PATTERN OF COPING AND FACTORS ASSOCIATED WITH LOW SELF ESTEEM AND DEPRESSION AMONG ADOLESCENTS IN IBADAN, NIGERIA.

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Declaration

I hereby declare that this study or any part of it has not been submitted for the award of any diploma, degree or any other examination.

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Supervisors' Attestation

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Key to Abbreviations (Acronyms)

ANOVA	Analysis of Variance
BDI	Beck's Depression Inventory
GHQ	General Health Questionnaire
HIV	Human Immunodeficiency Virus
IDI	In-depth interview
PTSD	Post-Traumatic Stress Disorder
RSES	Rosenberg's Self-esteem Scale

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Abstract

Background: Coping patterns refers to ways in which stressful life events are manoeuvred to avoid distress resulting from such stressors. Coping patterns can be effective in relieving distress or be ineffective and maladaptive. Adolescents in school settings are faced with difficulties that may cause significant distress if not properly managed. Long standing stressors or improperly resolved difficulties can lead to low self-esteem and depression as well as predispose to risky behaviours. Low self-esteem has been recognized to be associated with a number of mental disorders. The construct of self-esteem is however, culture- specific and individualized and thus attempts at conceptualizing should be context specific. Low self-esteem is often associated with depressive illness. Major depression has been recognized as one of the leading causes of morbidity worldwide and it impairs the well-being socially and academically of adolescents. The study therefore aims to identify the pattern of coping among secondary school students and establish its association with low self-esteem and depression. It will also explain the role of contextual factors in observed cases of low self-esteem

Methodology: Three hundred and three students from two senior secondary schools selected from rural and urban areas of Ibadanwere recruited to participate in the two-phase study. In the first phase, the adolescents completed the Rosenberg self-esteem scale, the Beck's Depression Inventory (BDI) and the Brief COPE. There was an independent assessment of academic performance by the schoolteachers. Data was analysed using mean and standard deviation for the self-esteem scores and a cut-off of 18 on the BDI was employed for clinical depression. The frequency of use of different coping methods among the students was categorized according to the 14-factor model. The association between the different coping methods and depression was tested using the chi-square test, while coping pattern association with self-esteem was evaluated using the t-tests.In the second phase, respondents with the lowest self-esteem scores were recruited for an in-depth qualitative interview exploring

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family, social and academic issues associated with low self-esteem and recurring themes were qualitatively coded and presented.

Results: Most of the respondents were aged between 13 and 18 years with a mean age of 15.5years (S.D = 1.27). Majority were females from monogamous family settings whose parents were currently married. About a quarter of the respondents worked after school hours, while about 20% were brought up by other than both parents. About 6% did not like their school, while one-fifth of the respondents had difficulties with schoolteachers.

About 27% of the respondents had clinical depression while 1.0% had low self-esteem scores. The predominantly used method of coping was *Turning to religion* (72.2%) followed by *Seeking instrumental support* (66.7%) , while the least used was *Alcohol use* observed in 17.3%. Male gender, little or no affiliation with religion, working after school, and poor academic performance were significantly associated with clinical depression. Higher prevalence of depression was found among those who used evasive coping methods such as *Acceptance*, *Behavioural disengagement*, *Denial* and *Self-distraction*. Lower mean self-esteem scores were observed among those who employed *alcoholuse* when faced with difficulties. Emergent themes identified from respondents during the in-depth interviews were poor treatment by family members, poor academic performance and dissatisfaction with personal attributes.

Conclusions: The study found high prevalence of clinical depression among secondary school students and observed that the use of evasivepatterns of coping were associated with depression and low self-esteem. Predisposing factors to low self-esteem described from the qualitative phase included family, academic and personal factors. Incorporation of coping skills training into school mental health programmes may help to equip adolescents to manage difficulties. Equipping schoolteachers with skills to identify early signs of depression may help promote better mental health among adolescents in schools.

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Key Words: Adolescents, Self-esteem, Depression, Coping, Academic Performance, Ibadan, Nigeria

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Chapter One

Introduction

1.1 Background of the Study

A lot of attention has been directed at preventive psychiatry, which emphasizes attempts at identifying individuals at risk of mental illness and providing interventions to strengthen their protection against development of a mental disorder. Coping strategies are the steps taken by individuals to reduce the impact of a stressor or a negative event (Lazarus and Folkman, 1984). It refers to conscious and unconscious strategies employed by individuals for mitigating the effect of stress. Coping may also involve efforts made to master the nature of the stressor or to modify ones thinking in order to be able to tolerate the stressor. Coping patterns are described as either emotion focused or problem focused. Emotion focused coping styles seek to modify the individuals internal milieu without addressing the source of the stressor. Problem focused coping seeks strategies to mitigate the stressors from its source.

An identified risk factor for mental illness is low self-esteem (Dray et al., 2014). Self-esteem is the attitude an individual has towards him or herself (Rosenberg, 1986). Low self-esteem is often implied when the image or perception of an individual about him or herself is poor, or he or she values self lowly. Low self-esteem has been associated with depression, risky behaviour, substance use and poor academic performance in male and female adolescents (Rosenberg et al., 1995, Wild et al., 2004, Veselska et al., 2009).

Depression is one of the top ten leading causes of disease burden globally (Lopez et al., 2006), and it has been found to be associated with low self-esteem. Major Depression refers to clinically significant illness that is characterised by Low mood, loss of interest in previously pleasurable activities and reduced energy. Associated symptoms may also include loss of concentration, poor appetite, poor sleep and feelings of low self-worth or guilt.

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Depression can start during adolescence and remain untreated for long periods (Birmaher et al., 1996). Depressed adolescents may miss classes or have poor concentration during educational activities. Up to a quarter of adolescents by age 19years would have had an episode of depression which might persist into adulthood (Kessler et al., 2001).

1.2 Statement of the problem

The risk of developing mental health disorders has been reported to be higher among individuals with low self-esteem among Nigerian adolescents (Adewuya and Ologun, 2006). Low self-esteem is also associated with substance use, poor academic performance and violence (Baumeister et al., 1996, Rosenberg et al., 1995). Individuals with low self-esteem tend to have higher risk of developing Post Traumatic Stress Disorder and they also suffer more from Stigma (Adewuya et al., 2009, Oshodi et al., 2013).

Prevalence of depression has been reported to be as high as 20% among adolescents with higher population values found in developing countries (Thapar et al., 2012). Individuals with maladaptive coping strategies when exposed to everyday environmental stressors tend to develop Low self-esteem (Chapman and Mullis, 1999). Studies carried out in Nigeria have mostly been quantitative assessment of self-esteem among in-patients or in individuals with chronic illnesses (Adewuya et al., 2009, Oshodi et al., 2013).

The role of coping strategies in relation with school performance has not been explored. While a study carried out among medical students found significant relationships between the psychological distress and coping styles (Yussuf et al., 2013), the possible association between these variables and academic performance was not explored.

As far as the author is aware, there has not been a reported qualitative study on low self-esteem in Nigerian students or any study employing the additional benefits of a mixed methods study in understanding the overall picture of self-esteem in the adolescent population. This is however important as there may be other components or themes that are

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not expressed in standard questionnaires that contribute to low self-esteem in adolescents in this population.

1.3 Relevance of the study

The study explored the predominant coping strategies employed by adolescents with low self-esteem and established associations between them. The study also identified adolescents with low self-esteem and proceeded to establish some of the contextual factors that may be associated with it. The study went further to explore how low self-esteem may vary with academic performance and depressive symptoms. The study provided further insight into other themes or concepts that may better predict or characterize the experience of low self-esteem as expresses by the adolescents themselves.

An appreciation of the role coping patterns may play in depression and Low self-esteem will help motivate teachers and instructors in understanding the need to inculcate good coping skills and thus promote positive self-esteem and mental health among students. Identified environmental factors associated with low self-esteem may be targeted for interventions that will promote the positive mental health of these adolescents. The association between low self-esteem and development of depression will also highlight the role of identifying at risk individuals for prompt preventive interventions.

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1.4 Aim

To identify the pattern of coping among adolescents and its associations with depression and low self-esteem.

1.5 Specific Objectives

1. To identify patterns of coping among adolescent students.
2. To determine the association between coping patterns and depression.
3. To determine the association between coping patterns and low self-esteem scores.
4. To identify contextual factors associated with cases of low self-esteem.

1.6 Primary Outcome Variables

1. Coping patterns
2. Depression
3. Low self-esteem
4. Academic performance

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Chapter Two

Literature Review

2.1 Concept of Coping and Coping Strategies

Coping has been described as an individual's reaction in the face of negative environmental changes in the established balance in emotions and behaviours (Carver et al., 1989, Suedfeld et al., 1997). Coping is used to refer to strategies employed by individuals for mitigating the effect of stress. These changes could be in thinking (cognitive), actions (behavioural) or disposition (attitude) (Folkman and Lazarus, 1988). Numerous coping styles have been identified and some authorities have stated that depending on the situation involved the styles are no better than the others. The processes involved in coping has been described in 3 stages as follows (Lazarus and Folkman, 1984):

Primary appraisal: this is usually a conscious process in which the individual identifies a particular stressor or threat and its potential to be of adverse consequence.

Secondary appraisal: the individual after processing the threat, determines an appropriate response. The type of response proffered depends on the experience and repertoire of strategies the individual possesses. It may also be unconscious or automatic process.

Coping: the individual executes the response identified from the stage above.

According to Carver the different types of coping can be divided into 14 domains (Carver, 1997). The first is *Acceptance*, which refers to cases in which the stressor must be accommodated as it is. It involves acting helplessly in the face of the situation.*Behaviouraldisengagement* involves reducing routine or desired activities in the face of a stressor. *Denial* involves a process of ignoring the stressor or the impact of the stressor.*Positivereinterpretation*includes appraisal of a problem with a positive outlook, or seeking a profitable aspect of an apparently adverse condition.

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Self-distraction refers to engaging in activities that would take the individuals concentration away from thinking about the stressor or the problems.*Activecoping* involves taking specific and goal directed steps to mitigate the stressor's effect.*Alcoholuse/ DrugUse* is a type of coping in which intake of alcohol or other psychoactive substances are employed to disengage from the moment in such a way that the stressors are forgotten temporarily. *Emotionalsupportseeking*refers to the process of seeking sympathy, comfort or hope in others.

Humour involves making fun of a stressful situation while *Seekinginstrumentalsupport*refers to soliciting material support or information from external sources.*Planning*is implied when an individual engages in a stepwise assessment of situations and proffers strategies to solve problems.*Turning to religion*refers to instances in which religious activities, as well as religious based support are soughtto mitigate difficulties.*Self-Blame* refers to attributing the course of a difficulty to one's self while *Venting Emotions* is the process of seeking relief from distress through anger, or expressing negative feelings.

Another classification of the types of coping has four domains, which are emotion-focused coping and problem-focused coping. Emotion focused coping refers to steps taken to mitigate the individuals subjective reaction to the stressor. This method is particularly useful when considering stressors that are overwhelming or resistant to change.Problem focused coping however seeks to identify the source of the stressors and provide solutions or eliminate the difficulty.

Another categorization of coping mechanisms (Knoll et al., 2005) into four domains is as follows: Evasive coping, Active coping, Focusing on positive and Support coping. Evasive coping consists of methods employed to ignore the effect of the stressor. It may be akin to the emotion based coping but differs in its use of strategies such as Self Blame, Denial, Venting emotions, Alcohol disengagement or use, behavioural disengagement, Self Denial. Active

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coping refers to use of action taking and planning. This is adjudgedthe best coping pattern. It seeks to identify the stressors and take conscious efforts to mitigate its effects. The steps are non-random and based on effective information gathering and consideration of options. Support coping combines seeking emotional or instrumental support, turning to religion. This form of coping employs external resources to avoid the effects of a stressful situation. It is particularly effective in individuals with good family and social support. Focus on positive, which includes acceptance, positive reinterpretation and Humour, refers to a cognitively based coping pattern that approaches a difficulty or stressful situation from the good side. The focus is on the positive aspect of the situation.

The ability of individuals to remain mentally healthy despite adverse conditions has been related to the type of coping employed by such people when faced with adversities. In addition, coping styleshave been shown to serve as moderators in the onset of PTSD in individuals exposed to conflicts (Siriwardhana et al., 2014). Numerous authorities have emphasized the position of religion as a coping strategy and have canvassed for its inclusion into traditional psychotherapies (Rutten et al., 2013). Coping strategies is a vital component of resilience and is as important as social networks in displaced individuals (Siriwardhana et al., 2014).

Self-esteem has been seen as an important mediator of individuals' response to stressful events. It is often seen to determine the kind of coping measures an individual presents to manage stressful events. That is, individuals with good self-esteem will likely have effective coping mechanisms (Lazarus and Folkman, 1984) , (Pyszczynski et al., 2004). However, the relationship between self-esteem and coping in relation to stressful events has been debated. Some investigators see self-esteem as the mediator or buffer against stressful events, while others propose that self-esteem is the outcome of inadequate response or coping to the events (Mruk, 2006). Studies conducted in Nigeria have shown that *Turning* to *Religion* is the most

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used form of coping. This has been demonstrated among medical students and women in southern Nigeria.

A study conducted in Ilorin (Yussuf et al., 2013), assessing medical students' reaction to the stress of medical education and investigated the various risk factors for psychological distress and their associated coping styles. The investigators measured psychopathology with the General Health Questionnaire (GHQ) and used the Brief COPE to assess their coping styles. Despite the high levels of stress reported among medical students, the study reported low morbidity. The investigators employed the 14-factor model of coping style to assess the association between coping styles and psychiatric morbidity. There was however no significant association between coping style and psychiatric morbidity as measured by the GHQ. In assessing the predominant coping style, majority of the student used religion and positive reframing as means of coping. The predominance of religion as a coping strategy was related to the level of religiosity prevalent in the state. The least of utilized measure of coping was use of substances.

