INFLUENCE OF PARENTS’ OCCUPATION AND FAMILY FUNCTIONING ON THE MANIFESTATION OF CHILDHOOD PSYCHOPATHOLOGY IN LAGOS METROPOLIS

BY

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RUN/PSY/12/4747

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A THESIS SUBMITTED TO THE DEPARTMENT OF BEHAVIOURAL STUDIES, COLLEGE OF MANAGEMENT & SOCIAL SCIENCES, REDEEMER’S UNIVERSITY EDE, OSUN STATE

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN PSYCHOLOGY

JUNE 2016
ACKNOWLEDGEMENT

I ascribe all the glory and praise to God Almighty, without whom I could not have accomplished this feat; may His name be praised now and forevermore!

I thank my supervisors, Prof Olutope Ebenezer Akinnawo and Prof. Alfred Awaritefe for their invaluable support and guidance throughout the duration of this programme.

I thank the HOD Department of Behavioural Studies, Dr. Akinbobola; former HOD and current Dean of Student Affairs, Dr. Arogundade; Coordinator of PG Seminars, Dr. Uzowanne and all the academic and non-academic staff of the Department of Behavioural Studies and College of Management & Social Sciences for their support and guidance.

I also thank my family, friends, colleagues and course mate, Mrs. Ibikunle for their help and support.

May the Good Lord bless and reward each one immensely, Amen!
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ABSTRACT

Emotional and behavioural disorders are common mental illnesses in children which affect their functioning in various domains of life but receive limited research attention. The purpose of this exploratory study was to investigate the prevalence of anxiety, depression, anger and disruptive behaviour, and parents’ occupation and family dysfunction as determinants of psychopathology among children. The participants were 635 JS1 and JS2 students purposively selected from five schools across three local government areas in Lagos Metropolis. One-way ANOVA, Linear regression and Independent t-test were the statistical analyses employed. Fifty-one and forty-nine percent of the sample were female and male respectively. Father’s occupation significantly influenced the manifestation of anger (F=3.34, df=2/634, p=0.036) and disruptive behaviour (F=7.81, df=2/634, p<0.001), while mother’s occupation significantly influenced the manifestation of depression (F=3.55, df=2/634, p=0.029) and disruptive behaviour (F=7.81, df=2/634, p<0.001), with artisan occupations having the lowest mean scores. Family dysfunction significantly predicted the manifestation of anxiety ($\beta=0.08$, $p=0.038$), depression ($\beta=0.13$, $p=0.001$) and disruptive behaviour disorders ($\beta=0.10$, $p=0.014$). Based on these findings it was concluded that family and parental factors are important determinants of childhood psychopathology. Recommendations for increased advocacy on the significant role of the family in promoting mental health are proffered along with areas for further research.

Key words: Psychopathology, Childhood, Family, Occupation, Emotional disorders, Behavioural disorders
CHAPTER ONE

BACKGROUND TO THE STUDY

1.1 INTRODUCTION

Almost half of the world’s population comprises young people under the age of eighteen years (Crispin, 2015). Based on 2013 statistics which indicate that the world population is 7.125 billion (Population Reference Bureau, 2013), this means that there are about 3.5 billion young people in the world. In Nigeria, children aged 0-14 years make up about forty-four percent of the population and given a population estimate of about 173.6 million people (Population Reference Bureau, 2013) it means there are about 70 million children in Nigeria.

The implication of the above is that children are significant members of the population. According to the World Health Organization Regional Office for Africa report (2001), young people are ‘a valuable resource for socio-economic and cultural development’; in other words, they are the future. The report further states that ‘young people’s health has a significant impact on national development [and vice-versa]’. This underscores the importance of promoting the health and wellbeing of children, which the United Nations Convention on the Rights of the Child (1989) affirmed in Article 6, that every child has the right to live and governments and families are tasked to ensure their survival and healthy development.

The World Health Organization at the International Health Conference held in New York, USA in 1946 defined health as ‘a state of complete physical, mental and
social well-being and not merely the absence of disease or infirmity’ (WHO, 2003). The organization in 1954 further attested that ‘without mental health there can be no true physical health’ (Kolappa, Henderson & Kishore, 2013), highlighting the multidimensional nature of health as well as the impact of mental health in determining overall wellbeing. Child health is obviously not excluded in this regard as Vikram and Rahman (2015) noted correctly that ‘there is no global child health without mental health’.

