISSION TO CONDUCT RESEARCH

I hereby write to the Ph.D Coodinator unbehalf of the bearer **Mr. Alakeme Nestor Johnson** with matric number **160469** who is a student of the above department to conduct an experimental research in our school. His research title is metacognitive therapy and Negotiation skills training on sexual decision making skills among in school adolescents in Bayelsa State, Nigeria.

We accepted him to carry out the training programme between 8th January - 16th March, 2018 in good faith.

Thanks in anticipation.

Yours faithfully,

GOVERNMENT SECONDARY SCHOOL
AMASSOMA
PRINCIPAL 7/3/18
DATE

IGBE FESTUS .E.
PRINCIPAL

APPENDIX I

COMMUNITY SECONDARY SCHOOL
SAGBAMA

OFFURUGBO PREVE G.
[PRINCIPAL]
08139675504

OFFICE OF THE PRINCIPAL

P. O. BOX 49
SAGBAMA
BAYELSA STATE

Our Ref: .....

Your Ref: .....

Founded 20th Nov. 1980

Date: 26-01-18

The PHD coordinator;
University of Ibadan;
Ibadan
Oyo State

LETTER OF ACCEPTANCE

The bearer Alakeme Nestor J. with the matriculation number 160469 a PHD student of your great institution wish to carry out his research work in our school.

His experimental research topic is metacognitive therapy and negotiation skill training on sexual decision making skill among in-school adolescents in Bayelsa State; Nigeria.

We have giving him our maximum support. Thank you for being part of us.

COMMUNITY SECONDARY SCHOOL
26-01-18

OFFURUGBO PREYE, G.
principal

APPENDIX J

METACOGNITIVE THERAPY, NEGOTIATION SKILLS TRAINING AND SEXUAL DECISION-MAKING AMONG IN-SCHOOL ADOLESCENTS IN BAYELSA STATE, NIGERIA

ORIGINALITY REPORT

20%	18%	9%	12%
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APPENDIX K

GROUP PHOTOGRAPHS FROM FIELD REPORT