In a hospital based study aimed at evaluating the prevalence of intimate partner violence and identify coping strategies (Itimi et al., 2014), the investigators interviewed 384 participants of both sexes who have reported being victims of intimate partner violence. The study identified similar pattern of coping among the victims of intimate partner violence as in that of Yussuf in Ilorin. The most used coping style was religiousness and the least used was substance use. The study identified prevalent coping mechanism among the cohort but did not proceed to examine how these coping mechanisms might have affected their functioning or mental health in the presence of the stressor.

2.2History oftheSelf-esteem Concept

The first mention of self-esteem concept was by William Jones in 1890, when he described in his write-up the *nature of the self*(Robson, 1988). He expressed ideas suggestive of a dynamic

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nature of self-esteem which varies with the interactions and successes experienced by an individual. Cooley followed this in 1902 by propounding the *looking glass theory,* which attributes the development of self-esteem to an individual'sself-worthwas basedon evaluationand comments made by others about the individual. In 1944, Lewin used the term self-esteem and related it to the *levels of aspiration* which he proposed was the major factor determining self-esteem(Robson, 1988). While in 1928, Mcdougel explained self-esteem using the *unit of character* and the *sentiment theory*. Mead in 1934 expanded on Cooley's theory and stated that self-esteem was the aggregation of reflected*appraisal of other.* Storm in 1979 attempted to provide a psychodynamic explanation for self-esteem(Robson, 1988). He posited that infants are generally helpless and this feeling of helplessness changes to a feeling of self-worth if the infant while growing up is exposed to positive interactions from parents and individuals in the environment. Bowlby explored the attachment theory and described the effects of secure and unsecure attachments. The characteristics of insecurely attached children resemble that observed in individuals with low self-esteem(Robson, 1988).

A number of views on the nature of self-esteemhave been propounded, among which is the *personal attribute theory*(Siriwardhana et al., 2014). This theory proposes that self-esteem has to do with outcome of the perception of attributes an individual has, and thus individuals with bodily deformities or handicap will likely have low self-esteem, while individuals with culturally acceptable morphological characteristics will have high self-esteem.

2.3 Self-esteem as Risk Factor of Mental Illness

Low self-esteem has been identified as a major risk factor for the development of mental health problems, and is a determinant of risky health behaviours(Dray et al., 2014).Social researchers have often attributed the formation of gangs to the need by individuals to find a means of acceptance and belonging in individuals with low self-esteem(Reasoner, 2000). It has also been noted that violence has been motivated in some cases by a need for the defence

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of self-image in individuals with a perceived sense of insecurity and low self-esteem(Reasoner, 2000).

Ingham in 1986, explored relationship between self-esteem and the development of depressive symptoms. He stated that a possibility is that the altered self-esteem may result from the change in affect that is found in depressed patients, and thus low self-esteem is a cognitive consequence of the change in emotion. He also expressed the view that low self-esteem may predate the onset of depression. He alluded to Beck's theory of the changes in cognition found in depression. Beckbelieved that *negative view of the self* pre-dates the onset and could be the reason for depression. In support of the etiological role of low self-esteem in depression, he mentioned the work of Brown and Harris among the middle class women in London and their findings, which included that social disadvantages of women alongside other vulnerabilities resulted in a final common pathway that resulted in impaired self-esteem(Ingham et al., 1986).

2.4 Impact of Low Self-esteem

The concept of self-esteem is viewed differently by different groups of researchers, which is evident from the different instruments used in measuring the concept. Nevertheless, there exists established evidence that links major behavioural and psychological problems in adolescents to the way they perceive themselves and their need to be accepted(Reasoner, 2000). Further studies have established the link between low self-esteem and depression in adolescents, also there has been documented evidence of link between the onset of suicidal ideation and low self-esteem in adolescents(Reasoner, 2000).

Studies in western society have often mentioned that the school environment is not conducive for self-esteem and that as students spend longer years in school there self-esteemtends to fall(Reasoner, 2000). It is also established that academic performance has significant impact

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on self-esteem. That is student's performing well in class compared to their colleagues tended to have higher self-esteem(Reasoner, 2000).

The relationship is however said to be bidirectional that is good self-esteem is required by the student to be able to concentrate and enjoy academic activities while success in the academic activities results in higher self-esteem.

2.5 Self-esteem in the DSM 5 (American Psychiatric Association, 2013)

The Diagnostic and Statistical Manual latest review attributes extreme of esteem (low and high) to the manifestation of a number of mental disorders. It also mentions aspects where low self-esteemcan be seen as risk factors or a consequence of a mental condition. For example, it identifies consequences of motor coordination disorder, enuresis and encopresis in children to include *low self-esteem and reduced sense of self-worth.* It also identifies inflated self-esteemas a major feature of Mania and Hypomania and that it could be intense enough to reach delusional intensity.

While a major criterion in Major depression is low self-esteem, the DSM-V emphasises a distinction, which is that a preservation of the self-esteem occurs in normal grief reaction. The DSM-V also emphasises that one of the reasons for the occupational (and interpersonal) impairment in major depression is the low self-esteem experienced by the patients. The importance low self-esteemas a consequence of impaired perception of physical appearance and function is emphasized in the diagnoses Body Dysmorphic Disorder, Anorexia nervosa, Bulimia nervosa, Erectile disorders and Premature ejaculation. Low self-esteem can also be an independent risk factor for the subsequent development of Bulimia nervosa(American Psychiatric Association, 2013).

The ICD-10 (World Health Organization, 1992), in its clinical descriptions and guidelines identifies low self-esteem as a consequence of social phobias, specific reading disorders , hyperkinetic disorder and conduct disorder. The ICD-10 also has a separate diagnostic category i.e. *Z61- problems related to negative life events in childhood*. This category

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emphasizes the fact that life events can result in low self-esteem by highlighting a subsection named*with events resulting in low self-esteem in childhood*.

2.6 Measurement of Self-esteem

Self-esteem can be measured using qualitative, quantitative or mixed methods. The quantitative measures of assessment used pre-established questions in scales and interviews while respondents provide appropriate answers based on level of agreement. The questions are close-ended and restrictive in the extent of response that can be provided. It however has the advantage of permitting the researcher to compare statistical summaries of esteem scores between populations and make inferences with respect to predetermined correlates. It also allows for accommodation of large amount of data and conclusions to be made but does not clarify individual's views or context(Hartigan O'Reilly, 2014).

The qualitative means of measurement involves open-ended questions to which a respondent provides a wide range of answers. It allows novelty and context to be expressed and does not limit the answers provided. It is particularly useful in themes or context that are been explored for the first time(Calderón and Tennstedt, 1998, Greenwood et al., 2009, Jungbauer et al., 2003).Its disadvantages however include it being cumbersome, time consuming and difficulty in application of statistical inferences.

This study will however employ a mixed method designs which provides opportunity for the optimization of the benefits of both quantitative and qualitative designs and therefore provide a complete analysis(Creswell et al., 2004). The opportunity offered by combining the quantitative and qualitative methods in separate forms of combinations, sequencing and priority allows for *triangulation*, *complementarity* and *development*(Greene et al., 1989). Triangulation is implied when data from different sources are combined in order to enable better sense to be made of data or to allow for corroboration of conclusions. Complementarity is implied when conclusions from a study can only be elaborated or clarified with results from the other method. As such combining the two provides encompassing data.

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Development is implied when the results of a method provides the premise or basis for selection or sampling for the other(Greene et al., 1989). A number of studies have examined different aspects of self-esteem and its relationship with peer affiliation, coping and academic achievements among various groups of young people in different cultures using a mixed methods model(Leung and Choi, 2010, Booth and Gerard, 2011, Hartigan O'Reilly, 2014).

Considering the fact that mixed methods are quite challenging there must be a veritable need for such before it is embarked upon(Creswell and Clark, 2007). The concept of mixed methods design is based on the combination of quantitative and qualitative methods in terms of sequence, priority, mixing and interaction of both methods(Creswell and Clark, 2007). Mixed methods can be pre-determined early on before commencement of the study and during design stage (fixed) or could emerge as a result of (emergent) circumstances during the course of a study(Creswell and Clark, 2007).

A typology-based approach to mixed methods has been recommended which includes identifying a particular pattern based on the established identified outline. Such an outline as identified by Creswell and Clark is as follows, however other outlines exists:

Creswell and Clark(Creswell, 2011), described six types of mixed method design which are Sequential explanatory design, Sequential exploratory design, Convergent design, Embedded design, Transformative design and the Multiphase design.

The first three are the basic forms of mixed methods design; the last three are complex applications of the principles in the first three.

However, in order to understand the basis for the delineation, an exploration of the basic characteristics of the mixed methods is imperative. A *strand* is used to refer to either of qualitative of quantitative methods consisting of sampling, data collection, analysis and conclusions(Creswell and Clark, 2007). A qualitative strand therefore implies a sampling process followed by, a qualitative data collection, analysis and conclusion. This is important in order to understand the categorization of each method. There are four basic decisions that

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needto be made which are *Interaction level, Priority, Timing and Mixing*(Creswell et al., 2004, Creswell and Clark, 2007).

In considering level of interaction, the investigator decides whether the two strands are *independent* or *interactive.* Independent when the interaction between the two strands occurs after each is analysed and conclusions are only used to explain or clarify the findings in each case. Interaction occurs when the two strands are mixed before the final analysis is carried out. This can occur in the sampling stage or analysis stage.

Consideration of priority refers to the level of importance carried by either of the two strands concerning answering the primary questions of the research. Quantitative priority occurs when the research questions are answered primarily by the quantitative strand but additional information is provided by the qualitative strand. There could also be qualitative priority or equal priority depending on the importance of the strands in relation to the primary research questions.

Concerning timing, two broad approaches exist. There is the *concurrent* approach and the *sequential* approach. The concurrent describes a situation where data collection for both strands occur simultaneously in order to answer the same research questions, while the sequential approach implies quantitative precedes the qualitative or vice versa.

Mixing refers to the nature of integration that occurs at the *point of interface* between the two strands. Mixing can occur during the design stage, data collection, data analysis or interpretation stage(Creswell and Clark, 2007).

The *sequential explanatory design,* is based on an interactive model with quantitative strand coming before the qualitative strand, wherein mixing occurs at the level of data collection. This ensures maximisation of findings from the quantitative phase. *Sequential exploratory design* consists of an initial qualitative phase, whichis then followed by a quantitative phase, in which mixing occurs at the level of data collection. It is also based on the interactive model. The *Convergent design* is an independent model, with equal priority, in which both

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quantitative and qualitative data collection and analyses are carried out concurrently and mixing is done at the level of interpretation and drawing of conclusions after both strands have been independently analysed. The Embedded, Transformative and Multiphase designs are different combinations of the above 3 basic designs (Driscoll et al., 2007).

2.7 Studies on Low Self-esteem in Nigeria

Adewuya et al., in 2009, examined the role of self-esteem as a predictor of HIV stigma related Post Traumatic Stress Disorder (PTSD). In ahospital-based study of 190 seropositive attendees, the investigators administered scales to measure the contribution of stigma, exposure to stressful events, social support and self-esteem measured using the Rosenberg self-esteem scale. The investigator used a cut-off of 10 and below to categorize individuals with low self-esteem. They found out that an independent predictor of PTSD in HIV patients exposed to stigma was low self-esteem with an odds ratio of *6.52*. This is important when compared with the odds ratio of *3.33* for individuals with low levels of social support*, 2.28* for individuals with history of exposure to a single traumatic life event and *2.18* for the presence of a general psychopathology. The investigators proposed that in accordance with previous studies, there was a significant relationship between the development of PTSD and coping strategies and defence styles in individuals exposed to various degrees of traumatic events.

Another study conducted in Ilorin (Salami, 2010), explored the relationship between low self-esteem and PTSD in healthy adolescent population. A cohort of 280 senior secondary school students in Ilorin, Kwara state of Nigeria was enrolled in the study. Participants filled questionnaires that assessed exposure to violence in the physical, sexual and emotional abuse, domestic violence. These traumatic events exposure was measured using the childhood experiences of violence questionnaire, while the Rosenberg self-esteem scale was used to measure self-esteem. The findings of symptoms of PTSD were found to correlate significantly with self-esteem. In explaining their findings, the authors suggested that

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individuals with higher self-esteem probably had better confidence in themselves and a positive outlook to life that helped them to see the positive aspects to events in life while those with low self-esteem had higher vulnerabilities to the consequences of exposure to the traumatic events.

In a study conducted in eastern Nigeria (Nwankwo et al., 2012), the investigators interviewed 150 students in a secondary school and assessed their levels of personal and academic functioning, locus of control and self-esteem. The study was premised on the theory that individuals that perceived themselves as being in control of events and their actions should have higher self-esteem as measured on a self-esteem scale. Out of the 150 students interviewed, 100 students were identified as functioning. The investigators administered a 15-itemself-esteem questionnaire and found that about one in every five (19 out of 98 students) reported low self-esteem.Analysis of results revealed that there was a significantly positive association between self-esteem and locus of control wherein, students with external locus of control tended to report lower self-esteem than their colleagues.