Available statistics suggest that mental illness is one of the leading causes of disability globally, along with other non-communicable diseases such as cardiovascular disease and cancer and accounts for more than one-fourth of health-related disability (Whiteford, Degendart, Rehm, Baxter, Ferrari, Erskine, Charlson, Norman, Flaxman, Johns, Burstein, Murray & Vos, 2013; WHO, 2012). Mental illness causes suffering and disability which prevents people from functioning normally and also optimally. In addition, it can lead to suicide which causes premature death. When it occurs in children, it can also persist into adulthood (Kay-Lambkin, Kemp, Stafford, & Hazell, 2007). The financial cost of global mental illness in 2010 was about USD 2 trillion and by 2030 this figure is expected to increase to over USD 6 trillion (Bloom, Cafiero, Jané-Llopis, Abrahams-Gessel, Bloom, Fathima, Feigl, Gaziano, Mowafi, Pandya, Prettner, Rosenberg, Seligman, Stein& Weinstein,2011). There is also a lot of stigma associated with psychopathology in both developed and developing nations (Weiss, Jadhav, Raguram, Vounatsou & Littlewood, 2001 as cited in Hyman, Chisholm, Kessler, Patel & Whiteford, 2006). Consequently, the costs attached to the onset, course and treatment of
mental illness, both financial and non-financial, are enormous and contribute to the huge burden of mental illness on the sufferer, the family and the society.

Unfortunately, children and adolescents share a significant burden of mental illness. According to Kessler, Berglund, Demler, Jin, Merikangas and Walters (2005), half of all lifetime cases of mental illness begin by age fourteen, with anxiety and mood disorders having the highest prevalence. According to Davey (2008), the prevalence of mental illness in children globally is between 10% and 20%. The Australian Child and Adolescent Survey of Mental Health and Wellbeing estimates the prevalence of psychopathology among children aged 4 to 17 years at about 14% (Lawrence, Johnson, Hafekost, Boterhoven De Haan, Sawyer, Ainley & Zubrick, 2015). In the United States, about thirteen percent of children aged 8 to 15 years suffered from severe mental illness based on 2012 statistics (National Institute of Mental Health, 2016). A systematic review of literature which included data on over 9,000 children in six African countries suggests that about 1 in 10 children and adolescents in sub-Saharan Africa has a diagnosable mental illness (Cortina, Sodha, Fazel & Ramchandani, 2012). In a study of eight hundred and eighty-nine adolescents aged 10 to 18 years in Ibadan, Oyo State, Taiwo (2011) found a prevalence rate of psychopathology of 15.2%. Similar results were established by Grillo and Akinnawo (2014) in their study of two hundred and forty-one secondary school students in a local government in Lagos State.

According to Bernstein, Borchardt and Perwien (1996, as cited in Kay-Lambkin, Kemp, Stafford & Hazell, 2007) anxiety, depressive and behavioural disorders are
amongst the commonest child psychopathologies, occurring in about nine to fifteen percent of children. These disorders will be discussed in detail in the following sections.
1.1.1 ANXIETY DISORDERS

Childhood anxiety disorders are among the commonest mental disorders of childhood occurring in about 15-20\% of children (Beesdo, Knappe & Pine, 2009). It is an umbrella term for various disorders which comprise panic disorder, phobias, obsessive-compulsive disorder (OCD), separation anxiety, generalized anxiety and post-traumatic stress disorder (PTSD) according to the American Psychiatric Association (APA) Diagnostic and Statistical Manual of Mental Disorders (DSM) IV (APA, 2000). The World Health Organization International Classification of Diseases (ICD) 10 (WHO, 1993) specifies four types of anxiety disorders: phobic anxiety, other anxiety disorders (such as GAD), OCD and reaction to severe stress and adjustment disorders.

Anxiety disorders represent ‘specific clusters of anxiety symptoms that cause marked distress or impairment’ (McLeod, Wood & Weisz, 2007a). Anxiety involves hypersensitivity to perceived threats and can be state (that is, transient) or trait (that is, enduring).

