CHILDHOOD TRAUMA, COPING AND MENTAL HEALTH PROBLEMS AMONG ADOLESCENTS IN SECONDARY SCHOOLS IN IBADAN

BY

EZUGWU EBUBECHUKWU D.

MATRIC NO: 163713

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CERTIFICATION

I certify that this research project was written by Miss EzugwuEbubechukwu D. from the centre for Child and Adolescent Mental Health, University of Ibadan.

_____ _____

Supervisor Date
Dr. Tolulope Bella-Awusah
Child and Adolescent Mental Health
Department of Psychiatry
College of Medicine
University of Ibadan.

_____ _____

Supervisor Date
Dr. Cornelius Ani
Centre for Psychiatry
Imperial College London.

_____ _____

Supervisor Date
Dr. B. Adedokun
Department of Epidemiology and Medical Statistics,
University of Ibadan.

DECLARATION

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

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Miss EzugwuEbubechukwu D.

ABBREVIATIONS

BAI	–	Beck Anxiety Inventory
BDI	–	Beck Depression Inventory
CAMH	–	Child and Adolescent Mental Health
CTCRS	–	Childhood Trauma Chart Review Scale
DSM	–	Diagnostic Statistical Manual
LMIC	–	Low & Middle Income Countries
NCTSN	–	National Child Traumatic Stress Network
SPSS	–	Statistical Package of Social Sciences
WHO	_	World Health Organization

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ABSTRACT

Background: Childhood trauma is an unfortunate reality for many children today. Many children in low and middle income countries experience multiple traumatic events as a result of several risk factors. Childhood traumatic experiences remain largely hidden and unreported because of fear and stigma and the social rejection. Childhood experiences greatly impact mental health.

Objective: The overall aim of the study is to explore the association between childhood trauma, coping and different mental health problems among adolescents in Ibadan, Nigeria.

Methods: This study was a descriptive cross sectional study conducted in four private and public secondary schools in Ibadan North Local Government Area. Simple Random Sampling Technique was used to select a total of 341 students from the four secondary schools. The age range of the study participants was 13 to 17 years of age. A socio demographic questionnaire (SDQ), Childhood Trauma Questionnaire (CTQ), Brief Cope Scale, Beck Depression Inventory (BDI) and Beck Anxiety Inventory(BAI) was used to collect data from 340 secondary school adolescents.

Results: The mean age of respondents was 14.67 years (SD = 1.33). Participants from public schools (52.4%) were more than the participants from private school (47.6%). Male adolescents (61.9%) and female adolescents (38.1%) participated in the study. Majority of the adolescents (61%) reported death of a very close friend or family member, many adolescents(59.9%) also reported extremely ill or injured, while (32.9%) reported other major problems, major problem between parents/divorce was reported by (19.7%) of the adolescents, traumatic sexual experience was reported by (9.6%) of the adolescents, the least reported trauma was victim of violence which was reported by (6.1%) of the adolescents. More males (83.3%) than females (16.7%) reported being victim of violence, this difference was statistically significant (p = 0.028).

The prevalence of anxiety was 20.5% and depression 38.9%. Traumatic sexual abuse was significantly associated with anxiety (p = 0.001), Adolescents who reported traumatic sexual experience reported higher anxiety compared to their counterparts who did not.

Most of the adolescents engaged in active coping (65.7%), while substance use was the least reported means of coping (16.9%). Self-blame as a coping strategy predicted anxiety while venting and self-blame predicted depression among the study participants.

Conclusion: Adolescentsin this study reported childhood trauma and mental health problems like anxiety and depression. Adolescents who experienced other major problems (continuous violence, bullying or physical abuse, serious and present family discord, presence of chronic illness) had higher risk of anxiety and depression. Teachers, clinicians and other mental health professionals should be trained and provided with adequate resources to help and guide the students. Positive coping styles should be encouraged and the negative coping styles should be discouraged.

Keywords: Childhood Trauma, Coping, Anxiety, Depression, Adolescents.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Childhood trauma is an unfortunate reality for many children today (Wood, 2018). Childhood experiences greatly impact mental health (Oladeji,Makanjuola and Gureje,2010;Bach and Louw,2010). Early trauma exposure is well known to significantly increase the risk for a number of psychiatric disorders in adulthood, although many who had childhood trauma exposure are quite resilient (Khoury et al., 2010). Survivors of trauma often find it difficult to develop an understanding of why and how the trauma occurred, and of why they should be a victim (Kaminer and Eagle, 2010). People who are not able to overcome childhood trauma often waste their human potential on drug and alcohol abuse, end up in prison, uneducated, or develop other self-destructive behaviors. People with childhood trauma also experience poor learning and social skills (Schaaf, 2012).

Condly (2006) says: "Traumatic events effect great damage, not so much because of the immediate harm they cause but also because of the lingering need to re-evaluate one's view of oneself and the world."

There is a significant link between trauma and general social functioning- individuals who have not experienced trauma are likely to have better psychological and social functioning, while those with a history of trauma are at risk of poor psychological and social functioning (Davidson et al., 2009). No age group is immune from experiencing trauma and dealing with the effects (Khan, 2006). Children are an important group in the world population, therefore discovering the different mental health problems they are susceptible to is very relevant (Magroob et al., 2004). Twenty percent of people that go through traumatic events will develop mental health problems and children are at an even higher risk (Breslau et al., 1998; Apolone et al., 2002). Studies show that

specific mental health disorders are associated with childhood traumatic events rather than the traumas that occur later in life (Yen et al., 2002; Pole et al., 2007).

Childhood trauma may include sexual, physical and emotional abuse, neglect, war, school violence, loss of loved one, death and emotional dysregulation. General emotional dysregulation plays a huge role in the development of mental health problems for children that experienced abuse or maltreatment (Wanner et al., 2012). Studies also indicate that multiple childhood trauma may lead to the development of mental health disorders in childhood or even later in life. Many mental health problems begin in childhood or adolescence. Early assessment, detection and intervention may help to reduce the occurrence of primary disorders and prevent the onset of secondary disorders (Kessler et al., 2007).

Coping in response to stress is very important for adaptive functioning. Different coping strategies can be influenced by different environmental factors early in life, including the type of trauma experienced (Rachel et al., 2018). There are different coping strategies, though one or more styles of coping may be better than other styles (Mefoh et al., 2015).

1.2 Statement of the problem

Childhood traumatic experiences remain largely hidden and unreported because of fear and stigma and the societal rejection (Jacqueline, 2015). It is estimated that approximately 25% of children and adolescents will have experienced trauma by age 16 years (Costello et al., 2002). About 80% of adolescents worldwide have been exposed to likely trauma of violence and abuse (Atwoli et al., 2007). Childhood adversity is one of the reasons for increase in the numbers of street children seen in South African towns (Maepa et al., 2015). Many children in low and middle income countries (LMIC) experience multiple traumatic events as a result of several risk factors, including

community violence, extreme poverty, different forms of child abuse and internal displacement (Williamson et al., 2018).

Neglecting or not paying attention to childhood trauma is a major cause of the most disturbing problems faced by communities (Gerrity and Folcarelli, 2008). The minor domestic abuse and neglect of our children is overlooked and untreated, that needs to change (Finkestein, 2013). Even the increased awareness on traumatic experiences in children, little time and attention has been given to their socio-emotional function and learning activities in school (Tishelman et al., 2010). Young children who experienced maltreatment are considered to have low threshold for tolerance, get angry easily and are not compliant in pre-school setting (Egeland et al., 1983). Children who experienced traumatic events are more likely to drop out of schools (Boden et al., 2007; Cahil et al., 1999).

Traumatic experiences greatly affect personal functioning, interpersonal relationships and employment (Swain et al., 2017).

1.3 Justification for the study

Studies have shown that about 50% of mental health disorders start in adolescence (Kessler et al., 2007). Many children in low and middle income countries (LMIC) are exposed to trauma (Williamson et al., 2018). A population of children and adolescents from LMIC have higher rates of conflict and discord, ethnic/cultural differences and society or family dysfunction and are at greater risk of experiencing trauma (Atwoli et al., 2013). Early childhood and adolescence are major developmental periods when children and adolescents are susceptible to traumatic experiences (Ford, 2012). It is very important to address the mental health status of young people (Swain et al., 2017). Coping skill is very important for students' educational, professional and personal development (Yussuf et al., 2018). Identifying a traumatized child at school can be

difficult for the teachers because children, especially those experiencing violence in their families, do not announce or show themselves as victims of violence (Tishelman et al., 2010).

This study will explore the association between different mental health problems in adolescence and experience oftraumas among secondary school adolescents in Ibadan. This study will help to identify the coping strategies used by the adolescents. The outcome of this study could enable school teachers, school-based clinicians and psychologists to identify children and adolescents that have experienced trauma and provide necessary help for them.

1.4 Aim of the study

The overall aim of the study is to explore the association between childhood trauma, coping and different mental health problems among adolescents.

1.5 Research Questions

1. What are the prevalence of traumatic experiences among school going going adolescents?
2. What are the socio-demographic correlates of traumatic experiences among school going adolescents?
3. What are the prevalence of mental health problems among school going adolescents?
4. Are there association between childhood trauma and anxiety and depression in adolescents?
5. What are the coping strategies used by the adolescents after trauma?
6. What are the relationship between coping strategies and anxiety and depression among school going adolescents?

1.6 Specific objectives

1. To determine the prevalence of traumatic experiences among school going adolescents.
2. To determine the socio-demographic correlates of traumatic experiences among school going adolescents.
3. To determine prevalence of mental health problems (anxiety and depression) among school going adolescents
4. To determine the association between childhood trauma and anxiety and depression in adolescents
5. To determine the coping strategies used by the adolescents after trauma.
6. To determine relationship between coping strategies and anxiety and depression among school going adolescents

1.7 Primary Outcome

The association between childhood trauma and anxiety and depression.

1.8 Secondary Outcome

The association between childhood trauma and ways of coping.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Studies have found that negative effects of trauma experienced by parents can be seen in their children (Zorich, 2014). A study of 75 adolescent inpatients who completed Childhood Trauma Chart Review Scale (CTCRS) and were interviewed with Diagnostic Statistical Manual (DSM) 111-R while on admission found that 81% had experienced at least one traumatic event during childhood, with loss of caregiver being the most recurrent type of trauma (Weine et al., 1997). Studies suggest that childhood abuse can lead to difficulties with intimate relationships later in life and building of a pleasant attachment; hence it has been suggested that childhood trauma creates problems with interpersonal relationships (Jung Huh et al., 2014). More than 40% of Adolescents reported lifetime exposure to at least one traumatic event (Oladeji et al., 2011). "The stressors tend to accumulate in people's lives and it appears that it affects the way they develop and can affect their reasoning and emotional control" (Anda et al., 2006). Trauma is a deeply distressing or disturbing experience that causes damage to the mind. Traumatic experiences most times involve a threat to life or safety, any situation that makes the person feel overwhelmed and withdrawn can be traumatic, even without any physical abuse (Sidran Institute). It was thought that children were exempted from traumatic experiences because they do not know about the dangers, but today very young children react to trauma and the outcome (Malizia, 2017).

Trauma response is a psychological and emotional response to an extremely negative event that is distressing or disturbing. It could be negative events like accident, rape, death of a loved one, divorce, abuse or natural disaster. Gender plays a vital role in traumatic experiences (Omigbodun et al., 2008). Traumatized individuals struggle to deal with feelings of uncertainty and

susceptibility in the aftermath of trauma, most survivors struggle with questions such as 'why does this sort of thing happen in the world' (Kaminer and Eagle, 2010).

Understanding the formation, function, and development of the human brain, and brain-mediated responses to threat, helps to understand the traumatized child (Gerrity and Folcarelli, 2008).Social factors will have an influence on childhood traumatic experience (Oladeji et al., 2010).

The process of coping can be active and responsive, men and women have different ways of coping with stress (Orzechowska et al., 2013). People react and cope in different ways after traumatic events. Coping refers to a different cognitive and behavioural strategies and methods individuals use to manage their stress (Folkman et al., 2004). Coping in an unhealthy way could create more stress, anxiety and depression (Boyes, 2013). Studies of adolescents show the different kinds of trauma they have been exposed to and their use of coping strategies when experiencing stress (Rachel et al., 2018).

2.2 Childhood Trauma

Traumatic experiences are usually unexpected (Kaminer and Eagle, 2010). Trauma is an emotionally destructive situation to those who experience trauma, it affects the stages of child development (Malizia, 2017). Traumatic events destroy confidence and limit sense of safety and security (Teicher, 2018).

Childhood trauma is any form of abuse that hurts or may cause harm to the child such as verbal., emotional., psychological or even sexual abuse and performed by the parent, caregiver and/or any individual (Leeb et al., 2104 as cited in Maepa et al., 2015). Childhood trauma is any type of emotional and physical maltreatment, sexual abuse, neglect or negligent treatment, any form of exploitation of a child that leads to actual or potential harm to a child's health, living, development or dignity (Jacqueline, 2015). Family structure influences a child's development, it plays an

important role in the outcome of a child (Paylo,2005). The death of a parent or loved one may have different impact on children in nuclear family structure and children in extended family structure (Oladeji et al., 2010). It cannot therefore be assumed that research findings regarding the long-term childhood trauma disturbs the normal development and function of the brain (Schore, 2003). Childhood trauma is mainly characterized by the experience which involves the form and duration of the trauma experienced, and the child's response to the traumatic experience that may impair child's ability to cope which causes fearfulness and helplessness (American Psychological Association).Children experiencing trauma feel helpless and alone (Heide and Solomon, 2006). Trying to endure trauma can cause lasting damage to the psyche, particularly when occurring in childhood (Waller et al., 2000). Trauma represents negative situations that are emotionally hurting and overwhelms an individual's capacity to cope (International Society for Traumatic Stress Studies, 2015).

2.3 Types of Trauma

2.3.1 Neglect

Neglecting a child can be more painful and disturbing to the child than physical abuse itself (Cicchetti et al., 1995). Neglect is described as the inability of the parent/caregiver to provide a suitable environment needed for the child's development and wellbeing (Kitta et al., 2016). This occurs when the child does not receive the care that he/she needs according to their age. Children who experienced multiple forms of abuse and neglect were at elevated risk for the development of a later depression (Wisdom et al., 2015). Neglect can have substantial and long lasting effects on a child's physical and mental health and other areas of development. It may cause impaired brain development, poor academic performance, emotional and behavioral problems that may lead to severe mental health problems (Dubowitz, 2013).

