EMOTIONAL PROBLEMS AND ITS ASSOCIATION WITH ACADEMIC PERFORMANCE AMONG IN-SCHOOL ADOLESCENTS OF IKPOBA-OKHA LOCAL GOVERNMENT AREA, BENIN-CITY, EDO STATE

BY

AIWERIOGHENE, ENOGIERU STELLA-ROSE

B.Sc (Ed) CHEMISTRY, DELTA SATE UNIVERSITY

MATRICULATION NUMBER: 208618

A RESEARCH PROJECT SUBMITTED TO THE CENTER FOR CHILD AND ADOLESCENT MENTAL HEALTH, IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTERS OF SCIENCE IN CHILD AND ADOLESCENT MENTAL HEALTH, UNIVERSITY OF IBADAN, NIGERIA

MAY 2019

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

DECLARATION

I declare that this research was carried out by me and submitted to the Centre for Child and Adolescent Mental Health of the University of Ibadan. No part of this research has been previously presented or published anywhere else.

_____

AIWERIOGHENE Stella-Rose Enogieru

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

CERTIFICATION

I certify that this research was written by Miss Aiwerioghene, Stella-Rose Enogieru of the centre for Child and Adolescent Mental Health, University of Ibadan.

_____

Supervisor

Dr.Tolulope Bella-Awusah
MBBS (Ibadan), FWACP, M.Sc. CCAMH (Ibadan).
Department of psychiatry
College of Medicine
University of Ibadan, Nigeria

_____

Supervisor

Professor Olayinka Omigbodun
MBBS (Ibadan), MPH (Leeds), FMCPsych, FWACP
Professor of psychiatry
College of Medicine
University of Ibadan, Nigeria

_____

Supervisor

Dr.Victor O. Lasebikan
Department of Psychiatry
College of Medicine
University of Ibadan, Nigeria

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

TABLE OF CONTENT

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

LIST OF TABLES

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

LIST OF APPENDICES

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

LIST OF FIGURE

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

ACRONYMS

WHO	World health organization
BDI	Beck's Depression inventory
BAI	Beck's Anxiety inventory
APQ	Academic Performance Questionnaire
SPSS	Statistical Package of Social Sciences
CAMH	Child and Adolescent Mental Health
FGD	Focus Group Discussion

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

ABSTRACT

Background

Emotional problems are internalizing problems which go a long way in affecting the general functioning of an adolescent both academically and otherwise. Recent studies have looked at the factors that affect students' academic performance and these have ranged from social to psychological factors such as socio-economic status, inability to manage course load, anxiety, stress, and personality, poor attitude of teachers and depression. The academic well-being of students has of recent years been of great concern to parents, teachers, and even the government at large. However, few studies have been done on the relationship between emotional problems and academic performance. Thus; this study was carried out to evaluate the association between depression, anxiety and academic performance of in-school adolescents.

Methodology: This was a cross sectional study, ten senior secondary schools were randomly selected from the study location. A total of 300 participants were recruited into the study comprising of 210 students from public schools and 90 students from private schools all from senior secondary school one. A sociodemographic questionnaire was used to obtain background information about the students. The Becks Depression Inventory (BDI-11) was used to assess for depression, Becks Anxiety Inventory (BAI) was used to asses for anxiety and academic performance was measured using the Academic performance questionnaire which was adapted and validated by the researcher.

Results: Majority of the participants were between 12-15years of age with a mean age of respondents 14years (SD = 1.39). There were 39.0% males and 61.0% females. 93.3% of the participants were from monogamous homes. Reported prevalence shows Depression was 11.7% and Anxiety was 29.3%. Logistics regression analysis shows that number of people lived with asides parents and marital status of parents of study participants was found to be significantly

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

significant with depression (p= 0.007 and 0.021 respectively), class population was also seen to be significantly related with anxiety. Older adolescents (16-19 years) were seen to have higher academic performance compared to younger adolescents 12 – 15 years (OR=O.63, 95% CI, 0.451-1.701).With a higher academic mean score (2.362), male participants performed better academically compared to female participants (OR=0.19, 95% CI, 0.042-0.173). Class population was found to be significantly associated with academic performance of study participants (OR=0.20, 95% CI, 0.092-0.311). Anxiety was found to be significantly negatively correlated with academic performance (p = 0.011).

Conclusion: This study finding revealed that emotional problem (anxiety) is significantly associated with poor academic performance. It also found that very small and very large class population was seen to be a predictor for emotional problem, a statistically significant relationship was seen to have existed between academic performance and class population. It is therefore recommended that the ministry of education or other bodies involved in school regulations should put into place a policy guiding against over populated class rooms this will go a long way in reducing class room stressors for both the teachers and students thereby improving teaching, learning and performance of students in a long run.

Key Words: Emotional problems, Depression, Anxiety, Adolescents, Academic performance, In-school, Secondary school students.

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

Emotion is derived from a Latin word "emovere" which means to stir up, agitate, excite and move (Oladele, 2004). Psychologists do not agree on the exact meaning of emotion. Some defines it as an outward expression of strong inner feeling which is aroused by ones behavior or that of others. Most argue that emotional expression like other complex behavior develops through maturation and learning. The concept of emotion as arousal and feeling implies that emotions are responses to the provoking stimuli.

Virtually all psychologists who have classified emotions divide them into categories:

Unpleasant emotions - Given example; fear, anger, sorrow, jealousy, and feeling of guilt. These sometimes impede or inhibit growth, learning and mental health.

Pleasant emotions – Given examples include; joy, love, happiness, pleasure, humor and laughter. These facilitate growth and development and bring about mental health in children and adolescent throughout their entire life.

Adolescence is marked by immense chaos in emotional spheres (Pathak *et al.*, 2011). It is a transitional period of physical and psychological development between childhood and maturity. During this period, the body grows rapidly. Adolescence period is universally known as a period of fundamental biological, cognitive and social changes (Taraka, 2012). According to Erikson psychological development theory, the chief task of the adolescent is to develop a sense of personal identity (Oladele, 2004). The World Health Organization defines adolescence as the period of life between ages 10 to 19 (WHO, 2005). While still adjusting to societal norms, adolescents struggle to develop individually. Rapid urbanization and modernization has

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

exposed these adolescents to changes in the society, which leads to breakdown in family structure, exposing them and making these adolescents vulnerable to maladaptive patterns of thinking and behavior (Taraka, 2012). Healthful adulthood depends solely on successful resolution of these problems, bearing in mind that most of these problems start in the early years of life and adolescents are at very high risk. Trending on this situation, some adolescents go through to adulthood normally, while some may not be fortunate to get the ideal societal support for smooth transition. Some develop inadequate patterns in emotional and behavioral spheres, resulting in depression and anxiety and other related problems which are characterized as emotional problems.

Emotional problems refer to symptoms of anxiety and depression and are the most common mental health problems in childhood and adolescence (Evalillkarevold, 2008). Symptoms of emotional problems in late adolescence may sometimes extend into adulthood. Emotional problems have majorly personal costs, which includes reduced level of functioning in relation to family and friends, school achievement and subjective wellbeing. Findings from population based studies indicate that 12-19% of adolescents have strong symptoms of emotional problems and that it has negative impact on daily functioning (puura*et al*, 1998; egger &angold, 2006; Costello,egger&angold, 2005). Life time prevalence rates for major depression in adolescence ranges from 4% to 25%, but most often the rates are around 15-20% (Kessler, avenevoli, merikanagas, 2001). The prevalence estimate of depression in adolescent is almost half the size in childhood (Roberts & Bishop, 2005, cicchetti&Toth, 1998). Lifetime estimates of anxiety disorders in school age children and adolescents ranges from 4% to 27% (merikangas, 2005; Costello *et al*, 2005)

1.2 STATEMENT OF THE PROBLEM

There has been a rise in the prevalence of mental illness and maladaptive behavior among adolescents worldwide (Madlan, 2004). The World Health Organization estimates shows that

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

up to 20% adolescents have one or more mental and emotional problems at different stages in life (WHO, 2005). Studies conducted in different parts of the world show that the prevalence of behavioral and emotional problems in adolescents ranges from 16.5% to 40.8% (Pathak *et al.*, 2011). In Nigeria, about 10% to 20% of children and adolescent are affected (Omigbodun*et al*, 2008).Depression and Anxiety disorders are the most common disorders in adolescence and young adults (Costello *et al.*, 2003) andthese problems have significant relationship on students' academic performance Khurshid*et al* (2015). Emotional problems interfere with the way adolescents think, feel and even act thereby causing distress and limiting their academic achievements and ability to be productive both to themselves and the society at large (Arnett, 1999). In a study carried by out by (Alokan, 2010) in Ado-Ekiti, it was stated that emotional problems give rise to worries which lend to adversely affect concentration and overall learning ability therefore leading to low academic performance.

1.3 JUSTIFICATION AND RELEVANCE OF THE STUDY

In recent years, issues related to mental health are often propaganda in mass media, even around the world, mental health may deteriorate and its effects will affect daily lives if left without treatment (Madlan, 2004). Studies have shown that adolescents have a higher risk of mental health issues in the general population than adults (WHO 2005).

Children and adolescents account for 45% of the Nigeria's general population (NHDS, 2015), the commonest emotional problems (depression and anxiety) affects about 10% to 20% of the Nigerian children and adolescents (Omigbodun*et al*., 2008, Adewuya 2007) and this goes a long way to affect academic performance at large thereby leading to increase in low academic achievement and even school dropout (Alokan, 2010).Emotional problems were also seen by (Omojola, 2015) to be a precipitating factor for class repetition.

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

Students' academic performance is indeed a subject of concern for parents, teachers, school management, the government, curriculum designers and in fact the general public, this is because everyone especially parents and teachers wants their students to perform excellently well in relation to what has been thought in previous times. To this effect, a lot of researchers have in the past years investigated factors that affect students' academic performance and these have ranged from social to psychological factors such as socio-economic status, inability to manage course load, anxiety, stress, personality, poor attitude of teachers and depression(Muhammed *et al;* 2018*)*. However, few studies have been done to determine the relationship between depression, anxiety and academic performance in Nigeria. Therefore, this study focuses on Emotional problems (depression and anxiety) and its association with students' academic performance. This study will contribute to the knowledge on adolescent depression, anxiety and its relationship with academic performance in ikpoba-okha local government area and serve as a baseline for planning interventions for possible prevention, early detection and management. It will also help in informing policy in child and adolescent mental health.

1.4 AIM OF STUDY

This study sets to determine the association between emotional problems and academic performance among in-school adolescents.

1.5 SPECIFIC OBJECTIVES

The specific objectives of the study are as follows;

1. To determine the prevalence of emotional problems among in-school adolescents
2. To determine the socio-demographic correlates of emotional problems among in-school adolescents
3. To determine the association between emotional problems and academic performance among in-school adolescents

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

1.6 RESEARCH QUESTIONS

1. What is the prevalence of emotional problems among in-school adolescent?
2. What are the socio-demographic correlates of emotional problems among in-school adolescent?
3. Are emotional problems associated with academic performance among in-school adolescents?

1.7 PRIMARY OUTCOME

The Relationship between Emotional Problems and Academic Performance Among in-school Adolescents

UNIVERSITY OF IBADAN LIBRARY

Word count: 1175

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

CHAPTER TWO

LITERATURE REVIEW

2.1 CONCEPT OF EMOTIONAL PROBLEMS

Symptoms of mental health problems in childhood and adolescence are usually classified into two broadband categories, emotional (internalizing) and behavioral (externalizing) problems (Kovacs & Devlin, 1998). But for the purpose of this study, emotional problems will be emphasized. Emotional problems are a sub-classification of mental health problems and they are usually internalizing. Emotional problems are associated with concept of psychopathology in childhood and adolescence;it refers to symptoms of anxiety and depression, such as sadness, loneliness, worrying, feelings of worthlessness. Emotional problems reduce level of functioning in relation to family and friends, school achievements and general wellbeing (Karevold, 2008).

Reinarz, Hanson and Wood (2009) characterized emotional problems as "an inability to build or sustain acceptable interpersonal relationships with peers and/or teachers. An inability to learn which cannot be effectively explained by intellectual, sensory or health factors". Emotional problems could give rise to worries which can affect concentration and overall learning ability (Alokan, 2010)Studies have shown that depression and anxiety disorders are the most common emotional disorders in childhood and adolescence (Costello, Mustillo, Erkanli, Keeler, &Angold, 2003). Childhood emotional problems have a prognostic value for problems resulting in adolescence and this can increase the risk for psychiatric disorders later in the life of the adolescent (Karevold, 2008).