The DSM IV descriptions for various anxiety disorders are listed below:

1. Separation anxiety disorder: exclusive to children (under the age of 18 years), this disorder involves developmentally inappropriate and excessive anxiety concerning separation from home or from those to whom the child is attached. It is characterized by persistent reluctance or refusal to go to school or other places, to go to sleep or to be alone or without significant adults because of the fear of
separation; persistent and excessive worry regarding separation from, loss of or harm to a significant adult. Separation anxiety disorders can occur in children younger than six years old.

2. Panic disorder: a discrete period of intense fear or discomfort in which symptoms of panic attacks (palpitations, trembling or shaking, feeling of choking and shortness of breath, chest pain, nausea, fear of losing control or dying, chills or hot flushes) develop and heighten abruptly. Panic attacks occur with or without agoraphobia (that is, anxiety about being in places from which escape might be difficult or in which help may not be available when needed). Panic disorder usually does not occur in children.

3. Specific (simple) phobia: it is characterized by marked and persistent fear that is excessive or unreasonable, cued by the presence or anticipation of a specific object or situation, such as flying, animals or seeing blood. In children, these symptoms should be present for six months in order for a diagnosis of specific phobia to be made.

4. Social phobia (social anxiety disorder): it is characterized by a marked and persistent fear of one of more social or performance situations in which the person is exposed to unfamiliar people or possible scrutiny by others. In children, anxiety is expressed by crying, tantrums, freezing or shrinking from social situations with unfamiliar people.
5. Obsessive-compulsive disorder (OCD): it has two chief features – (a) obsessions, which are characterized by recurrent and persistent thoughts, impulses or images; these thoughts are intrusive and inappropriate and cause marked anxiety or distress. (b) compulsions, which are described as repetitive behaviours (such as hand washing) or mental acts (such as praying or counting) that the person feels driven to perform in response to an obsession and are aimed at preventing or reducing distress or preventing some dreaded event or situation. When OCD occurs in children, they do not realize that the obsessions and compulsions are excessive or unreasonable.

6. Post-traumatic stress disorder (PTSD): unlike other anxiety disorders, PTSD occurs as a result of exposure to a traumatic event in which the individual experienced or witnessed an event that involved actual or threatened death or serious injury or threat to the physical integrity of self or others; and this experienced involved intense fear, helplessness or horror (or in children) disorganized or agitated behaviour. The symptoms usually include reliving the traumatic event through flashbacks and frightening dreams and intense psychological distress when there is exposure to cues that resemble the traumatic event; persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (for example, inability to recall important aspects of the trauma, markedly diminished interest or participation in significant activities, feeling of detachment or estrangement from others); persistent symptoms of
increased arousal (such as irritability, outbursts of anger, hypervigilance and
difficulty concentrating and falling or staying asleep).

7. Generalized anxiety disorder: it is characterized by excessive anxiety and worry
about a number of events or activities (such as work or school performance)
expressed in restlessness, being easily fatigued, difficulty concentrating or mind
going blank, irritability and sleep disturbance. These symptoms should be present
for at least six months for a diagnosis of generalized anxiety disorder to be made.

Anxiety disorder in childhood causes significant disability and distress. It affects
functioning in various areas of life including school failure, interpersonal problems, and
if it persists into adulthood, employment problems (Piacentini & Roblek, 2002). It also
often co-occurs with other emotional and behavioural disorders including depression and
substance dependence or abuse. Its course is therefore usually chronic making it a
significant psychopathology in children.

Research on the etiology of childhood anxiety disorders suggests that it is caused
by both genetic and environmental factors. According to Eley and Gregory (2004 as cited
by Muris & Broeren, 2009), genetic factors account for about fifty percent of the
variability in the development of childhood anxiety disorder. This genetic component is
thought to manifest in personality type, with neuroticism trait strongly linked to it
(Craske, 1997 as cited by Muris & Broeren, 2009). The temperament of behaviour
inhibition (that is, excessive shyness, oversensitivity and guardedness) has also been
linked with the development of this disorder (Degnan, Almas & Fox, 2010). In addition,
environmental factors, particularly in the family environment have been established as
determinants of childhood anxiety. Family dysfunction has been identified as a
significant risk factor along with the presence of psychopathology in parents (notable
depression and anxiety disorders) (ibid.).
1.1.2 DEPRESSION