2.3.2 Physical Abuse

Physical abuse in children can be described as the intentional use of physical force against a child and can be in form of punishments (Kitta et al., 2016). This occurs when the child is beaten, kicked, thrown in a way that causes injury to the body. Physical abuse in children may cause negative effects on the child's social, emotional and physical development and most severe cases may lead to serious injury or death (Appleton et al., 2017). Most child physical abuse is perpetrated by parents/caregivers of children who were also abused as children. WHO reports the prevalence of physical abuse to be about 25-50% (WHO, 2002).

2.3.3 Sexual Abuse

Sexual abuse in children sometimes happen alongside other types of child abuse and neglect (Laura et al., 2015). Involving a child in a sexual act, that he or she does not fully understand, is not able to give informed consent to, or for which the child is not developmentally prepared for (Jacqueline, 2015). This kind of trauma occurs when the child is sexually harassed or used for sexual exploitation. There is a link between childhood sexual abuse and different interpersonal problems later in life than other abuses like emotional and physical trauma. People who experienced childhood sexual abuse tend to be domineering/in control, extremely accommodating, self-sacrificing and show intrusive personality patterns. Thus, childhood sexual abuse creates a contrasting personality in individuals (Huh, 2014). Several studies have reported the relationship between sexual abuse in childhood and depression later in life (Negele et al., 2010). Individuals that experienced severe sexual abuse are at higher risk of developing all types of psychopathologies. Female sexual abuse is more widely noticed and looked into, which may have been the reason for higher reports of sexual abuse among females (Murray et al.,2014).A study conducted in Lagos, Nigeria by Adeosun and Ogunlowo (2014) also reports a significant

association between sexual abuse and anxiety. There is no significant relationship between sexual abuse and age (Manyikeet al., 2015). Females who experience sexual abuse during childhood have more symptoms of anxiety (Margaret and Kyle, 2005).

2.3.4 School Violence

This is the kind of stigma that comes from violence in school, such as bullying, peer rejection and stigmatization in school. Violence in school causes a decrease in the student's academic performance, lead to drop outs and psychological imbalance (Altun et al., 2010). A study that explored the views of teachers, school children and school administrators on school violence reported the 3 main types of school violence as vandalism, physical assault and mental aggression against students. However, their perceptions were different depending on factors like type of school, gender and socio-economic class (Schubarth, 2000). The present state of student violence is a serious problem in schools, counselors encounter two to five cases in an academic year (McAdams and Lambie, 2003).Victimization and experiences of violence is associated with mental health problems like anxiety, depression, posttraumatic stress disorder, suicidal ideation, anger, high risk sexual behaviours and substance abuse (Buka et al., 2001; Hammond et al., 2009). Males are more likely to be both perpetrators and victims of violence (Furlong & Morrison, 2000). Males are more likely to experience violence and bullying (Osinubi,2018). Different studies have found more male than female involvement in school violence (Cornell &Loper, 1998). Boys are more likely to engage in high-risk behaviours (Furlong & Morrison, 2000).

2.3.5 Complex Trauma

This is described as a constellation of casual risk factors involving repeated re-occurrence of interpersonal trauma by caregivers or parents early in life and resulting dysfunction that starts

across different areas including emotional., behavioral., interpersonal., psychological and cognitive functioning (Cook et al., 2005). It describes multiple forms of maltreatment and abuse, violence and other traumatic experiences (Ford et al., 2011). Experiencing two or more of sexual abuse, physical abuse, emotional abuse, neglect or domestic violence can be described as complex trauma (Kisiel et al., 2009). Experiences of multiple trauma is linked with different psychological functions (Briere and Scott, 2015). This is an exposure to multiple or prolonged traumatic events. It involves simultaneous or sequential exposure to multiple or prolonged traumatic event. Adolescent complex trauma can involve experiencing both acute and chronic trauma incidents.

2.4 Trauma in Children

When children and their developing brains are exposed to trauma, it effects changes (Hornor, 2015). Children are often direct and indirect victims of trauma and are also witnesses to violence that occur between adults in their environment (Kaminer and Eagle, 2010). The greatest rates of child abuse occur between the ages 0-4 (WHO, 2002). People are different in the way they respond to trauma. The difference can be related to their temperaments, other people's reactions and the help or support available for the child and family. Some children experienced concentration-camp life during the holocaust and were still psychologically and physically stable (Brownstein, 2009). Children vary in their responses to traumatic experiences. The reactions and responses may be influenced by the developmental level, ethnicity and cultural factors, previous trauma exposure, available resources, and preexisting child and family problems. Negative outcomes of trauma in children depend on the magnitude and type of trauma experienced (Shakespeare-finch, 2009). Considering the severity, frequency, nature, and pattern of traumatic events, at least half of all children that experienced trauma may develop significant neuropsychiatric symptomatology (Schwarz and Perry, 1994). Children exposed to sudden, unexpected and unresolved childhood

traumatic experiences can affect the child's fast developing brain, damage the immune system and result in low quality of life (Brown, 2017). Some studies found deficiencies in the intellectual and cognitive functioning of children who experienced trauma compared to those who had not experienced trauma. The development of the brain is impacted by both genetic and environmental factors (Brietzke et al., 2012). Most children and adolescents will develop some psychological or somatic symptoms immediately after a traumatic experience (Bui et al., 2014).

A good parent-child relationship is important for the prevention of childhood traumas which are the major pathway to children's emotional and behavioural problems (Maepa et al., 2015). Understanding children and the impact of traumatic experiences on them, the more compassionate and supportive we can be in our dealings and in our problem solving approach (Perry, 2013). Caregivers' response to a child's trauma affects the child's reactions to trauma (Vaplon, 2015).

Different types of trauma experienced by children include natural disasters, medical injury, illness, neglect, deprivation, loss/death, accidents, school violence, and divorce. Childhood trauma can create long-lasting scars, damage the perception of life and cause the brain to self-destruct until the age of 50s. The relationships built as children greatly impact their general development (Young, 2016).

2.5 Trauma in Adolescents

Traumatic experience is not uncommon among adolescents (Costello et al., 2002). Studies in different western countries showed that 20-87% of young people are exposed to traumatic events before adulthood (Omigbodun,Bakare and Yusuf., 2008). Trauma in adolescence can occur in different ways. Some adolescents become withdrawn, uncommunicative and almost 'shut down'. Others become defiant, oppositional and even aggressive in their behaviour (Kaminer and Eagle,

2010). Traumatized adolescents are at risk of being impulsive and aggressive, having thoughts of self-harm and suicidal ideations (Ford et al., 2012; Ford and Gomez, 2015). Experiences of trauma increase the chances of mood disorders and addictive behaviours in adolescents and youths (Fuchshuber et al., 2018). Anxiety in adolescents usually appear as very worried, nervous, or tearful and may not engage in general activities or activities of interest (National Child Trauma Stress Network, 2007). Trauma in adolescents can cause delays in their general development which makes them unable to give a good consideration to the outcome of their behaviour, to be more conscious and realistic of danger and safety, to have control and self-discipline, and to apply abstract thinking and problem solving skills (NCTSN, 2008).Adolescents who experience trauma engage in delinquency and associate with delinquent friends (Ford, 2012).

2.6 Causes of Trauma

"When we think about childhood trauma, it is important to consider the sorts of environments that give rise to these kind of difficult experiences" (Briggs et al., 2014). Childhood trauma negatively affects the brain development (De Bellis, 2002). It involves the disruption of chemicals that function as neurotransmitters e.g. cortisol, norepinephrine, dopamine causing increase in response to stress. These chemical responses can then negatively affect the growth and development at specific sensitive periods of childhood (Heim et al., 2008). Growing up in a household in which a parent or primary caregiver takes too much alcohol, is a chronic abuser of narcotics, goes to prison, has a diagnosable psychiatric condition, such as major depression, or the mother is physically abused by the father, experiencing emotional or physical abuse or neglect, loses a parent through death or divorce are major causes of trauma in children (Hosier, 2016).

2.7 Indicators of Childhood Trauma

Adult survivors of childhood trauma frequently feel shame and stigmatization for their childhood experiences (Dube, 2017). Trauma experiences and childhood maltreatment interrupt normal childhood development and may result to low self-esteem, self-blame, hopelessness and feelings of rejection and withdrawal (Schaaf, 2012). Four characteristics or indicators are expected in most cases of childhood trauma, which include visualised or otherwise continuous perceived memories, repetitive behaviours, trauma-specific fears, and changed attitudes about people, life and the future (Terr, 1991).

There are different behaviors that indicate the presence of a trauma. The parents or caregivers and school teachers may be able to recognize these behaviors like; development of new fears, separation anxiety (particularly in younger children), sleep disturbances, sadness, loss of interest in normal activities, reduced concentration, decline in school work, anger, somatic complaints, and irritability (Hamblen, 2001). Poor verbal skills, memory problems, poor appetite, weight loss are also symptoms of childhood trauma (Burr-Harris, 2012). It may be difficult to notice anxiety and depressive symptoms. Substance use is sometimes initiated or increased after trauma. People that experienced trauma can start making use of substances like alcohol, marijuana and cigarettes as a way of coping (Vlahov et al., 2015).

2.8 Coping

Children's response to traumatic experiences is greatly determined by their developmental stage and capacities (Kaminer and Eagle, 2010). Coping is the different cognitive and behavioural strategies individuals use to manage their stress (Folkman et al., 2004). Coping can also be described as an effortful response to stress (Compas et al., 2010). It is any effort, which may be healthy or not healthy, done consciously or unconsciously to overcome stressors or to tolerate the

effects of stress in a minimal way (Matheny et al., 1986). The process of coping is active and responsive, coping with difficult situations is a continual cognitive and behavioural process to deal with external and internal demands that are really overwhelming (Orzechowska et al., 2013). Coping involves both cognitive and behavioural elements in efforts to master, reduce, or tolerate the internal and external demands created by stressful events (Yussuf et al., 2015). Some individuals affected with trauma are able to understand the realities of their stressful situations and quickly plans on conceiving and implement different coping strategies and survival mechanisms (Oyefara and Alabi, 2016). The past experience of an individual is a factor in shaping the persons' perception of the extent of the threat and the ability to respond appropriately and defend themselves (Maria et al., 2015).

Different individuals use different coping strategies in different situation. The process of coping changes with time (Buettner et al., 1995). The extent to which an individual is stressed impacts the physical psychological and behavioural factors that partly determines one's coping skills and strategies (Yussuf et al., 2018). Adolescents who experienced trauma struggle with their emotions and mental capacity relating, trying to cope and trying to understand what happened (NCTSN, 2008). Emotional reaction to depression is a major factor in determining coping strategies (Kelly et al., 2007). There is a significant relationship between anxiety, coping strategies and socio demographic characteristics (Tarik et al., 2008). Adults who experienced childhood trauma need to be guided and supported in developing coping strategies to improve their quality of life that results to normal behaviours and creating good relationship with people (Schaaf, 2012).

Different coping strategies helped give meaning to life circumstances, helped develop self-confidence, and played a vital role in how individuals perceive adversity (Maria et al., 2015).Researches show that the uses of coping strategies can reduce psychological distress and

improve well-being (Gullone et al., 2009 as cited in Mefoh et al., 2015). Being supportive to distressed individuals can result in positive impact and studies have shown that social support has been found to have positive effects on both physical health and psychological wellbeing of individuals (Okhakhume et al., 2016).

Unfortunately, most times the coping mechanisms used by different people are either psychologically or physically unhealthy methods (Hornor, 2015). 85% of Kenyan adolescents used religion as a means of coping in difficult situations (Eve,Melissa,Sherryl,2013). The school environment impacts and plays an important role in aiding children that have experienced trauma to shape their view of life, enhance their sense of self and cope through assistance from school staff, friendly relationships within the school and better educational curriculum (Cortina et al., 2016).Schools can provide spaces and social system that make group-based intervention easily accessible (Bella-Awusah et al.,2016),

Anxiety and depression may be as a result of poor and negative coping strategies and increased stress (Hays,Sherbourne,Mazel,1995). Anxiety and Depression may occur in physiological responses to trauma (Gilmore,Osho,Heads, 2013). There is higher a prevalence of depression among students who use acceptance as a way of coping (Abdurahman,2014).Active coping among medical students was found with a prevalence of 50.2% (Goyal et al.,2016).There is an association between self-blame and anxiety (Kulpa,Zietalewicz and Zioklkowska,2016) religious coping is a good and reliable means of coping according to Amadi et al(.2006). A study among Iranian patients also showeed a significant association between religious coping and depression (Goudarzian, Zarmani, Nesami, Beik, 2017).Religious coping reduces depression(Olszewski and Norum,2000).

2.8.1 Different types of coping

Problem – Focused Coping: Endeavours are made to overcome the stressful conditions through problem solving, decision making and direct action. Problem focused coping involves confronting the problem, seeking social support and problem-solving (Lazarus et al., 1986). Problem-focused coping focuses on the management of stressful events (Yussuf et al., 2018).

Emotion – Focused Coping: Efforts are made to regulate the disturbing emotion, sometimes by changing the effect of the stressful situation cognitively without changing the condition (Folkman and Lazarus, 1985). Emotion-focused coping is the organization of an individual's affective response (Yussuf et al., 2018) Emotion focused coping involves self-control, seeking social support, distancing, positive appraisal accepting responsibility and escape avoidance (Lazarus et al., 1986). It can be used to overcome different forms of emotional problems including depression, anxiety, frustration and anger (Hanson, 1997).

Psychologist came up with a general classification of coping mechanisms:

- **Defense** - the unconscious ways of coping stress. Examples: reaction formation, regression
- **Adaptive** –manages the stressful situation. Examples: altruism, symbolization
- **Avoidance** –withdraws self from the stress or stressor. Examples: denial, dissociation, fantasy, passive aggression, reaction formation.
- **Attack** - takes one's attention a person or group of individuals other than the stressor or the stressful condition. Examples: displacement, emotionality, projection.
- **Behavioral** - improving the way we act in order to reduce or eradicate the stress. Examples: compensation, sublimation, undoing.

- **Cognitive** – changing the way we think so that stress is reduced or eliminated. Examples: compartmentalization, intellectualization, rationalization, repression, suppression.
- **Self-harm** - intention to harm self as a reaction to stress. Examples: introjection, self-harming
- **Conversion** - changes one thought, behaviour or emotion into another. Example: somatization (Sarah,2012).

2. 9 Association between Childhood Trauma and Mental Health

Childhood traumatic experiences has been discussed as a major risk factor for developing psychopathology later in life since the end of the Nineteenth century (Fuchshuber et al., 2018). Different studies show the significance in the increased prevalence of childhood trauma and mental health problems, emphasizing the role of traumatic exposures as a risk factor for developing different types of psychopathology (Negele et al., 2010). The experience of severe childhood trauma is related with poor functioning, poor cognition and different mental health problems later in life (Brietzke et al., 2012). There is a significant relationship between all types of childhood traumatic experiences and depression and anxiety symptoms later in life for women while in men there is association between emotional abuse, neglect, and physical abuse with depression and anxiety symptoms (Rehan et al., 2017).