Oshodi in 2013(Oshodi et al., 2013), assessed the impact of stigma and discrimination on individuals with a diagnosis of major depression. In this multicentre study, levels of anticipated and expected stigma because of the diagnosis of a mental illness were examined. The investigators measured self-esteem using the Rosenberg self-esteem scale and used a cut-off of 15 to differentiate normal self-esteem from low self-esteem. The findings showed that high levels of stigma did not correlate with lower scores on self-esteem scale, which may mean that individuals, who have experienced high levels of stigma or have higher anticipation of stigmatization, are still able to preserve their self-worth. When the investigators compared individuals who were aware of their diagnosis with those who were not aware, it was found out that there was lower self-esteem among those with an awareness of their diagnosis.

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Chapter Three

Methodology

3.1 Study Location

The study was carried out in Ibadan,South-West, Nigeria. It is the third largest city in Nigeria with a population of about2.5 million (RUAF, 2010). The city has 11 local governments of which five are urban local government areas and six are rural. Every local government has approximately four to five secondary schools located strategically. Each school has between 30 and 60 teachers and may enrol between 400 and 800 students.

3.2 Study Design

This was a cross sectional study.

3.3Study Population

Adolescents in senior secondary classes (SS1 and SS2) were the study participants.

Inclusion criteria:

1. All students age less than 18 years.

Exclusion Criteria:

1. Students who enrolled less than 6 months into the school.
2. Students who did not partake in the previous term examination.

3.4Sample Size Calculation

The minimum sample size for the first phase was calculated as follows:

$$N = \frac{z^2 pq}{E^2}$$ (Araoye, 2003).

Where;

p = 20%; approximate prevalence of low self-esteem (19.3%)(Nwankwo et al., 2012)

$q = 1 - p$ = 1- 0.2 = 0.8

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z = standard normal deviate at α set at 0.05 = 1.96

E = margin of error = 0.05

$$N = \frac{1.96^2 \times 0.2 \times 0.8}{0.5^2} = 246$$

Assuming a 10% adjustment for non-response or poorly filled questionnaire, the formulae is:

$$N_a = \frac{N}{1 - a}$$

$$N_a = \frac{246}{0.9} = 273$$, approximated to 280 as minimum sample size.

3.5Sampling Technique

The local governments in the state were categorized into rural and urban by the Oyo State Ministry of Education. One local government was randomly selected from each of the rural (Akinyele Local Government) and urban (Ibadan North Local Government) local government groups. A secondary school was randomly selected from each of the selected local governments. The schools were:

1. Emmanuel College; Ibadan North Local Government
2. Orogun Grammar School; Akinyele Local Government

Each of the two schools had senior levels designated as Senior Secondary School (SS) 1, 2 and 3. Each of these levelsis comprised of different arms depending on the school size and population. A register of students fromall the arms in SS 1 and SS 2 was obtained from

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eachschool administrator. Students were randomly selected using the names on the register from each of the two levels from the schools. The proportion selected from the two schools depended on the total number of students in each school. A total of 303 students were sampled from both schools.

Preliminary analysis identifiedtwo male and two female students with the lowest self-esteem scores and were selected from each school (total of 8 in both schools) to participate in the second phase. The purpose of the second phase was explained to them and consent obtained.

3.6Study Instruments

Quantitative phase:

- Socio-demographic Questionnaire
- Rosenberg Self-Esteem Scale
- Brief COPE Inventory
- Beck Depression Inventory

Qualitative phase: In this phase, eight students with the lowest self-esteem scores were invited to participate in the in-depth interviews. Eight sessions were carried outin the two schools.

The Socio-demographic Questionnaire: This consists of variables relating to age, gender, religion, family background, size and structure of the family, level of education and occupation of the parents. It also has a school-related component, asking if respondents liked their school and their relationship with teachers. It is modelled after that used in a previous study carried out among adolescents in Southwest Nigeria (Omigbodun et al., 2008b).

The Brief COPE inventory(Carver, 1997): This is a 28- item abridged version of the original 60-item COPE inventory(Carver et al., 1989) and its length and time involved was widely reported toimpair completion rates. It assesses an individual's methods of response to difficult situations or events by suggesting popular means of coping and asking how well the

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respondent agrees to using the methods. The original factor analysis carried out by the author (Carver et al., 1989) revealed a 14-factor model which has been employed, in a study among university students in Nigeria(Yussuf et al., 2013).Individuals may use multiple coping strategies but the most frequently used,is identified from the scale. Questions are scored on a Likert scale where;

1 = I usually don't do this at all,

1 = I usually do this a little bit,

2 = I usually do this a medium amount,

2 = I usually do this a lot.

It has been used among various populations in Nigeria (Yussuf et al., 2013, Itimi et al., 2014).

The Rosenberg Self-esteem Scale(Rosenberg, 1965): This is a ten item self-administered questionnaire that measures self-worth. It was originally developed to measure self-esteem among secondary school students making it suitable for this study(Ciarrochi and Bilich, 2006). It is scored on a four point Likert scale from strongly disagree (1 point) tostrongly Agree (4 points). Half of the items are scored in the reverse order. A total of 40 points is the maximum and higher scores indicate higher self-esteem. According to a study conducted in Nigeria, the following categorization can be employed (Adewuya et al., 2009):

- RSES score 21-30 = high self-esteem
- RSES score 11-20 = normal self-esteem
- RSES score 0-10 = low self-esteem

It has been used severally in Nigeria in assessing risk of mental illnesses or their associated factors and risks (Oshodi et al., 2013, Salami, 2010, Onyeaso, 2003, Maqsud, 1983, Oladipo et al., 2014).

The Beck Depression Inventory BDI-II(Beck et al., 1988): A 21 item self-administered questionnaire designed to measure the severity of depressive symptom. The BDI –II is modelled after the DSM IV(Beck et al., 1996). Each item is rated from 0 to 3; 0 for no

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symptom at all, while 3 is for the highest symptom. The maximum score on the BDI-II is 63. It is used worldwide in assessing severity of depression in both general population and hospital patients. It takes less than 10 minutes to complete. Internal consistency as high as 0.92 has been reported by Beck, and test retest reliability as high as 0.93 in non-psychiatric populations(Beck et al., 1988). The BDI-II has better content validity than the first edition version due to its been aligned with the DSM-IV (Beck et al., 1988), and it positively correlated with Hamilton rating scale (0.71) when considering criterion validity(Beck et al., 1996).In adolescent populations in Nigeria, a cut off of 18 has been suggested by validation studies carried out in different regions of the country(Abdulmalik, April 2009, Adewuya and Ologun, 2006).

For this study, a binary classification was employed in grouping the participants as follows:

- 0-18 = not depressed
- 18 and above = depressed

It has been successfully used in adolescent populations in various parts of Nigeria (Abdulmalik, April 2009, Bella-Awusah et al., 2015).

Academic performance assessment: The academic performance of the studentswas obtained from schoolteachers who taught the students and graded each participating students as follows:

- Poor Performance
- Average Performance
- Good Performance

3.7 Pre-test

The instruments were pretested amongst a small group of senior secondary students consisting of four males and three females from Bishop Phillips Academy, a school different

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from those sampled for the study. This enabled an assessment of ease of administration of instruments.

3.8 Ethical Considerations

Approval was obtained from the Oyo state Ethical Review Committee of the Ministry of Health and Permission obtained from the Ministry of Education. Participants' data were kept confidential as much as possible. No names were used on the questionnaires but each one was identified by a code. During the second phase individuals with low self-esteem were invited alongside two other individuals in the same class in order to avoid them been labelled adversely.

Students with significant depression scoreswere givenreferrals to the Child Psychiatry Clinic of the University College Hospital, Ibadan while some others preferred to obtain phone numbers to contact if there was a need to speak with someone.The participants were not exposed to any harm beyond what was generally encountered in normal day-to-day classroom environment. Participation in the study was made voluntary and participants were told they could withdraw at any time during the study.

3.9 Study Procedure

The first phase was a cross sectional quantitative study designed to identify the patterns of coping, depressive symptoms and the levels of self-esteem among the students. Initial analysis was carried out to identify students from both groups of local governments of both genders with the lowest self-esteem scores who were then approached to participate in the second phase of the study.

The Second phase consisted of qualitative in-depth interviews of students with the lowest scores on the self-esteem scale conducted from the two schools. Two male and two female students with the lowest self-esteem scores were invited to participate in the second phase from each school. The interviews were conducted individually in the presence of a chaperone

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who was a female Masters of Public Health student, of the University of Ibadan. The sessions were recorded on battery operated recording devices, while notes were simultaneously taken during the sessions.

3.10Data Management

The data from the quantitative phase of the studywas cleaned and analysed with SPSS version 22 software. Means and standard deviation of continuous variables were computed, while categorical variables were displayed as frequencies. Association between the self-esteem scores and the depression scores was evaluated using the Pearson product moment correlation.

The frequency of use of the coping domains were obtained based on the 14 factor model which has been used in analysis of coping style among university students in Nigeria (Yussuf et al., 2013). Depression being a clinical construct, the recognized cut off point (18) for clinically significant depression on the BDI-IIwas used to establish associations.

Preliminary analysis revealed that the number of respondents falling in the low self-esteem range i.e. less than or equal to 10, were small (3) and thus categorical analysis using the Fischer's exact gave insignificant associations. The mean self-esteem scoreswere observed to have wide standard deviation margins and thus an attempt at non-parametric analysis yielded insignificant results. However, using the mean self-esteem scores and t-test for mean differences yielded some significant associations, which were presented.

Students with the lowest self-esteem scores were identified and selected for the qualitative phase of the study. The second phase of the study was analysed by the investigator after transcription of the interview proceedings captured via audio deviceswas concluded.Emergent themes were identifiedand quotes representing recurrent themes were merged. The relevance of these themes were thereafter highlighted in the context of the

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finding of low self-esteem. These themes were subsequently categorized according to contextual domains.

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Chapter Four

Results

4.1Socio-Demographic Characteristics of Respondents

A total of 303 students were interviewed in two schools in both rural and urban areas of Ibadan. The mean age of the respondents was 15.53 years (SD±1.27). The majority of the interviewed students were females, 181 (59.5%), most were from the senior secondary school 2 classes, 238 (78.3%). Most of the respondents were from monogamous family settings 261(85.9%), with 259 (85.2%) of the respondents stated that both parents are married. The mean number of mother's children obtained was 4.36 children (SD±2.02). Two hundred and twenty four (73.7%) currently lived with both parents. Seventy-three (23.7%) of the respondents did some work after school. Table 4.1 shows the details of the socio-demographic characteristics of the respondents.

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Table 4.1: Socio Demographic Characteristics of Respondents (N = 303)

Variables		Frequency	Percentage
Sex	Female	181	59.5
	Male	122	40.1
School location	Rural	142	46.7
	Urban	161	53.3
Family type	Monogamy	261	85.9
	Polygamy	41	13.5
	Missing	1	0.7
Parents' marital status	Married	259	85.2
	Separated/divorced	42	13.8
	I don't know	2	1.0
Who you are living with	With Parents	224	73.7
	With other relatives	79	26.3
Brought up bywho?	Parents	249	81.9
	Others	54	18.1
Working after school	Yes	71	23.7
	No	229	75.3
	Missing	3	1.0
Level of father education	No formal education	14	4.6
	Secondary school and below	99	32.5
	Beyond Secondary school	189	62.2
	I don't know	1	0.7
Mothers level of education	No formal Education	13	4.6
	Secondary School and below	122	40.1
	Beyond Secondary school	163	53.6
	I don't know	5	1.6
Do you like your family?	Yes	293	96.4
	No	9	3.0
	no response	1	0.7

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4.2School Related Characteristics of the Respondents

The mean number of students in the classes is 55.9 students (SD±20.9). The majority of the respondents 286 (94.1%) stated that they liked their school. Two hundred and eighty eight (94.7%) agreed they performed well academically. Sixty-six of the respondents (21.7%) stated they had difficulty with their teachers while, 112 (36.8%) had been to see the school counsellors available in their school. Table 4.2 below shows the school related variables of the students interviewed.

Table 4.2: School Related Characteristics of Respondents (N= 303)

Variables		Frequency	Percentage
Do you like your school?	Yes	286	94.1
	No	17	5.9
Subjective academic performance	Yes	288	94.7
	No	15	4.9
Presence of difficulty with school teachers	Yes	65	21.7
	No	237	78.0
	Missing	1	0.3
Have you ever gone to see Schoolcounselors?	Yes	112	36.8
	No	191	63.2

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4.3 Profile of the different Coping patterns among respondents

The most employed pattern of coping among the students was *Turning to religion* (72.2%)followed by *seeking instrumental support* (66.7%), *positive reinterpretation* (62.8%), then *active coping* (61.7%). The least employed is*alcohol use* (17.3%) followed by *self-blame*(43.9%) and then*self-distraction*(44.3%). Figure 4.1 details the percentages of the different domains of coping used by the interviewed students.