Depression is a complex mood disorder characterized by extreme sadness and lethargy. Although depression is associated more with adults, it also occurs in children, accounting for a prevalence of between 0.3% to 7.8% in children aged 0-12 years (Lima, Nascimento, Carvalho, Abreu, Neto, Brasil, Telesforo, Junior, Oliviera & Reis, 2013). According to Luby, Essex, Armstrong, Klein, Zahn-Waxler, Sullivan and Goldsmith (2009), depression can occur in children as young as three years old, manifesting in symptoms such as anhedonia (low energy or lack of interest in pleasurable activities), irritability and anger and diminished laughing and smiling.

The DSM IV description of depressive disorders is listed below:

1. Major depressive disorder: it is characterized by persistent depressed or irritable mood; feelings of sadness, emptiness, worthlessness or inappropriate guilt; fatigue; significant weight loss; markedly diminished interest in significant activities; reduced ability to think or concentrate and recurrent thoughts of death. For a diagnosis of major depressive disorder to be made, these symptoms should not be caused by loss of a loved one (or if this is the case, the symptoms persist for longer than two months after this loss) and have been present persistently for two weeks.

2. Dysthymic disorder: this involves the presence of regular depressed mood for at least one year (in children and adolescents) or two years (in adults). It is
characterized by eating disturbance (either under- or over-eating); sleep disturbance (hypersomnia or insomnia); fatigue; low self-esteem; poor concentration; difficulty making decisions or feelings of hopelessness.

3. Bipolar disorder (manic-depressive illness or manic depression): it is characterized by periods of abnormally elevated (mania) and depressed moods. The person oscillates between extreme feelings of grandiosity and distractibility and excessive involvement in pleasurable activities that have a high potential for painful consequences (such as buying sprees) and depressive feelings of extreme sadness, hopelessness and lethargy. Bipolar disorder can occur at any age, however the onset usually occurs in late adolescence or early adulthood.

Depression is a significant psychopathology because of its association with suicide (Son & Kirchner, 2000). This is because of the feelings of worthlessness, hopelessness and guilt which are features of this disorder. Although depression in childhood usually manifests in clingy behaviours, school refusal, exaggerated fears and somatic complaints (headache and stomach pain) it is difficult to identify the disorder in children (Davey, 2008). Additionally, depression in children is usually co-morbid with other internalizing and externalizing disorders and has been found to be a risk factor for the development of substance abuse and juvenile problems in adolescence and personality problems in adulthood; therefore the early onset of depression in childhood has poorer prognosis (Lima et al, 2013).
Several determinants of depression have been identified. Maughan, Collishaw, and Stringaris (2013) suggest that there is the interplay of bio-psycho-social factors. These factors include family history of depression and also stressful family environments characterized by loss, neglect, abuse and violence (Avanci, Assis, Oliveira & Pires, 2012). Early experiences, particularly in the family, have been found to be significantly associated with the development of depression. Parent-child relationships that offer poor support and attachment have been implicated (McLeod, Weisz & Wood, 2007b) as well as negative schemas notably, pessimistic inferential style, in which situations are consistently perceived negatively (Davey, 2008).

The vulnerability-resilience model also supports the role of stressful experiences and poor coping skills in the development of depression and other psychopathologies (Degnan, Almas & Fox, 2010). Beardslee & Gladstone (2001) describe the risk factors for childhood depression as being female, living in poverty, having low self-esteem and low self-efficacy, academic problems and having health challenges. Genetic factors have been found to play a minimal role, contributing mainly to vulnerability rather than triggering the manifestation of depression. Lima et al (2013) also report that functional deficits in the amygdala, which controls emotion, have also been associated with the development of depression. Considering the fact that depression is a seriously debilitating illness, the consensus is that targeted prevention and treatment are crucial (Thomas, 2012).

1.1.3 ANGER
The conceptualization of anger disorder is still unclear. The chief characteristic symptom which involves severe and recurrent outbursts of anger is associated with several psychopathologies such as Attention-Deficit/Hyperactivity disorder (ADHD), Oppositional Defiant disorder (ODD) and Bipolar disorder (BD) (Sibcy & Kuhnley, 2013).