Childhood trauma has been associated with negative outcomes in childhood and later in life, which causes brain dysfunction, unpleasant personality traits and high risk of depression and anxiety (Kitta et al., 2016). There is a relationship between mental health problems and trauma. Different types of trauma may lead to some mental health problems. Trauma load during the stress-sensitive period of childhood may be especially important when considering psychiatric outcomes. The

effect of different types of trauma on psychopathology have also been examined, suggesting the effect of trauma may sometimes be type-specific (Khourny et al., 2010). Poor learning and poor social skills and other mental health disorders can be outcomes of different types of childhood trauma (Schaaf, 2012). Continuous emotional distress is physically exhausting and emotionally painful (Perry, 2003).

Recurrent stress results in mental health problems, especially anxiety and depression. Excess stress can increase the risk of post-traumatic stress disorder and personality problems and may increase the risk of psychosis. Previous reports show association between environmental stress in childhood and development of affective disorders as adults (Orzechowska et al., 2013). Emotional abuse has been linked to low self-esteem, and people who experienced emotional neglect and physical abuse reported greater problems in different domains (Gauthier et al., 1996). Trauma can also lead to a psychological dissociation, causing an inability to incorporate "cognitive, behavioural and emotional aspects of experience" (Oyefara and Alabi, 2016). Childhood traumatic experiences disturb physiological, psychological and social developmental pathways. It increases the risk of developing different mental health problems (Sara and Lappin, 2017). Childhood trauma is associated with increase in the reports of negative events (Infurna et al., 2015). High levels of anxiety and depression can lead to lower academic performance and poor cognitive function (Dobson,2006).

The literature reviewedindicate that there is an association and link between childhood trauma and mental health. Children that experienced traumatic events are more likely to develop mental health problems unlike the children that did not experience any distressing event.

2.9.1 Anxiety Disorder

Those who experienced childhood abuse had high autonomic and pituitary adrenal responses to stress (Daniel et al., 2007). Emotional abuse and neglect is linked with anxiety (Briere and Runtz, 1998). Individuals with anxiety disorder have higher rates of childhood emotional abuse and neglect, sexual abuse and physical abuse (Kuo et al., 2010). Experiences of childhood abuse increase the chances of having continuous anxiety (Rehan et al., 2017). In a study carried out in South Africa,the prevalence of mental health problems among children and Adolescents set at 17% with generalized anxiety disorder being most reported (11%), posttraumatic stress disorder (8%) and major depressive symptoms (8%) (Kleintjes,Flisher,Flick,Railoun,Lund,Molteno and Robertson., 2006). A study by Adewuya et al among secondary school students reported a prevalence of 15.0% other studies among secondary school adolescents in Enugu reported a prevalence of 34.1%(Chinawa et al.,2018) and in Uganda by Nsereko,2018 reported a prevalence of 35.5%. A prevalence of 10.3% and 8.2% was found in Qatar and Malaysia respectively by (Gholoum and Abou-Saleh,2012) and (Maideen et al,2015),

Symptoms of anxiety in adolescents who experienced trauma usually appear as being very worried, nervous or fearful and loss of interest in activities (NCTSN, 2007). Anxiety symptoms predict later symptoms of depression more prominent for females than for males among high school students (Tara et al., 2009).

2.9.2 Depression

Epidemiological studies have shown reliable evidence that childhood traumas such as abuse and neglect or loss, are associated with significant increase in the risk of developing depression (Edward et al., 2003). Depression ranks third among the leading causes of global burden of diseases worldwide and first in middle and high-income countries. The prevalence of major

depressive disorder in Nigerian adolescents is comparable to what is found in the western part of the world (Adewuya et al., 2007). The prevalence of depressive symptoms among public secondary school adolescents in Kenya was 26.45% with females showing more significant symptoms (Khasakhala,Ndetei, Mustiso, Mbwayo and Mathai., 2012). A study by (Abidioun and Sanu,2014) reports a prevalence of 35.8% among undergraduate students in Ota, Nigeria

The relationship between childhood trauma and an increased risk of depression later in life has been confirmed in different studies (Negele et al., 2010). Depressive disorders have great effect on well-being and daily functioning similar to or even higher than the impact recorded in common medical illnesses (Jacqueline, 2015). Depression was diagnosed twice as often in people who experienced physical abuse, sexual abuse, neglect or family discord (Orzechowska et al., 2013). Childhood traumatic experiences are linked to depression later in life and may be a major factor for chronic depression (Wiersma et al., 2009). Childhood emotional neglect is significantly associated with depression (Kuo et al., 2010).

Depressed adolescents show deep sadness, tearfulness, poor concentration, irritability, feelings of guilt and suicidal ideations (NCTSN, 2007).

2.10 Prevalence of Childhood Trauma

Children do not often open up about their experiences for many reasons like getting into trouble, a sense of stigmatization, shame, guilt or self-blame about the event or fear of getting the offender into trouble. Child neglect is the most prevalent, but least empirically studied form of child maltreatment. It is hypothesized that poor cognitive development may be caused by adverse brain development due to child neglect (De bellis, 2005).

Experiences of childhood trauma are highly prevalent. Globally, one in eight adults report childhood sexual abuse and one in four reports childhood physical abuse (Sara and Lapppin, 2017). A study done in the United States showed that almost half of all children have experienced at least one trauma (Bethel et al., 2014). In surveys of adolescents receiving treatment for substance abuse, more than 70% had a history of trauma exposure (Khourny et al., 2010). Different studies have shown that there is higher physical and sexual abuse than other causes and types of trauma, especially in women. Studies of adverse childhood experiences found relationships between childhood trauma and adult health in over 17,000 mostly white, middle class Americans (Felliti et al., 1998). It showed that adverse childhood experiences is more common that it is noticed. Felliti (2002) found the following responses in a study of 10 childhood maltreatments: 29.5% reported parental substance use, 27% physical abuse, 24.5% parental separation or divorce, 23.3% household mental illness, 16.5% emotional neglect, 13.7% mother treated violently, 13.1% emotional abuse, 9.2% physical neglect, and 5.2% incarcerated household member (Felliti, 2002). Symptoms of depression were reported by 28.1% of people who had experienced trauma while 15.6% reported depressive symptoms without having been exposed to trauma (Omigbodun et al., 2008).

2.11 Relevance of the study to Child and Adolescent Mental Health

The prevalence of childhood traumatic experiences and the long term effects are a major factor in the health and social wellbeing of the nation (Brown, 2017). Nigeria is the largest black African country (Ebigbo, 2003). Childhood trauma is a major challenge not only in the public health framework, but also in the wider society and requires effective ways of managing and reducing the negative outcomes in young people (Sara and Lappin, 2017).Increasing knowledge into the long-term impacts of childhood trauma is of great public relevance and important for clinical

practice (Jacqueline, 2015). Persistence of the pervasive maltreatment of children in the face of decreasing global and national resources will lead, inevitably, to sociocultural devolution which should not be so (Gerriti and Folcarelli, 2008).

Educators can also help children cope with trauma by ensuring stability, permitting students to make choices when appropriate (sometimes children feel a loss of control after a traumatic event), set limits and provide logical consequences for rule breaking, notice trauma related behavioural issues, increase encouragement and support, be sensitive to potential risk factors including memories of traumatic experiences, and pay attention to other student's reactions to traumatized classmates (National Child Traumatic Stress Network Schools Committee, 2008).

This study is important and relevant to the field of child and adolescent mental health.It could help child and adolescent mental health professionals to understand the association between childhood trauma and mental health. It could provide knowledge to guide mental health professionals to ascertain the mental health impact on a child that has been traumatized.

CHAPTER THREE

METHODOLOGY

3.1 Study Area

This study was conducted in Ibadan, the capital city of Oyo State in the South West Nigeria. Ibadan has a population of over 3.5 million and it is the most populous city in Oyo State (World Population Review, 2018). The city geographically lies within the tropical forest zone and the Savanna. Ibadan covers 3,080 square kilometres. Ibadan metropolis consists of eleven local governments (five urban and six rural local government areas) out of the 33 local governments in Oyo State.

The study focused on Ibadan North Local Government Area. Ibadan North local government covers an area of 145.58km square, it is the largest land mass among the urban metropolis local government areas. It has a population of 432,900 at the 2016 population projection. However, according to Population projection by National Bureau of Statistics (NBS, 2017), Oyo state was projected to be 6,843,840. (NBS, 2017). It consists of 12 wards with its headquarters at Agodi. The major ethic group is the Yorubas with other ethnic groups like Igbos, Urhobos, Edos, Itsekiris, Hausas and Fulanis. There are about 42 government schools and38 private secondary schools in Ibadan North Local Government Area. Most of the secondary schools are mixed while few of the public schools are specifically for boys or girls. Students in the secondary schools fall within the age range of 10 to 18 years.

3.2 Study Design

This was a Cross-sectional descriptive study.

3.3 Study Population

Study population of this study comprised of adolescents attending the selected secondary schools in Ibadan North Local Government.

3.3.1 Inclusion Criteria

Adolescents within the age range of 13 to 17 years of age whose parents gave written consent and who also gave assent to participate in the study.

3.3.2 Exclusion Criteria

- Adolescents whose parents did not give written consent
- Adolescents who did not assent to participate.
- Adolescents who were physically ill to participate in the study.

3.4 Sample Size Calculation

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

$n=Z^2pq/d^2$

d is the level of precision set at 0.05

p is the prevalence of depressive symptomatology among youths at 28.1% (Omigbodun et al., 2008)

q = (1-p)

Z is standard normal deviate corresponding to level of significant=1.96

n = 310

using 10% non-response rate

n =341

3.5 Sampling Technique

Simple Random Sampling Technique was used to select a total of 341 students from four secondary schools, using two private and two public schools from the list of schools within the

Ibadan North Local Government Area . The schools were randomly selected from the list of secondary schools (public and private schools) in Ibadan North Local Government of Oyo State, South West Nigeria.

Students of the selected schools were randomly selected from JSS3 classes to SSS3 classes in order to meet the required age range of 13 to 17. The four randomly selected secondary schools were stratified into Public and Private schools. In the each of the selected school, students were selected using their sample frame (School population). Students were selected proportionally from their sampling frame.178 students were selected from a population of 715 students in the public schoolswhile 162 were selected from a polulation of 650 students in the private schoolsMaking it a total of 340 respondents.

3.6 Study Instrument

The following five instruments were used for this study.

(a)	Socio Demographic Questionnaire	Appendix II
(b)	Childhood Trauma Questionnaire (CTQ)	Appendix III
(c)	Beck Depression Inventory (BDI)	Appendix IV
(d)	Beck Anxiety Inventory (BAI)	Appendix V
(e)	Brief COPE Inventory	Appendix VI

3.6.1 The Socio Demographic Questionnaire

The Socio Demographic Questionnaire consisted of questions relating to socio demographic characteristics and information was adapted from a previous study on adolescents in this region (Omigbodun et al., 2008). It contained variables like age, gender, religion, family background of

adolescents as well as level of education and occupation of each parent, size and structure of family and family possessions.

3.6.2 The Childhood Trauma Questionnaire

This instrument measures the degree to which an individual has experienced traumatic events in childhood. It was developed by Pennebaker and Susman (2013). It had two sections, the first consisted of six items that screens any trauma that was experienced before the age of 17years. The second section had six items that measure recent trauma within the last 3 years. It was scored using a 7 point scale. The 7 point scale was categorized into Not traumatic as point 1, May be traumatic as point 2, Slightly traumatic as point 3, Moderately traumatic as point 4, Moderately severe trauma as point 5, Severely traumatic as point 6 and Extremely traumatic as point 7. The experience of trauma was measured from point 3. It has been used in Nigeria and some African Countries.

3.6.3 Beck Depression Inventory

The Beck's Depression Inventory is 21 item self-report questionnaire was used for measuring the presence and severity of depressive symptoms over the past two weeks and is designed for adolescents who are 13 years and above (Beck, 1996). The Beck Depression Inventory requires 5^{th} and 6^{th} grade reading level to comprehend (Groth-Mamat, 1990). It takes about 10 minutes to complete the items. The items are rated on a 4 point Likert scale ranging from 0-3 giving a maximum score of 63. Scores of 0-13 indicate minimal depression, 14-19 indicate mild depression, 20-28 indicate moderate depression, 29 and above indicate severe depression (Beck 1996). The Beck Depression Inventory has been validated in Nigeria (Adewuya et al., 2007) and used among adolescents in the country (Bella-Awusah et al 2016)

3.6.4 Beck Anxiety Inventory

The Beck Anxiety Inventory is a 21item measure of anxiety symptoms over the past week (Beck, 1988) and it takes about 5-10 minutes to complete. It can be used on adolescents. The items are rated on a scale value of 0 to 3. Scores of 0-9 indicate normal to minimal anxiety, 10 -18 indicate mild to moderate anxiety, 19-29 indicate moderate to severe anxiety while 30-63 indicate severe anxiety (Beck, Epstein, Brown and 1988). The Beck Anxiety Inventory has been used in Ghana and Nigeria (Naab et al., 2013). The Beck Anxiety Inventory is a reliable instrument for psychiatric inpatient and high school adolescents (Osman et al., 2002).

3.6.5 The Brief COPE Inventory (Carver.1997):

This is a 28 items abridged version of the original 60 items COPE inventory (Carver et al., 1989) and its length and time involved was widely reported to disturb completion rates. This instrument assesses an individual's methods of response to difficult situations or events by suggesting popular means of coping, and finding out how well the respondent agrees to use the methods. The original factor analysis carried out by the author (Carver et al., 1989) revealed a 14 - factor model which has been employed in a study among university students in Nigeria (Yussuf et al., 2013). Individuals may use different coping styles but the most frequently used is identified from the scale. Questions are scored on a Likert Scale.

This instrument has been used among different populations in Nigeria (Yusuf et al., 2013; and Itimi et al., 2014).

3.7 Study Procedure

Four research assistants were trained to understand the topic if the research and administration of research instruments. Each instrument was read and explained in English and interpreted in Yoruba

language. The research assistants explained each item and guidelines to choosing the correct option.

The questionnaire was administered at the convenience of the participants, within the school compound. Comfort and confidentially was ensured by the researcher and the research assistants. The instrument was submitted after administration in each school, the questionnaire was arranged properly.