2.1.1 Symptoms of Depression

In DSM-IV a Major Depressive Disorder is characterized by one or more Major Depressive Episodes, which indicates "at least two weeks of depressed mood or loss of interest

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

accompanied by at least four additional symptoms of depression" (DSM IV, p. 317). The core Symptoms in a Major Depressive Episode for children and adolescents include;

1) Feelings of sadness or emptiness

2) Irritable mood or somatic complaints

3) Social withdrawal or diminished interest in nearly all activities

4) Significant and unexpected weight changes or somatic complaints

5) Psychometric agitation or retardation

6) Fatigue or loss of energy

7) Feelings of worthlessness or excessive guilt

8) Lack of concentration

9) Suicidal thoughts (DSM IV).

Depressive symptomatology is wide-ranging, and covers areas as diverse as appetite disturbance, restlessness and suicidal thoughts (Angold*et al*., 1995 se SMFQ).

2.1.2 Symptoms of Anxiety

The groupings of anxiety disorders consist of separation anxiety disorder (SAD), social phobia, generalized anxiety disorder (GAD)/overanxious disorder, specific phobias and obsessive-compulsive disorder. Among these, SAD, GAD and phobias (including social phobia) are the most common in childhood and adolescence (Costello *et al*., 2005; Merikangas, 2005; Axelson&Birmaher, 2001). Separation anxiety disorder (SAD) is distinguished by excessive worry about separation from home or from significant attachment figures, and it develops in childhood. Additional symptoms include tearfulness, somatic complaints (headache, stomach

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

pain), nightmares and school refusal. GAD is related with excessive anxiety and worry over several areas of life functioning. It is associated with psycho-physiological symptoms like restlessness, sleep disturbance, irritability or muscle tension. Children affected are worried about disasters like earthquake or nuclear war, their school performance and they have excessive need for approval. Excessive fear of unfamiliar social situations or performance situations, fear of being evaluated by others, and failure to reach expected levels of functioning are all associated with social phobia. While adolescent onset is characterized by a decrease in social and academic performance, Specific phobias are characterized by extreme fears of events or objects. Anxiety disorder and its manifestation across development are broadly understudied. This reflects, the belief that anxiety disorder constitute 'mild' psychopathology. One of the major concerns regarding anxiety is the definition of impairment, with unclear boundaries between 'normal' and 'abnormal' anxious symptoms (Evalillkarevold, 2008).

Psychiatrics classified anxiety into different subset they include;

Generalized Anxiety Disorder: Individuals that suffer this condition live each day in a state of high tension, feeling uneasy and tends to overreact even in mild stresses. Instead of concentrating the individual worry about potential problems. Data from the Early Developmental Stages of Psychopathology (EDSP) study revealed a cumulative incidence for GAD as 4.3% at age 35years with relatively few onsets observed in childhood and the core incidence period being in adolescence and young adulthood.

Panic Disorder: This is characterized by episodes of acute and overhauling apprehension to terror; it begins abruptly and reaches a peak within 10 minutes with such symptoms as perspiration, muscle tremors, faintness and shortness of breath. Eventually this fear intensifies and interferes with every day school activities thus disrupting concentration, classes, reading, assignments and decision – making resulting to poor academic performance. Approximately 6

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

million American adults aged 18 and above, or 2.7% of people in this age group in a given year have panic disorder.

Agoraphobia: Involves intense fear and anxiety of any place or situation where escape might be difficult, leading to avoidance of the situation such as being alone outside the home, travelling in a car, bus, airplane, writing an examination or being in a crowded place.

Phobias: It is a persistent fear of specific object or situation. The fear occurs when the individual is brought in contact with the object or situation. This reason is why some students perform badly in certain courses. The life time prevalence of phobias in women is 17.7% compared to 10.4% in men

2.2 DIMENSIONALITY AND CONSTRUCT VALIDITY OF EMOTIONAL PROBLEMS

Is the underlying structure of emotional symptoms one, two or multidimensional construct? Anxiety and depression are in the current nomenclature of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994) conceptually and empirically perceived as distinct phenomena. At the same time we know that the symptoms of anxiety and depression are highly correlated, often with co-morbid disorders (Cannon & Weems, 2006; Kendall, Kortlander, Chansky, & Brady, 1992). This brings up the question of the underlying structure of anxiety and depression, and how necessary it is to separate the symptoms. Some have argued for a single syndrome in children and early adolescence (Achenbach, 1991; Wadsworth, Hudziak, Heath, & Achenbach, 2001). Previous research on the structure of anxiety and depression in children and adolescents indicate different levels of convergent and discriminant validity (e.g. Cole, Truglio, &Peeke, 1997; Lambert, McCreary, Joiner, Schmidt, &Ialongo, 2004; Cannon & Weems, 2006). It is more frequent to classify emotional symptoms into one dimension when a child is young. This may be due to low frequencies of emotional

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

symptoms and difficulty in identifying distinct emotional symptoms in early childhood. In a review of co morbidity of anxiety and depression in children, anxiety was found to herald the onset of depression 67% in a review of co morbidity of anxiety and depression in children, (Kovacs, Gatsonis, Paulauskas, & Richards, 1989). There has been hypothesis that adolescent depression is caused by childhood anxiety (Crick & Zahn-Waxler, 2003; Cicchetti&Toth, 1998). Anxiety symptoms are more typical in childhood, while depressive symptoms are more common in adolescence (Cole, Peeke, Martin, Truglio, &Seroczynski, 1998; Pine, Cohen, Gurley, Brook, & Ma, 1998).

This has led researchers to suggest that anxiety may be the predominant expression of internalizing symptoms in childhood, while depression is predominantly expressed in adolescence (Cannon & Weems, 2006). In general, symptom scales used in preschool and school-aged samples have consistently shown a distinct internalizing problem dimension (e.g. Egger &Angold, 2006). This is supported by studies indicating that anxiety and depression are best considered as two facets of a single syndrome (Achenbach, 1991; Wadsworth et al., 2001). Clark and Watson (1991) presented a model known as the tripartite model of the structure of anxiety and depression. In this study, anxiety and depression were anticipated to share a common dimension, referred to as negative affectivity. This model was originally developed for psychopathology in adults, but several studies supported an application of the model in children and adolescents (Cole *et al*., 1997; Chorpita, Albano, & Barlow, 1998; Lambert *etal*., 2004). However, anxiety and depressive symptoms are found to cluster in distinct groups in other studies and argue for separate symptoms in children and adolescents (Cannon & Weems, 2006; Ollendick, Seligman, Goza, Byrd, & Singh, 2003). Of the few studies that have examined the discriminative validity of anxiety and depressive symptoms in children, one group concluded that their data showed successful convergent and discriminant validity for identifying clusters of anxiety and depression (Epkins& Meyers, 1994). Another group, Patterson, Greising,

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

Hyland and Burger (1994), using the same data set, disagreed on this interpretation of the results, they reanalyzed Epkins and Meyers' data and found that the measurements of anxiety and depression lacked adequate discriminant validity. The relation between symptoms of anxiety and depression in third and sixth graders was done by Cole and colleagues (1997). The underlying constructs of depression and anxiety were found to be essentially identical among the youngest group, while among the sixth graders there were some evidence of differentiation between anxiety and depression. Anxiety and depression construct of validity measures is a major concern for epidemiological studies using symptom scales (Egger &Angold, 2006). Thus, the need for clarify investigations of dimensionality in research on emotional symptoms in childhood and adolescence is of great necessity.

2.3 DEPRESSION AND ACADEMIC PERFORMANCE

Arslan, *et al* (2009) in a survey, investigate the prevalence of depression among Turkish university students, and to determine some of the risk factors connected to depression, and also to evaluate its effect on health-related quality of life. The study reveals that the prevalence of depression was 21.8%. They conclude that the prevalence of depression among the university students in Turkey was wide-spread, affecting negatively the health-related quality of life of the students. For prevention and control of depression, depression information and knowledge need to be addressed by health education programs.

Morales *et al*, (2013) opine that the prevalence of depression among medical students is significantly higher than that from the general population or other undergraduate students and can result in dropping out, in such a way that the growing number of students who have dropped out due to their poor performance or their vocational indecision could be related to the presence of this condition. While investigating depressive symptoms and academic performance in medical students, Morales *et al*, (2013) show that the percentage of students with depressive

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

symptoms was 23%, with a significant difference in depressive symptoms between female and male medical students. 68% of students who had depressive symptoms failed a subject, which was a risk of disapproval of 2.4 times compared with those without such symptomatology. The variables sex and depressive symptomatology were found to be factors related to poor academic performance, with an increased risk for students with symptoms. They conclude that depressive symptomatology is an important risk factor for failing a subject or having a poor academic performance.

Chinawa*et al* (2015) in a research on depression among adolescents attending secondary schools in south east Nigeria, found out that depression among adolescents is an uncommon and frequently unrecognized issues in pediatrics, children and adolescents however suffer from both depression and associated symptoms. The result of the study shows that the prevalence of moderate depression was lowest (2.3%) at the age of 10 and highest at (6.2%) the age of 13. The prevalence of severe depression was lowest (1.9%) at the age of 11 and highest (7.4%) at the age of 12. Female gender is a risk factor for depression. Children whose parents are separated showed higher incidences of depression in all the spectra studied. Chinawa*et al* concluded that Adolescents exhibit different levels of depression with a female preponderance.

In a study on Depression and Suicidal attitude among adolescents in some selected secondary schools in Lagos state, Nigeria by (Ajidahun 2012), it was shown that adolescents' thought line which shows their belief, difficulty in making decision, negative view of themselves, and the world around them was significantly related to the depressive suicidal attitude. Ajidahun concluded that adolescenst cognition changes when they are depressed, while personal feelings and peer acceptance were not significantly related to the depressive suicidal attitude. A recent study by muhammed*et al* (2018) on relationship between depression and academic performance among undergraduate student of Benue state university makurdi, it was seen that there is a significant negative relationship between depression and students' academic performance (r

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

(137) = -0.040; p<0.05. The study also found out that females were more likely to get depressed than males with a t-test value (t (145) = 0.0646; p<.05). Based on the findings, the study recommended that, Educators, Counselors, Psychologists, and Researchers to develop strategies to reduce psychological problems like depression among students and to develop intervention programs to enhance students' psychological well-being which may help to increase their academic performance.

2.4 ANXIETY AND ACADEMIC PERFORMANCE

Anxiety is a common cause of poor academic performance among students in every part of the globe. This was largely emphasized in the study done by Afolayan*et al* (2013) aimed at determining the relationship anxiety and academic performance of students in the faculty of Nursing, Niger Delta University, Wilberforce Island, Bayelsa State. Result of the study indicated that generally students experience anxiety during examination which is seen as physiological, psychological and behavioural changes and abnormality. It was also seen that there was no statistical difference between gender and academic performance of students. Therefore, the need for students to be counseled to maintain optimal thought process and health during examination was emphasize.

Lama. M. Al. Qaisy (2011) conducted a study to identify the impact of mood disorders, especially anxiety and depression among asample of students for their academic achievement in Tafila Technical University. The study laid emphasis on the difference between gender and the level of depression and anxiety that exist between them. It also looked at the difference between colleges and the levels of depression and anxiety. TwoMeasurements were applied, one measures the level of anxiety and the other measures the levelof depression on a random sample of 200 students from different faculties in the university. The result of the study shows that females are more anxious than males, while males are more depressed thanfemales. In

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

addition the result also shows that there is a positive relationship between achievement andanxiety, while a negative relationship is found with depression.

A perceived difficult subject would elicit higher anxiety levels, and anxiety as a psychological condition can adversely affect people in every field of life (Cohen, 2004) and especially, it adversely affects students faced with different exam situations. The suspicion is that anxiety may not exist alone but co-exist with other forms of psychological distress such as depression, and psychological intervention such as cognitive therapy is expected to reduce students' anxieties and any other psychological distress and consequently improve their academic performance. Esther *et al* (2013), In an attempt to verify their suspicion and confirm the expectation, carried out a survey on test anxiety, depression and academic performance: assessment and management using relaxation and cognitive restructuring techniques involving 420 senior secondary school students made up of 210 males and 210 females aged between 13 and 19 years who responded to test anxiety, trait anxiety, and depressive symptoms inventories. Results obtained from the study showed that anxiety and depression co-exist and are positively related but they are negatively related to academic performance. In addition the combination of relaxation and cognitive restructuring treatment reduced anxiety and depression better than relaxation treatment alone or no treatment and improved test performance of the students much more than any of the other two conditions. In conclusion the effectiveness and efficacy of cognitive therapy in managing anxiety and depression and improving academic performance was confirmed and when combined with relaxation technique, the combination optimizes academic performance.