The DSM IV (APA, 2000) describes these disorders as follows:

1. Attention-Deficit/Hyperactivity disorder (ADHD): it is characterized by persistent and maladaptive symptoms of inattention, hyperactivity and impulsivity. Children diagnosed with this disorder experience difficulty sustaining attention and also organizing tasks and activities; are forgetful and easily distracted. They are also fidgety and excessively active and talkative, impatient and quick to interrupt conversations and activities. The DSM IV criteria indicates that these symptoms should be present before the age of seven years and persist for at least six months for a diagnosis of ADHD to be made.

2. Oppositional defiant disorder (ODD): it is characterized by a pattern of negative, hostile and defiant behaviour manifested in feelings and expressions of irritability, anger, stubbornness and defiance, and spiteful or vindictive behaviour.

3. Conduct disorder: it is characterized by a repetitive and persistent pattern of behaviour in which the basic rights of others or age-appropriate societal norms or rules are violated. Typical behaviour manifestations include bullying, aggression.
to people and animals, deliberate destruction of property, deceitfulness and truancy. Conduct disorder is typically associated with aggressive and juvenile behaviours that are opposed to age-appropriate societal norms.

Although each of these disorders has differing characteristics, the exhibition of temper tantrums sometimes results in an overlap of diagnosis. In addition, some characteristics of ODD have been found in Conduct disorders (Rowe, Costello, Angold, Copeland, & Maughan, 2010) further complicating the understanding of anger disorder. Furthermore, it has also been termed as Disruptive Mood Deregulation disorder (DMDD) in the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders (DSM-5). This implies that extreme and abnormal manifestations of anger occur as a result of inability or failure to regulate mood and behaviour. Tan, Armstrong & Cole (2013) describe emotion regulation as ‘the ability to modulate emotion in order to accomplish goals’; thus children diagnosed with this disorder have deficits in anger regulation and this has been associated with having difficult temperaments (Clifford, Lemery-Chalfant & Goldsmith, 2015)

Prevalence estimates for these psychopathologies are therefore varied, for example, Singh (2011) reports that ADHD occurs in about 5% of school-aged children; prevalence of bipolar disorder is between 0% and 3% in children and adolescents (NIMH, 2016); and between 1% and 16% of children and adolescents manifest ODD (American Academy of Child & Adolescent Psychiatry, 2009). A more recent study by Dougherty, Smith, Bufferd, Carlson, Stringaris, Leibenluft and Klein (2014) found 3-month DMDD
prevalence of 8.2% among children aged 6 years. Although the study also found that more than half of the children diagnosed with DMDD also had co-morbid anxiety disorder, ADHD and ODD, it is one of the few that have established anger disorder as a distinct disorder. This justifies the need to continue to investigate anger as a distinct disorder in further research.

1.1.4 DISRUPTIVE BEHAVIOUR DISORDER

Disruptive behaviour encompasses Oppositional Defiant disorder (ODD), Attention-Deficit/Hyperactivity disorder (ADHD) and Conduct disorder (CD). These disorders are generally characterized by emotional (anger outbursts) and behavioural (defiance and aggression) symptoms. The symptoms of ODD include angry and irritable mood and headstrong behaviour. ADHD symptoms are inattention, hyperactivity and impulsivity while the symptoms of CD include destructive and aggressive behaviours. These disorders are usually co-morbid, accompanied by mood or anxiety disorders; and are predictors of juvenile delinquency and adult criminality (Broidy, Tremblay, Brame, Fergusson, Horwood, Laird, Moffitt, Nagin, Bates, Dodge, Loeber, Lynam, Pettit & Vitaro, 2003).

Disruptive behaviour disorders usually have their onset in early childhood, with prevalence of between 2% and 16% for ODD and 6% and 9% for CD (Gathright & Tyler, 2014), and remain stable into adolescence and adulthood, manifesting as antisocial personality disorder. As with other childhood psychopathologies, disruptive behaviour disorders have both biological and environmental determinants. Structural abnormalities
in the brain have been linked to the development of disruptive behaviour disorders (Fahim, He, Yoon, Chen, Evans & Perusse, 2011). Research suggests that environmental factors, particularly poverty, unhealthy family environments – characterized by conflict and lack of cohesion – and poor parenting and parental discipline are significant risk factors (Martel, Nikolas, Jernigan, Friderici & Nigg, 2012; Petitclerc & Tremblay, 2009). Additionally, disruptive behaviour disorders have been associated with poor academic performance and school failure as well as other negative social outcomes (Alatupa, Pulkki-Råback, Hintsanen, Mullola, Lipsanen & Keltikangas-Järvinen, 2011).