3.8 Data Management

Data was cleaned and coded and entered into the computer. Data analysis was done using the statistical package for the social sciences version 23 (SPSS 23).

Socio-demographic variables was represented using frequency tables. Depression and Anxiety scores were presented continuously using means and standard deviations as well as categorically using percentages of cut-off scores.

Childhood trauma was cross tabulated with the socio demographic variables and anxiety and depression in a bivariate analysis to explore for associations with depression and anxiety both categorically using chi-square test and continuously using T test.

Multivariate linear regression was used to test the association between childhood trauma and anxiety and depression and coping.

3.9 Ethical Consideration

Ethical approval was granted by the State Ethical Review Committee and from the Ministry of Education and Ministry of health. Official permission was given by the school authorities. Every information and data collected was protected and kept confidential.

Informed consent

I am a postgraduate student at the centre for child and Adolescent mental health, university of Ibadan. I am interviewing Adolescent students in four secondary schools within Ibadan North Local Government area in order to find out if some of the students experienced stressful and difficult situations as children, how they coped and the relationship of the experiences to their mental health.

I will give you questionnaires to fill with appropriate answers. Your answers and any personal information provided will be kept confidential and protected.

The information received will help to provide more understanding of childhood trauma and how children cope.

As part of this project, students who have experienced multiple/complex trauma in childhood will be counselled on how to cope with the trauma how to cope and improve living. Those with life-threatening mental health problems will be referred to the CAMH Clinic UCH Ibadan.

You are free to take part in this study. You also have the right to withdraw at any time. I will appreciate your cooperation and support in responding and taking part in the study.

Consent: Now that the study has been well explained to me and I understand all that is written and the context of the process, I agree to participate in the study.

_____ _____

CHAPTER FOUR

RESULTS

4.0 Introduction

This study aimed to explore the association between childhood trauma and different mental health problems among adolescents in Ibadan North LGA, Southwest Nigeria. A total of 341 questionnaire was returned. The analysis of the findings are presented as follows;

1. Socio-demographic characteristics of study participants
2. Prevalence of reported childhood trauma experienced by adolescents
3. Socio-demographic correlates of childhood trauma experiences in adolescents
4. Association between childhood trauma and mental health problems
5. Coping strategies reportedly used by the adolescents after trauma
6. Association between coping strategies and anxiety and depression

4.1 Socio-demographic characteristics of study participants

4.1.1 Personal Demographic Information of Study Participants

The participants ranged in age from 13 – 17 years (mean = 14.67; SD = 1.33). Two hundred and eleven (61.9%) of the participants were males while the remaining one hundred and thirty (38.1%) were females. In terms of school attended, one hundred and eleven (32.6%) attend school 1, fifty-one (15%) attend school 2, one hundred (29.4%) attendSchool 3 while the remaining seventy-eight (22.9%) attend School 4, In total, one hundred and sixty two (47.6%) were private school students while the remaining one hundred and seventy-eight (52.4%) were public school students. Eighty-four (24.9%) of the participants were JSS3 students, one hundred and twenty-eight (38%) were SS1 students, one hundred and eight (32%) were SS2 school students while the remaining

seventeen (5%) were SS3 students. Ninety-seven (34.8%) of the participants practice Islam, forty-two (15.1%) practice Christianity in Orthodox Church while the remaining one hundred and forty (50.2%) practice Christianity in Pentecostal church. See Table 4.1.1 below;

Table 4.1.1: Personal Characterictics Information of Study participants

Variables	n	%
Age group (in years)		
10 – 14	158	49.2
15 – 19	163	50.8
Total	321	100
Gender		
Male	211	61.9
Female	130	38.1
Total	341	100
School		
School 1	111	32.6
School 2	51	15
School 3	100	29.4
School 4	78	22.9
Total	340	100
Type of School		
Private	162	47.6
Public	178	52.4
Total	340	100
Class of students		
JSS 3	84	24.9
SS 1	128	38
SS 2	108	32
SS3	17	5
Total	337	100
Religion		
Islam	97	34.8
Orthodox Christian	42	15.1
Pentecostal Christian	140	50.2
Total	279	100
Extent to which religion guide your behaviour		
Very much	250	74.6
Much	66	19.7
Just a little	18	5.4
Not at all	1	0.3
Total	335	100

4.1.2 Family Characteristics Information of Study Participants

Participants from monogamous and polygamous homes were two hundred and eighty two (85.7%) and forty seven (14.3%) respectively. Two hundred and ninety-one (291; 85.8%) reported their parents were married, twenty five (7.4%) indicate that their parents were divorced/separated, fourteen (4.1%) reported that their father was dead, eight (2.4%) reported that their mother was dead while only one (0.3%) reported that both parents were dead. Two hundred and five (60.1%) had not lived with anyone other than their parents, one (0.3%) lived with just one person, thirty-two (9.4%) lived with at least two persons, fourteen (4.1%) lived with three while eighty-nine (26.1%) lived with four or more. Highest level of education of father shows that; eight (2.4%) have no formal education, six (1.8%) have Koranic education, nine (2.7%) have primary education, seventy-one (21.5%) have secondary education, twenty-two (6.6%) have post-secondary education, one hundred and seventy-four (52.6%) have university education while forty-one (12.4%) don't know the father's education level. Highest level of education of mother shows that; five (1.6%) have no formal education, six (1.9%) have Koranic education, twelve (3.7%) have primary education, seventy-three (22.7%) have secondary education, twenty-eight (8.7%) have post-secondary education, one hundred and fifty-nine (49.5%) have university education while thirty-eight (11.8%) did not know the mother's education level. See Table 4.1.2 below;

Table 4.1.2: Family Demographic Information of Study Participants

Variables	n	%
Family type		
Monogamous	282	85.7
Polygamous	47	14.3
Total	329	100.0
Number of mother's children		
1 – 4	230	68.2
5 and above	107	31.8
Total	337	100.0
Number of Father's Children		
0 – 4	240	72.1
5 and above	93	27.9
Total	333	100.0
Marital status of parents		
Married	291	85.8
Separated/Divorce	25	7.4
Father is dead	14	4.1
Mother is dead	8	2.4
Mother and Father are both dead	1	0.3
Total	339	100.0
Who you live with presently		
Parents	259	77.8
Mother	35	10.5
Father	10	3
Others	29	11.7
Total	333	100.0
Persons who brought you up from childhood		
Parents	279	82.3
Mother	36	10.6
Father	6	1.8
Grandmother	18	7.3
Total	339	100.0
Number of people lived with asides parents		
None	205	60.1
One	1	0.3
Two	32	9.4
Three	14	4.1
Four and more	89	26.1
Total	341	100.0
works to earn money		
Yes	49	14.8
No	281	85.2
Total	330	100.0
If Yes, please describe		
Housework	15	18.8
Apprenticeship	40	50 .0
Hawking	11	13.8
Trading	13	16.3
Total	80	100.0
Highest Level of Father's education		
No formal education	8	2.4
Koranic School	6	1.8
Primary School	9	2.7
Secondary school	71	21.5
Post-Secondary	22	6.6
University Degree and above	174	52.6
Don't know	41	12.4
Total	331	100.0
Highest Level of Mother's education		
No formal education	5	1.6
Koranic School	6	1.9
Primary School	12	3.7
Secondary school	73	22.7
Post-Secondary	28	8.7
University Degree and above	159	49.5
Don't know	38	11.8
Total	321	100.0

4.1.3 School-Related characteristics of Study Participants

School related demographics of the study participants are summarized in Table 4.1.3 below. Majority liked school (89.5%) and reported doing well academically (95.45). Three hundred and seventeen (94.1%) had a school guidance counsellor and one hundred and six (31.3%) had gone to see the guidance counsellor on at least one occasion. See Table 4.1.3 below.

Table 4.1.3: School-Related Demographics of Study Participants

Variables	N	%
Do you like your School		
Yes	297	89.5
No	35	10.5
Total	332	100
Do you believe you are doing well academically		
Yes	314	95.4
No	15	4.6
Total	329	100
Difficulty with teachers		
Yes	72	21.9
No	257	78.1
Total	329	100
Do you have guidance counsellor		
Yes	317	94.1
No	20	5.9
Total	337	100
Have you ever gone to see them		
Yes	106	31.3
No	233	68.7
Total	339	100

4.2 Prevalence of reported childhood trauma experienced by adolescents

Childhood trauma experience were categorized into six categories namely;

1. Death of a very close friend or family member
2. Major problems between parents
3. Traumatic sexual experience
4. Victim of violence
5. Extremely ill or injured
6. Other major problem (continuous violence, bullying or physical abuse, serious and present family discord, presence of chronic illness).

One hundred and ninety seven (61%) participants before the age of 17 years had experienced death of a very close friend or family member, sixty (19.7%) had experienced divorce or separation of parents, twenty-nine (9.6%) of the participants had experienced traumatic sexual experience, eighteen (6.1%) had experienced violence other than sexual, one hundred and eighty-seven (59.7%) had experienced extreme illness or injury, and ninety seven (32.9%) had experienced other major problems that they believe have shaped their life and personality.

Table 4.2.1 Prevalence of childhood trauma experienced before the age of seventeen among Study Participants by Category

Variables	Yes n (%)	No n (%)	Total N (%)
Death of a very close friend or family member Before the age of seventeen did you experience the death of a very close friend or family member?	197 (61)	126 (39)	323 (100)
Major problem between parents (divorce or separation) Before the age of seventeen, was there a major problem between your parents (such as divorce, separation)?	60 (19.7)	244 (80.3)	304 (100)
Traumatic sexual experience Before the age of seventeen, did you have a traumatic sexual experience (rape, molested etc)?	29 (9.6)	272 (90.4)	301 (100)
Victim of violence Before the age of seventeen, were you the victim of violence (child abuse, mugged or assaulted other than sexual)	18 (6.1)	277 (93.9)	295 (100)
Extremely ill or injured Before the age of seventeen, were you extremely ill or injured	187 (59.7)	126 (30.3)	313 (100)
Other major problem Before the age of seventeen, did you experience any major problem that you think may have shaped your life or personality significantly?	97 (32.9)	198 (67.1)	295 (100)

4.3 Socio-demographic correlates of childhood trauma experiences in adolescents

Childhood trauma were cross-tabulated with socio-demographic variables of; age, gender, type of school, family type, students who work to earn money, students who live with others, educational status of father, educational status of mother, number of fathers children and number of mothers children using chi square.

4.3.1 Childhood trauma and age of participants

There was no statistical significance between age and childhood trauma. Ninety-four (50.3%) younger adolescents and ninety-three (49.7%) older adolescents reported death of a very close friend or family member; this difference was not significant (p = 0.683). Thirty (51.7%) younger adolescents and twenty (48.3%) older adolescents reported divorce or separation of parents was statistically not significant (p = .657). Eleven (39.3%) younger adolescents and seventeen (60.7%) older adolescents reported traumatic sexual experience; this difference was statistically not significant (p = 0.291). Twelve (66.7%) younger adolescents and six (33.3%) older adolescents reported being victims of violence; this difference was statistically not significant (p = 0.157). Eighty-four (47.7%) younger adolescents and ninety-two (52.3%) older adolescents reported extreme illness or injury; this difference was statistically not significant (p = 0.600). Forty (43%) younger adolescents and fifty-three (57%) older adolescents reported other major problems; this difference was statistically not significant (p = 0.262). See table 4.3.1 below.

4.3.1 Association between Childhood trauma and age of participants

Variables (Childhood Trauma)	Age in years		X^2	P value
	13 – 15	16 – 18		
	n (%)	n (%)		
Death of a very close friend or family member				
Yes	94 (50.3)	93 (49.7)	0.166	.683
No	56 (47.9)	61 (52.1)		
Divorce or separation of Parents				
Yes	30 (51.7)	28 (48.3)	0.197	.657
No	110 (48.5)	117 (51.5)		
Traumatic sexual experience				
Yes	11 (39.3)	17 (60.7)	1.117	.291
No	127 (49.8)	128 (50.2)		
Victim of violence				
Yes	12 (66.7)	6 (33.3)	2.002	.157
No	128 (49.4)	131 (50.6)		
Extremely ill or injured				
Yes	84 (47.7)	92 (52.3)	0.275	.600
No	60 (50.8)	58 (49.2)		
Other major problem.				
Yes	40 (43)	53 (57)	2.675	.262
No	93 (51.1)	89 (48.9)		

4.3.2 Childhood trauma and gender of participants

Twenty-eight (46.7%) male adolescents and thirty-two (53.3%) female adolescents reported divorce or separation of parents; this difference was statistically significant (p = .017). Fifteen (83.3%) males and three (16.7%) females reported being victim of violence other than sexual; this difference was statistically significant (p = .028). See Table 4.3.2 below

Table 4.3.2 Childhood trauma and gender of participants

Variables (Childhood Trauma)	**Gender**			
	Male n (%)	**Female n (%)**	**X^2**	**P value**
Death of a very close friend or family member				
Yes	124 (62.9)	73 (37.1)	0.575	.448
No	74 (58.7)	52 (41.3)		
Divorce or separation of Parents				
Yes	28 (46.7)	32 (53.3)	5.712	**.017**
No	155 (63.5)	89 (36.5)		
Traumatic sexual experience				
Yes	14 (48.3)	15 (51.7)	1.882	.170
No	167 (61.4)	105 (38.6)		
Victim of violence				
Yes	15 (83.3)	3 (16.7)	4.818	**.028**
No	158 (57)	119 (43)		
Extremely ill or injured				
Yes	113 (60.4)	74 (39.6)	0.015	.903
No	77 (61.1)	49 (38.9)		
Other major problem				
Yes	59 (60.8)	38 (39.2)	1.528	.466
No	118 (59.9%)	79 (40.1)		

4.3.3 Childhood trauma and School of participants

One hundred and twelve (57.1%) private school adolescents and eighty-four (42.9%) public school adolescents reported death of a very close friend or family member; this difference was statistically significant (p = .000). Fifty-seven (58.8%) private school adolescents and forty (41.2%) public school adolescents reported other major problem; this difference was statistically significant (p = .023). See table 4.3.3 below.