Relationship between negative affect, worry, memory and academic performance was emphasized by Matthew *et al* (2012). They showed a support for mediation hypothesis where worry and central executive processed medicated the link between negative affect and academic

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

performance. Result of the study suggests that program targeting a reduction in symptoms of anxiety and depression should improve academic performance for young people. However, it focuses mainly on anxiety and academic performance. The study provides an understanding of the negative effect of anxiety as an emotional disorder and other co morbidities on academic performance of adolescents. George Patton *et al* (2014), reports a high prevalence of mental disorder and that most adults with mental disorders report their symptoms before 24years of age although, adolescent anxiety and depression are frequent. The study shows that almost a third of men and more than half of women had an episode of prominent depressive and anxiety symptoms at least once during mid-to-late adolescence. The study goes a long way in showing the great importance of understanding that most mental disorder starts from early childhood to adulthood and it will show a large number of prognosis of depression and anxiety.

UNIVERSITY OF IBADAN LIBRARY

Word count: 2764

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

CHAPTER THREE

METHODOLOGY

3.1 STUDY LOCATION

The study was conducted in 10 selected secondary schools, in IkpobaOkha Local government area of Benin-city, Edo state, Nigeria. Edo State is located in South-south geopolitical Zone of Nigeria with Benin-City as its capital. The state comprises of 18 Local government Areas. IkpobaOkha Local Government has its administrative headquarters in the town of idogbo. The Local Government Area falls within the southern senatorial district of Edo State otherwise known as Edo South senatorial district alongside other Local Government Area. Ikpoba-Okha Local Government covers an area of 862km^2(Nipost, 2009).The Local Government is bounded in the North by uhunmwodel.g.a, to the East by orhionmwonl.g.a to the South by the Bight of Benin, and to the West by Ovia north, Oredo and Egorl.g.a with a population of 372,080. Ikpobaohka Local government is the second largest Local government area by population in Edo state. (NIPOST, 2009).

Seven public schools were selected from the list of registered 20 public schools in the local government area and three private schools were randomly selected from the list of registered 131 private schools in the local government area. The public schools comprised of a senior and junior secondary school combined as a single school. Two of the public schools were female only and one was male only while others were mixed. Each school was headed by a principal and vice principal respectively and also had a head teacher who is known to be in-charge of academic work, each school had over a 1000 students enrolled. The private schools were co-educational and each comprised of a senior and junior secondary school combined as a single school. Each school was also headed by both a principal and a vice principal respectively with about 1000 students enrolled.

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

3.2 STUDY DESIGN

The study was a cross sectional study, which was conducted using self-administered questionnaires to collect information from the adolescents recruited in the study.

3.3 STUDY POPULATION

Adolescents in selected senior secondary schools in Ikpobaokha local government Benin-City, Edo state who were in senior secondary school one.

Inclusion criteria

1. Adolescents in senior secondary school one within ages 12 – 19, who gave consent to participate in the study

Exclusion criteria

1. Adolescents who did not give consent to participate in the study.
2. Adolescents who were too ill to participate in the study

Senior secondary school one was used because these students have been exposed to a new stage of education different from junior school, having to take new subject, cope with new learning environment and new teachers with different teaching patterns. Also, academic performance can be measured as all the students in senior secondary school one offer same subjects in all arms in the study location.

3.4 SAMPLE SIZE CALCULATION

Sample size will be calculated using the formula for the estimation of a single proportion.

$n = z\alpha^2 pq/d^2$ (kish, 1965)

- n = minimum calculated sample size
- p =prevalence of emotional problems in adolescents set at 20% (0.2)

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

(Adewuya, 2007)

- d =the level of precision set at 0.05
- q = (1 – p)
- z is the level of confidence interval corresponding to 95% standard normal deviate (1.96)

$n = 1.96^2 \times 0.2 \times 0.8 / 0.05^2$

n= 245.88

Using a non-response rate of 10% (24.588)

n = 245.88+24.588 =270

n will be approximated to 300.

3.5 SAMPLING TECHNIQUE

A 3-stage sampling technique was used to select the number of schools and students that were employed into the study, after obtaining the information on the total number of registered secondary schools from the ministry of education, 113 were private schools and 20 were public schools in the study location.Ten secondary schools were used in this study. The Initial selection was 5 private schools and 5 public schools. However, due to the difficulty in gaining access to the private schools, the school selection was restructured into using 7 public and 3 private school.

STAGE 1 all the secondary schools were classified based on the 10 wards in the local government area.

STAGE 2 the schools were later stratified into public and private school. For both public and private school, a school each was thereby randomly selected from the wards (which made 10 schools used in the study).

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

STAGE 3 students who were recruited into the study was strictly based on the inclusion criteria following a random sampling technique.

30 students per school were selected. The numbers were obtained by selecting 15 students in each of the senior school one arms of the 7 public schools. The same method was used to select students from the 3 private schools. The form register containing the names of all students belonging to each arm was used as a sampling frame. Students were randomly selected from the schools' register using the table of random numbers till the numbers required in each arms were met.

The selected students were allocated tallies on which the serial numbers on their questionnaire were well written, the serial number saved as a means of maintaining confidentiality all through the study. Figure 1 shows the sampling process while figure 2 shows the distribution of the student's selection for public and private schools

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

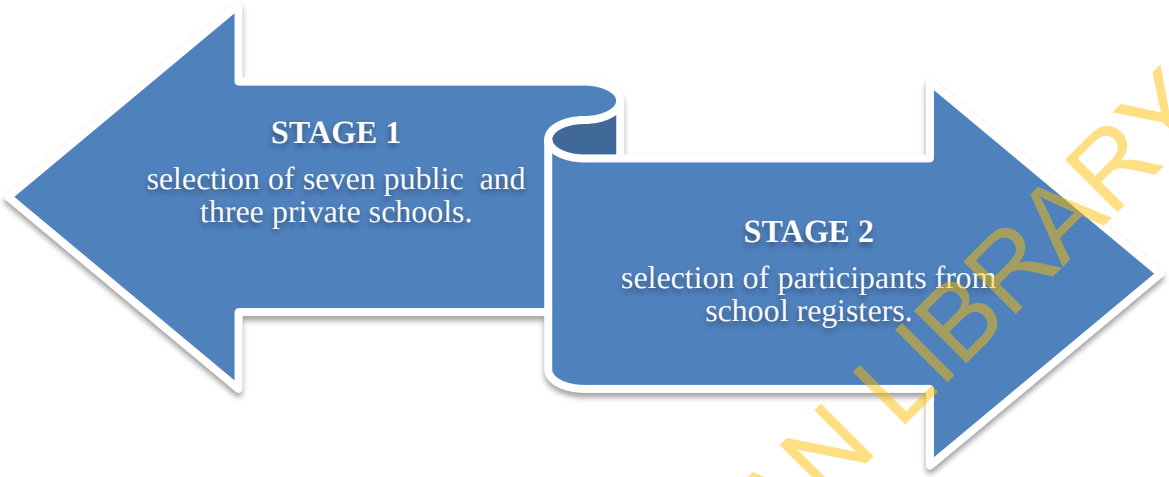

Figure 1: Sampling Process of the Study

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

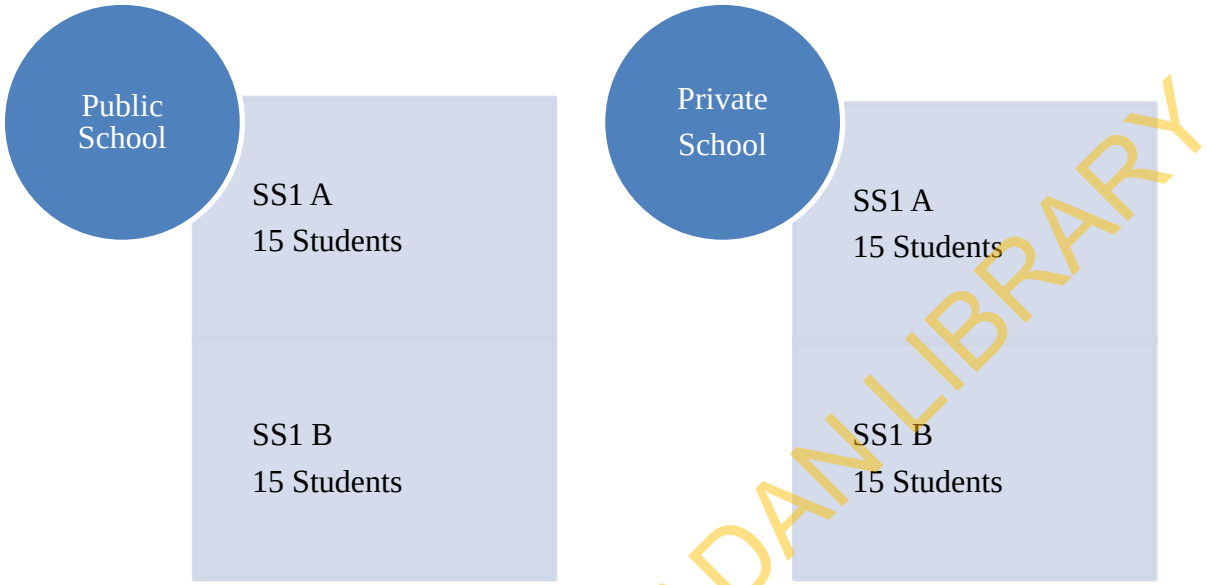

Figure 3: Distribution of the Student Selection for Public and Private Schools

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

3.6 STUDY INSTRUMENTS

Four instruments were used for data collection in this study. These include;

- The socio-demographic questionnaire developed by (Omigbodun*et al*., 2008)
- Becks depression inventory developed by (Beck *et al.*, 1996)
- Becks anxiety inventory developed by (Beck *et al.*, 1993)
- Academic Performance Questionnaire (Bennet *et al*., 2009)

3.6.1 Socio-Demographic Questionnaire

The Socio Demographic Questionnaire consists of questions concerning socio demographic characteristics and was adapted from a previous study on adolescents in rural and urban areas (Omigbodun*et al*., 2008). It consist of variables relating to age, gender, religion, family background of adolescent, size and structure of family, level of education and occupation of each parent. The socio demographic questionnaire was self-administered.

3.6.2 The Beck Depression Inventory (Bdi-11)

The Beck Depression inventory, version 11 is a 21 item multiple choice self- report inventory use for the assessment of depression. It is designed for adolescents as well as adults. It consists of items related to sadness, loss of interest, difficulty in concentration, appetite change etc (Beck *et al*., 1996) which are all symptoms of depression. According to Groth-Marnat, 1990, Becks depression inventory requires 5^{th} to 6^{th} grade reading level to comprehend. This is equal to 5 to 6 year's formal education and takes approximately 10minutes to complete. Scores on each of the 21 items range from 0-3.The BDI-11 is the latest version of the inventory published in 1996. It has been used as an assessment tool by health care professionals and researchers in different population samples. At a cut off score of 18 and above, BDI-11 has a sensitivity of 0.91, specificity of 0.97, positive predictive value (PPV) of 0.88 and negative predictive value (NPV) OF 0.98. The BDI-11 has been validated for use in Nigeria and has been used to screen for

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

depression in adolescents, with a standardized cut off point of 18 and above (Adewuya*et al*., 2007)

3.6.3 Beck Anxiety Inventory

The Beck Anxiety inventory is a 21- multiple-choice self- report inventory that is used for measuring the severity of anxiety in children and adolescents. The questions used in this measure ask about common symptoms of anxiety that the subject has had during the past week (including the day you take it) (such as numbness and tingling, sweating not due to heat and fear of the worst happening). BAI takes about 5 to 10 minutes to complete. Each of the questions answered are scored on a scale value of 0(not at all) to 3(severely) with a standardized cut off point of 16 and above (Beck & steer 1993).The BAI demonstrates high internal reliability and good factorial and discriminate validity (Kabacoff*et al*., 1997).

3.6.4 Academic Performance Questionnaire

The Academic Performance Questionnaire (APQ) is a 10-item questionnaire was completed by teachers. It uses 4- and 5-point ordinal scales to identify the child's general academic performance in reading, mathematics, writing, and homework. This measure has been previously used to obtain descriptive information about children who are being evaluated in a multidisciplinary Centre that specializes in the assessment and treatment of children who require assessment of their academic performance in the United States (Bennet *et al*, 2009).

Scoring: Response options are: 1 indicates well above average; 2 at or somewhat above average; 3 somewhat below average; 4 well below average; 5 extremely poor

A mean score is generated, lowest possible score is 1 and highest possible score is 10. A high mean score signifies high academic performance and a low mean score signifies low academic performance.