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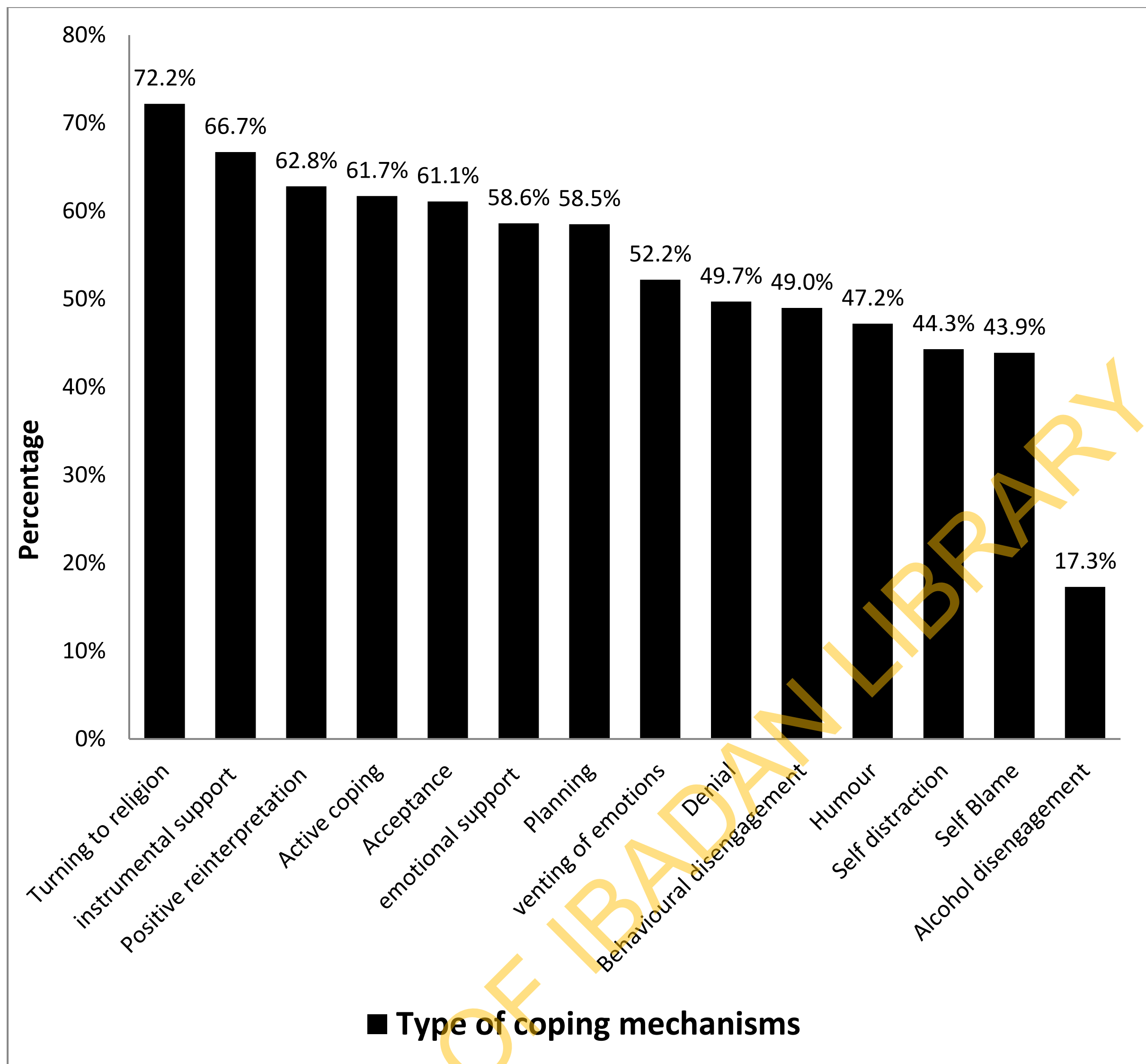

Figure 4.1 Pattern of Coping Mechanisms Employed By Students

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4.4Prevalence of Depressive Symptoms among Respondents

The mean score of the respondents on the Beck's Depression Inventory (BDI) scale was 12.23 (SD ±10.31). Using a cut-off point of 18 on the BDI, 27.6% of the respondents had significant depression.

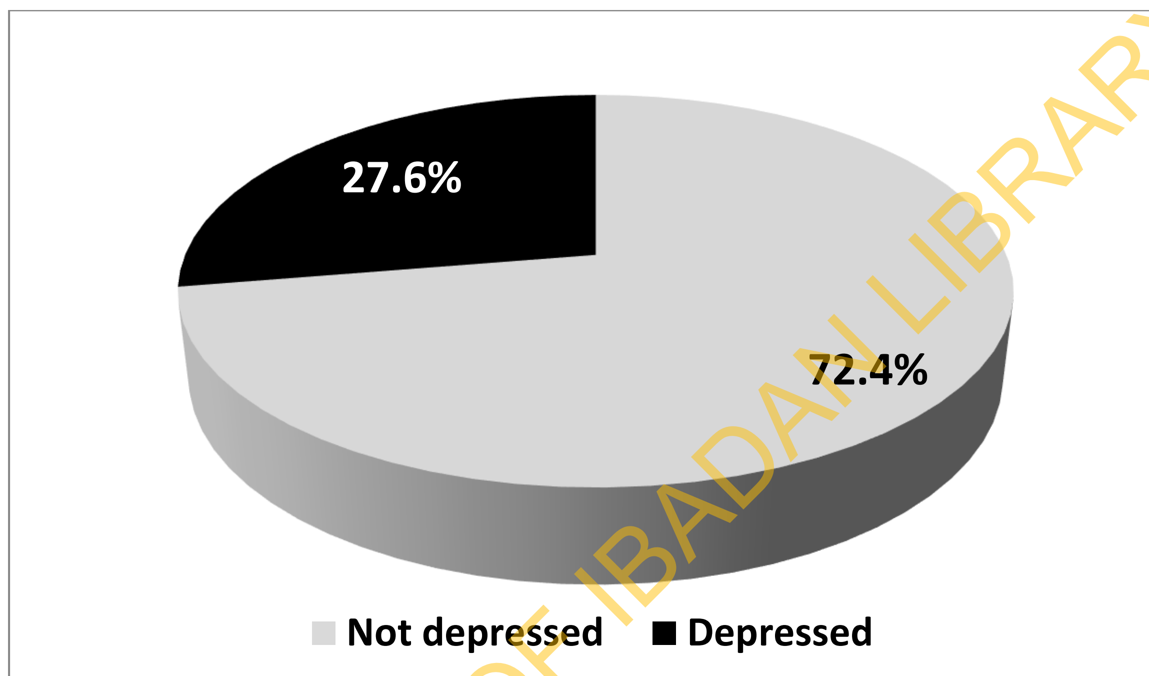

Figure 4.2Proportion of Students with Significant Depressive Symptoms

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4.5Profile of Self-esteem Scores among Respondents

Majority of the respondents had high and normal self-esteem with only three (1.0%) of the students having self-esteem scores below 10. The mean score on the Rosenberg-Self-esteem scale was 18.2 (SD±4.0).

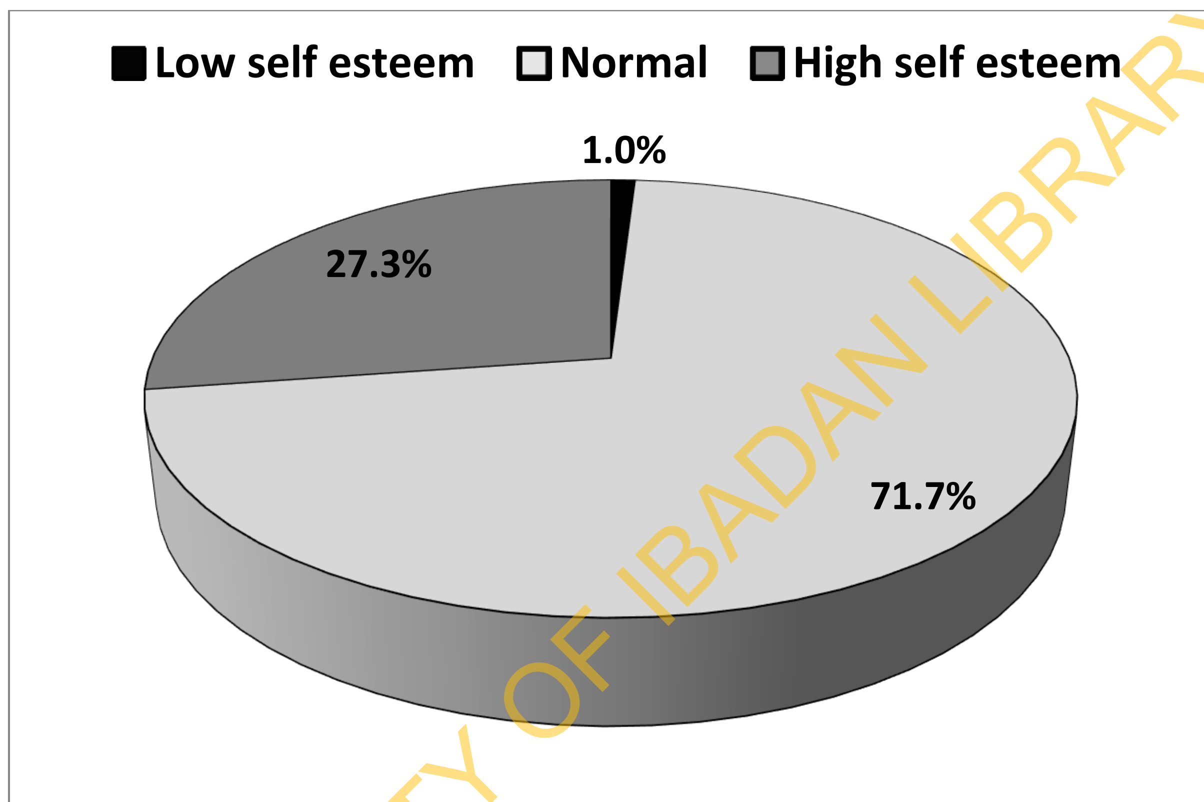

Figure 4.3Distribution of Self-esteem Scores among Respondents

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4.6Academic performance of respondents

Teachers rated 43.1% of the students as having good performance while 3.9% had poor performance in academic activities. Figure 4.4 shows the performance of students as assessed by the teachers.

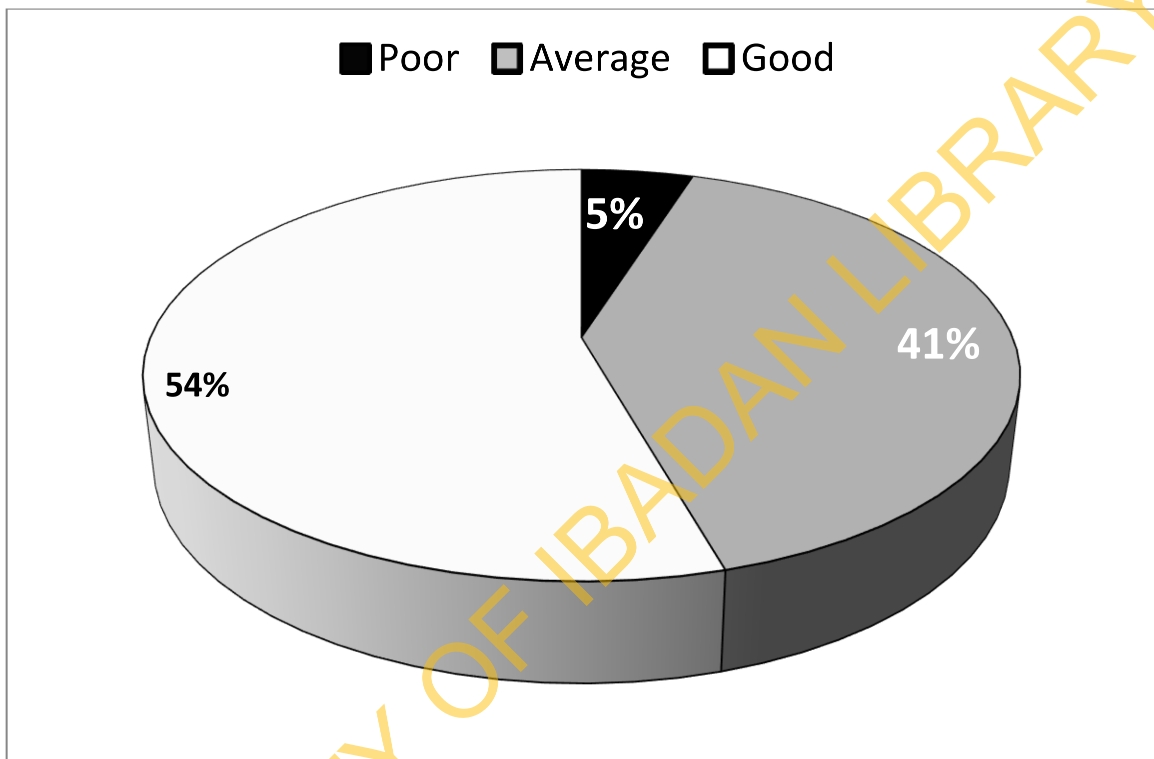

Figure 4.4 Teachers' Assessment of Students' Academic Performance

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4.7Socio-Demographic Correlates of Depression

The male gender was associated with higher depression scores as 42 (34.4%) had BDI scores greater than 18, compared with 42(23.2%) among the female gender ($p<0.05$). The extent to which religion guided behaviour was significantly associated with depression as all the respondents that reported that religion had just a little influence on behaviour 3(100%), and no influence on behaviour at all; 1(33.3%) had scores above cut off for depression compared with those who said religion had greater influence on behaviour. Students who worked after school had significantly more depressive symptoms 28(38.9%) compared with those who did not work after school 55(24.0%). Table 4.3 details the association between socio-demographic characteristics and depression scores based on the cut-off point of 18.