Table 4.3.3 Childhood trauma and School of participants

Variables (Childhood Trauma)	School Private n (%)	Public n (%)	X^2	P value
Death of a very close friend or family member				
Yes	112 (57.1)	84 (42.9)	14.096	**.001**
No	45 (35.7)	81 (64.3)		
Divorce or separation of Parents				
Yes	30 (50)	30 (50)	0.020	.886
No	119 (49)	124 (51)		
Traumatic sexual experience				
Yes	15 (51.7)	14 (48.3)	0.120	.729
No	131 (48.3)	140 (51.7)		
Victim of violence				
Yes	7 (38.9)	11 (61.1)	0.499	.480
No	131 (47.5)	145 (52.5)		
Extremely ill or injured				
Yes	96 (51.6)	90 (48.4)	.689	.407
No	59 (46.8)	67 (53.2)		
Other major problem				
Yes	57 (58.8)	40 (41.2)	7.502	**.023**
No	84 (42.9)	112 (57.1)		

4.3.4 Childhood trauma and family type of participants

Thirty-eight (64.4%) adolescents from monogamous families and twenty-one (35.6%) adolescents from polygamous family type reported divorce or separation of parents; this difference was statistically significant (p = .001). Seventeen (63%) adolescents from monogamous family type and ten (37%) adolescents from polygamous family type reported traumatic sexual violence; this difference was statistically significant (p = .001). One hundred and forty-six (81.6%) adolescents from monogamous family and thirty-three (18.4%) adolescents from polygamous family type reported extreme illness or injury; this difference was statistically significant (p = .013). See Table 4.3.4 below

Table 4.3.4 Childhood trauma and family type of participants

Variables (Childhood Trauma)	Family type Monogamy n (%)	Polygamy n (%)	X^2	P value
Death of a very close friend or family member				
Yes	164 (86.3)	26 (13.7)	0.008	.927
No	104 (86.0)	17 (14.0)		
Divorce or separation of Parents				
Yes	38 (64.4)	21 (35.6)	27.010	**.001**
No	212 (91.0)	21 (9.0)		
Traumatic sexual experience				
Yes	17 (63)	10 (37)	12.143	**.001**
No	230 (87.8)	32 (12.2)		
Victim of violence				
Yes	15 (83.3)	3 (16.7)	0.102	.750
No	228 (86)	37 (14)		
Extremely ill or injured				
Yes	146 (81.6)	33 (18.4)	6.212	**.013**
No	112 (91.8)	10 (8.2)		
Other major problem				
Yes	76 (83.5)	15 (16.5)	0.444	.801
No	164 (85.9)	27 (14.1)		

4.3.5 Childhood trauma and work of participants

There was no statistically significant difference between students who worked and those that did not work in relation to childhood trauma.

Table 4.3.5 Childhood trauma and work of participants

Variables (Childhood Trauma)	Students who work			
	Yes n (%)	No n (%)	X^2	P value
Death of a very close friend or family member				
Yes	32 (16.8)	159 (83.2)	2.949	.086
No	12 (9.8)	110 (90.2)		
Divorce or separation of Parents				
Yes	11 (19.3)	46 (80.7)	2.021	.155
No	29 (12.1)	210 (87.9)		
Traumatic sexual experience				
Yes	4 (14.8)	23 (85.2)	.090	.765
No	34 (12.8)	232 (87.2)		
Victim of violence				
Yes	3 (17.6)	14 (82.4)	0.313	.576
No	35 (12.9)	236 (87.1)		
Extremely ill or injured				
Yes	28 (15.6)	152 (84.4)	1.619	.203
No	13 (10.5)	111 (89.5)		
Other major problem				
Yes	18 (19.1)	76 (80.9)	5.639	.060
No	18 (9.4)	174 (90.6)		

4.3.6 Childhood trauma and who participants lives with

Forty-seven (82.5%) adolescents who lived with parents and ten (17.5%) adolescents who lived with others other than their parents reported divorce or separation of parents; this difference was statistically significant (p = .028). Thirteen (76.5%) adolescents who lived with parents and four (23.5%) adolescents who lived with others reported being victim of violence; this difference was statistically significant (p = .047). See table 4.3.6 below

Table 4.3.6: Childhood trauma and who the participants live with

Variables (Childhood Trauma)	Living with Parents n (%)	Others n (%)	X^2	P value
Death of a very close friend or family member				
Yes	176 (91.7)	16 (8.3)	0.169	.681
No	112 (90.3)	12 (9.7)		
Divorce or separation of Parents				
Yes	47 (82.5)	10 (17.5)	4.845	**.028**
No	221 (92.1)	19 (7.9)		
Traumatic sexual experience				
Yes	24 (85.7)	4 (14.3)	.828	.363
No	243 (91)	24 (9)		
Victim of violence				
Yes	13 (76.5)	4 (23.5)	3.955	**.047**
No	248 (91.2)	24 (8.8)		
Extremely ill or injured				
Yes	167 (91.8)	15 (8.2)	0.799	.371
No	110 (88.7)	14 (11.3)		
Other major problem				
Yes	85 (90.4)	9 (9.6)	0.150	.928
No	177 (91.2)	17 (8.8)		

4.3.7 Childhood trauma and number of mother's children of the participants

There is no statistically significant difference in number of mother's children of participants and childhood trauma.

Table 4.3.7: Childhood trauma and number of mother's children of the participants

Variables (Childhood Trauma)	Mother's children 1 – 4 n (%)	5 or more n (%)	X^2	P value
Death of a very close friend or family member				
Yes	147 (75.8)	47 (24.2)	0.014	.907
No	94 (75.2)	31 (24.8)		
Divorce or separation of Parents				
Yes	45 (77.6)	13 (22.4)	0.099	.753
No	183 (75.6)	59 (24.4)		
Traumatic sexual experience				
Yes	20 (71.4)	8 (28.6)	.180	.671
No	202 (75.1)	67 (24.9)		
Victim of violence				
Yes	10 (58.8)	7 (41.2)	2.361	.124
No	207 (75.5)	67 (24.5)		
Extremely ill or injured				
Yes	138 (74.2)	48 (25.8)	0.369	.543
No	95 (77.2)	28 (22.8)		
Other major problem				
Yes	72 (75)	24 (25)	2.957	.228
No	146 (74.9)	49 (25.1)		

4.3.8 Childhood trauma and number of father's children of the participants

There was no statistically significant difference in number of father's children and participants' experience of childhood trauma.

4.3.8 Childhood trauma and number of father's children of the participants

Variables (Childhood Trauma)	Father's children 1 – 4 n (%)	5 or more n (%)	X^2	P value
Death of a very close friend or family member				
Yes	138 (71.9)	54 (28.1)	0.048	.827
No	87 (70.7)	36 (29.3)		
Divorce or separation of Parents				
Yes	40 (77.6)	17 (29.8)	0.042	.837
No	171 (75.6)	68 (28..5)		
Traumatic sexual experience				
Yes	16 (59.3)	11 (40.7)	1.739	.187
No	190 (71.4)	76 (28.6)		
Victim of violence				
Yes	11 (64.7)	6 (35.3)	0.255	.614
No	191 (70.5)	80 (29.5)		
Extremely ill or injured				
Yes	128 (69.9)	55 (30.1)	0.322	.570
No	89 (73)	33 (27)		
Other major problem				
Yes	67 (70.5)	28 (29.5)	2.369	.306
No	136 (70.5)	57 (29.5)		

4.3.9 Childhood trauma and father's educational level of participants

There was no statistically significant difference in the level of father's education and experiences of childhood trauma.

Table 4.3.9: Childhood trauma and father's educational level of participants

Variables (Childhood Trauma	Father's educational level Primary School and below n (%)	Secondary and above n (%)	X^2	P value
Death of a very close friend or family member				
Yes	15 (7.8)	176 (92.2)	3.672	0.721
No	7 (5.6)	119 (94.4)		
Divorce or separation of Parents				
Yes	6 (10.3)	176 (92.2)	8.646	0.194
No	7 (5.6)	119 (94.4)		
Traumatic sexual experience				
Yes	3(15)	17 (85)	12.12	0.059
No	25 (9.1)	250 (90.9)		
Victim of violence				
Yes	0 (0)	17(50)	6.028	0.420
No	18 (9.1)	255 (58.8)		
Extremely ill or injured				
Yes	15 (8.3)	166 (91.7)	12.84	0.46
No	5 (4)	120 (96)		
Other major problem				
Yes	9 (9.8)	83 (90.2)	8.84	0.717
No	12 (6.1)	185 (93.9)		

4.3.10 Childhood trauma and mother's educational level of participants

Twenty-three (25%) adolescents whose mother have primary education and below and sixty-nine (75%) adolescents whose mother have secondary education and above reported other major problem; this difference was statistically significant (p = 0.00). See table 4.3.10 below

4 .3.10 Childhood trauma and mother's educational level of participants

Variables (Childhood Trauma	**Mother's educational level**			
	Primary school and below n (%)	**Secondary school and above n (%)**	**X^2**	**P value**
Death of a very close friend or family member				
Yes	13 (6.8)	176 (93.2)	10.825	0.094
No	9 (76)	51 (52)		
Divorce or separation of Parents				
Yes	5 (8.9)	51 (91.1)	4.332	0.632
No	16 (6.7)	217 (93.3)		
Traumatic sexual experience				
Yes	2 (6.9)	27 (47.8)	3.083	0.703
No	19 (7.4)	237 (57)		
Victim of violence				
Yes	7 (41.1)	10 (58.9)	10.80	0.095
No	46 (44.7)	217 (82.5)		
Extremely ill or injured				
Yes	37 (20.8)	141 (79.2)	7.360	0.289
No	19 (16.1)	99(83.9)		
Other major problem				
Yes	23 (25)	69 (75)	39.95	**<0.01**
No	31 (16.5)	157 (83.5)		

4.4 Prevalence of reported anxiety and depression experienced by adolescents

Anxiety and depression experience were categorized into "Case" and "Non case" based on the cut-off for BAI (16 and above) and BDI (18 and above). Mean score of anxiety was 9.55, the median score of anxiety was 7.0 (SD = 10.01). Fifty-four (20.5%) respondents were classified as "cases" for anxiety while two hundred and ten (79.5%) participants were "non-cases".

Mean depression scores was 13.68 (SD = 11.95). One hundred (38.9%) were classified as "cases" for depression while one hundred and fifty-seven (61.1%) participants were "non-cases".

Prevalence of anxiety and depression among Study Participants

Variables	Mean	Median	SD	Non cases N (%)	Cases N (%)	Total N (%)
Anxiety	9.55	7.0	10.01	210 (79.5)	54 (20.5)	264 (100)
Depression	13.68	11.0	11.95	157 (61.1)	100 (38.9)	257 (100)

4.5 Association between childhood trauma and mental health problems among Study Participants

Mental health problems are categorized into anxiety and depression.

4.5.1 Association between childhood trauma and anxiety scores among study participants

Traumatic sexual experience was significantly associated with anxiety (t = 3.885; p = .001) such that adolescents who reported traumatic sexual experience ($\overline{X}$ = 17.17) reported higher anxiety compared their counterparts who did not ($\overline{X}$ = 8.94). Other major problems also had a significant association with anxiety (t= 3.959; p <.001) and adolescents who experienced it reported higher anxiety ($\overline{X}$ = 13.51) compared to those who did not ($\overline{X}$ = 8.11). See Table 4.5.1 below.

4.5.1 Association between childhood trauma types and anxiety among study participants

Variables	$\overline{X}$ (BAI)	SD	Df	t	P-value
Death of a very close friend or family member					
Yes	9.36	9.51	253	-0.183	0.857
No	9.59	10.28			
Divorce or separation of Parents					
Yes	11.98	9.43	242	1.736	0.084
No	9.19	10.01			
Traumatic sexual experience					
Yes	17.17	11.78	236	3.885	**.001**
No	8.94	9.42			
Victim of violence					
Yes	12.21	9.23	234	1.040	.299
No	9.36	9.98			
Extremely ill or injured					
Yes	10.64	9.42	244	1.826	0.069
No	8.32	10.47			
Other major problem					
Yes	13.51	9.63	232	3.959	**.001**
No	8.11	9.67			

4.5.2 Association between childhood trauma and depression score among study participants

Extreme injury or illness had a significant association with depression (t = 2.568) such that adolescents who reported extreme injury or illness reported higher depression ($\overline{X}$ = 15.47) compared to other adolescents who do not report extreme illness or injury ($\overline{X}$ = 11.58). Also, other major problems had a significant association with adolescent depression (t = 5.292) such that those adolescents who reported other major problem reported higher depressive symptoms ($\overline{X}$ = 19.69) compared to those who do not report other major problem ($\overline{X}$ = 11.32).

See Table 4.5.2 below.

4.5.2 Association between childhood trauma type and depression score among study participants

Variables	$\overline{X}$ (BDI)	SD	Df	T	P-value
Death of a very close friend or family member					
Yes	14.71	11.42	243	1.169	.244
No	12.93	12.38			
Divorce or separation of Parents					
Yes	15.87	11.66	233	1.390	.172
No	13.23	11.53			
Traumatic sexual experience					
Yes	16.89	7.10	228	1.287	.061
No	13.24	11.83			
Victim of violence					
Yes	16.64	14.28	225	.851	.498
No	13.56	11.54			
Extremely ill or injured					
Yes	15.47	11.75	233	2.568	**.010**
No	11.58	11.13			
Other major problem					
Yes	19.69	11.90	219	5.292	**.000**
No	11.32	10.52			

4.6 Coping strategies reportedly used by the adolescents after trauma

Two hundred and twenty seven (71.6%) adolescents have been making use of instrumental support, it is the most used coping strategy. Two hundred and fifteen (65.7%) adolescents have been using active coping One hundred and ninety four (64.4%) adolescents were making use of acceptance. Two hundred and seven(64.9%) adolescents were making use of religion. Fifty five(16.9%) adolescents have been actively engaged in substanceuse, which is the least used coping strategy. See Table 4.6 below.