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

Validation Procedure

An expert panel was constituted comprising of the researcher, 3 teachers, 1 clinical psychologist and 6 students. One of my supervisors (VO) was also a member of the expert panel. This panel reviewed the original APQ for its face validity. The panel through a focus group discussion (FGD) suggested items in the questionnaire that needed to be modified. In the modified version, original question 6 "please estimate the accuracy of completed written maths work" was deleted because it was regarded to be contained in question 5 and was replaced with original question 7 with some modifications "compared with the average students in your class, how well is this child able to write short stories". Original question 7 was replaced with "compared with the average students in your class, how good is this child in science subjects?"

Also, original question 8 "please estimate the percentage of written language arts work completed (regardless of accuracy) relative to classmates" was deleted and substituted with "compared with the average students in your class, how good is this child in Arts subjects?" Furthermore, original question 9 "please estimate the accuracy of completed written language arts work" was deleted because it was believed to be contained in the modified question 6 "compared with the average students in your class, how well is this child able to write short stories?" original question 9 was then substituted with "compared with the average students in your class, how good is the child in Social Science subjects?"

Lastly, original question 10 was deleted and substituted with "regarding the performance of the child in class, relative to others, what is the general comment of the school principal?" During the pre-test, both original and modified version were administered to a 30 students (about 10% of the original study sample size) to determine the reliability and the internal consistency of the modified version. Analysis shows that both original and modified version were significantly correlated (r = 0.668), while the internal consistency was 0.75. About 2 weeks after the initial assessment, a re-test was carried out among 10 students and the test-re-test reliability was 0.98.

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

TRANSLATION OF THE INSTRUMENTS

All the questionnaires used were translated to Pidgin English but administered in English as the students chose to use the English version.

3.7 STUDY PROCEDURE

PRE - TEST

A pre-test was conducted on 30 students selected at random from the sample frame of schools within the study location, excluding the selected schools for main study. This was to assess the ease of administration of instruments and identify any likely issues that needed to be addressed before the main study was done. It was discovered that students were reluctant in giving out some important family information like "how husbands has their mother" for fear of being ridiculed by other students. Further assurance was given that the information gotten in the study was strictly confidential and met for research purpose only.

MAIN STUDY

Students who had given consent were assembled in a designated location given by the school authority (this was usually either the classroom or the school hall). The students were addressed by the researcher, the address was to serve as a form of introduction and give explanations about the aims and objectives of the study, as well as guidance on how to complete the questionnaires. Allowance was given for drop out. The instruments were administered to the students' one after the order with the help of a research assistant. Each student sat at a desk and completed the questionnaires privately.

Mathematics, English and class room teachers were used after getting consent from them to assess the Academic performance of the student individually using the academic performance questionnaire. The teachers and students returned the questionnaires completely filled. Academic performance of all the students recruited was assessed.

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

3.8 ETHICAL CONSIDERATIONS

Approval to carry out the study was sort from Edo State Ethnics Review Committee and permission was obtained from Edo State Ministry of Education.

3.8.1 Rights to decline/ withdraw from the study without loss of benefits

Participation in the study was completely voluntary and participants were given the liberty to decide whether or not to participant in the study. They were given the free will to withdraw from the study at any point in time without threat or consequences. Explicit explanation of the purpose of the study sufficient enough to give informed consent was provided and collected using consent forms

3.8.2 Confidentiality of Data

Data from participants' was kept confidential. No name was used in the questionnaire as each questionnaire was coded using identification codes. Participants' identity and codes were kept secure separately. In any subsequent publications that may arise from this study no name or other forms of identification will be used.

3.8.3 Beneficence of participant

Participants were expected to have benefitted from the study, as it was an opportunity to evaluate emotional problems which might not have being obvious to both the teachers and students. And also from psychotherapy sessions which was organized by the researcher.

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

3.8.4 Non Maleficence to the participants

Participant were not exposed to any harm beyond what is been generally encountered in normal day to day classroom environment. Also, data collection from participants did not involve any invasive process.

3.9 DATA MANAGEMENT

The sociodemographic characteristics of respondents were described using frequency tables and proportion whereas, the continuous variables were described using the measure of central tendency such as mean and standard deviation.

The association sociodemographic variables and emotional problems (depression and anxiety) were analyzed using the chi-square test.

The association between sociodemographic variables and the mean scores of the modified APQ was analyzed using the independent t-test.

The association between academic performance and depression as well as association between academic performance and anxiety, was analyzed using the independent t-test and the bivariate correlation coefficient.

The sociodemographic variables that were significantly associated with depression during univariate analysis were subjected to binary logistic regression analysis in order to determine the predictors of depression and anxiety respectively. However, the results were spurious because of too few independent variables.

Only one sociodemographic variable was associated with anxiety disorder, thus, not subjected to regression analysis.

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

Sociodemographic variables that were significantly associated with academic performance were subjected to linear regression analysis in order to determine the predictors of poor academic performance.

All the analyses were set at $p < 0.05$ and carried out using the statistical package for the social sciences (SPSS) Version 23.

UNIVERSITY OF IBADAN LIBRARY

Word count: 2489

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

CHAPTER FOUR

RESULTS

This study aimed to determine the association between emotional problems and academic performance among in-school adolescents in Ikpobaokha local government area Benin-city Edo state, South-south Nigeria. A total of 300 participants were recruited into the study and all returned completed questionnaire. The analyses of the findings are presented as follows;

1. Socio-demographic characteristics of the study participants

2. Prevalence of emotional problems (depression and anxiety)

3. Socio-demographic correlates of emotional problems (depression and anxiety)

4. Association between emotional problems (depression and anxiety) and academic performance

4.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE STUDY PARTICIPANTS

4.1.1 Personal Characteristics of Study Participants

The participants recruited into the study, ranged in age from 12-19 years (mean 14.91 years, SD = 1.39). One hundred and seventeen (39.0%) were males and one hundred and eighty three (61.0%) were females. 70% of the study participants (210) were public school students and 30% of the study participants were private school students. All the study participants were from senior secondary school one (SS1). Results are shown in table 4.1.1 below;

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

Table 4.1.1: Personal Characteristics of Study Participants N=300

Sociodemographic Characteristics	n	%
Age		
12-15[Y]	211	70.3
16-19[X]	89	29.7
Gender		
Male	117	39.0
Female	183	61.0
Type of School		
Public	210	70.0
Private	90	30.0
Religion		
Christianity	280	93.3
Islam	5	1.7
Others	15	5.0
Do you do any work to earn money?		
Yes	54	82.0
No	246	18.0

Y: Younger Adolescents; X: Older Adolescents

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

4.1.2 Family Characteristics of Study Participants

Participants from monogamous and polygamous homes were 84.7% (254) and 15.3% (46) respectively. 254 (84.7%) of the study participants reported to have parents who were married, 75.3% (226) were living with their parents, as at the time of the study. 248 (82.7%) were bought up by both parents. 18.7% (56) of the study participants reported to have lived with one person, 8.0% (24) lived with two persons, 3.3% (10) lived with 3 persons and 0.7% (2) lived with 4 persons apart from their parents. 113 (37.7%) and 103(34.3%) reported to have fathers with secondary education and university education respectively. 131(43.7%) and 79(26.3%) reported to have mothers with secondary and university education respectively. See table 4.1.2 below;

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

Table 4.1.2: Family Characteristics of Study Participants (N=300)

Family characteristics	n	%
Family type		
Monogamous	254	84.7
Polygamous	46	15.3
Number of maternal siblings		
0-5	221	73.7
6 and above	79	26.3
Number of paternal siblings		
0-5	283	94.3
6 and above	17	5.7
Marital status of parents		
Married	254	84.7
Not married	46	15.3
Living with presently		
Parents	226	75.4
Mother only	37	12.3
Father only	7	2.3
Others	30	10.0
Who brought you up from childhood		
Parents	248	82.7
Mother only	30	10.0
Father only	5	1.7
Others	17	5.6
Number of people lived with asides parents		
None	208	69.3
One	56	18.7
Two and above	36	12.0

*Others living with presently: grandparent, uncle, aunty. *Others who brought you up; grandparent, uncle, aunty.

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

4.1.3: School-Related Characteristics of Study Participants

School related demographic characteristics of the study participants are shown in Table 4.1.3 below. 116(38.7%) of the study participants had school guidance counselor and 51(17%) had gone to see the guidance counselor at one point or the other. 288(96.0%) of the participants reported that they did well academically and 47(15.7%) of the participants reported to have difficulties with their teacher 22.0% of the participants were reported to have class population between 25 – 35, 10.3% reported to have class population of 36 – 50 and 67.7% reported to have class population from 51 and above.

Table 4.1.3: School-Related Characteristics of Study participants (N=300)

School characteristics	n	%
Do you like your school?		
Yes	283	94.3
No	17	5.7
Class population		
25 - 35	66	22.0
36 - 50	31	10.3
51 and above	203	67.7
Do you do well academically?		
Yes	288	96.0
No	12	4.0
Do you have difficulties with teachers?		
Yes	47	15.7
No	253	84.3
Do you have a guidance counselor?		
Yes	116	38.7
No	184	61.3
Have you ever gone to see them?		
Yes	51	17.0
No	249	83.0

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

4.2 PREVALENCE OF EMOTIONAL PROBLEMS (DEPRESSION AND ANXIETY)

4.2.1 Prevalence of Depression

Thirty five (11.7%) of the respondents met the cutoff of 18 on the BDI for depressive symptoms, while 265 (88.3%) were below.

4.2.2 Prevalence of Anxiety

Eighty eight (29.3%) of the respondents met the cutoff of 16 on the BAI for anxiety symptoms, while 212 (70.7%) of the respondents were below.

4.3 SOCIODEMOGRAPHIC CORRELATES OF EMOTIONAL PROBLEMS

4.3.1 Sociodemographic Correlates of Depression

The table 4.3.1 below shows that 10.4% of the participant who were aged 12-15years had Depressive symptoms compared to 14.6% of those aged 16-19years (p = 0.543). 10.3% and 12.6% of male and female participants had Depressive symptoms respectively (p =0.303). 10.6% of the participants who were from monogamous family had Depressive symptoms and 17.4% of the study participants who were from polygamous homes had Depressive symptoms (p = 0.189). (21.7%) of the study participants who have lived with more than one person asides their parents respectively at the time of this study had symptoms of Depression (p = 0.007). 11.3% of participants who had class population between 25-65 had Depressive symptoms, 22.4% of the participants who had class population between 70 and above had Depressive symptoms (p = 0.181). depressive symptoms was higher in participants with unmarried parents 21.7% than those with married parents (9.8%). It was also seen that there is a significant association between marital status of parents and depression (p = 0.021). Number of people lived with asides parents was also seen to be significantly related with depression (p = 0.007). Post-hoc pairwise comparison shows that this significant association was because a higher proportion of participants who had lived with people asides their parents had depression

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

compared with those who lived with their parents only, as at the time of the study ($p = 0.03$ respectively).

Whereas; age, number of students in class, religion, family type, number of maternal siblings and number of paternal siblings were seen not to be statistically associated with depression respectively $p > 0.05$.

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

Table 4.3.1: Sociodemographic Correlates of Depression

Study participant (N=300)

Sociodemographic characteristics	Depression					
	Yes		**No**		**X^2**	**P**
	n	%	n	%		
Age						
12-15	12	10.3	105	89.7	0.370	0.543
16-19	23	12.6	160	87.4		
Gender						
Male	22	10.4	189	89.6	1.061	0.303
Female	13	14.6	76	85.4		
Religion						
Christianity	32	11.4	248	88.6		
Islam	0	0.0	5	100.0	1.687	0.430
Others	3	20.0	12	80.0		
Family type						
Monogamous	27	10.6	227	89.4	1.723	0.189
Polygamous	8	17.4	38	82.6		
Number of maternal siblings						
0-5	26	11.8	195	88.2	0.008	0.930
6 and above	9	11.4	70	88.6		
Number of paternal siblings						
0-5	22	11.0	178	89.0	0.259	0.611
6 and above	13	13.0	87	87.0		
Marital status of parents						
Married	25	9.8	229	90.2	5.349	0.021*
Unmarried	10	21.7	36	78.3		
Number of people lived with aside parents						
None	15	7.2	193	92.8	14.262	0.007^{BS}
One	12	21.4	44	78.6		
Two and above	8	22.2	28	77.8		
Work to earn money?						
No	26	10.6	220	89.4	1.598	0.206
Yes	9	16.7	45	83.3		
Number of students in class						
25-35	8	12.1	58	87.9	0.137	0.934
36 – 50	3	9.7	28	90.3		
51 and above	24	11.8	179	88.2		

*Level of significance set at $p < 0.05$; BS Significant at 0.05 (Bonferonni Correction)

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

4.3.2 Sociodemographic Correlates of Anxiety

Table 4.3.2 below shows that 29.9% of the participant who were aged 12-15years had depressive symptoms and 28.1% of those aged 16-19years had Anxiety symptoms. 23.1%, 33.3% of male and female participants had Anxiety symptoms respectively. 28.3% of the participants who were from monogamous family had Anxiety symptoms and 34.8% of the study participants who were from polygamous homes had Anxiety symptoms. (35.9%) of the study participants who have lived with more than one person asides their parents respectively at the time of this study had symptoms of Anxiety.