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Table 4.3: Association between Depression and Socio-Demographic Characteristics

Variables		BDI scores		χ^2	p value
		<18	≥18		
Gender	Male	80 (65.6)	42 (34.4)	4.580	0.032
	Female	139 (76.8)	42 (23.2)		
Practice of any religion	Yes	215 (72.1)	83 (27.9)	0.151	0.697
	No	4 (80.0)	1 (20.0)		
Family Type	Monogamy	192 (73.6)	69 (26.4)	1.057	0.304
	Polygamy	27 (65.9)	14 (34.1)		
Extent to which religion guides behavior	Very much	198 (73.1)	73 (26.9)	7.936	0.047
	Much	18 (72.0)	7 (28.0)		
	Just a little	0 (0.0)	3 (100.0)		
	Not at all	2 (66.7)	1 (33.3)		
Parents' marital status	Married	198 (76.4)	61 (23.6)	4.153	0.549
	Separated /divorce	11 (64.7)	6 (35.3)		
	One/both parents are dead	19 (76.0)	6 (24.0)		
Living circumstances	Both Parents	173 (77.2)	51 (22.8)	4.958	0.175
	Single parent	23 (65.7)	12 (34.3)		
	Grandparents	14 (66.7)	7 (33.3)		
	Others	21 (87.5)	3 (12.5)		
Engaged in work after school?	Yes	44 (61.1)	28 (38.9)	6.066	0.014
	No	174 (76.0)	55 (24.0)		
Do you like your family?	Yes	213 (72.7)	80 (27.3)	1.278	0.258
	No	5 (55.6)	4 (44.4)		
Number of people lived with since childhood	Less than 2	139 (73.2)	51 (26.8)	0.714	0.398
	2 and above	44 (67.7)	21 (32.3)		

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4.8School-related Correlates of Depression

Depression was found to be higher among those who stated that they did not like their school 10 (55.6%) compared with those who like their school 74(25.9%) ($p<0.05$). Subjective report of academic performance was significantly associated with depression as higher prevalence of depression scores were found among students who reported not doing well academically than those who did well (60.0% versus 25.7%; p- value = 0.004). Similarly, teachers' report of academic performance was significantly associated with depressions scores as higher prevalence of depression were found among those with poor academic performance compared with those with good academic performance (41.7% versus 19.8%; p-value = 0.022). Table 4.4 below details the association between depression scores and school related characteristics.

Table 4.4: Association between Depression and School Related Characteristics.

Variables		BDI scores		χ^2	p value
		<18	≥18		
Do you like your school?	Yes	212 (74.1)	74 (25.9)	7.461	0.006*
	No	8 (44.4)	10 (55.6)		
Subjective academic performance	Yes	214 (74.3)	74 (25.7)	8.436	0.004*
	No	6 (40.0)	9 (60.0)		
Teacher rated Academic performance	Poor	7 (58.3)	5 (41.7)	7.658	0.022*
	Average	64 (65.3)	34 (34.7)		
	Good	105 (80.2)	26 (19.8)		
Presence of difficulty interacting with teachers	Yes	48 (72.7)	18 (27.3)	0.001	0.980
	No	172 (72.6)	65 (27.4)		

* = $p< 0.05$

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4.9Association between Depression and Pattern of Coping

Higher prevalence of depression was observed among respondents who employed acceptance as a form of coping compared to those who rarely used it (32.1% versus 20.5% ; p-value = 0.029), as well among those using Behavioural disengagement (22.5% versus 33.1% ; p-value = 0.042); Denial (20.3% versus 36.3% ; p-value = 0.002); positive reinterpretation (19.1% versus 33.9% ; p-value = 0.006); and Self Distraction (22.9% versus 34.8% ; p-value = 0.023). Table 4.5 below details the association between pattern of coping and depression scores.

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Table 4.5: Association between Depression Scores and Pattern of Coping Mechanisms

Coping Mechanism		Depression scores		χ^2	p value
		<18	≥18		
Acceptance	Not used	93 (79.5)	24 (20.5)	4.779	0.029
	Used	125 (67.9)	59 (32.1)		
Behavioral disengagement	Not used	117 (77.5)	34 (22.5)	4.139	0.042
	Used	97 (66.9)	48 (33.1)		
Denial	Not used	118 (79.7)	30 (20.3)	9.322	0.002
	Used	93 (63.7)	153 (36.3)		
Positive reinterpretation	Not used	89 (80.9)	21 (19.1)	7.429	0.006
	Used	123 (66.1)	63 (33.9)		
Self-distraction	Not used	134 (80.7)	32 (19.3)	5.520	0.023
	Used	91 (68.9)	41 (31.1)		
Active coping	Not used	87 (75.7)	28 (24.3)	1.026	0.311
	Used	130 (70.3)	55 (29.7)		
Alcohol use	Not used	181 (74.2)	63 (25.8)	1.901	0.168
	Used	33 (64.7)	18 (35.3)		
Emotional support seeking	Not used	91 (74.6)	31 (25.4)	0.590	0.442
	Used	122 (70.5)	51 (29.5)		
Humour	Not used	119 (75.3)	39 (24.7)	1.580	0.209
	Used	97 (68.8)	44 (31.2)		
Seeking instrumental	Not used	72 (73.5)	26 (26.5)	0.135	0.713
support	Used	140 (71.4)	56 (28.6)		
Planning	Not used	95 (76.6)	29 (23.4)	2.020	0.155
	Used	121 (69.1)	54 (30.9)		
Turning to religion	Not used	63 (75.9)	20 (24.1)	0.769	0.381
	Used	153 (70.8)	63 (29.2)		
Self-Blame	Not used	129 (78.2)	36 (21.8)	0.822	0.365
	Used	95 (73.6)	34 (26.4)		
Venting Emotions	Not used	112 (79.4)	29 (20.6)	2.158	0.142
	Used	111 (72.1)	43 (27.9)		

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4.10Association between Self-esteem and Depression

Using the Pearson correlation coefficient, Self-esteem was found to exhibit a significantly negative correlation with depression (Pearson correlation = - 0.260, p-value = <0.001), meaning as depression scores increase, Self-esteem scores decrease. Figure 4.5 shows the scatter diagram illustrating the distribution of self-esteem scores by depression scores.

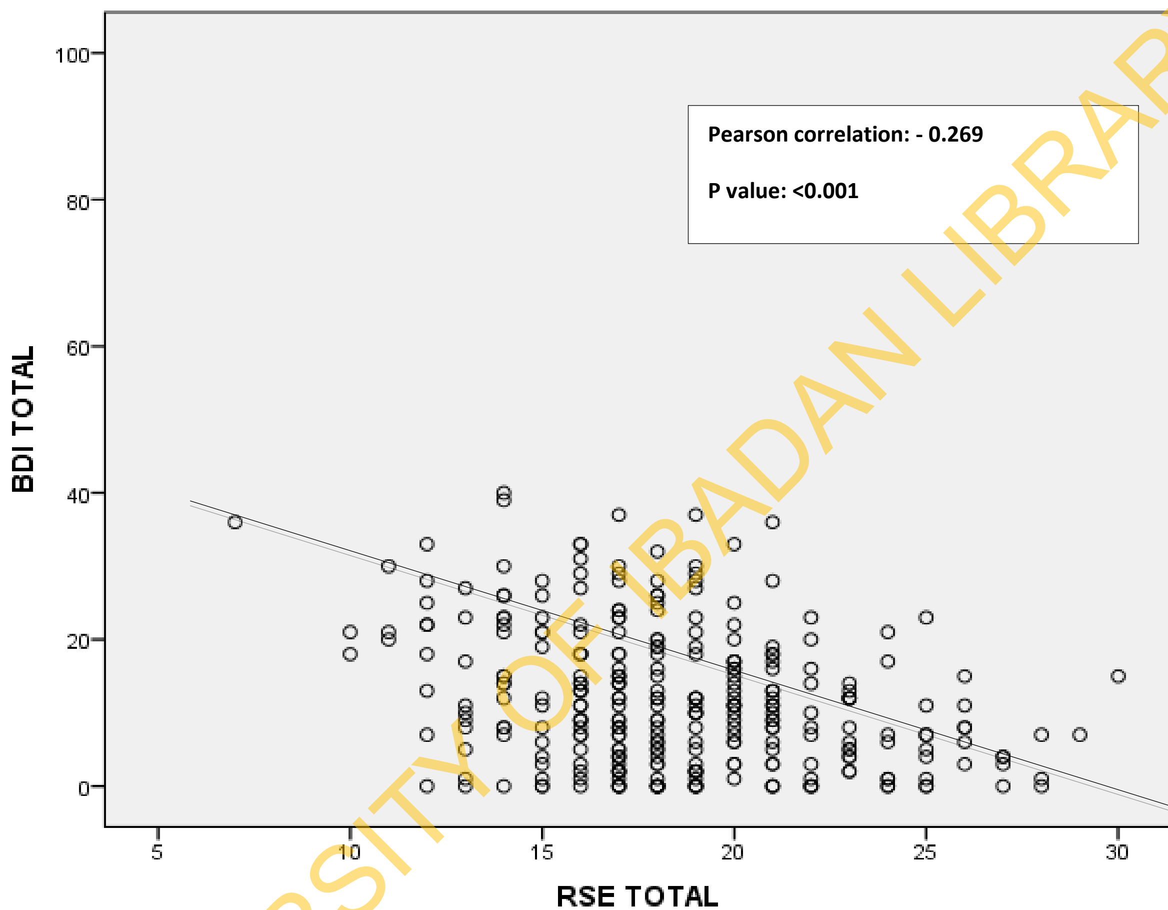

Figure 4.5 Association Between Self-Esteem and Depression.

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4.11Socio-Demographic Correlates of Self-Esteem

Respondents who practiced no religion had significantly higher mean self-esteem scores compared with those who practiced a religion (32.40 ±2.6 versus 28.14 ±3.9, t = 2.401, p = 0.017). Similarly, respondents who stated that they liked their family had higher mean self-esteem scores compared with those who did not like their families (28.33 ±3.9 versus 24.89 ±3.1, t = 2.584, p = 0.010). Table 4.6 details the socio-demographic correlates of self-esteem using mean values.

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Table 4.6: Association between Self-Esteem Mean Scores and Socio-Demographic Variables

Variables		N	MeanRSES scores	S.D	t-test/ F*	p-value
Gender	Male	122	28.25	4.200	-0.018	0.986
	Female	181	28.25	3.857		
Parents' Status	Married	259	28.41	3.962	1.016*	0.399
	separated/ divorced	17	27.59	4.078		
	father is dead	14	26.43	4.910		
	mother is dead	8	27.88	3.720		
	mother and father are dead	3	29.33	2.082		
Practice any religion?	Yes	298	28.14	3.946	-2.401	0.017**
	No	5	32.40	2.608		
Doing any work after school?	Yes	72	27.69	3.906	-1.358	0.176
	No	229	28.43	4.027		
Religion guiding	Very much	271	28.20	3.887	1.325*	0.266
	Much	25	28.56	4.664		
	Just a little	3	25.00	2.646		
	Not at all	3	31.33	7.572		
Age	less or =15 yrs.	161	28.29	4.276	0.399	0.690
	above 15 yrs.	138	28.11	3.557		
Family type	Monogamous	261	28.43	3.891	1.949	0.052
	Polygamous	41	27.12	4.518		
Do you like your family	Yes	293	28.33	3.959	2.584	0.010**
	No	9	24.89	3.180		

* = ANOVA

** = significant at $p < 0.05$

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4.12School- related correlates of Self-esteem

Respondents who like their school, performed well academically and had no difficulties with their teachers had higher mean self-esteem scores compared with others. However, the findings were not statistically significant. Table 4.7 below details the association between self-esteem and school related characteristics.

Table 4.7: Association between Self-Esteem mean scores and School Related Characteristics.

Variables		Mean RSES score	SD	t test	p value
Do you like your school?	Yes	18.59	3.785	1.481	0.140
	No	17.22	3.919		
Subjective academic performance	Yes	18.60	3.773	1.596	0.112
	No	17.00	4.088		
Teacher rated Academic performance	Poor	16.33	2.807	2.774*	0.064
	Average	18.36	3.450		
	Good	18.88	3.969		
Presence of difficulty interacting with teachers	Yes	18.29	4.018	0.523	0.601
	No	18.57	3.752		

* = ANOVA

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4.13Association between Self-esteem and Pattern of Coping

Significantly higher self-esteem scores were observed among those who used *Active coping* compared with those who did not (18.92±4.01 versus 17.83±3.37, $t = 2.435$, p value = 0.015). Whereas, significantly lower mean self-esteem scores were observed among those who used *Alcohol disengagement* (17.47±3.51 versus 18.78±3.86, $t = 2.243$, p value = 0.026). No other coping variables were significantly associated with self-esteem. Table 4.8 shows the association between self-esteem and domains of coping.