Table 4.6Coping strategies reportedly used by the adolescents after trauma

Variables (Coping Strategy)	Yes	No	Total
Use of instrumental support(e.g., *I have been trying to get advice or help from other people about what to do; I have been getting help and advice from other people* **)**	227 (71.6%)	90 (28.4%)	**317**
Active Coping (e.g., *I have been concentrating my effort on doing something about the situation I am in; I have been taking actions to try to make the situation better*)	215 (65.7%)	112 (34.3%)	**327**
Religion (e.g., *I have been trying to find comfort in my religion or spiritual beliefs; I have been praying or meditating*).	207 (64.9%)	112 (35.1%)	**319**
Planning (e.g., *I have been thinking hard about what steps to take; I have been trying to come up with a strategy about what to do*).	195 (62.5%)	117 (37.5%)	**312**
Acceptance(e.g., *I have been accepting the fact that it has happened; Have been learning to live with it*)	194 (61.4%)	122 (38.6%)	**316**
Positive reframing(e.g., *I have been trying to see it in a different light to make it seem morepositive; I have been looking for something good in what is happening***)**	198 (61.1%)	126 (38.9%)	**324**
Venting(e.g., *I have been saying things to let my unpleasant feelings escape; I have expressing my negative feelings*)	187 (59.6%)	127 (40.4%)	**314**
Use of emotional support (e.g., *I have been getting emotional support from others; I have been getting comfort and understanding from someone else*	180 (55%)	147 (45%)	**327**
Self-Distraction *(e.g.,I have been turning to work or other activities to take my mind off things: I have been doing something to think it less, such as going to movies, watching TV, reading, daydreaming, sleeping or shopping)*	178 (54.3)	150 (45.7%)	**328**
Humour(e.g., *I have been making jokes about it; I have been making fun of the situation*)	153 (49.2%)	158 (50.8%)	**311**
Denial (., *I have been saying to myself "this isn't real"; I have been refusing to believe that it has happened*	149 (46.6%)	171 (53.4%)	**320**
Behavioural disengagement(e.g., *I have been giving up trying to deal with it; I have been giving up the attempts to cope* **)**	120 (37.7%)	198 (62.3%)	**318**
Self-blame(e.g., *I have been criticizing myself; I have been blaming myself for things that happened*)	119 (37.5%)	198 (62.5%)	**317**
Substance Use (e.g., *I have been using alcohol or other drugs to make myself feel better; I have been using alcohol and other drugs to help me get through it*	55 (16.9%)	270 (83.1%)	**325**

4.7 Relationship between reported Coping strategies and anxiety and depression

Coping strategies was divided into doing and not doing, which was interpreted as Yes or No. These categories were significantly associated with anxiety and depression.

4.7.1 Relationship between reported Coping strategies and anxiety

Denial had a significant association with anxiety (p = 0.001) such that adolescents who adopted denial as a coping strategy reported higher anxiety (M = 15.27; SD) compared to those who did not (M = 8.61; SD). Venting had a significant association with anxiety (p = 0.008) such that adolescents who adopted venting as a coping strategy reported lower anxiety (M = 8.95;SD) compared to those who did not (M = 13.21;SD). Self-blame was significantly associated with anxiety (p = 0.001) such that adolescents who adopted self-blame as a coping strategy reported higher anxiety (M = 18.10 ;SD) compared to those who did not (M = 8.16;SD). Planning had a significant association with anxiety (p = 0.010) such that adolescents who didn't adopt planning as a coping strategy reported higher anxiety (M = 12.41;SD) compared to those who did (M = 8.51 ;SD). See table 4.7.1

Table 4.7.1 Relationship between reported Coping strategies and anxiety

Variables (Coping strategy)	$\overline{X}$ of anxiety	SD	T	Df	P-value
Self-Distraction					
Doing	9.47	10.15	.837	255	.412
Not Doing	10.65	9.77			
Active Coping					
Doing	9.09	10.73	.910	254	.364
Not Doing	10.24	8.57			
Denial					
Doing	15.27	13.56	3.833	251	**.001**
Not doing	8.61	8.98			
Substance Use					
Doing	14.00	11.58	.764	252	.499
Not doing	9.55	9.97			
Use of emotional support					
Doing	9.35	9.39	.840	256	.402
Not doing	10.54	11.26			
Behavioural disengagement					
Doing	9.45	7.72	.096	245	.924
Not doing	9.30	10.10			
Venting					
Doing	8.95	9.99	2.721	246	.008
Not doing	13.21	10.04			
Use of instrumental support					
Doing	9.09	8.55	.815	247	.416
Not doing	10.10	11.09			
Positive reframing					
Doing	9.63	10.52	.071	252	.944
Not doing	9.71	8.97			
Self-blame					
Doing	18.10	12.73	6.220	250	**.001**
Not doing	8.16	8.57			
Planning					
Doing	8.51	9.21	2.636	243	**.010**
Not doing	12.41	11.15			
Humour					
Doing	9.35	9.87	1.210	249	.232
Not doing	11.59	10.53			
Acceptance					
Doing	9.67	10.69	.431	251	.667
Not doing	10.22	8.31			
Religion					
Doing	9.85	10.68	.186	251	.853
Not doing	9.62	9.08			

4.7.2 Relationship between reported Coping strategies and depression

Self-distraction was significantly associated with depression (p = 0.001) such that adolescents who adopted self-distraction as a coping strategy reported lower depressive symptoms (M = 12.49;SD) compared to those who did not (M = 18.68 ;SD). Active coping was significantly associated with depression (p = 0.008) such that adolescents who adopted active coping as a coping strategy reported lower depressive symptoms (M = 12.20;SD) compared to those who did not (M = 16.29 ;SD). Denial was significantly associated with depression (p = 0.005) such that adolescents who adopted denial as a coping strategy reported higher depressive symptoms (M = 19.68 ;SD) compared to those who did not (M = 12.65;SD).

Venting was significantly associated with depression (p = 0.001) such that adolescents who adopted venting as a coping strategy reported higher depressive symptoms (M = 19.82 ;SD) compared to those who did not (M = 12.48 ;SD). Positive reframing was significantly associated with depression (p = 0.042) such that adolescents who adopted positive reframing as a coping strategy reported lower depressive symptoms (M = 12.68 ;SD) compared to those who did not (M = 15.84 ;SD). Self-blame was significantly associated with depression (p = 0.001) such that adolescents who adopted self-blame as a coping strategy reported higher depressive symptoms (M = 21.71;SD) compared to those who did not (M = 12.71;SD).

Planning was associated significantly with depression (p = .004) such that adolescents who adopted planning as a coping strategy reported lower depressive symptoms (M = 12.59;SD) compared to those who did not (M = 17.53;SD). Acceptance was significantly associated with depression (p = 0.005) such that adolescents who adopted acceptance as a coping strategy reported lower depressive symptoms (M = 12.52;SD) compared to those who did not (M = 17.20;SD).

Religion was significantly associated with depression ($p = 0.003$) such that adolescents who adopted religion as a coping strategy reported lower depressive symptoms ($M = 12.05$;SD) compared to those who did not ($M = 16.78$;SD).

Table 4.7.2 Relationship between reported Coping strategies and depression

Variables (Coping strategy)	$\overline{X}$ of depression	SD	T	Df	P-value
Self-Distraction					
Doing	12.49	11.13	3.556	248	**.001**
Not doing	18.68	13.35			
Active Coping					
Doing	12.20	11.48	2.681	248	.008
Not doing	16.29	12.39			
Denial					
Doing	19.68	13.53	2.984	244	**.005**
Not doing	12.65	11.17			
Substance Use					
Doing	17.75	14.72	.777	247	.343
Not doing	13.66)	11.89			
Use of emotional support					
Doing	13.18	12.04	1.324	250	.187
Not doing	15.32	11.75			
Behavioural disengagement					
Doing	15.60	13.00	.840	239	.406
Not doing	13.63	11.76			
Venting					
Doing	19.82	12.47	3.740	242	**.001**
Not Doing	12.48	11.48			
Use of instrumental support					
Doing	12.92	11.37	1.826	243	0.69
Not Doing	15.85	12.82			
Positive reframing					
Doing	12.68	12.31	2.049	243	**.042**
Not Doing	15.84	11.15			
Self-blame					
Doing	21.71	14.84	4.253	243	**.001**
Not Doing	12.71	10.97			
Planning					
Doing	12.59	11.84	2.914	240	**.004**
Not Doing	17.53	11.99			
Humour					
Doing	13.59	11.79	.593	240	.556
Not Doing	14.89	12.44			
Acceptance					
Doing	12.52	13.12	2.805	242	**.005**
Not Doing	17.20	11.35			
Religion					
Doing	12.05	11.31	3.014	244	**.003**
Not Doing	16.78	12.47			

4.7.3 Association between childhood trauma, anxiety and depression.

Table 4.6.3 shows the association of childhood trauma on anxiety and depression among school students and the result showed that childhood trauma had a joint influence on anxiety [F(6,203) = 3.911; R = .316; R^2 = .10; p <.01]. Independently, only rape or molestation had a significant independent association with anxiety (B = .214, p <.01) while others had no significant independent association with anxiety. Childhood trauma experiences had no significant association with depression [F(6,203) = 1.866; R = .229; R^2 = .052; p >.05]. See Table 4.7.3 below.

Table 4.7.3 Multiple regression statistics table showing the association between childhood trauma, anxiety and depression respectively

Dependent Variable	Independent Variable	B	T	P	R	R^2	F	P
Anxiety	Death of family/friend	.090	1.294	>.05	.316	.10	3.911	<.01
	Divorce/separation	.060	.884	>.05				
	Rape/Molestation	.214	3.048	<.01				
	Child abuse	.031	.466	>.05				
	Illness or injury	.130	1.885	>.05				
	Major problem	.107	1.628	>.05				
Depression	Death of family/friend	.093	1.294	>.05	.229	.052	1.866	>.05
	Divorce/separation	.081	1.124	>.05				
	Rape/Molestation	.002	0.033	>.05				
	Child abuse	.000	0.001	>.05				
	Illness or injury	.138	1.949	>.05				
	Major problem	.086	1.245	>.05				

4.7.4 Association between coping strategy, depression and anxiety

The result from table 4.7.4 shows that coping strategy jointly predicted anxiety [F(14,201) = 4.676, p <.01] and depression [F(14,200) = 2.990, p <.01]. Independently, only self-blame predicted anxiety (B = .397, p <.01) while venting (B = .310, p <.01) and self-blame (B = .166, p <.01) independently predicted depression.

Table 4.7.4 Multiple regression summary table showing the of coping strategy on depression and anxiety

Dependent Variable	Independent Variable	B	T	P	R	R^2	F	P
Anxiety	Self-Distractions	.017	.197	.844	.509	.259	4.676	<.01
	Active Coping	-.068	-.710	.478				
	Denial	.076	.960	.338				
	Substance Use	.079	1.124	.262				
	Use of Emotional Support	.011	.156	.876				
	Use of Instrumental Support	-.085	-1.126	.262				
	Behavioural Disengagement	-.126	-1.718	.087				
	Venting	.112	1.264	.208				
	Positive Refraining	-.139	-1.387	.167				
	Planning	.202	1.825	.070				
	Humour	-.019	-.269	.788				
	Acceptance	.043	.460	.646				
	Religion	-.025	-.288	.774				
	Self-Blame	.379	4.992	.000				
Depression	Self-Distractions	.094	1.039	.300	.429	.184	2.990	<.01
	Active Coping	.108	1.048	.296				
	Denial	.051	.598	.550				
	Substance Use	-.048	-.614	.540				
	Use of Emotional Support	-.082	-1.091	.277				
	Use of Instrumental Support	-.018	-.198	.843				
	Behavioural Disengagement	-.057	-.730	.466				
	Venting	.310	3.390	.001				
	Positive Refraining	-.071	-.721	.472				
	Planning	-.049	-.445	.657				
	Humour	.017	.231	.818				
	Acceptance	-.020	-.207	.836				
	Religion	-.002	-.026	.979				
	Self-Blame	.166	2.019	.045				

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATION

5.0 Introduction

This chapter deals with the discussion of study findings in relation with the existing literature that was reviewed earlier in accordance with the study objectives. Childhood trauma, coping and mental health problems among adolescents in secondary schools in Ibadan North local government area of Oyo state was examined. The chapter concludes by highlighting some of the limitations of the study and recommendations for future research are made.

5.1.1 Socio-demographic Characteristics of study respondents

A total of 341 respondents drawn from four different schools, two public schools (School3 and School 4) and two private schools (school 1 and school 2) within Ibadan North LGA participated in the study.

The participants of this study comprised of adolescents aged 13-17years. The mean age of the participants was 14.67 with the SD=1.33,This is similar to a previous study within the same LGA by Osinubi (2018)which found a mean age of 14.00 years. Other studies in Ibadan found a higher mean age of 15.4 years (Bella-Awusah, 2014) and 15.5 years (Abdurahman,2016). Two hundred and eleven (61.9%) of the participants were males while the remaining one hundred and thirty (38.1%) were females, the number of males is higher than the number of females which is in tandem with previous school studies by Agu and Sam,(2013) and Amadi et al.,(2016) which reported (53%) males and (47%) females. In most studies, males are more than females possiblybecause of cultural values and societal belief in the male superiority and female subordination, though there is change in proportion and increase in the number of girls in school because of awareness. Eighty-four (24.9%) of the participants were JSS3 students, one hundred

and twenty-eight (38%) were SS1 students, one hundred and eight (32%) were SS2 school students while the remaining seventeen (5%) were SS3 students. Very few students in SS3 participated because they were engaged in preparations for their upcoming exam (SSCE).

Participants from monogamous home (85.7%) while participants from polygamous home (14.3%). Other studies in this area also found more students in monogamous families, Bella-Awusah et al (2015) found 67.5% students from monogamous family while 32.5% was from polygamous family, Adeshinwa (2013) also had a similar finding (61%) from monogamous family while (39%) from polygamous family, Bamgbade and Saloviita (2014) found (75%) from monogamous family while (25%) from polygamous family.

The consistency of this finding may be as a result of modernization and development, most men marry just one wife these days unlike years back when polygamy was more in practice, and also the study location which is an urban location. Ninety-seven (34.8%) of the participants practice Islam, forty-two (15.1%) practice Christianity in Orthodox Church while the remaining one hundred and forty (50.2%) practice Christianity in Pentecostal church. The findings that most of the study participants are Christians is similar to findings from other studies among secondary school adolescents in Ibadan (Omigbodun,2006 and Osinubi,2018).

5.1.2 Prevalence of reported childhood trauma experienced by adolescents

In this study childhood trauma was classified into 6- death of a very close friend or family member, divorce or separation of parents, traumatic sexual experience, violence other than sexual abuse, extreme illness or injury, other major problems (continuous violence or bullying, serious and present family discord, presence of chronic illness) that they believe have shaped their life and personality.

Twenty-nine (9.6%) of the participants had experienced traumatic sexual abuse,Adolescents usally feel shame, fear, guilt and are reluctant to give information about sexual abuse. This finding is not far from a study by Manyike et al,2015 which reported prevalence of sexual abuse as 11.5%. Fifteen (57.7%) of females reported sexual abuse while fourteen (48.3%) of male adolescents reported sexual abuse, There was no significant gender difference in the reports of sexual abuse. The finding of this study is close to a study by Oyekola,(2012) which reported the prevalence of sexual abuse in girls to be (56%) and (44%) in boys. Girls are more likely to report sexual abuse than boys(Isa et al..,2011).This study also found that more girls experienced sexual abuse than boys.