Twenty eight (42.45%) of participants who had class population 25-35 had Anxiety symptoms, 16.1% of the participants who had class population between 36 -50 had Anxiety symptoms, 25.1% those with class population 51 and above had anxiety symptoms. From the table, there was a statistical significant relationship between number of students in a class and Anxiety ($p = 0.027$). Post-hoc pairwise comparison shows that this significant association was because a higher proportion of students who had class population between 25- 35 and 51 and above had anxiety compared to those with class population (36 - 50) ($p = 0.019$) respectively.

Age, gender, family type, number of people lived with, religion, number of maternal siblings, number of paternal siblings, work to earn money were not statistical significant with anxiety with $p > 0.05$.

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

Table 4.3.2: Sociodemographic Correlates of Anxiety (N=300)

Sociodemographic characteristics	Anxiety					
	Yes		No		X^2	P
	n	%	n	%		
Age						
12-15	63	29.9	148	70.1	0.094	0.759
16-19	25	28.1	64	71.9		
Gender						
Male	27	23.1	90	76.9	3.622	0.057
Female	61	33.3	122	66.7		
Religion						
Christianity	84	30.0	196	70.0		
Islam	1	20.0	4	80.0	0.901	0.637
Others	3	20.0	12	80.0		
Family type						
Monogamous	72	28.3	182	71.7	0.778	0.378
Polygamous	16	34.8	30	65.2		
Number of maternal siblings						
0-5	71	32.1	150	67.9	3.159	0.076
6 and above	17	21.5	62	78.5		
Number of paternal siblings						
0-5	63	31.5	137	68.5	1.359	0.244
6 and above	25	25.0	75	75.0		
Marital status of parents						
Married	74	29.1	180	70.9	0.032	0.858
Not married	14	30.4	32	69.6		
Number of people lived with aside parents						
None	55	26.4	153	52.9	7.105	0.130
One	20	35.7	36	64.3		
Two and above	13	36.1	23	63.9		
Work to earn money?						
No	72	29.3	174	70.7	0.003	0.958
Yes	16	29.6	38	70.4		
Number of students in class						
25 – 35	28	42.4	38	57.6		
36 – 50	5	16.1	26	83.9	7.194	0.027*
51 and above	51	25.1	152	74.9		

*level of significance P > 0.05;BS (Bonferonni significant at 0.05)

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

4.4 ASSOCIATION BETWEEN EMOTIONAL PROBLEMS AND ACADEMIC PERFORMANCE

4.4.1 Sociodemographic Correlates of Academic Performance

From table 4.5.1 below, it can be denoted that participants between age 12-15years had a lower academic mean score of 2.075 than that of participants between ages 16-19 years who had higher mean scores of 2.605. It can also be seen that male participants had a higher academic mean score 2.362 than female participants 2.152. Those from monogamous family had an academic mean score of 2.202 lower than that of polygamous family with academic mean score of 2.408. Participants who had parents who were married had an academic mean score of 2.231 while those with either separated parents; dead mother (all classified as not married) had an academic mean score of 2.252, Age of study participant and gender was seen to be statistically significant with academic performance ($p < 0.01$). Participants who had class population 25 – 35 had academic mean score of 2.014 and participants who had class population of 36 and above had academic mean score of 2.296 and this was seen to be negatively statistically significant with academic performance ($t = -2.566$, $p = 0.011$).

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

Table 4.4.1: Sociodemographic Correlates of Academic Performance

Sociodemographic characteristics	Mean	Sd	t	*P*
Age				
12-15	2.078	0.679	5.482	< 0.001*
16-19	2.605	0.926		
Gender				
Male	2.362	0.906	2.242	0.008*
Female	2.152	0.709		
Family type				
Monogamous	2.202	0.802	1.622	0.586
Polygamous	2.408	0.752		
Number of maternal siblings				
0-5	2.238	0.789	0.143	0.608
6 and above	2.223	0.823		
Number of paternal siblings				
0-5	2.252	0.804	0.550	0.754
6 and above	2.198	0.786		
Marital status of parents				
Married	2.231	0.798	0.170	0.753
Not married	2.252	0.797		
Class population				
25 - 35	2.014	0.537	-2.566	0.011*
36 and above	2.296	0.847		

*significant values; level of significance set at < 0.05

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

4.4.2 Association between Academic Performance Questionnaire (APQ) Mean Scores of Study Participants with and without Depression

The mean scores of the APQ were compared among students with and without depression using the student independent t- test (at 95% confidence interval). Participants without depression (265) performed better academically with a higher academic mean score of (22.57) and a standard deviation score of (7.98), compared to participants with depression (35) who had lower academic mean score of (21.84) and a standard deviation score of (0.81). However, this was not statistically significant (p>0.05) see table 4.5.2 below;

Table 4.4.2: Association between Academic Performance Questionnaire (APQ) Mean Scores of Study Participants with and without Depression

		APQ			
Depression	**n**	**Mean**	**SD**	**t**	***p***
Yes	35	20.54	7.79	1.416	0.158
No	265	22.57	7.98		

Level of significance p< 0.05

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

4.4.3 Association between Academic Performance Questionnaire (APQ) Mean Scores of Study Participants with and without Anxiety

The mean scores of the APQ were compared among students with and without anxiety using the student independent t-test (at 95% confidence interval). Participants without anxiety (212) performed better academically with a higher academic mean score of (23.09) and a standard deviation score of (7.96) compared to participants with anxiety (88) who had a lower academic mean score of (20.51) and a standard deviation score of (7.74). This was statistically significant ($p<0.05$) that is; $0.011 < 0.05$ see table 4.5.3 below

Table 4.4.3: Association between Academic Performance Questionnaires (APQ) Mean Scores of Study Participants with and without Anxiety

		APQ			
Anxiety	**n**	**Mean**	**SD**	**t**	***p***
Yes	88	20.51	7.74	2.574	0.011*
No	212	23.09	7.96		

*significant value $p < 0.05$

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

4.4.4 Association between Emotional Problems (Depression and Anxiety) and Academic Performance

Association between emotional problems and academic performance was tested using the bivariate correlation analysis. According to the results it was observed that there is no significant relationship between depression and academic performance of the study participants with (p = 0.158). It was also observed that there is a negative significant relationship between anxiety and academic performance of the study participants (p = 0.011). See table 4.5.4 below;

Table 4.4.4: Association between Emotional Problems and Academic performance of Study Participants.

Variables	N	Academic performance r	*P*
Depression	300	-0.082	0.158
Anxiety	300	-0.147*	0.011*

*significant value p <.05

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

4.4.5 Linear Regression Analysis of Sociodemographic Predictors for High Academic Performance

The linear regression analysis for sociodemographic predictors for high academic performance shows that younger adolescents were 37% (0.63times) less likely to have high academic performance. It also shows that female participants were 81% (0.19 times) less likely to have high academic performance. So also, the results show that for every unit rise in class population there is an 80% (0.20 times) likely hood increase in academic performance.

Table 4.4.5: Linear Regression Analysis of Sociodemographic Predictors for High Academic Performance

Variables	OR	CI (95%)		P
		LOWER	UPPER	
Age				
12 - 15	1			
16 - 19	0.63	0.451	1.707	0.043
Gender				
Female	1			
Male	0.19	0.042	0.173	0.0043
Class	0.20	0.338	0.043	<0.001

Word count: 1473

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1 DISCUSSION

This was a cross sectional study aimed at determining the association between Emotional problems and Academic performance of in-school adolescents of ikpoba-okha local government area, Benin-city, Edo state.

5.1.2 Sociodemographic Characteristics of In-school Adolescents

A total of 300 senior secondary school one adolescents in 10 senior secondary schools in ikpoba-okha local government area participated in the study. The mean age of the participants was 14years (SD=1.39).This is less than what was observed in the study by Sangowawa*et al* (2009) among secondary school students in Ibadan, giving a mean age of 17.1. In this study, female participants were higher in proportion 183 (61%) than male respondents 117 (39%) in the study. This is different from the study by Omigbodun*et al* (2008) among secondary school students in Ibadan, which obtained a proportion of 52.8% males and 48.2% females. In Nigeria, females have been found to account for lower proportion of the number of students enrolled in secondary school which is 44.3% as to male 55.7% (National bureau statistics, 2015). The increase in female population in this study, may be due to various effort by the government to ensure equal percentage of male and female access schools. The findings that majority of the students were Christians living with parents in a monogamous home setting is similar to that from previous studies among secondary school adolescents in Ibadan (Omigbodun, 2006; Bella-Awusah*et al*., 2016). 82% of the study participants reported to have been involved in one work or the other to earn money before or after school.

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

5.1.3 Prevalence of Emotional problems

Emotional problems (depression and anxiety) have been accounted for as a large proportion of burden in Adolescents. Studies in Nigeria among adolescents estimates prevalence rate between 10% and 20% of emotional problems, (Adewuya*et al.,* 2007, Omigbodun*et al.,* 2008, Bella *et al.,* 2015).This is in agreement with this study that shows the prevalence rate of depression as 11.7%. The prevalence of depression among adolescents have been reported to range from 5% to 20% depending on the location, methodology and age bracket of the study participants (Rey et al., 2012). This study reported the prevalence of Anxiety among respondents to be 29.3%; this result is in keeping with the study by (Pathek*et al*., 2011) who gave a range of anxiety disorder to be from 16.5% to 40.8% .The differences in result from other studies may be partly as a result of the instruments used in ascertaining depression and anxiety symptoms in those studies.

With respect to gender, this study revealed that the prevalence rate of depression was higher in females compared to males 12.6% and 10.3% respectively but this was seen not to be statistically significant. This is in line with the study carried out by (Muhammed *et al., 2018*) whose findings revealed that females were more likely to get depressed than males with a t-test value ($t(145) = 0.0646$; $p < .05$) and also in-line with a study done by (Bartels *et al., 2011)* among adolescents on self-reported emotional and Behavioural problems, with a mean score of 10.02, females were found to be more depressed than males who had mean score of 6.72. This study also found that the male gender was seen to be a protective factor against anxiety with higher prevalence rate found in females compared to males 33.3% and 23.1% respectively. This buttresses the findings of Lama.M.Al.Qaisy (2011) that females are more prone to have anxiety symptoms compared to males. However, the in-significant figure found with respect to gender may be due to the uneven number of female and male participants

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

5.1.4 Sociodemographic Correlates of Emotional Problems

Major findings from this study in relation to sociodemographic characteristics of study participants was that a significant relationship was found to have existed between the number of people lived with asides parents and depression (ref; table 4.3.1). from the study it was seen that adolescents who have stayed with their parents only or at least one person asides their parents were less likely to have depressive symptoms unlike those who have stayed with more than one person such as aunty, uncle, grandparents, or even family friends e.t.c. this may be because those who have stayed with more than one person outsides their parents, may have been at one point or the other exposed to child labor, abuse and even neglect which may affect their mental health in the long run and they may also have been faced with different cultural upbringing . Omigbodun (2004), emphasized that children separation from parents to live with relative is a one of the psychosocial issue in child and adolescents psychiatry because it impair the general development of the child and adolescent in the long run.

A significant relationship was also seen between marital status of parents of study participants and Depression ($p < 0.05$) ref. table 4.3.1. This implies that those who have parents who are married a less likely to have depressive symptoms unlike those who have parents who are unmarried (this could be either the parents are divorced or separated, mother dead, father dead or both parents dead). Those whose parents are unmarried may at one point or the other been faced with ill treatment and even neglect from either of the parents as a result of family dysfunction. This is in relation with a study done by Chinawa*et al* (2015) which shows that children who have unmarried parents have higher emotional problems in all spectra. This study also found out that class population of the study participants was significantly related with anxiety with a p value <0.05 ref. table 4.3.2. This implies that the higher the number of people in a class the more likely the students in the class experience anxiety symptoms and the lesser the number of people in a class the more likely the students in class experience anxiety

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

symptoms. Healthy environment is one of the most powerful determinants of student's academic motivation and achievements. It provides the students with (psychological and physical) conducive atmosphere to attend to the varying needs. This has great implications on academics well-being of students and also increase class stressors like noisy class rooms amongst others the needs. Shafqat Ali shah's (2009).