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Table 4.8: Association between Self-esteem Mean Scores and Pattern of Coping Mechanisms

	RSES Mean (SD)	Not used Mean (SD)	Used Mean (SD)	t test	P value
Acceptance	18.54 (3.804)	18.31 (3.67)	18.68 (3.89)	0.838	0.403
Active coping	18.50 (3.810)	17.83 (3.37)	18.92 (4.01)	2.435	0.015*
Alcohol disengagement	18.56 (3.826)	18.78 (3.86)	17.47 (3.51)	2.243	0.026*
Behavioural disengagement	18.54 (3.808)	18.62 (3.75)	18.46 (3.88)	0.377	0.706
Denial	18.50 (3.830)	18.89 (3.72)	18.11 (3.92)	1.757	0.08
Emotional support seeking	18.48 (3.802)	18.25 (3.65)	18.64 (3.91)	0.849	0.397
Humour	18.48 (3.810)	18.87 (4.03)	18.04 (3.507)	1.876	0.062
Seeking instrumental support	18.49 (3.819)	18.09 (3.73)	18.69 (3.86)	1.276	0.203
Planning	18.48 (3.812)	18.23 (3.62)	18.65 (3.95)	0.933	0.352
Positive reinterpretation	18.51 (3.829)	18.53 (3.62)	18.49 (3.96)	0.071	0.944
Turning to religion	18.52 (3.793)	18.17 (3.34)	18.65 (3.95)	0.979	0.328
Self-blame	18.51 (3.804)	18.65 (3.79)	18.33 (3.83)	0.722	0.471
Self-distraction	18.46 (3.752)	18.37 (3.55)	18.58 (4.00)	0.462	0.645
Venting emotions	18.52 (3.802)	18.72 (3.73)	18.33 (3.87)	0.869	0.386

* = significant at $p < 0.05$

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4.14Qualitative Themes Identified Among Respondents with Lowest Self-esteem Scores (In-Depth Interview)

Some of the respondents with low self-esteem provided explanationsabout their circumstances. These responses can be grouped under three themes:

Home or Family theme:

"I don't like being scolded"

"I don't like being beaten and punished"

"Most people are angry at me"

"My parents curse and beat me a lot"

"I get blamed for eating a lot"

"There is absence of love and unity in my family"

"I get sent on lots of errands"

"My Uncles give food to their own children and don't give to me"

Personal attribute theme:

"I am too playful and I don't like it"

"I don't feel comfortable talking with girls, it make me weaker than my friends"

"I commit lots of sins and I am ungodly"

"I don't like being stubborn at home"

"I don't have enough money"

"My friends are just better than me"

Academic theme:

"*I don't understand what I am taught in class"*

"My friends are more brilliant than me"

"My teachers don't like me"

"I don't read my books well, I am not serious".

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Chapter Five

Discussion, Conclusions and Recommendations

5.1 Discussion

This was a cross-sectional study of pattern of coping among secondary school students and how it relates with the presence of depressive symptoms and low self-esteem. It also sought to identify associations between the different patterns of coping and academic performance. In addition, it detailed the association between socio-demographic and school related characteristics of the respondents and the presence of depressive symptoms and low self-esteem. The study also employed qualitative in-depth interviews to identify some of the contextual factors that may be associated with low self-esteem.

5.1.1Summary of Results

The study found thatthe prevalence of depression in the sampled population was 27.6%. Higher depression scores were associated with male sex, not practicing a religion and working after school hours.

The prevalence of low self-esteem was one per cent. Lowermean self-esteem scores were associated with not being pleased with their family and having difficulty with teachers.

The most employed pattern of coping was *Religion* (72.2%) while the least used was *Alcohol use* (17.3%). Respondents who used more of *Acceptance*, *Behaviouraldisengagement*, *Denial* and *Self-distraction* had higher depression scores, while *Alcohol use* was associated with lower mean self-esteem scores.

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5.1.2Socio-demographic variables of respondents

The female preponderance and mean age of respondents observed in this study is similar to that reported in a previous study conducted in the same environment (Bella-Awusah et al., 2015). Majority were also from monogamous family setting and most of the parents were married. Majority of the respondents lived currently with their parents and were brought up by both parents. These findings are similar to those reported by previous studies (Adewuya et al., 2007, Omigbodun et al., 2008a).

About a fifth of the respondents are engaged in some work after school. This is similar to a report about street children in Ibadan and observed that about 20% of children in schools hawked after school hours (Ebigbo, 2003). Despite legislation against child labour, this reported value may be a reflection of the economic status of the families from which these children come from. The attendant risks that adolescents engaged inworking and trading are exposed to ranges from substance use, physical illness like fever, malnutrition, skin lesions, physical and sexual abuse, all of which predisposes them to developing low self-esteem and depression(Abdulmalik et al., 2009, Omokhodion and Omokhodion, 2004, Ebigbo, 2003).

5.1.3Correlates of Clinically Significant Depression

The prevalence of clinically significant depression reported in this study is higher than that reported by most studies conducted in this region. Prevalence estimates between 6.7% and 12.5% has been reported among a similar population (Adewuya et al., 2007, Omigbodun et al., 2008a,Bella-Awusah et al., 2015). Estimates as high as 20% has been reported internationally (Rey et al., 2012). Studies carried out in other parts of the world have shown that depression often goes unnoticed among this segment of the population (Ruiz-Casares et al., 2009). Among this cohort, depression was found to be higher among males. This is different from the assertion that higher values are reported in females. However, it has been suggested that general psychiatric morbidities are commoner in males before adulthood. By

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adulthood, the distribution is said to reverse with females subsequently having higher prevalence than males.

The finding from this study that individuals who reported no religious affiliation had higher proportion of depressive symptoms is similar to that observed in a study that reviewed studies done to examine the role of religion in depressive symptoms (McCullough and Larson, 1999, Wink et al., 2005). A possible explanation can be that a religious affiliation provides a feeling of belonging and sense of higher purpose for those who hold on to it. In addition, most religious activities are carried out in congregation and thus opportunities to meet with people on a regular basis may serve indirect means of behavioural activation. Results from this study also showed that depression was commoner among those who engaged in some form of work after school. The practise not only deprives these adolescents of restful moments, it also prevents them from having enough time for academic activities as well as exposing them to harsh situations that can constitute enduring distress for them.

As observed in previous studies (Leach, 2009, Owens et al., 2012), poor academic performance is associated with depression. This finding can be bidirectional, as students who find themselves performing poorly repeatedly may become depressed. In addition, the presence of depressive symptoms, which may include loss of interest and reduced concentration, may prevent an adolescent from concentrating and learning effectively.

5.1.4Correlates of Low Self-esteem

The prevalence of low self-esteem was much smaller in this study in contrast to a referenced study conducted in Enugu, Nigeria (Nwankwo et al., 2012). However, another study conducted in Canada (Bagley et al., 2007) revealed a prevalence of 1.55%. The finding in this study however, might be attributable to the fact that individuals in the area studied have been anecdotally observed to believe in saying positive things about themselves and may not readily express their inner feelings.

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The mean difference in self-esteem scores between the sexes was not significantly different. This has been similarly reported among Korean immigrants in the USA (Nho, 1999). Two of the three students with self-esteem scores less than the cut-off of 10 were males. This contrasts the Canadian study that found a distribution of 2:1, female to male prevalence of low self-esteem. However, the small number of individuals with low self-esteem in this study would make a conclusion based on this finding invalid.

From this study, none of the school related variables were found to be significantly related to self-esteem scores. However, in contrast to results obtained from depression scores, higher mean scores on self-esteem were obtained for those who practiced no religion compared to those who practiced. This finding was found to be statistically significant. However, given that self-esteem correlated significantly and negatively with depression scores, this finding is unusual and therefore needs to be studied further. In addition, it is expected that the social inclusion provided by religion and religious activities will provide basis for observing higher self-esteem in adherents. Studies conducted have also found out that higher self-esteem scores are usually found in those with religious adherence (Rowe and Allen, 2004).

5.1.5Pattern of Coping among Respondents

The coping patterns explored in this study gives an idea of how respondents have reacted in the past to stressful situations. However, it is also an indication of predisposition, indicating that such methods of coping will likely be used in the future if they encounter other stressful events. The most commonly used coping pattern reported is *Turning to Religion*. This has been similarly reported in previous studies conducted among medial students and women exposed to intimate partner violence (Yussuf et al., 2013, Itimi et al., 2014). This is significant considering the fact that Nigerians are generally religious, as also reflected in the high proportion of respondents reporting having a religious affiliation in this study. This

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coping pattern denotes praying to God or engaging in other religious activities for seeking relief from the stressors.

Religious coping was followed by *Seeking Instrumental Support* in about two-thirds of the respondents. Both *Turning to religion* and *SeekingInstrumentalSupport* have both been identified as belonging to a similar construct of *SupportCoping*(Monzani et al., 2015). The least used type of coping, *Alcohol use*, *Self-blame* and *Self-distraction* all belonging to the construct of *Evasivecoping* (Monzani et al., 2015). The fact that majority of the respondents used Support coping could be attributed to the tested efficacy of such coping strategies in successfully solving problems. This method alleviates distress by seeking external resources, either instrumentally or emotionally from others who are more capable. In addition, because adolescence is a stage of dependence on families and relations, there are usually ample sources of support readily available.

5.1.6Association between Patterns of Coping and Depression

Depression was found to be significantly commoner among respondents who used *BehaviouralDisengagement*, *Denial* and *SelfDistraction* in this study. These three coping strategies belong to the *Evasivecoping* construct, which seeks to ignore the problem or the stressors. This form of coping might be useful in situations of overwhelming distress or where external support has not been helpful. In the study conducted among medical students, psychological distress was found to be less among students who used Behavioural Disengagement, Denial and Self distraction (Yussuf et al., 2013). This could be explained considering the fact that stressful events experienced by secondary school students might be more enduring and rooted in the family, in which evasive coping methods will serve to perpetuate the problems. Whereas, stressors in medical students, which might be transient, short-termed and linked to academic difficulties might be better repressed or evaded to allow concentration on demands of academic activities. This further buttresses the idea that any

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coping mechanism cannot be described as dysfunctional or ineffective without a consideration of the nature of the stressor or problems being experienced (McCaul and Malott, 1984).

The use of *BehaviouralDisengagement*, *Denial* and *SelfDistraction* coping patterns more in students with depressive symptoms might be an indication of the helplessness associated with clinical depression. However, significantly higher depression scores were also observed among those who used *acceptance* and *positivereinterpretation*. These two coping patternsalso reflect a passive approach to problems, which involves changing ones cognitive or emotional disposition about the stressor in other to minimize adverse outcomes.

5.1.7Association between Patterns of Coping and Low self-esteem

The use of *Active coping* however was associated with higher self-esteem scores in the respondents. This coping pattern involves taking goal directed steps to mitigate the effect of stressors. It focuses on problem solving approach, which is the same construct behind *Planning*. However, from this study, *Planning* as a coping method was not associated with differences in mean self-esteem scores despite the fact that both *planning* and *activecoping* fall in the same problem-solving construct. It has been stated that individuals with active coping may not be aware of the fact that they have made unconscious plans before executing their problem solving skills (Thompson, 2007).

Alcohol use was the only coping strategy found to be significantly associated with low self-esteem in this population. This association is stronger considering the fact that it is the least employed strategy of all the coping methods. Alcohol use involves ignoring the source of a problem and seeking to evade its resultant emotional complications through the use of alcohol. Studies in this environment have shown that about 20% of students in secondary schools use various substances, of which the majority use alcohol (Oshodi et al., 2010).

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Alcohol is a socially permissible psychoactive substance that is legally and readily available. Alcohol use in adolescence as a coping mechanism can develop into an alcohol abuse or dependence problem. In alcohol abuse, the individual neglects other sources of pleasure and develops a pattern of use that impairs interpersonal, occupational or social functioning. There may also be evidence of physical or psychiatric complications like liver damage, depression and memory problems. Alcohol dependence includes the pattern of use in increasing amounts and craving, with the development of physiologic withdrawal symptoms or stopping use (DSM 5, 2013).

*Turning to religion*as a coping strategy was not significantly associated with high self-esteem has would have been expected. As earlier observed in this study, respondents who practised no religion had higher average self-esteem scores compared with those who had religious affiliations. Similarly, in the study conducted among Nigerianmedical students, religious coping was found to be associated with higher distress among the medical students (Yussuf et al., 2013). These observations regarding the association between religious affiliation, religious coping and self-esteem scores contrast other studies that have stated otherwise (Krause, 1995, Sherkat and Reed, 1992).

However, the relationship between religiosity, religion, spirituality and self-esteem has been described as complex, as each concept refer to dissimilar constructs cognitively, emotionally and socially. In addition, individual differences such as locus of control have also been stated to have a separate effect on how religion based constructs affect self-perception (Benson and Spilka, 1973). Pre-existing personality disposition like neuroticism may also influence extent to which individuals turn to religion (Scheier et al., 1994).

5.1.8 Contextual and explanatory factors for Low self-esteem

This study further provides explanatory context for the self-esteem scores that are the lowest in the sampled domains. Self-esteem has often been stated to be a culturally specific and

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highly individualized concept (Schmitt and Allik, 2005) and thus the experiences and social circumstances of individuals in low self-esteem may be better addressed in their specific context.

The home environment is a major contributor to the development of self-esteem. Events during childhood, level of attachment with parents, opportunity for self-expression and emotionally conducive atmosphere enhances good self-esteem in adolescents and later life. Corporal punishment is also a widely employed means of discipline in both homes and schools in this environment (Ebigbo, 2003). Respondents from this study who reported adverse events in their home environment might be exhibiting direct manifestation of these circumstances. Reports such as being excessively scolded, abused or beaten could have predisposed these adolescents to low self-esteem. Similar associations have been observed that when children are exposed to extreme punitive measures or denied opportunity to voice their minds they may develop low self-esteem (Straus and Kantor, 1994) .

Children who grow up with other relations might get to be sent on most errands or deprived nurture and care while other children experience this care while with their parents. This study identified a case of an adolescent growing up with an uncle who gives food to his own children and deprives the respondent of similar treatment. It would have been appropriate to visit this adolescent's home and investigate the circumstances in which he lives, and probably remove the adolescent to a secure home facility, if the likelihood of reprisal or further abuse is suspected. However, the absence of a structured and legally backed Child welfare service in the state as obtained in the advanced countries has limited the extent to which the investigator can intervene in this case.