1.1.5 DETERMINANTS OF PSYCHOPATHOLOGY

It is evident from the above discussion that a significant percentage of children globally suffer from one or more psychiatric disorders. Given that half of the world’s population comprises children, childhood psychopathology is indisputably a huge problem for all countries of the world. Sadly, this fact is not recognized, particularly in developing countries, and therefore the mental health of children is not a global or national priority. In both developed and developing countries there are huge gaps in data on the epidemiology of child and adolescent psychopathology, particularly in sub-Saharan Africa (Baxter, Patton, Scott, Degendart & Whiteford, 2013; Erskine, Baxter, Patton, Moffitt, Patel, Whiteford & Scott, 2016). But this should not be the case. According to the American Psychological Association (APA, 2007a; 2007b) children who have mental disorders experience problems in their academic and socio-emotional development; for example, they are more likely to experience school failure and drop out
of school. The ripple effect of this is that they grow into adults whose ability to be gainfully employed is compromised thereby impacting their financial (economic) independence. This in turn can lead to a life of violence and crime. Additionally, mental illness affects interpersonal relationships and also physical health. Childhood psychopathology is thus a significant predictor of difficulties in functioning, achievement and adjustment during childhood.

From the foregoing the following becomes apparent: The statistics on the prevalence of psychopathology in children is high. The onset of psychopathology in adulthood can be traced to childhood and adolescence. Psychopathology in childhood can lead to substance use and abuse and criminal behavior, and can also persist into adulthood. While interest in child psychopathology is increasing, there are still huge gaps in the literature. The argument for prioritizing mental health in children is therefore convincing. One area of focus has been on the determinants of childhood psychopathology, with the goal of identifying those factors which promote, alleviate or prevent psychopathology.

These determinants have been broadly identified as socioeconomic, environmental and biological (American Psychological Association, 2011; Canadian Mental Health Association (Ontario Division), 2016; WHO, 2014; WHO, 2016). The chief socioeconomic factor is poverty, which has been consistently associated with poor mental and physical health in both children and adults (APA, 2015). Poverty is not only characterized by lack of access to (good) healthcare, educational and employment
opportunities, it is also evident in poor living conditions in deprived and violence-prone environments and increased stress as a result of inability to meet basic material needs. Environmental factors are closely tied to this and involve immediate contexts (family, school and community) as well as the extended environment or larger society with the attendant cultural, political and economic influences. Within this context, the role of early experiences is very significant (Davey, 2008). Children who grow up in safe neighbourhoods and close-knit families, enjoy healthy parental attachments, receive good education and are not exposed to violence, abuse or neglected are less likely to develop psychiatric or psychological problems.

Biological factors basically refer to genetic, neurological and physical factors which can influence the development and sustenance of mental illness. Anxiety disorders have been associated with a strong genetic component (Davey, 2008), with the risk of developing the disorder being higher in children whose parents also have the disorder. Other psychopathologies such as schizophrenia also have strong genetic links. The influence of neurotransmitters in the development of depression has also been noted in the literature just as structural and functional deficits in the brain have been implicated in the development of ADHD and other disruptive behaviour disorders (Fahim et al, 2011). Psychological factors also play a significant role. Personality and self-esteem have been identified as determinants of psychopathology (Tesser & Martin, 2006), with poor self-concept and low self-esteem and neurotic personalities acting as risk factors (Martel et al, 2012).
However, these factors do not operate individually or in isolation. Rather, various risk factors combine to produce negative outcomes in children (Flouri, 2008). The field of developmental psychopathology has contributed in no small measure to the understanding of childhood psychopathology, because of its focus on investigating lifespan development. Such studies have revealed that a consistent feature of the developmental trajectory across the lifespan is the influence of the environment which results in a dynamic interaction of individual-contextual and vulnerability-resilience factors.