5.1.5 Association between Emotional Problems and Academic Performance

From this study, it can be seen that in comparing the academic performance mean score of study participants with and without emotional problems, there was no significant relationship found between the mean score of study participants with depression and without depression ($t = 1.416$, $p > 0.05$) ref; table 4.4.2. Although, participants without depressive symptoms were seen to have performed better academically with a higher academic mean score compared to those with depressive symptoms. The study also found a significant relationship between the mean score of study participants with and without anxiety ($t = 2.574$, $p < 0.05$) ref; table 4.4.3.Participants without anxiety performed better academically with a higher academic mean score compared to those with anxiety symptoms. Results from epidemiological studies, reveals that depression and anxiety disorders are the most common disorders in adolescence and young adults (Costello *et al.*, 2003) and emotional problems have significant relationship on students' academic performance Khurshid*et al* (2015).

The study also found that in correlation between academic performance mean score of study participants and their sociodemographic characteristics, there was a significant relationship found between the ages of study participants and their academic performance mean scores ($t = 5.482$, $p < 0.01$) ref; table 4.4.1 with participants within ages 16-19 having higher academic performance than those within ages 12-15 ref; linear regression analysis table 4.4.5. This implies that as age increases the level academic performance increases. This is in-line with the study by Michael Sheard (2009) who found out that mature-age students achieved higher final

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

degree compared with younger age. An explanation for this may be that matured age students' often see education as a stimulant for change in their lives and feel a great pressure to succeed (Shanahan, 2006).

This study also found that males had a higher mean academic performance score (2.362) than females with a mean academic performance score (2.152), implying that male performed better academically than females among the study population T-test score of 2.242 and $p \leq 0.01$ ref; table 4.4.1 following a linear regression analysis (ref; table 4.4.5).This is not in agreement with a study by Afolayan *et al* (2015) who were of the opinion that there is no significant relationship between gender and academic performance. The difference between the two studies may be as a result of the instrument and method of accessing academic performance of the study participants.

Another major finding from the study was that a significant negative relationship was found between anxiety and academic performance of the study participant's p value < 0.05. This implies that as anxiety increases, academic performance of the adolescents reduces. This is in-line with the study by Esther *et al* (2013) who found a negative relationship between academic performance of adolescents and emotional problems. There was no relationship found between depression and academic performance of the study participants with a p value > 0.05. This finding is in-line with Dubana *et al* (2018) who found no significant relationship between depression and academic performance of university students in Zaria. Although, the finding is different from the results found by Lama. M.Al. Qaisy (2011), Afolayan *et al* (2013) who found that there is a relationship between depression and academic performance of adolescents. The difference in the findings may be as a result of the method used in assessing participants' academic performance and also depression.

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

Limitation of the study

1. The study was limited to 10 senior secondary schools in the study location, a higher number in schools used and a higher sample size may have revealed a better knowledge of findings.
2. This study followed a cross sectional study design which means that inferences about temporal precedence and causality cannot be made

5.2 CONCLUSION

This study explored the association between emotional problems and academic performance of in-school adolescent in ikpoba-okha Benin-city. This study among others revealed that male participants had a higher academic performance with a higher academic performance mean score than females. It also revealed that participants who were older in age performed better academically than those who were younger. A statistically significant relationship was seen between class population and academic performance.

The study was able to examine the association between depression and academic performance, anxiety and academic performance. A significant negative relationship was seen to have existed between Anxiety and Academic performance of in-school Adolescents. This means that as the level of anxiety increase, academic performance reduces. However, there was no significant association found between Depression and Academic performance of in-school Adolescents in this study

In conclusion, the major strength of this study is that it is one of the few studies in sub Saharan Africa that focus on the relationship between academic performance and emotional problems among adolescents, bringing out in details the gender and age differences in academic performance of the study participants.

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

5.3 RECOMMENDATION

1. There is need for continuous awareness on mental health problems in schools. This will help better understanding for the need to be mental wellbeing conscious.
2. Further studies should look at emotional problems among adolescents both in school and out of school
3. As class population being one of the precipitating factor for anxiety symptoms in this study, it will be of necessity for the ministry of education to put into law the expected average number of students in a class by getting a legalized rule guiding against over populated class rooms.
4. Mental health intervention services should be a major focus in schools, to help adolescents with emotional problems. The school and the society at large have a great role to play in reducing these emotional problems.

UNIVERSITY OF IBADAN LIBRARY

Word count: 1956

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

REFERENCES

Achenbach, T. M. (1991). *Integrative guide for the 1991 CBCL/4-18, YSR and TRF profiles.* Burlington: Department of Psychiatry, University of Vermont.

Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin, 101,* 213-232.

Adewuya, A.O, Ola, BA and Aloba, OO. (2007). Prevalence of major depressive disorders and validation of the Beck Depression Inventory among Nigerian Adolescent. *European Child & Adolescent psychiatry. Volume 16, Issue 5, pp 287-292*

Afolayan. J.A., Bitrus Donald, OlayinkaOnasoga, AdeyanjuBabafemi, Agama juan.A. (2013). Relationship between Anxiety and Academic Performance of Nursing Students, Niger Delta University, Bayelsa state, Nigeria, *Advances in Applied science Research* 4(5) 25-33.

AlokanFunmilolaBosede. (2010) Influence of Sex and Location on Relationship between Student problems and Academic Performance. *Social Science Journal* 5(4): 340-345.

American Psychiatric Association (1994). *Diagnostic and Statistical Manual of Mental Disorders*. (4th Ed.) Washington DC: American Psychiatric Association.

American Psychiatric Association (2000) *Diagnostic and Statistical Manual of Mental Disorders* 4th edition, Washington DC, American Psychiatric Association.

Angold, A., Costello, E. J., Messer, S. C., Pickles, A., Winder, F., & Silver, D. (1995). Development of a short questionnaire for use in epidemiological studies of depression in children and adolescents. *International Journal of Methods in Psychiatric Research, 5,* 237-249.

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

Angold, A., Erkanli, A., Silberg, J., Eaves, L., & Costello, E. J. (2002). Depression scale scores in 8- 17-year-olds: effects of age and gender. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 43,* 1052-1063.

Asendorpf, J. B. (1990). Beyond Social Withdrawal - Shyness, Unsociability, and Peer Avoidance. *Human Development, 33,* 250-259.

Axelson, D. A. &Birmaher, B. (2001). Relation between anxiety and depressive disorders in Childhood and adolescence. *Depression and Anxiety, 14,* 67-78.

Ajidahun B. O. (2011), Depression and Suicidal Attitude Among Adolescents in some Selected Secondary Schools in Lagos state, *Nigeria European journal of business and socialsciences,* vol. 1, no. 1, pp 23 – 31.

Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in socialpsychological research: Conceptual, strategic, and statistical considerations. *Journal ofPersonality and Social Psychology, 51,* 1173-1182.

Beck Anxiety Inventory. Available online htpp://www.nctsn.org/content/beck-anxiety-inventory-second-edition-bai.

Beck Depression Inventory. Available online htpp://www.nctsn.org/content/beck-depression-inventory-second-edition-bdi-ii.(Assessed 23/08/2015)

Bella-awusah, T., Ajuwon, A &Omigbodun,O, 2015. Effectiveness of brief school-based,group cognitive behavioural therapy for depressed adolescents in south west Nigeria. *Child and Adolescent Mental Health.*

Bentler, P. M. &Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88,* 588-606.

Burchinal, M., Nelson, L., & Poe, M. (2007). Growth curve analysis: An introduction to various method for analyzing longitudinal data. In Collins, A. W. (Ed.), *Monographs*

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

of the Sociaty forResearch in Child Development. [72], 65-87. Boston, Blackwell Publishing.

Bennet, A.E., Power, T, J., Eiraldi, R. B., Leff, S. S., & Blum, N. J. (2009). Identifying learning problems in children evaluated for ADHD: the Academic Performance Questionnaire. *Pediatrics, 124*(4), e633-e639. Doi: 10.1542/peds.2009-0143

Buss, A. H. &Plomin, R. (1984). *Temperament: Early developing personality traits*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Campbell, D. T. & Fiske, D. W. (1959). Convergent and discriminant validation by the multitraitmultimethod matrix. *Psychological Bulletin, 56,* 81-105.

Cannon, M. F. & Weems, C. E. (2006). Do Anxiety and Depression Cluster into Distinct Groups?: A test of tripartite model predictions in a community sample of youth. *Depression and Anxiety,23,* 453-460.

Chorpita, B. F., Albano, A. M., & Barlow, D. H. (1998). The structure of negative emotions in a clinical sample of children and adolescents. *Journal of Abnormal Psychology, 107,* 74-85.

Claudia fouillouxmorales, virginiabarragánpérez, silviaortizleón, aurora jaimesmedrano, María ester urrutiaaguilar, rosalindaguevara-guzmán. (2013), Depressive symptoms and academic Performance in medical students, salud mental; 36:57-63.

Cicchetti, D. & Cohen, D.J. (2006). Development and Psychopathology. *Developmental Psychopathology* (2nd ed., pp. 1-23). Hoboken, New Jersey: John Wiley & Sons, Inc.

Cicchetti, D. &Toth, S. L. (1998). The Development of Depression in Children and Adolescents. *American Psychologist, 53,* 221-241.

Clark, C., Rodgers, B., Caldwell, T., Power, C., &Stansfeld, S. (2007). Childhood and Adulthood Psychological ill Health as Predictors of Midlife Affective and Anxiety

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

disorders - The 1958 British Birth Cohort. *Archives of General Psychiatry, 64*, 668-678.

Clark, L. A. & Watson, D. (1991). Tripartite Model of Anxiety and Depression– Psychometric Evidence and Taxonomic Implications. *Journal of Abnormal Psychology, 100*, 316-336.

Costello, E. J., Mustillo, S., Erkanli, A., Keeler, G., &Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Archives of General Psychiatry*, 60, 837-844.

Dabana. A, Gobr A. A. (2018). Depression among students of a Nigeria University: Prevalence and academic correlates. *Arch Med Surg*, 3:6-10

Esther. F. Akinjola, AugustinaDubemNwajei. (2013). Test Anxiety, Depression and Academic Performance: Assessment and Management using Relaxation and Cognitive Restructuring Techniques. *Journal of psychology* vol4, NO.6, 18-24

Gul Arslan, UnalAyranci, Alaettin Uns. (2009). Prevalence of Depression, its Correlates Among Students, and its effect on Health-related Quality of Life in a Turkish university, upsala*journal of medical sciences;*114: 170_177.

George C. Patton, Carolyn Coffey, Helena Romaniuk, Andrew Mackinnon, john b carlin, Louisa degenhardt, Graig A. Olsson, Paul Moran. (2014). Prognosis of Common Mental disorders in Adolescent.

Josephat M Chinawa, Pius C Manyike, Herbert A Obu1, AEbeleAronu, Odetunde Odutola1, Awoere T Chinawa. (2015). Depression among Adolescents attending Secondary Schools in South East Nigeria. *Annals of African Medicine.*

Khadija Muhammed,Ikume Gerald Terna, Daniel Benjamin Saanyol(2018). The Relationship between Depression and Academic Performance among Undergraduate

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

Students of Benue State University Makurdi, Nigeria.*International Journal of Education and Evaluation* ISSN 2489-0073 Vol. 4 No. 6.

Khalid, M. (2003). The Relationship of Personality Factors and Academic Achievement in Pakistan (Unpublished PhD Disseration). *Institute of Professional Psychology*, Bahria University, Karachi, Pakistan.

Kish, Leslie. (1965). *Survery Sampling*. New York: John Wiley and Son, Inc.

Lama.M.al. Qaisy. (2011). The Relation of Depression and Anxiety in Academic Achievement Among group of University Students. *International Journal of psychology and counseling* vol.3 (5), pp. 96-100.

Matthew Owens, Jim Stevenson, Julie A. Hadwin and Roger Norgate. (2012). Anxiety and Depression in Academic Performance, *school psychology international*, vol. 33:433.

Michael Sheard (2009). Hardiness Commitment, Gender and Age Differentiate University Academic Performance. *British Journal of Educational Psychology* vol.79, 189-204.

National Bureau of Statistics (statistical report on women and men in Nigeria), 2015. *www.googlesearch.com*

Okogu J. O., Osah Mark and Umudjere, S. O. (2016). Examination Anxiety and Students Academic Performance: Social Studies Approach**.** *International Journal of Educational PolicyResearch and Review* Vol.3 (1), pp. 1-5.

Oladele. J.O. (2004). Fundamentals of Educational Psychology, *Handbook for educational students and teachers* Fifth Edition.