Personal attributes that an individual is not comfortable may result in low self-esteem. A study among students with handicap showed that this obvious or perceived personal attributes contributed to reports of low self-esteem (Mendelson et al., 1996, Franklin et al., 2006).

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Some respondents described themselves as being too playful, or stubborn. Another stated that his lack of confidence in talking to the opposite sex makes him appear inferior before his peers.

Poor academic performance can be an etiological factor in low self-esteem among adolescents. Adolescents spend majority of their time in educational settings and good performance will enhance feelings of self-worth. Studies have shown that improving academic skills and providing tips to enhance academic prowess can enhance self-esteem among students (Crocker et al., 2003, Crocker and Knight, 2005). This supports the finding among the cohort studied who stated academic concerns and poor performance as likely reasons they feel less important than others.

5.1.9Strengths and Limitations

The strength of this is that it provided a qualitative means of identifying contextual explanations for some of the cases of low self-esteem observed in the studied population.

However, limitations encountered in the course of the study include the inability of some of the teachers to rate the academic performance of some students who were not regular in school. Furthermore, objective measures of performance such as class reports were not properly prepared in some of the classes in the schools.It was also difficult getting the cooperation of some of the teachers, who were not motivated as they had not been paid salaries for months.

In addition, some of the students were very reluctant about giving out details about their experiences in school despite repeated assurances of confidentiality.Also, this study is a cross-sectional study, and therefore cannot establish the causal relationship between the coping patterns and low self-esteem or depression, as this would require a longitudinal follow up model.

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5.2Conclusions

In conclusion, the study highlighted the high prevalence of depression among secondary school students. Itshowed that religious coping and seeking instrumental support were the most prevalent patterns of coping among secondary school students. It also showed that the use of coping patterns that are evasive or passive such as self-blame, denial and alcohol disengagement were associated with depression and lower self-esteem among the respondents. The study also identified specific family, academic and personal factors that may explain low self-esteem in some of the observed cases.

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5.3Recommendations

1. School based mental health advocacy programmes should incorporate coping skills training for secondary school students to help mitigate the effect of stressful events that may predispose to mental health problems and poor academic performances.
2. Teachers should be trained to identify the early signs of depression among secondary school students in order to identify cases early and refer to mental health specialists.
3. Policy makers should provide Child welfare services that are legally and financially backed to provide safe haven for children and adolescents that are abused or maltreated by guardians.
4. Public enlightenment campaign should be instituted to regularly provide awareness among parents and guardians on the adverse consequences of harsh parenting and upbringing on children and adolescents.

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Appendices

Appendix 1

PATTERN OF COPING AND FACTORS ASSOCIATED WITH LOW SELF ESTEEM AND DEPRESSION AMONG ADOLESCENTS IN IBADAN

Serial Number:__ __ __ __ __ __

Today's Date: __ __/__ __/__ __

School Health Questionnaire

ENGLISH & YORUBA

Please write the answers to the questions or draw a circle where it applies to you.
This is not an examination it is only to find out about you and your health.
Jọwọkọidahunsiawọnibeereti o jẹmọ ọ, tabiki o faigisiabẹeyi to o jẹmọ ọ.
Eleyiikiişeidanwo; a kanfẹmọniparẹatiilerarẹni.

1. Name of School	
(*1. Orukọile-iwe*):	
2. Class	
(2. Kilaasi):	
3. Where do you live? (Address of Present Abode):	
3. Niboniongbe? (Ibugbe):	
4. What is your date of birth?	______ _______ _________
4. Kiniọjọibirẹ?	*ọjọoşuọdun*
5. How old are you?	
5. Ọmọọdunmeloni ọ? ____	
6. Are you a boy or a girl?	Boy Girl
6. Şeọkunrintabiobinrin?	*Ọkunrin* *Obinrin*
7. Do you practise any religion?	No Yes
7. Njẹ ẹ manse ẹsinkankan?	*Bẹẹkọ* *Bẹẹni*
8. Please write down the exact place you attend for worship	(a) Islam (b) Orthodox Christian (c) Pentecostal Christian (d) Traditional religion (e) Other
8. Kọibiti o timaanjọsin	*(a) Islam* *(b) Orthodox Christian* *(c) Pentecostal Christian*

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	(d) Traditional religion *(e) Other*
9. How much does the teaching of your religion guide your behaviour?	(a) Very much (b) Much (c) Just a little (d) Not at all
9. Bawoniigbagbọrẹṣentọihuwasirẹ?	*(a) O ntọ ọ gan an* *(b) O ntọ ọ* *(c) O ntọ ọ diẹ* *(d) O kotọ ọ rara*
10. How much does the teaching of your religion guide your family life?	(a) Very much (b) Much (c) Just a little
10. Bawoniẹsinnaa se sepataki to niẹbi ẹ?	*(a) O ṣepatakigan-an* *(b) O ṣepataki* *(c) O ṣepatakidiẹ*
Family Information	
11. Family Type:	(a) Monogamous (b) Polygamous
11. Iruẹbi:	*(a) Oniyawokan* *(b) Oniyawomejitabijubẹẹlọ*
12. Number of Mother's Children:	
12. ỌmọmeloniIyarẹni?:	
13. Number of Father's Children:	
13. Ọmọmeloni Baba rẹni?:	
14. What is your position among your father's children?	
14. Ipowo lo waninuawonọmọ baba rẹ?	
15. What is your position among your mother's children?	
15. Ipowo lo waninuawọnọmọiyarẹ?	
16. Marital Status of Parents:	(a) Married (b)Separated/Divorced (c) Father is dead (d) Mother is dead (e) Mother & Father are dead
16. Ibagbepọawọn obi rẹ:	*(a) Ṣewọngbepọ?* *(b)Ṣewọntikọrawọnsilẹ?* *(c) Baba tiku*
17. How many husbands has your mother had?	
17. ỌkọmeloniIyarẹtiniri?	
18. Who do you live with presently?	(a) Parents (b) Mother (c) Father (d) Grandparents (e) Grandmother (f) Grandfather (g) Other [please specify]_____________
18. Taniongbepẹlulọwọlọwọ?	*(a) Awọn obi* *(b) Iyanikan*

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<table>
<tr><td></td><td>(c) Baba nikan
(d) Iyaati Baba Agba
(e) IyaAgbanikan
(f) Baba Agbanikan
(g) AwọnIyoku [Jọwọsọnipato]______</td></tr>
<tr><td>19. Who brought you up from your childhood?</td><td>(a) Parents
(b) Mother
(c) Father
(d) Grandparents
(e) Grandmother
(f) Grandfather
(g) Other [please specify]____________</td></tr>
<tr><td>19. Talotọ ẹ dagbalatikekere?</td><td>(a) Awọn obi
(b) Iyanikan
(c) Baba nikan
(d) Iyaati Baba Agba
(e) IyaAgbanikan
(f) Baba Agbanikan
(g) AwọnIyoku [Jọwọsọnipato]______</td></tr>
<tr><td>20. How many different people have you left your parents to live with from your childhood?</td><td></td></tr>
<tr><td>20. Awoneniyanọtọọtọmeloni o fi awon obi rẹsilẹlatilọgbepẹluwọn?</td><td></td></tr>
<tr><td rowspan="2">21. If more than one person, list the people, time spent and whether experience was good or bad?</td><td>
<table><tr><td>Person lived with</td><td>From which age to which age</td><td>Experience (good or bad)</td></tr></table>
</td></tr>
<tr><td>
<table><tr><td>Ẹniti o bagbe</td><td>Ọmọọdunmeloni ọ nigbanaa</td><td>Iririrẹnibẹ (O daratabikodara)</td></tr></table>
</td></tr>
<tr><td>22. Do you do any kind of work to earn money before or after school?</td><td>Yes
No</td></tr>
<tr><td>22. Njẹ o maanṣiṣẹlatiriowolẹhintabisaajuki o to lọsiileiwe?</td><td>Bẹẹni
bẹẹkọ</td></tr>
<tr><td>23. If yes, please describe what you do</td><td></td></tr>
<tr><td>23. Ti o ba je bẹẹni, ṣealaayeohunti o ṣe</td><td></td></tr>
<tr><td>24. Level of Father's Education</td><td>(a) No Formal Education
(b) Koranic School
(c) Primary School
(d) Secondary School
(e) Post Secondary (Non-University)
(f) University Degree and above
(e) I do not know</td></tr>
<tr><td>24. Iwemeloni baba rẹka?</td><td>(a) Kokawerara
(b) Ile-keu
(c) Ile-IweAlakọbẹrẹ
(d) Ile iwegirama
(e) Ile-iweagba (Yatọ fun yunifasiti)</td></tr>
</table>

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	(f) Yunifasitiatijubẹẹlọ *(e) Nkomo*
25. Occupation of Father: [Write the exact occupation]	______________________ I do not know
25. Işẹwoni Baba rẹ n şe: [Kọişẹtiwọnnşepatolẹkunrẹrẹ]	________________________ */Nkomo*
26. Level of Mother's Education	(a) No Formal Education (b) Koranic School (c) Primary School (d) Secondary School (e) Post Secondary (Non-University) (f) University Degree and above (e) I do not know
26. Iwemeloniiyarẹka?	*(a) Kokawerara* *(b) Ile-keu* *(c) Ile-IweAlakọbẹrẹ* *(d) Ile iwegirama* *(e) Ile-iweagba (Yatọ fun yunifasiti)* *(f) Yunifasitiatijubẹẹlọ* *(e) Nkomo*
27. Occupation of Mother: [Write in the exact occupation]	____________________/ I do not know
27. Isẹwoniiyarẹnşe: [Kọişẹtiwọnnşepatolẹkunrẹrẹ]	________________________ */Nkomo*
28. Do you like your family?	Yes No
28. Şe o fẹranẹbirẹ?	*Bẹẹni* *Bẹẹkọ*
29a. If Yes, Why?	
29a. Bẹẹni, Şealaye?	
29b. If No, Why?	
29b. Bẹẹkọ, Şealaye?	
School-Related Questions	
30. Do you like your school?	Yes No
30. Şe o fẹranile-iwerẹ?	*Bẹẹni* *Bẹẹkọ*
31. How many children are there in your class?	
31. Akẹkọọmeloni o wanikilaasirẹ?	
32. Do you do well academically?	Yes No
32. Njẹ o nşedaadaninuẹkọrẹ?	*Bẹẹni* *Bẹẹkọ*
33a. If Yes, explain	
33a. Bẹẹni, Şealaye	
33b. If No, explain	
33b. Bẹẹkọ, Şealaye	
34. Are you having difficulties with your teachers?	Yes No

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34. Njẹ o niişorokankanpẹluawọnolukọrẹ?	*Bẹẹni* *Bẹẹkọ*
35. If yes, what sort of difficulties?	
35. Ti o bajẹbẹẹni, iruişorowoni?	
36. Do you have guidance counsellors in your school?	Yes No
36. Njẹ ẹ niawonOludamọranAtọnisọnaniile-Ẹkọrẹ?	*Bẹẹni* *Bẹẹkọ*
37. Have you ever gone to see them?	Yes No
37. Njẹ o ti lo sọdọwọnri?	*Bẹẹni* *Bẹẹkọ*
38. If yes, what did you go to see them for?	
38. Ti o bajẹbẹẹni, kini o lọriwọn fun?	
39. If you have a problem at school would you go to the guidance counsellor for help?	Yes No
39. Ti o baniidaamuni Ile-Ẹkọ, njẹiwọ o lọriOludamọranAtọnisọna?	*Bẹẹni* *Bẹẹkọ*
40a. If yes, why would you go?	
40a. Bẹẹni, Şealaye	
40b. If no, why not?	
40b. Bẹẹkọ, Şealaye	

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APPENDIX II

Rosenberg Self-Esteem Scale

Instructions: Below is a list of statements dealing with your general feelings about yourself. For each question, indicate your level of agreement by ticking in the corresponding space. You can only tick one answer.

1.	On the whole, I am satisfied with myself.	strongly agree	agree	disagree	strongly disagree
2.*	At times, I think I am no good at all.	strongly agree	agree	disagree	strongly disagree
3.	I feel that I have a number of good qualities.	strongly agree	agree	disagree	strongly disagree
4.	I am able to do things as well as most other people.	strongly agree	agree	disagree	strongly disagree
5.*	I feel I do not have much to be proud of.	strongly agree	agree	disagree	strongly disagree
6.*	I certainly feel useless at times.	strongly agree	agree	disagree	strongly disagree
7.	I feel that I am a person of worth, at least on an equal plane with others.	strongly agree	agree	disagree	strongly disagree
8.*	I wish I could have more respect for myself.	strongly agree	agree	disagree	strongly disagree
9.*	All in all, I am inclined to feel that I am a failure.	strongly agree	agree	disagree	strongly disagree
10.	I take a positive attitude toward myself.	strongly agree	agree	disagree	strongly disagree

THANK YOU

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APPENDIX III

Brief COPE Inventory

We are interested in how students respond when they confront difficult or stressful events in their lives. There aremany ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feelwhen you experience stressful events. Then respond to each of the following items by ticking in the appropriate response space. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU, not what you think "most people" would say or do.

Indicate what YOU usually do when YOU experience a stressfulevent.