Globally, one in eight adults report childhood sexual abuse and one in four reports childhood physical abuse (Sara and Lapppin, 2017), which is higher than the findings of this study and may be as a result of increased awareness. The adolescents may also have feelings of shyness or shame and may be reluctant to give information concerning sexual experiences. Eighteen (6.1%) had experienced violence other than sexual abuse, experience of violence was more prevalent in the male adolescents. Fifteen (83.3) adolescents that experienced violence were male while only three (16.7) were females. This finding can be linked to studies that found that males are more likely to be both perpetrators and victims of violence (Furlong & Morrison, 2000). Different studies have found more male than female involvement in school violence (Cornell &Loper, 1998). Boys are more likely to engage in high-risk behaviours (Furlong & Morrison, 2000).

One hundred and eighty-seven (59.7%) had experienced extreme illness or injury, and ninety seven (32.9%) had experienced other major problems (continuous violence or bullying,serious family discord, presence of chronic illness) that they believe have shaped their life and personality. The

above findings is also related with the studies of (Sara and Lappin, 2017; Bethel et al., 2014; Khourny et al., 2010; Felliti et al., 1998) where they asserted that experiences of childhood trauma are highly prevalent. A study done in the United States showed that almost half of all children have experienced at least one trauma (Bethel et al., 2014). In surveys of adolescents receiving treatment for substance abuse, more than 70% had a history of trauma exposure (Khourny et al., 2010).

5.1.3 Socio Demographic Correlates of Childhood Trauma

Childhood trauma and age of the Adolescents

Traumatic experience is not uncommon among adolescents (Costello et al., 2002). Traumatic experiences are usually unexpected (Kaminer and Eagle, 2010). These previous studies show that childhood trauma is not particular to any age. People who experience trauma are usually not prepared for it, it can occur at any time and age.

This study found that there was no significant relationship between younger and older adolescents in relations to childhood trauma.

Both traumatic experiences are indirect in the sense that the adolescent is not affected directly unlike sexual abuse which is directly experienced by the adolescent. The older adolescents may have reported less because they have developed more threshold for persistence and are have more capability to resist the pain. Eleven (39.3%) younger adults and seventeen (60.7%) older adolescents reported traumatic sexual abuse; the difference wasnot statistically significant (p = 0.262). this finding is in line with the findings of Mankiye,(2015) which also found that there was no statistical significance in childhood trauma and age of adolescents with (p=0.157). The findings of this study in comparison to a study by (Costello et al., 2002) where he opined that it is estimated that approximately 25% of children and adolescents will have experienced trauma by age 16 (older adolescents) (Costello et al., 2002). Only three out of the six classification of childhood trauma in

this study which are sexual abuse, extreme illness or injury, other major problems were reported to behigher in older adolescents. Although none was statistically significant.

Childhood trauma and gender of participants

Gender plays a vital role in traumatic experiences (Omigbodun et al., 2008). The role of gender in traumatic experiences cannot be ignored. The perceptions of adolescents are different depending on factors like type of school, gender and socio-economic class (Schubarth, 2000). Gender is one the major factors that plays an important role in the experiences of trauma.

Fifteen (51.7%) femalesandfourteen (48.3%) males experienced sexual abuse which means the proportions are similar. This increase in the number of males that reported sexual abuse compared to other studies is a concern, this may also be because of the awareness in the change and pattern of sexual abuse and increase in prevalence of homosexuality(Meyer, 2003). Female sexual abuse is more widely noticed and looked into, which may have been the reason for higher reports of sexual abuse among females (Murray et al.,2014). More of the females who experienced sexual abuse reported anxiety symptoms than the males. A previous finding also reports that females who experience sexual abuse during childhood have more symptoms of anxiety (Margaret and Kyle, 2005). Twenty-eight (46.7%) male adolescents and thirty-two (53.3%) female adolescents reported divorce or separation of parents, which was statistically significant. Perhaps, it could be that females feel the absence of one of their parents more than the males. Fifteen (83.3%) males and three (16.7%) female adolescents reported being victim of violence, which was statistically significant. Osinubi,2018 also reported that males significantly reported more violence and bullying than females. Different studies have found more male than female involvement in school violence (Cornell &Loper, 1998). Boys are more likely to engage in high-risk behaviours (Furlong & Morrison, 2000).

Childhood trauma and family type of participants

Family structure influences a child's development, it plays an important role in the outcome of a child (Paylo,2005). The death of a parent or loved one may have different impact on children in nuclear family structure and children in extended family structure (Oladeji et al., 2010). There is a difference in the experiences and reactions of children depending on their family type and structure.

Thirty-eight (64.4%) adolescents from monogamous family and twenty-one (35.6%) adolescents from polygamy family type reported divorce or separation of parents, which was statistically significant (p = .001). Seventeen (63%) adolescents from monogamous family type and ten (37%) adolescents from polygamous family type reported traumatic sexual abuse which was statistically significant (p = .001), this finding is not in agreement with a report from WHO,(2000) which reports that being a stepchild in a polygamous home is a risk factor for being sexually abused. One hundred and forty-six (81.6%) adolescents from monogamous family and thirty-three (18.4%) adolescents from polygamous family type reported extreme illness or injury; this difference was statistically significant

Reports of the listed childhood traumatic experiences were more prevalent in children from monogamous homes. The study was carried out in an urban area, most families in the urban area are monogamous. Children from polygamous homes may be able to receive more support and care from other wives, aunties or siblings of the family.Browstein (2009) stated that the difference can be related to their temperaments, other people's reactions and the help or support available for the child and family.

5.1.4 Prevalence of reported Anxiety and Depression among study participants.

The prevalence of anxiety disorder and depression in Nigerian adolescents is comparable to the prevalence in other parts of the world (Adewaya et al,2007).

Meanscore of anxiety was 9.55 (SD = 10.01),fifty-four (20.5%) met criteria for caseness for anxiety. The prevalence of anxiety in this study is comparable to a study by Adewuya et al among secondary school students which reported a prevalence of 15.0%,other studies among secondary school adolescents in Enugu reported a prevalence of 34.1%(Chinawa et al.,2018) and in Uganda by Nsereko (2018) reported a prevalence of 35.5% which is higher than the finding of this study. The disparity may be as a result of higher sample size and use of different instruments. A prevalence of 10.3% and 8.2% was found in Qatar and Malaysia respectively by (Gholoum and Abou-Saleh,2012) and (Maideen et al,2015), this is lower than the finding of this study and a pointer that the Nigerian adolescents may need more awareness and attention on mental health. Another study carried out among Nigerian adolescents by Adewuya et al.,2005 also shows high prevalence of anxiety disorder, the high prevalence of anxiety in this study may be because of the increased mental health awareness among adolescents, though it is still a concern.

Meanscore of depression was13.68 (SD = 11.95), and one hundred (38.9%) met casenessfor depression. The prevalence of depression in this study is high compared to other studies carried out among secondary school adolescents within Africa which reports a prevalence of 28.43% in Nigeria (Adewuya et al.,2005) 26.5% in Kenya (Khasakhala et al.,2012) and 21.1% in Uganda (Nsereko,2018). A study by Omigbodun,2008 also finds a prevalence of 28.1% among youths in SouthWest Nigeria which is still lower than the finding of this study. The difference in the reports of depression in this study may be because of the use of different instruments which includes the diagnostic versus screening instruments, different methods and time of study. There is also an

increase in the prevalence of depression worldwide, Depression ranks third among the leading causes of global burden of diseases worldwide and first in middle and high-income countries. This finding is similar to the finding of a study by (Abiodun and Sanu,2014) which reports a prevalence of 35.8% among undergraduate students in Ota, Nigeria.

Depression is an essential global public health concern because of its high lifetime prevalence (Bella-Awusah et al.,2016)

5.1.5 Association between Childhood Trauma and Mental Health Problems among study participants

Mental health problems are categorized into anxiety and depression. Traumatic sexual experience was significantly associated with anxiety ($t = 3.885$; $p = 0.001$) such that adolescents who reported traumatic sexual experience reported higher anxiety compared to their counterparts who did not. A study conducted in Lagos, Nigeria by Adeosun and Ogunlowo (2014) also reports a significant association between sexual abuse and anxiety with ($p = 0.007$). This finding is in agreement with a study by Kuo et al (2010) which found that individuals with anxiety disorder experienced higher rates of childhood emotional abuse and neglect, sexual abuse and physical abuse. Other major problems also had a significant association with anxiety and adolescents who experienced other major problems reported higher anxiety compared to those who did not. Other major problems are experiences not listed in the traumatic scale that may be traumatic to the adolescents. Experiences of childhood trauma increase the chances of having continuous anxiety (Rehan et al., 2017).

Extreme injury or illness had a significant association with depression such that adolescents who reported extreme injury or illness reported higher depression compared to other adolescents who do not report extreme illness or injury . Extreme injuries and illness are traumatic because it makes

the children and adolescents to feel different from others, the injuries and illness may hinder them from going to school or taking part in other activities which leaves them with feelings of depression. Different types of trauma experienced by children include natural disasters, medical injury, illness, neglect, deprivation, loss/death, accidents, school violence, and divorce (Young,2016). Childhood traumatic experiences are linked to depression later in life and may be a major factor for chronic depression (Wiersma et al., 2009). Children that experience traumatic events are more likely to develop depression than children who did not experience any trauma. Also, other major problems had a significant association with adolescent depression such that those adolescents who reported other major problem reported higher depressive symptoms compared to those who do not report other major problem .

5.1.6 Coping strategies reportedly used by the adolescents after trauma

This study explored the different types of coping strategies used by the adolescents after trauma. Previous research show that the use of coping strategies can reduce psychological distress and improve well-being (Gullone et al., 2009 as cited in Mefoh et al., 2015). Unfortunately, sometimes the coping mechanisms used by different people are either psychologically or physically unhealthy methods (Hornor, 2015).

Fifty five (16.9%) adolescents were actively engaged in substance use. Substance use is sometimes initiated or increased after trauma. This finding is lower than the finding of Lasebikan and Ola (2016) which found a prevalence of 23.7% among young people, this may be because of larger sample size. People that experienced trauma can start making use of substances like alcohol, marijuana and cigarettes as a way of coping (Vlahov et al., 2015). Adolescents make use of different substances to help them forget the situation. Substance use was the least reported means

of coping. This could be because the study participants were in-school adolescents and schools do not permit the use of substances, though it is not uncommon to find students using alcohol because of the curiosity and desire to overcome emotional problems like anxiety (Bada and Adebiyi,2011). Adolescents and young people not in school may use more of substances as a means of coping after trauma. In surveys of adolescents receiving treatment for substance abuse, more than 70% had a history of trauma exposure (Khournyetal.2010).

Two hundred and seven (64.9%) adolescents were using religion. From the findings of the study, 65.3% of the study participants practiced Christianity while 34.8% practiced Islam, 74.6% reported that their religion guides their behaviour. However 64.9% reported to actively use religion as a way of coping. This finding is lower compared to a study in Kenya where most of the study adolescents in the study (85%) used religion to cope in stressful situations (Eve et al.,2013) and higher than a study amongst Pakistanis found increased use of religion to cope (48.1%). The difference in the findings may because of the use of different instruments and different sample size.

5.1.7 Relationship between reported Coping Strategies and Anxiety and Depression

Coping can be healthy or unhealthy, done consciously or unconsciously to overcome stressors or to tolerate the effects of stress in a minimal way (Matheny et al., 1986). Unhealthy ways of coping may lead to higher risk of developing mental health problems. This study explored the different ways of coping used by the adolescents,. There are significant relationships between some of the coping styles with anxiety and depression. Some of the coping styles may increase the risk of anxiety or depression. Anxiety and depression may be as a result of poor and negative coping strategies and increased stress (Hays,Sherbourne,Mazel,1995). Anxiety and Depression may occur in physiological responses to trauma (Gilmore,Osho,Heads, 2013).

Denial had a significant association with anxiety (p = 0.001) such that adolescents who adopted denial as a coping strategy reported higher anxiety (M = 15.27) compared to those who did not (M = 8.61). Given that adolescents who used this coping style reported higher anxiety, it suggests that Denial or Avoidance are negative ways of coping and may result in higher risk of mental health problems. This is in line with the findings of Uqdahet al.,(2009) which showed that denial as a coping style is associated with anxiety and depression.

Self-blame was significantly associated with anxiety (p = 0.001) such that adolescents who adopted self-blame as a coping strategy reported higher anxiety (M = 18.10) compared to those who did not (M = 8.16). This is in tandem with a study among medical students that found self-blame to likely damage the student's self-worth and esteem with (p=0.01) (Goyal et al.,2016). Adolescents who used self –blame reported the highest level of anxiety than other coping methods. Thus self-blame is not a good means of coping. A study by Kulpa et al., (2016) also found an association between self-blame and anxiety.

Venting had a significant association with anxiety such that adolescents who adopted venting as a coping strategy reported higher anxiety compared to those who did not. Therefore venting may not be a positive means of coping. This was also found in another study which showed that venting resulted in higher levels of anxiety (Uqdah et al.,2009). This letting out anger, stress and difficulties without finding a proper means of coping may not be of help.

Planning had a significant association with anxiety (p = 0.010) such that adolescents who didn't adopt planning as a coping strategy reported higher anxiety compared to those who did .This finding indicates that planning is a good and positive means of coping as it helps to reduce anxiety.

Kulpaet al.,(2016) also states that planning is negatively correlated with anxiety. There is a significant relationship between anxiety, coping strategies and socio demographic characteristics (Tarik et al., 2008). The above findings is not just dependent on the coping style but also on the socio demographic characteristics like gender, family type and structure of the study participants.

Self-distraction was significantly associated with depression (p = 0.001) such that adolescents who adopted self-distraction as a coping strategy reported lower depressive symptoms (M = 12.49) compared to those who did not (M = 18.68). Self-distraction is emotion focused coping style. The adolescents that used this means of coping try to distract themselves from the difficult situation. This seems to help in this study but not in line with some studies that found that emotional focused means of coping resulted in higher levels of depression (Uqdah et al., 2009). Also emotional reaction to depression is a major factor in determining coping strategies (Kelly et al.,2007).

Active coping was significantly associated with depression (p = 0.008) such that adolescents who adopted active coping as a coping strategy reported lower depressive symptoms (M = 12.20) compared to those who did not (M = 16.29). Uqdah,et al (2009) also found that active coping was associated with lower levels of mental health problems.