Omigbodun O. O.(2004). Psychosocial issues in a child and adolescent psychiatric clinic population in Nigeria. *Social Psychiatry and Psychiatric Epidemiology* Vol 39 No 8, 667-72

Omojola O.C. (2015) Prevalence of Emotional Problems and its Correlation with Class Repititionamong Schooling Adolesents in Ibadan Nigeria.A Thesis Submitted to The

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

Centre for Child and Adolescent Health, University Of Ibadan In Partial Fulfillment of The Requirement for Award of Masters of Science degree In Child and Adolescent Mental Health (unpublished)

Rambha Pathax, Ravic Sharma, UC Parvan, Gupta BP, RishikOjha, NkGoel (2011). Behavioral and Emotional Problems in School going Adolescent. *The Australasian Medical Journal* 4(1), 15-21.

Rey, J.M., Bella-Awusah, T.T., Jing, L. (2012). Depression in Children and Adolescents. In Rey,J.M.(ed). IACAPAP e-Textbook of Child and Adolescent Mental Health. Geneva: *International Association for Child and Adolescent Psychiatry and Allied Professions. Chapter E1:1-8.*

Sangowawa, A.O., Owoaje, E.T., Feseru, B., Ebong, I.P., Adekunle, B.J. (2009). Sexual Pratices of Deaf and Hearing Secondary School Students. *Annals of Ibadan Postgraduate Medicine.*7(1), 26-30.

Shafquat S.A.S. (2009). "Impact of teachers' behaviour on the academic achievement of university students". Journal of college teaching & learning-January/Feburary.

Shanaham, M. (2006). Being that Bit Older, Mature Students' Experience of University and Healthcare Education. *Occupational Therapy International.*7,153-162.

Taraka. K., Rama Rao and M.V.R. Raju. (2012), Early Adolescents: Emotional and Behavioral Problems. *Journal of the Indian academy of applied psychology*. 38(1),34-39.

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

APPENDIX ONE

INFORMED CONSENT FORM

EMOTIONAL PROBLEMS AND ITS ASSOCIATION WITH ACADEMIC PERFORMANCE AMONG IN-SCHOOL ADOLESCENT IN IKPOBA OKHA BENIN-CITY

I am a student of the Centre for Child and Adolescent mental health, University of Ibadan. The purpose of this study is to find the association between emotional problems (Depression and Anxiety) and academic performance among in-school Adolescents in ikpobaokha Local Government Area.

In the course of this study, you will be asked some personal and family related questions as well as symptoms that may suggest emotional problem; you will also be asked to complete some series of questionnaire.

Your participation in this research will be at no cost, but if we discover any sign of emotional problem, you will benefit from psychotherapy sessions and appropriate referral where and when necessary.

All questionnaires to be used will be coded in such a way as to provide confidentiality of information gotten from participant. There will be no name writing on any of the research instruments.

Note that your participation in this research is voluntary and you have the right to withdraw at any time if you choose to, it won't affect your interaction with your teachers, colleagues or interviewers in any way. However, I will appreciate your assistance in responding and taking part in the study.

Consent: Now that the study has been well explained to me and I understand fully all that is written therein and the content of the process, I will be willing to participate in the study.

_____ _____

Participant signature Date interviewed

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

APPENDIX TWO

TEACHER CONSENT FORM

Good day and thank you very much for your time.

I am a student of the department of Child and Adolescent Mental Health, University of Ibadan.

The purpose of this study is to identify the association between Emotional problems and Academic Performance of Adolescent in senior secondary schools.

In the course of this study, you will be asked questions relating to the Academic Performance of students in your class who will be recruited into this study. This will help access the academic performance of each student to be recruited. In total we expect to interview a couple number of students in selected secondary schools in ikpobaokha local government area.

Your participation in this research will not cost you anything, but you will be expected to be involved in the research for about 15 to 30 minutes

All information collected in this study will be confidential and no name will be used or recorded. This cannot be linked to you in anyway and your name or identifier will not be used in any publication or reports from this study.

Your participation in this research is entirely voluntary and if you choose not to participate it will not affect you in any way.

However, your participation will be highly appreciated

_____

Teacher signature & Date

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

APPENDIX THREE

Beck Anxiety Inventory (BAI)

Below is a list of common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by each of the symptom in the last one month, including today, marking an X in the degree of disturbances in the column of cells on the right cell.

No.	Symptoms	How much you were bothered			
		Not at all 0 **It did not bother at all**	**Mild 1** **It bothered a little**	**Moderate 2** **It bothered a lot but I could handle it**	**Severe 3** **I could almost not handle it**
1	Numbness or tingling				
2	Feeling hot				
3	Weakness in legs				
4	Not able to relax				
5	Fear of the worst happening				
6	Dizzy				
7	Heart beating fast or heart racing				
8	Restless				
9	Afraid or terrified				
10	Worried or tense				
11	Feeling of choking				
12	Shaky or trembling hands				
13	Trembling				
14	Fear of losing control				
15	Difficulty in breathing				
16	Fear of dying				
17	Fearful frightened				
18	Discomfort in the stomach or indigestion				
19	Faint or weak				
20	Feeling hot in the face				
21	Sweat (not due to heat)				
	Column total				

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

APPENDIX FOUR

Beck's depression inventory

Please choose one statement from among the groups of statement that best describe how you have been feeling over the past 2 weeks including today. Indicate your choice by circling the number next to the statement.

1	0 I do not feel sad. 1 I feel sad. 2 I am sad all the time and I can't snap out of it. 3 I am so sad and unhappy all the time.
2	0 I am not particularly discouraged about the future. 1 I feel discouraged about the future. 2 I have nothing to look forward to. 3 I feel the future is hopeless and that things cannot improve.
3	0 I do not feel like a failure. 1 I feel I have failed more than the average person. 2 As I look back on my life, all I can see is a lot of failures. 3 I feel I am a complete failure as a person.
4	0 I get as much satisfaction out of things as I used to. 1 I don't enjoy things the way I used to. 2 I don't get real satisfaction out of anything anymore. 3 I am dissatisfied or bored with everything.
5	0 I don't feel particularly guilty. 1 I feel guilty a good part of the time. 2 I feel quite guilty most of the time. 3 I feel guilty all of the time.
6	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	0 I don't feel disappointed in myself. 1 I am disappointed in myself. 2 I am disgusted with myself. 3 I hate myself.
8	0 I don't feel I am any worse than anybody else. 1 I am critical of myself for my weaknesses or mistakes. 2 I blame myself all the time for my faults. 3 I blame myself for everything bad that happens.
9	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.

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

10	0 I don't cry any more than usual. 1 I cry more now than I used to. 2 I cry all the time now. 3 I used to be able to cry, but now I can't cry even though I want to.
11	0 I am no more easily angered or irritated by things than I ever was. 1 I am slightly more easily angered or irritated now than usual. 2 I am quite annoyed or irritated a good deal of the time. 3 I feel annoyed or irritated all the time.
12	0 I have not lost interest in other people. 1 I am less interested in other people than I used to be. 2 I have lost most of my interest in other people. 3 I have lost all of my interest in other people.
13	0 I make decisions about as well as I ever could. 1 I put off making decisions more than I used to. 2 I have greater difficulty in making decisions more than I used to. 3 I can't make decisions at all anymore.
14	0 I don't feel that I look any worse than I used to. 1 I am worried that I am looking old or unattractive. 2 I feel there are permanent changes in my appearance that make me look unattractive. 3 I believe that I look ugly.
15	0 I can work about as well as before. 1 It takes an extra effort to get started at doing something. 2 I have to push myself very hard to do anything. 3 I can't do any work at all.
16	0 I can sleep as well as usual. 1 I don't sleep as well as I used to. 2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep. 3 I wake up several hours earlier than I used to and cannot get back to sleep.
17	0 I don't get more tired than usual. 1 I get tired more easily than I used to. 2 I get tired from doing almost anything. 3 I am too tired to do anything.
18	0 My appetite is no worse than usual. 1 My appetite is not as good as it used to be. 2 My appetite is much worse now. 3 I have no appetite at all anymore.
19	0 I haven't lost much weight, if any, lately. 1 I have lost more than 2k.g. 2 I have lost more than 5k.g. 3 I have lost more than 7k.g.
20	0 I am no more worried about my health than usual. 1 I am worried about physical problems like aches, pains, upset stomach, or constipation.

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

	2 I am very worried about physical problems and it's hard to think of much else. 3 I am so worried about my physical problems that I cannot think of anything else.
21	0 I have not noticed any recent change in my interest in the opposite sex. 1 I am less interested in the opposite sex than I used to be. 2 I have almost no interest in the opposite sex. 3 I have lost interest in the opposite sex completely.

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

APPENDIX FIVE

Serial Number: __ __ __

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

SOCIO-DEMOGRAPHIC QUESTIONNAIRE

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.

SECTION I

Personal Information

1. Name of School:

2. Class:

3. Where do you live? (Address of Present Abode):

4. What is your date of birth? Date of Birth: _____ _____ _____

Day Month Year

5. How old are you? ____

6. Are you a boy or a girl? (a) Boy (b) girl

7. Do you practice any religion? No Yes

8. Please write down the exact place you attend for worship

(a) Islam (b) Orthodox Christian (c) Pentecostal Christian (d) Traditional religion (e) Other

9. How much does the teaching of your religion guide your behavior?

(a) Very much (b) much (c) Just a little (d) Not at all

10. How much does the teaching of your religion guide your family life?

(a) Very much (b) much (c) Just a little (d) Not at all

Family Information

11. Family Type:

(a) Monogamous (b) Polygamous

12. Number of Mother's Children:

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

13. Number of Father's Children:

14. What is your position among your father's children?

15. What is your position among your mother's children?

16. Marital Status of Parents:

(a) Married (b) Separated/Divorced (c) Father is dead (d) Mother is dead (e) Mother & Father are dead

17. How many husbands has your mother had?

18. Who do you live with presently?

(a) Parents (b) Mother (c) Father (d) Grandparents (e) Grandmother

(f) Grandfather (g) other [please specify] _____

19. Who brought you up from your childhood?

(a) Parents (b) Mother (c) Father (d) Grandparents (e) Grandmother

(f) Grandfather (g) other [please specify] _____

20. How many different people have you left your parents to live with from your childhood? ____

21. If more than one person, list the people, time spent and whether experience was good or bad?

Person lived with	from which age to which age	Experience (good or bad)
_____	_____	_____
_____	_____	_____
_____	_____	_____

22. Do you do any kind of work to earn money before or after school? Yes No

23. If yes, please describe what you do _____

24. Level of Father'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

25. Occupation of Father: [Write the exact occupation] _____/ I do not know

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

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

27. Occupation of Mother: [Write in the exact occupation] _____/ I do not know

28. Do you like your family? Yes No

29a.If Yes, Why? _____

29b. If No, Why? _____

School-Related Questions

30. Do you like your school? Yes/ No

31. How many children are there in your class? ___

32. Do you do well academically? Yes No

33a. If Yes, explain_____

33b. If No, explain_____

34. Are you having difficulties with your teachers? Yes No

35. If yes, what sort of difficulties? _____

36. Do you have guidance counsellors in your school? Yes No

37. Have you ever gone to see them? Yes No

38. If yes, what did you go to see them for? _____

39. If you have a problem at school would you go to the guidance counselor for help? Yes No

40a. If yes, why would you go?

40b. if no, why not?

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

APPENDIX SIX

Academic Performance Questionnaire

Please read each item carefully and use the response options below to complete the questionnaire

Original Items	Modified Items	Response
1. Compared with the average students in your class, how well is this child able to read orally?		
2. Compared with the average students in your class, how well is this child able to comprehend what he or she reads?		
3. Compared with the average students in your class, how well is this student able to perform maths calculation?		
4. Compared with average students in your class, how well is this student able to perform maths word problems?		
5. Please estimate the percentage of written maths work completed (regardless of accuracy) relative to classmates.		
6. Please estimate the accuracy of completed written maths work.	Compared with the average students in your class, how well is the child able to write short stories or essays?	
7. Compared with the average students in your class, how well is the child able to write short stories or essays?	Compared with the average students in your class, how good is this child in science subjects?	
8. Please estimate the percentage of written language arts work completed (regardless of accuracy) relative to classmates.	Compared with the average students in your class, how good is this child in Arts subjects?	
9. Please estimate the accuracy of completed written language arts work.	Compared with the average students in your class, how good is this child in Social Sciences subjects?	
10. Please estimate the percentage of homework completed	Regarding the performance ofthechild in class, relative to others, what is the general comment of the school principal?	