1. I haven't been doing this at all
2. I've been doing this a little bit
3. I've been doing this a medium amount
4. I've been doing this a lot

	1	2	3	4
1. I have been turning to work or other activities to take my mind off things.				
2. I've been concentrating my efforts on doing something about the situation I'm in.				
3. I have been saying to myself "this isn't real."				
4. I have been using alcohol or other drugs to make myself feel better.				
5. I have been getting emotional support from others.				
6. I have been giving up trying to deal with it.				
7. I have been taking action to try to make the situation better.				
8. I have been refusing to believe that it has happened.				
9. I have been saying things to let my unpleasant feelings escape.				
10. I have been getting help and advice from other people.				
11. I have been using alcohol or other drugs to help me get through it.				
12. I have been trying to see it in a different light, to make it seem more positive.				
13. I have been criticizing myself.				
14. I have been trying to come up with a strategy about what to do.				

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15. I have been getting comfort and understanding from someone.				
16. I have been giving up the attempt to cope.				
17. I have been looking for something good in what is happening.				
18. I have been making jokes about it.				
19. I've been doing something to think about it less, such as going to movies, watching TV,				
reading, daydreaming, sleeping, or shopping.				
20. I have been accepting the reality of the fact that it has happened.				
21. I have been expressing my negative feelings.				
22. I have been trying to find comfort in my religion or spiritual beliefs.				
23. I have been trying to get advice or help from other people about what to do.				
24. I have been learning to live with it.				
25. I have been thinking hard about what steps to take.				
26. I have been blaming myself for things that happened.				
27. I have been praying or meditating.				
28. I have been making fun of the situation.				

THANK YOU.

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APPENDIX IV

Beck's Depression Inventory

V 0477

Beck Depression Inventory

CRTN: _____ CRF number: ______

Page 14

Baseline

patient inits: ________

Date:

Name: ______________________ Marital Status: ________ Age: ______ Sex: ______

Occupation: ______________________ Education: ______________________

Instructions: This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the **one statement** in each group that best describes the way you have been feeling during the **past two weeks, including today**. Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

1. Sadness
- 0 I do not feel sad.
- 1 I feel sad much of the time.
- 2 I am sad all the time.
- 3 I am so sad or unhappy that I can't stand it.

2. Pessimism
- 0 I am not discouraged about my future.
- 1 I feel more discouraged about my future than I used to be.
- 2 I do not expect things to work out for me.
- 3 I feel my future is hopeless and will only get worse.

3. Past Failure
- 0 I do not feel like a failure.
- 1 I have failed more than I should have.
- 2 As I look back, I see a lot of failures.
- 3 I feel I am a total failure as a person.

4. Loss of Pleasure
- 0 I get as much pleasure as I ever did from the things I enjoy.
- 1 I don't enjoy things as much as I used to.
- 2 I get very little pleasure from the things I used to enjoy.
- 3 I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings
- 0 I don't feel particularly guilty.
- 1 I feel guilty over many things I have done or should have done.
- 2 I feel quite guilty most of the time.
- 3 I feel guilty all of the time.

6. Punishment Feelings
- 0 I don't feel I am being punished.
- 1 I feel I may be punished.
- 2 I expect to be punished.
- 3 I feel I am being punished.

7. Self-Dislike
- 0 I feel the same about myself as ever.
- 1 I have lost confidence in myself.
- 2 I am disappointed in myself.
- 3 I dislike myself.

8. Self-Criticalness
- 0 I don't criticize or blame myself more than usual.
- 1 I am more critical of myself than I used to be.
- 2 I criticize myself for all of my faults.
- 3 I blame myself for everything bad that happens.

9. Suicidal Thoughts or Wishes
- 0 I don't have any thoughts of killing myself.
- 1 I have thoughts of killing myself, but I would not carry them out.
- 2 I would like to kill myself.
- 3 I would kill myself if I had the chance.

10. Crying
- 0 I don't cry anymore than I used to.
- 1 I cry more than I used to.
- 2 I cry over every little thing.
- 3 I feel like crying, but I can't.

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______ Subtotal Page 1

Continued on Back

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V 0477

Beck Depression Inventory

Baseline

CRTN: _____ CRF number: ______ Page 15 patient inits: _________

11. Agitation
0 I am no more restless or wound up than usual.
1 I feel more restless or wound up than usual.
2 I am so restless or agitated that it's hard to stay still.
3 I am so restless or agitated that I have to keep moving or doing something.

12. Loss of Interest
0 I have not lost interest in other people or activities.
1 I am less interested in other people or things than before.
2 I have lost most of my interest in other people or things.
3 It's hard to get interested in anything.

13. Indecisiveness
0 I make decisions about as well as ever.
1 I find it more difficult to make decisions than usual.
2 I have much greater difficulty in making decisions than I used to.
3 I have trouble making any decisions.

14. Worthlessness
0 I do not feel I am worthless.
1 I don't consider myself as worthwhile and useful as I used to.
2 I feel more worthless as compared to other people.
3 I feel utterly worthless.

15. Loss of Energy
0 I have as much energy as ever.
1 I have less energy than I used to have.
2 I don't have enough energy to do very much.
3 I don't have enough energy to do anything.

16. Changes in Sleeping Pattern
0 I have not experienced any change in my sleeping pattern.
1a I sleep somewhat more than usual.
1b I sleep somewhat less than usual.
2a I sleep a lot more than usual.
2b I sleep a lot less than usual.
3a I sleep most of the day.
3b I wake up 1–2 hours early and can't get back to sleep.

17. Irritability
0 I am no more irritable than usual.
1 I am more irritable than usual.
2 I am much more irritable than usual.
3 I am irritable all the time.

18. Changes in Appetite
0 I have not experienced any change in my appetite.
1a My appetite is somewhat less than usual.
1b My appetite is somewhat greater than usual.
2a My appetite is much less than before.
2b My appetite is much greater than usual.
3a I have no appetite at all.
3b I crave food all the time.

19. Concentration Difficulty
0 I can concentrate as well as ever.
1 I can't concentrate as well as usual.
2 It's hard to keep my mind on anything for very long.
3 I find I can't concentrate on anything.

20. Tiredness or Fatigue
0 I am no more tired or fatigued than usual.
1 I get more tired or fatigued more easily than usual.
2 I am too tired or fatigued to do a lot of the things I used to do.
3 I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex
0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

3 4 5 6 7 8 9 10 11 12 A B C D E

Subtotal Page 2

Subtotal Page 1

Total Score

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APPENDIX V

In-Depth Interview Guide

This study aims to understand how you feel about yourself and your thoughts about the way others might think about you, and explore the circumstances and experiences that may be responsible for this. You are allowed to express yourself as you wish and comment freely. There are no right or wrong answers.

Positive reflections (open ended questions to get the respondents talking and at ease)

1. Can you tell me about yourself?
2. What are the things about yourself that you are satisfied with?

Negative reflections

1. What about yourself are you not satisfied with?
2. What do you think affects the way you feel about yourself?
3. How do you think you compare with your friends?

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APPENDIX VI

Informed Consent Form(Study questionnaire)

PATTERN OF COPING AND FACTORS ASSOCIATED WITH LOW SELF ESTEEM AND DEPRESSION AMONG ADOLESCENTS IN IBADAN

This study is being conducted by Dr Abdurahman Haleem of the Centre for Child and Adolescent Mental Health, University of Ibadan. The purpose of this study is to find out about the way you think about yourself and how may be affected by some of your experiences.

In the course of this study, you will be asked some questions in relation to your personal information, your family, your academics as well as symptoms that may suggest mental health problems. You will be asked to complete a series of questionnaires and subsequently may be called upon to participate in an interview with the investigator.

Your participation in this research will not cost you anything, but if we discover any sign of Mental health problems in the course of the study, you will benefit from free consultation with the researcher. If the need arises, however, you may be referred to the appropriate specialist.

All information collected in this study will be given code numbers and no names will be recorded. This cannot be linked to you in any way and your name or any identifier will not be used in any publication or reports from this study. Your participation in this research is voluntary and if you choose not to participate, it will not affect your interaction with your teachers, colleagues or the interviewers in any way.

You can also choose to withdraw from the research at any time. Please note that some of the information that has been obtained about you before you withdraw may have been modified

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or used in reports and publications. This cannot be removed anymore but the researcher promises to make good faith effort to comply with your wishes as much as is practicable.

....

I have fully explained this research to ---------- ------ ------------------------ ---------- and have given sufficient information, including about risks and benefits, to make an informed decision.

Date ------------------ Signature---------------------------

Name--

I have fully read the description of the research. I understand that my participation is voluntary. I know enough about the purpose, methods, risks and benefits of the research study to judge that I want to take part in it.

Date ---------------------- Signature-----------------------

Name ---

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APPENDIX VII

Informed Consent Form(In-depth Interview)

PATTERN OF COPING AND FACTORS ASSOCIATED WITH LOW SELF ESTEEM AND DEPRESSION AMONG ADOLESCENTS IN IBADAN

This study is being conducted by Dr Abdurahman Haleem of the Centre for Child and Adolescent Mental Health, University of Ibadan. The purpose of this study is to find out about the way you think about yourself and how may be affected by some of your experiences.

In this interview, you will be asked questions about what you think about yourself and your perceptions about your self-worth. You will also be asked questions requesting you to state how you manage situations and experiences. The information required are quite personal and strict confidentiality will be assured. The interview will be recorded on battery-operated device and some handwritten notes will be taken, but we will not record your name. Your participation in this research is voluntary and if you choose not to participate, it will not affect your interaction with your teachers, colleagues or the interviewers in any way.

You can also choose to withdraw from the research at any time. Please note that some of the information that has been obtained about you before you withdraw may have been modified or used in reports and publications. This cannot be removed anymore but the researcher promises to make good faith effort to comply with your wishes as much as is practicable.

....

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I have fully explained this research to ---------- ------ ------------------------ ---------- and have given sufficient information, including about risks and benefits, to make an informed decision.

Date ------------------ Signature--------------------------

Name---

I have fully read the description of the research. I understand that my participation is voluntary. I know enough about the purpose, methods, risks and benefits of the research study to judge that I want to take part in it.

Date ---------------------- Signature-----------------------

Name ---

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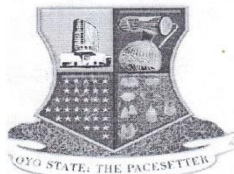
APPENDIX VIII

Letter of Ethical Approval

TELEGRAMS................ TELEPHONE................



MINISTRY OF HEALTH

DEPARTMENT OF PLANNING, RESEARCH & STATISTICS DIVISION

PRIVATE MAIL BAG NO. 5027, OYO STATE OF NIGERIA

Your Ref. No. ....

All communications should be addressed to the Honorable Commissioner quoting

Our Ref. No. AD 13/ 479/093

7th June, 2016

The Principal Investigator,
Department of Psychiatry,
University College Hospital,
Ibadan.

Attention: Abdulrahman Haleem

ETHICAL APPROVAL FOR THE IMPLEMENTATION OF YOUR RESEARCH PROPOSAL IN OYO STATE

This is to acknowledge that your Research Proposal titled: "Correlates of Low Self Esteem, Depression and Pattern of Coping among Adolescent in Ibadan Nigeria" has been reviewed by the Oyo State Ethical Review Committees.

2. The committee has noted your compliance. In the light of this, I am pleased to convey to you the full approval by the committee for the implementation of the Research Proposal in Oyo State, Nigeria.

3. Please note that the National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations, in line with this, the Committee will monitor closely and follow up the implementation of the research study. However, the Ministry of Health would like to have a copy of the results and conclusions of findings as this will help in policy making in the health sector.

4. Wishing you all the best.

OYO STATE RESEARCH ETHICAL REVIEW COMMITTEE
Signature & Date

(Dr) Abbas Gbolahan
Director, Planning, Research & Statistics
Secretary, Oyo State, Research Ethical Review Committee

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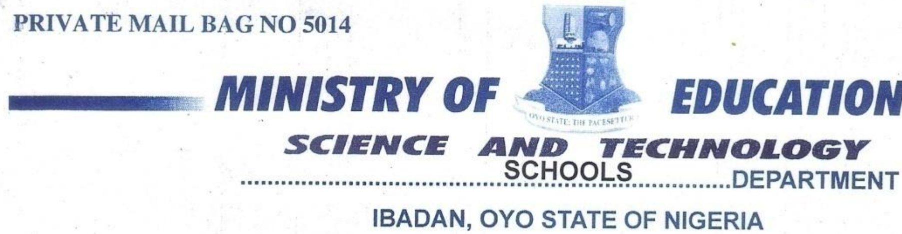
APPENDIX IX

Letter of Permission



TELEPHONE: IBADAN

PRIVATE MAIL BAG NO 5014

MINISTRY OF EDUCATION
SCIENCE AND TECHNOLOGY
SCHOOLS DEPARTMENT
IBADAN, OYO STATE OF NIGERIA

*Your Ref. No*__________
All correspondence should be addressed to the Hon. Commissioner Quoting.
Our Ref. No EDU21ST9/7

Date 29th February, *20* 16

Dr. Abdulrahman Haleem Abiodun,
Centre for Child and Adolescent Mental Health,
University of Ibadan,
Ibadan.

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH AMONG STUDENTS IN SELECTED SECONDARY SCHOOLS IN IBADAN METROPOLIS

I am directed to acknowledge the receipt of a letter dated 4th February, 2016 on the above subject and to convey the Ministry's approval to carry out the research titled: **"Correlates of Low Self-Esteem, Depression and Associated Patterns of Coping Among Adolescents in Ibadan: a Mixed Study"**

2. However you are to liaise with the Local Inspectors of Education of the Ibadan North and Akinyele Local Government Areas for necessary assistance.

3. Please note that all data collected from sample schools should be used strictly for the research work. Also note that you are required to submit, to the Ministry of Education, a copy of the results and conclusions of your findings to assist in policy making in the education sector.

4. I thank you.

Awodiran P. A.
For: Permanent Secretary.

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