The human person is a social creature whose life experiences are largely determined by social interactions and learning processes occurring within the family, community and ecological contexts (Carr, 2005; Muris & Broeren, 2009). Nowhere are these experiences and events more critical than within the family, the bedrock of society and the primary provider of nurturance for a human person from conception to death. The World Health Organization Regional Office for Africa report (2001) states unequivocally that the family has the primary responsibility for the health and wellbeing of children. Indeed, the encyclical of Pope Francis, *Amoris Laetitia* (2016), affirms that ‘the family is not an abstract ideal but rather a practical trade, which is carried out with tenderness and which is also confronted with challenges’. This highlights the dynamic nature of the family, which is characterized not only by interrelationships and interdependencies within the family (Kerr, 2000) but also by the influences of conditions external to the family such as employment, housing, economic, political, cultural, religious, security factors as well as global conditions.
Noteworthy is that the role of the family is especially critical during childhood; the experiences and events of this period shape the development of the personality, self-identity and self-esteem and consequently determine mental health and wellbeing. Family dynamics therefore has a significant bearing on the health and wellbeing of children. Research has consistently shown that family dysfunction, characterized by parental conflict, communication problems, absence of rules, ambiguity of expectations, and other problems, is linked to the manifestation of various mental illnesses (Belardinelli, Hatch, Olvera, Foncseca, Nicoletti, Pliszka & Soares, 2008; Kumar & Tiwari, 2008; Sanni, Udoh, Okediji, Modo & Ezeh, 2010).

Research on the family within the Nigerian context has typically focused on the role of family structure or composition; to be specific, the investigation of the difference between two-parent and single-parent families. However, current trends in family psychology both globally and locally, affirm that the traditional structure of the family has changed significantly. Apart from single families, typical family compositions include divorced families, families without children, those with adopted children, those with domestic workers as well as re-married families with step children. However, regardless of the composition of families, the consistent feature is the pattern of interactions among members of the family, which can either be healthy or dysfunctional.

Furthermore, these interactions are influenced by factors in the larger environment since the family does not exist in isolation. Contemporary social conditions and changes – such as employment patterns, economic conditions, cultural trends and so
on and so forth – also affect the family, and invariably its members. One of such environmental factors which affects the family is occupation. Socioeconomic status is largely determined by the type of occupation a person engages in. Occupation is also a significant stressor, affecting physical and psychological health. It has also been found to interfere with family life as the time for being available to one’s spouse and children is often times occupied by work. Occupation therefore has far reaching consequences. As a result, it behooves family research to focus on the salient issues of family life that determine mental health and illness.

1.2 STATEMENT OF THE PROBLEM

According to the United Nations Convention on the Rights of the Child (1989), every child has the right to a good life, which includes the promotion of their physical as well as mental health. While high priority is placed on children’s physical health and there are extensive national and global efforts to reduce infant and child mortality, mental illness remains ‘invisible’ in many parts of the world, particularly in sub-Saharan African countries (Baxter et al, 2013) – including Nigeria.

For example, promotion of mental health was not included as part of the Millenium Development Goals (MDGs), even though the World Health Organization affirms that there is no health without mental health. Furthermore, it was only in the last century that any recognition was accorded to the reality of mental illness in children (Campbell, 1998); prior to this time, the focus was mainly on adult psychopathology. In Nigeria, less than five percent of the allocation for healthcare is devoted to mental health.
healthcare; more importantly there is no provision in the existing mental health policy – which was formulated in 1991 and has not been updated since – for child mental health neither is there a targeted national intervention for alleviating mental illness in children (Mental Health Situation Analysis in Nigeria Report, 2012). Consequently, there is a lot of misunderstanding of mental illness in the country, which inevitably leads to stigmatization. There is also neglect insufficient data and information.