Response options

1 indicates well above average;

2 At or somewhat above average;

3 Somewhat below average

4 Well below average

5 Extremely poor

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

APPENDIX SEVEN

MINISTRY OF HEALTH

EDO STATE

Ring Road,

P.M.B. 1113
Benin City. Edo State
Nigeria

Tel.....

Fax.....

E-Mail.....

Our Ref: HM.1208.697
Your Ref:

3rd January, 2019

Miss Aiwerioghene Enogieru Stella-Rose
Centre for Child Health and Adolescent
Mental Health,
University of Ibadan.
Ibadan Nigeria.

RE: REQUEST FOR ETHICAL APPROVAL ON "EMOTIONAL PROBLEM AND ITS ASSOCIATION WITH ACADEMIC PERFORMANCE AMONG IN-SCHOOL ADOLESCENTS IN IKPOBA-OKHA LOCAL GOVERNMENT AREA, EDO STATE".

I am directed to acknowledge the receipt of your request on the above stated matter. Consequently upon the review of your proposal and recommendations by the state ethical clearance committee, you are hereby given approval by the Honorable Commissioner to Conduct the research on **"A PROPOSAL TO CONDUCT A STUDY ON "EMOTIONAL PROBLEM AND ITS ASSOCIATION WITH ACADEMIC PERFORMANCE AMONG IN-SCHOOL ADOLESCENTS IN IKPOBA-OKHA LOCAL GOVERNMENT AREA, EDO STATE"**

You are to ensure confidentiality of the respondents and make available to the library of the Ministry of Health, a copy of your research findings

Accept the assurances of the highest esteem of the Honourable Commissioner

Dr. Mrs. H.I. Eboreime
(Director Medical Services)
For: Honourable Commissioner.

UNIVERSITY OF IBADAN LIBRARY

APPENDIX EIGHT

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

EDO STATE
MINISTRY OF EDUCATION
P.M.B. 1058
BENIN CITY, NIGERIA
moe.edostate@gmail.com

OUR REF: STT./SEC.24/VOLI/119

9th January, 2019.

Miss Aiwerioghene Stella-Rose Enogieni,
Centre for Child and Adolescent,
Mental Health,
University Of Ibadan,
Ibadan.

RE: REQUEST TO CARRY OUT RESEARCH IN SCHOOLS IN IKPOBA-OKHA LOCAL GOVERNMENT AREA.

I am directed to refer to the above subject matter and inform you that the Honourable Commissioner has graciously granted approval to you to visit schools (public and private) according to ward's location of schools to carry out study on emotional problems and its Association with Academic performance among in-school Adolescents.

2. The Ministry may wish to know the outcome of your research.
3. Please, accept the assurances of the Honourable Commissioner's warmest regard.
4. Compliments of the season.

Festus Eribo (Mr.)
For: Honourable Commissioner

UNIVERSITY OF IBADAN LIBRARY

APPENDIX NINE

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

Pidgin English Version Beck Anxiety Inventory (BAI)

You go see below some signs of anxiety, abeg read them well well. You go talk how much these signs dey worry you for the last one month and today. How you go take fill this questionnaire na make you just write X for under the item(0-3) as the signs don take worry you.

No.	Symptoms	How much you deyworried			
		Not at all 0 **He nor dey bother me at all**	**Mild 1** **He dey bother me small small**	**Moderate 2** **He dey bother me well well but I fit handle am**	**Severe 3** **I nor fit handle am at all**
1	You nor dey feel anything for body(even if person touch you)				
2	You dey feel heat				
3	Your leg weak				
4	You nor dey fit rest				
5	You dey fear say bad thing wan happen				
6	You dey feel say your head light				
7	Your heart dey beat fast				
8	You nor dey fit rest				
9	You dey fear				
10	you dey worry				
11	You dey feel say something block your throat				
12	Your hand dey shake				
13	You dey shake				
14	E dey be like say you nor fit control yourself				
15	You nor fit breathe				
16	You dey fear say you go die				
17	You dey fear everytime				
18	Your food nor dey digest well				
19	Faint				
20	You dey feel hot for face				
21	You dey sweat (not because of heat)				
	Column total				

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

APPENDIX TEN

Pidgin English Version Beck's Depression Inventory

Abeg choose one statement from the statement way them write for down the one way show how you don dey feel over the past 2 weeks and today. The only thing wey you go do na to circle the number weydey near the statement.

1	0 I nor dey feel sad. 1 I dey feel sad. 2 I dey feel sad everytime I nor fit even come out of am. 3 I dey sad and unhappy eveytime.
2	0 I nor dey discouraged about the future. 1 I deydiscouraged about the future. 2 I nor get anything wey I dey look up to. 3 I feel say nothing deythe future and things nor go improve.
3	0 I nor dey feel like failure. 1 I feel I have failed more than the average person. 2 As I look back on my life, all I can see is a lot of failures. 3 I feel I am a complete failure as a person.
4	0 I dey get satisfaction from things wey I dey do. 1 I nor deyenjoy things the way I be dey enjoy dem. 2 I nor dey get real satisfaction from anything again. 3 I nor deysatisfied with everything.
5	0 I nor dey feel guilty. 1 sometimes I dey feel guilty. 2 I dey feel guilty well well. 3 Everytimena him I dey feel guilty.
6	0 I nor dey feel say demdey punish me. 1 I dey feel say demdey punish me. 2 I dey want make dem punish me. 3 I feel say dem they suffer me.
7	0 I dey happy with myself. 1 I dey sad with myself. 2 I dey disappointed with myself. 3 I nor like myself at all.
8	0 I nor dey feel say i bad pass anybody. 1 I dey blame myself sometimes for wetin I do. 2 I dey blame myself for everytime for wetin happen. 3 for every bad wey happen I dey blame myself.
9	0 I nor dey think say make I kill myself. 1 Idon think say make I kill myself, but I never do am. 2 I go like kill myself. 3 If I get any chance I go kill myself.
10	0 I nor dey cry dan normal. 1 I dey cry now pass before. 2 I dey cry everytime. 3 I be dey cry before, but now I nordey fit cry even if cry dey hungry me.
11	0 I nordey vex well well like before. 1 I dey quick vex now.

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

	2 I dey vex well well now. 3 I dey vex everyday and everytime now.
12	0 I still like other people. 1 I like other people small. 2 I nor like other people. 3 I nor like other peole at all.
13	0 I dey decide wetin I want do. 1 I dey sideline some decisions. 2 I nor dey fit decide wetin I wan do. 3 I nor dey fit decide wetin I wan do at all.
14	0 I dey feel say I ugly. 1 I deyworried say I be like old person and I nor fine. 2 I feel say somethings done change for my body weydey make me ugly. 3 I feel say I ugly.
15	0 I fit do anything wey I wan do. 1 Before I work I dey think am. 2 Before I do work I need to push myself well well. 3 I nor fit work at all.
16	0 I fit sleep. 1 I nor nordey sleep well like before. 2 I dey wake up 1-2 hours unlike before and E go hard before I sleep again. 3 I dey wake up many times and I nor dey fit sleep again.
17	0 I nor dey tire pass before. 1 I dey tire pass before. 2 I dey tire when I dey do anything. 3 I tire so teyI nor fit anything.
18	0 I get appetite. 1 I nor get appetite like before. 2 My appetite worse now. 3 I nor get appetite at all anymore.
19	0 I never lose many weight. 1 I don lose more than 2k.g. 2 I don lose more than 5k.g. 3 I don lose more than 7k.g.
20	0 I nor dey worried about my health dan before. 1 I deyworried about physical problems like aches, pains, upset stomach, or constipation. 2 I dey worry well wellabout physical problems and E dey hard to think of other things. 3 I deyso worried about my physical problems so teyi nor fit think of anything.
21	0 I never see any recent change for my likeness for the opposite sex. 1 I get less likeness for the opposite sex than before. 2 I get almost no likeness for the opposite sex. 3 I nor get likeness for the opposite sex at all.

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

APPENDIX ELEVEN

Serial Number: __ __ __ __

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

SCHOOL HEALTH QUESTIONNAIRE IN PIDGIN ENGLISH

Abeg write the answer to the question or make you draw circle where it applies to you. This one no be examination, na just to sabi little information about you and your health.

SECTION I

Questions wey concern you

1. Which school you dey go:

2. Which class you dey

3. Where you dey live? (Na where you dey live now make you put):

4. For which date, month and year dem born you? Date of Birth: _____ _____ _____
Day Month Year

5. Wetin be your age? _____

6. You be boy abina Girl? (a) Boy (b) Girl

7. You dey practice any religion? (a) No (b) Yes

8. Abeg for which place you dey worship

(a) Islam (b) Orthodox Christian (c) Pentecostal Christian (d) Traditional religion (e) other

9. Your religion teaching, how well he dey guide how you dey behave?

(a) Plenty wella (b) Plenty (c) Na just small (d) e no guide me at all at all

10. Your religion teaching, how well he dey guide how your family life?

(a) Plenty wella (b) Plenty (c) Na just small (d) e no guide me at all at all

Question wey concern your family

11. Shey your Papa marry one wife abi e plenty pass one?

(a) Na one wife he marry (b) My Papa marry more than one wife o

12. How many pikin your Mamaget?

13. How many pikin your Papa get?

14. Which position you dey among the pikinwey your Papa get?

15. Which position you dey among the pikinwey your Mamaget?

16. Wetin be the marital status of your Mamaand Papa?

(a) them still dey married (b) them don leave each other (c) Papa don die (d) Mama don die (e) Papa and Mama don die

17. How many husband your mama get?

18. Who you dey follow live for house?

(a) Papa and Mama (b) Mama (c) Papa (d) Grandpapa and Grandmama (e) Grandmama

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

(f) Grandpapa (g) You get another person, abeg write im name here _____

19. Who you follow stay from pikin?
(a) Papa and Mama (b) Mama (c)Papa (d) Grandpapa and Grandmama (e) Grandmama
(f) Grandpapa (g) You get another person, abeg write im name here _____

20. How many people you don leave your mama and papa go stay with from pikin? _____

21. if the people you don go stay with pass one and if them treat you bad or good, abeg write ham for the space below

Person wey you live with	from which age to which age	Experience (good of bad)
_____	_____	_____
_____	_____	_____
_____	_____	_____

22. You dey do any work after or before school? Yes No

23. If your answer na Yes, abeg explain wetin you dey do _____
24. Wetin be level of you papa education?
(a) He no go school (b) Koranic school (c) Primary School (d) Secondary school

(e) Post-Secondary (Non-University) (f) University Degree and above (g) I no sabi
25. Wetin your papa dey do: _____/ I no know
26. Wetin be level of you mama education?
(a) He no go school (b) Koranic school (c) Primary School (d) Secondary school

(e) Post-Secondary (Non-University) (f) University Degree and above (g) I no sabi
27. Wetin your mama dey do: _____/ I no know
28. You like your family? Yes No
29a. Ifna yes, why you like them? _____
29b. If na No, why you no like them? _____

Questions wey concern your school
30. You like your school? Yes No
31. How many of unadey class? _____
32. You dey do well for school? Yes No
33a. If yes, abeg explain _____
33b. If No, abeg explain _____
34. You get any issue with your teacher? Yes No
35. If your answer na yes, which issue? _____
36. Una get guidance counsellors for una school? Yes No
37. You don go see them before? Yes No
38. If your answer na yes, wetin you go see them for? _____
39. if you get any issue for school, you go go see una guidance counsellor? Yes No
40a. If your answer na yes, why you go go see them? _____
40b. If your answer na No, why you no go see them? _____

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

UNIVERSITY OF IBADAN LIBRARY

APPENDIX TWELVE

Translated Academic Performance Questionnaire

Abeg read all the items well make you sofery choose your answer

Items	Response
1. Compared with the average studentsweydey your class how well this pikin fit read with mouth?	
2. Compared with the average studentsweydey your class, how well is this pikin fitunderstand wetinim read?	
3. Compared with the average students weydey your class, how well is this pikin fit solve maths	
4. Compared with average studentsweydey your class, how well this pikin fit domaths word problems?	
5. Abeg to which extent this pikin fit completed impercentage of written mathswork.?	
6. Compared with the average studentsweydey your class, how well is the pikin fit write short stories?	
7. Compared with the average students weydey your class, how well this pikindey for science subjects?	
8. Compared with the average students weydey your class, how well thispikindey for Arts subjects?	
9. Compared with the average students weydey your class, how well thisdey for Social Sciences subjects?	
10. wetin be the general comment of school principal concerning this pikin?	

Wetin you go write for the empty box

1 well above average;

2 Average;

3 Somewhat below average

4 Well below average

5 Extremely poor

UNIVERSITY OF IBADAN LIBRARY

AFRICAN DIGITAL HEALTH REPOSITORY PROJECT