Denial was significantly associated with depression (p = 0.005) such that adolescents who adopted denial as a coping strategy reported higher depressive symptoms (M = 19.68) compared to those who did not (M = 12.65). This finding is similar to the finding of Abdurahman (2016) which a significant relationship between denial and depression with (p = 0.02). Venting was significantly associated with depression (p = 0.001) such that adolescents who adopted venting as a coping strategy reported higher depressive symptoms (M = 19.82) compared to those who did not (M = 12.48). Adolescents who use Denial and venting as a way of coping reported the second highest

level of depression. This finding suggest that Denial/Avoidance and Venting are negative coping styles for depression. Venting also resulted in greater levels of depression in a study by Uqdah et al (2009). Self-blame was significantly associated with depression (p = 0.001) such that adolescents who adopted self-blame as a coping strategy reported higher depressive symptoms (M = 21.71) compared to those who did not (M = 12.71). Adolescents who make use of self-blame reported the highest level of depressive symptoms from the findings of this study. This was higher than those that had anxiety and reported self-blame as a coping style. From the findings of Kulpa et al, (2016) self-blame is greatly associated with anxiety but the findings of this study shows that self –blame is more associated with depression than anxiety.

Planning was associated significantly with depression such that adolescents who adopted planning as a coping strategy reported lower depressive symptoms compared to those who did not. Acceptance was significantly associated with depression (p = 0.005) such that adolescents who adopted acceptance as a coping strategy reported lower depressive symptoms (M = 12.52) compared to those who did not (M = 17.20). This finding is in contrast with the findings of Abdurahman (2016) which reports higher prevalence of depression among students who used acceptance as a way of coping with (p=0.029). This may be because acceptance involves changings in ones cognitive or psychological state about the problem in order to reduce expected harm which may not have a positive outcome. The study suggests thatadolescents who use planning and acceptance as a way of coping could have lower depressive symptoms; hence it good means of coping. This finding agrees with the finding of Kulpaet al.,(2016) that planning is associated with depression.

Religion was significantly associated with depression (p = 0.003) such that adolescents who adopted religion as a coping strategy reported lower depressive symptoms (M = 12.05) compared

to those who did not (M = 16.78). A study among Iranian patients also showed a significant association between religious coping and depression with (p = 0.009) (Goudarzian et al., 2017). This study finds that some of the adolescents used their religion which is Christianity and Islam to cope through stress. Religious coping reduces depression (Olszewski and Norum,2000). Religious coping has been shown to be a good and reliable means of coping (Amadi et al., 2006).

5.1.8 Relationship between Childhood Trauma,Coping and Mental Health Problems (Anxiety and Depression).

Adolescents who experiencedchildhood trauma showed a joint significant association with anxiety. This is similar to a study conducted in South Africa among children and adolescents which found anxiety as the most reported mental health problem after trauma (Kleintjes et al., 2006). Persons that experience trauma struggle to deal with feelings of uncertainty and susceptibility in the aftermath of trauma (Kaminer and Eagle, 2010). This may explain why childhood trauma is greatly associated with anxiety in adolescents, the experiences of trauma creates fear and uncertainty in them which may expose them to anxiety.Independently, only sexual abuse had a significant independent association with anxiety, while others had no independent significant association with anxiety.A study conducted in Lagos, Nigeria by Adeosun and Ogunlowo (2014) also reports a significant association between sexual abuse and anxiety. There is no significant relationship between Childhood trauma experiences withdepression. It is surprising to report that childhood trauma had no significant association with depression. This finding is in contrast to a study which reports that there is a significant relationship between all types of childhood traumatic experiences and depression and anxiety symptoms later in life (Rehan et al.,2017). This may be because of low response of study participants on the instrument used to measure depression in this study.

Coping strategy jointly predicted anxiety and depression. Some of the study participants reported high risk of anxiety and depression after trying to cope with the stress of trauma, it is quite surprising that people may develop high risk of anxiety and depression in the process of coping, this finding is in tandem with this statement "Coping in an unhealthy way could create more stress, anxiety and depression" (Boyes, 2013). Individuals cope in different ways while trying to overcome trauma and this may lead to a negative outcome. People react and cope in different ways after traumatic events. Coping refers to a different cognitive and behavioural strategies and methods individuals use to manage their stress (Folkman et al., 2004). Independently, only self-blame predicted anxiety, venting and self-blame independently predicted depression.

5.2Strength of the Study

This study is among the few studies in Nigeria that has examined childhood trauma, coping and mental health problems among adolescents in secondary school adolescents. This study is also one of the few studies in Nigeria that has been able to find positive and negative ways of coping among secondary school adolescents.

Limitations of the Study

1. Small sample size, the findings of this study cannot be generalised because of small number of study participants.
2. Childhood traumatic events and coping styles were obtained through reflection of past experiences, which is unavoidable and similar to the findings of other studies. However remembering past experiences may not be accurate because of limitations for human memory or to avoid re-awakening distress.

5.3Conclusion

The study examined childhood trauma, coping and mental health problems among adolescents in secondary schools in Ibadan North local government area of Oyo state, Nigeria.

Many adolescents reported childhood trauma and mental health problems like anxiety and depression. This may cause difficulties in their academics and should be addressed properly. The adolescents used different coping strategies, the coping strategies were influenced by different factors.

This study has been able to explore the impact of childhood trauma on mental health and the impact of coping strategies on mental health. Therefore adolescents should be encouraged to use the positive coping strategies.

5.4 Recommendation

1 Creating awareness about different types of traumatic experiences and how to prevent possible trauma is important. There is need for intervention and management of children and adolescents that have experienced trauma. Schools can provide spaces and social system that make group-based intervention easily accessible (Bella-Awusah et al.,2016),

2 Teachers, clinicians and other mental health professionals should be trained and provided with adequate resources to guide the students.

3 Positive coping styles should be encouraged and the negative coping styles should be discouraged.

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APPENDIX 1

INFORMED CONSENT FORM

PROJECT TITLE: CHILDHOOD TRAUMA, COPING AND MENTAL HEALTH PROBLEMS AMONG SECONDARY SCHOOL ADOLESCENTS IN IBADAN

I am a postgraduate student at the centre for child and Adolescent mental health, university of Ibadan. I am interviewing Adolescent students in four secondary schools within Ibadan North Local Government area in order to find out if some of the students experienced stressful and difficult situations as children, how they coped and the relationship of the experiences to their mental health.

I will give you questionnaires to fill with appropriate answers. Your answers and any personal information provided will be kept confidential and protected.

The information received will help to provide more understanding of childhood trauma and how children cope.

As part of this project, students who have experienced multiple/complex trauma in childhood will be counselled on how to cope with the trauma how to cope and improve living. Those with life-threatening mental health problems will be referred to the CAMH Clinic UCH Ibadan.

You are free to take part in this study. You also have the right to withdraw at any time. I will appreciate your cooperation and support in responding and taking part in the study.

Consent: Now that the study has been well explained to me and I understand all that is written and the context of the process, I agree to participate in the study.

_____ _____

APPENDIX II

Project title:Childhood trauma, coping and mental health problems among adolescents in secondary schools in Ibadan.

Signature of Participant **Interview Date**

Serial Number: _____

Today's date_____/_____/_____

SCHOOL HEALTH QUESTIONNAIRE IN ENGLISH

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 1

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 practise any religion? (a) No (b) Yes
8. Please write down the exact place you attend for worship

   (a) Islam (b) Orthodox Christian (c) Pentecostal Christian (d) Traditional religion (c) other
9. How much does the teaching of your religion guide your behaviour?

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

10. How much does the teaching of your religion guides your family life's?

(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 _____

13. Number of father's children _____

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

15. What is your position among your father's children? _____

16. Marital Status of Parents:

(a) Married (b) Separated/ Divorced (c) father is dead (b) Mother is dead (e) Mother and 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 wither experience was good or bad? _____

22. Person lived with from which age to which age Experience (Good or Bad)

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 (f) 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.

26. Level of mother's Education(a) No Formal Education (b) Quranic 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 the exact occupation) _____ I do not know _____

28. Do you like your family? (a) Yes (b) No

29. a. If Yes, why? _____

29. b. If No, Why? _____

School-Related Question

30. Do you like your school? (a) Yes (b) No

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

32. Do you do well academically? (a) Yes (b) No

33. a. If Yes, explain _____

33. b. If No, explain _____

34. Are you having difficulties with your teachers? (a) Yes (b) No

35. If Yes, what sort of difficulties? _____

36. Do you have guidance counsellors in your school? (a) Yes (b) No

37. Have you ever gone to see them? (a) Yes (b) 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 counsellor for help? (a) Yes (b) No

40. a. If Yes, why would you go? _____

40. b.If No, why not? _____

41. How do you cope with stress?

_____

_____

_____

_____

42. What helps you to cope with the stress challenges in your life?

_____

_____

_____

_____

43. How can your school help improve coping skills among students?

_____

_____

_____

_____

APPENDIX III

Project title:Childhood trauma, coping and mental health problems among adolescents in secondary schools in Ibadan.

CHILDHOOD TRAUMATIC EVENTS SCALE

For the following questions, answer each item that is relevant. Be as honest as you can. Each question refers to any event that you may have experience before the age of 17.

The seven (7) points scale

1. Not traumatic
2. May be traumatic
3. Slightly traumatic
4. Moderately traumatic
5. Moderately severe traumas
6. Severely traumatic
7. Extremely traumatic

1. Before the age of 17, did you experience a death of a very close friend or family member? _____ If yes, how old were you? If yes, how traumatic was theexperience? (using a 7-point scale, where 1 = not at all traumatic, 4 = somewhat traumatic, 7 =extremely traumatic_____
2. Before the age of 17, was there a major problem between your parents (such as divorce, separation)? _____ If yes, how old were you? _____
3. Before the age of 17, did you have a traumatic sexual experience (rape, Molestation etc.)? _____ If yes, how old were you? _____
4. Before the age of 17, were you the victim of violence (child abuse, mugged or assaulted other than sexual)? _____If yes, how old were you? _____

5. Before the age 17, were you extremely ill or injured? _____ If yes, how old were you? _____

6. Before the age of 17, did you experience any other major problem that you think may have shaped your life or personality significantly? _____ If yes, how old were you? _____ if yes how traumatic was this (7 = extremely traumatic)_____

RECENT TRAUMATIC EVENTS SCALE

For the following questions, again answer each item that is relevant and again be as honest as you can. Each question refers to any event that you may have experienced within the last 3 years

1. Within the last 3 years, did you experience a death of a very close friend or family members? _____

   If yes, how traumatic was this? (1 = not all traumatic, 7 = extremely traumatic)_____

   You confide in others about the experience at the time? (1 = not all, 7 = a great deal).

2. Within the last 3 years, did you have a traumatic sexual experience (raped, molested, etc.) _____?

3. Within the last 3 years were you the victim of violence (other than sexual)? _____ If yes, how traumatic was this? _____

4. Within the last 3 years, were you extremely ill or injured? If yes, how traumatic was this? _____ did you confide in others.

5. Within the last 3 years, have you been suspended expelled from school? If yes, how traumatic was this?

6. Within the last 3 years, did you experience any other major problem that you think may have shaped your life or personality significantly?

If yes, what was the event? _____

If yes, how traumatic was this? _____

Do you confide in others? _____

APPENDIX IV

Project title:Childhood trauma, coping and mental health problems among adolescents in secondary schools in Ibadan.

BECK ANXIETY INVENTORY

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

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 of heart racing				

8	Restless				
9	Afraid or terrified				
10	Worried or tense				
11	Feeling of choking				
12	Shaky or trembling				
13	Trembling				
14	Fear of losing control				
15	Difficulty in breathing				
16	Fear of dying				
17	Fearful or 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 totals				

APPENDIX V

Project title:Childhood trauma, coping and mental health problems among adolescents in secondary schools in Ibadan.

BECK DEPRESSION INVENTORY

Please choose one statement from among the groups of statements that beast 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 feel 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 discharged 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 things cannot improve
3	0 I do not feel liked a failure 1 I feel I have failed more than the average person 2 As in look back on my life all I can see is a lot of failure 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 as much as 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 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
10	0 I don't cry any more than usual 1 I cry more now than I used to 2 I cry at all time now

	3 I used to be able to cry but now I can't cry even if 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 by things than usual 2 I am quite annoyed or irritated a good deal of the time 3 I feel annoyed or irritated at 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 my interest in other people
13	0 I make decisions as well as I ever could 1 I put off making decisions more than I used to 2 I have greater difficulty making decisions more than I used to 3 I can't make decisions at all anymore
14	0 I don't feel I look any worse than I used to 1 I am worried I am looking old and unattractive 2 I feel there are permanent changes in my appearance that make me look unattractive 3 I believe I look ugly
15	0 I can work about as well as before 1 It takes extra effort to get started at doing something 2 I have to push myself very hard to do anything 3 I can't do my 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 go back to sleep 3 I can't do any work at all
17	0 I don't get more tired than usual 1 1 I get tired more easily than I used to 2 I am tired from doing almost anything 3 I am all 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
19	0 I have not lost much weight, if any, lately 1 I have lost more than 2 kilos 2 2I have lost more than 5 kilos 3 I have lost more than 7 kilos
20	0 I am not more worried about my life than usual 1 I worried about physical problems such as pains, aches, stomach upset or constipation 2 I am so worried about my physical problems that it is hard to think of anything 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

APPENDIX VI

Project title:Childhood trauma, coping and mental health problems among adolescents in secondary schools in Ibadan.

BRIEF COPE

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

Indicate what YOU usually do when YOU experience a stressful event.

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

S/N	QUESTIONS	1	2	3	4
1.	I've been turning to work or other activities to take my mind off things.				
2.	I've been concentrating my efforts on doing something about the situation I'm in				
3.	I've been saying to myself "this isn't real"				

4.	I've been using alcohol or other drugs to make myself feel better				
5.	I've been getting emotional support from others				
6.	I've been giving up trying to deal with it				
7.	I've been taking action to try to make the situation better				
8.	I've been refusing to believe that it has happened				
9.	I've been saying things to let my unpleasant feelings escape				
10.	I've been getting help and advice from other people				
11.	I've been using alcohol or other drugs to help me get through it				
12.	I've been trying to see it in a different light, to make it seem more positive				
13.	I've been criticizing myself				
14.	I've been trying to come up with a strategy about what to do				
15.	I've been getting comfort and understanding form someone				
16.	I've been giving up the attempt to cope				
17.	I've been looking for something good in what is happening				
18.	I've been making jokes about it				
19.	I've been doing something to think about it less, such as going to movies, watching TV, reading daydreaming, sleeping or shopping				
20.	I've been accepting the reality of the fact that it has happened				

21.	I've been expressing my negative feelings				
22.	I've been trying to find comfort in my religion or spiritual beliefs				
23.	I've been trying to get advice or help from other people about what to do				
24.	I've been learning to live with it				
25.	I've been thinking hard about what steps to take				
26.	I've been blaming myself for things that happened				
27.	I've been praying or mediating				
28.	I've been making fun of the situation				

THANK YOU