Another significant concern about psychopathology in childhood is that it results in difficulties at school, at home and other interpersonal and social contexts and therefore has a significant negative impact on overall development. Additionally, mental disorders can persist into adulthood, particularly when they are neither detected nor treated, which is the case in many developing countries including Nigeria. This will further worsen the impact on the individual, the family and also the society. Interestingly, there is growing attention to pervasive developmental disorders, notably Autistic spectrum disorders; individuals and organizations (such as Guaranty Trust Bank Plc) promote awareness and treatment of these disorders and there are also educational institutions structured to provide education and rehabilitation for children with these disorders. However, the recognition of emotional and behavioural disorders in children is low even though they impair functioning and wellbeing just as much as developmental and intellectual disorders.

These reasons provide the rationale for this study. It is believed that reasearch attention to psychopathology in childhood will increase understanding of the topic and
invariably stimulate further research. Furthermore, it will provide an evidence-base upon which sound policies and interventions can be developed and implemented. There currently does not exist mental health facilities solely for children; neither is there any coordinated national framework for investigating, monitoring and evaluating mental health in Nigeria (WHO AIMS Report on Mental Health System in Nigeria, 2006). The target is that this study will spur greater appreciation of mental health in children generally, and in particular, increased advocacy and provision of care and treatment for children living with emotional and behavioural disorders.
RESEARCH OBJECTIVES

The objectives of this study are to:

1. Investigate the influence of parents’ occupation on the manifestation of child psychopathology.
2. Evaluate the influence of family dysfunction on the manifestation of child psychopathology.

1.3 RESEARCH QUESTIONS

1. Does parent’s occupation have any influence on the manifestation of child psychopathology?
2. Does family dysfunction predict the manifestation of child psychopathology?
3. Will there be gender differences in the manifestation of child psychopathology?

1.4 JUSTIFICATION FOR THE STUDY

The present status of insufficient information on the prevalence and determinants of childhood psychopathology in the Nigerian context form the major justification for this study. It has been highlighted above that mental health is not a priority in many nations, including Nigeria; more research focus is therefore required to provide a pool of convincing empirical data needed to make mental health a national priority in Nigeria.
Another justification for this study is the fact that research on childhood psychopathology can help to prevent psychopathology in adulthood. Undetected mental illness in children can persist into adulthood. In addition, childhood experiences can serve as risk factors for the development of psychopathology in adolescence and adulthood. Furthermore, children constitute a significant proportion of the population – about half – in Nigeria and also globally. Their health and wellbeing inevitably has an impact on the economy and development of their societies. Research on childhood psychopathology is therefore essential, rather than optional, and is an effective and cost-effective health promotion strategy.

Trends in research on the determinants of psychopathology suggest that the family is the first and most critical level of intervention. In addition, the recognition that risk factors of psychopathology operate via complex pathways implies that factors cannot be investigated in isolation; rather, a systematic and eclectic approach is often adopted in research in order to generate data that has practical relevance. Unfortunately, research on family factors in Nigeria is limited and existing studies focus on the influence of family structure, which is a constricted approach. The choice of family dysfunction and parental occupation as risk factors is a more robust approach. Moreover, these are factors which are germane to all families.
1.5 SIGNIFICANCE OF THE STUDY

1. The findings of the investigation on the determinants of childhood psychopathology will provide robust data which will enhance understanding of the mental health status of children in Nigeria.

2. The study findings will also add to existing literature on the global coverage of the burden of mental illness.

3. The study is also significant because the findings will inform the drafting of relevant mental health strategies for government, schools and other relevant institutions.

4. The study findings will also be relevant for individuals and organizations who are involved in promoting the health and wellbeing of children and families.

5. Finally, the study will provide the platform upon which further research can be developed and implemented.

1.6 SCOPE OF THE STUDY

The target population for this study comprises children in the period of late childhood enrolled in formal education (in junior secondary school). This period is significant in life-span development because it is characterized by enhanced cognitive and social skills compared to earlier developmental periods. These changes have been programmed to prepare the child for increasing roles and challenges in life, particularly the transition from elementary (primary) to secondary school, which is also a significant milestone in lifespan development. Children within this category can also read and write, and therefore reasonably comprehend the purpose and intent of the research study.
Additionally, the research will focus on the community (non-clinical) population of children, rather than a clinical population, defined as those who have been formally diagnosed with a psychiatric disorder and are receiving treatment in a psychiatric facility. Research focus on a community sample will, first and foremost, facilitate a larger sample size. It is also useful for exploratory research, wherein various psychopathologies and risk factors can be assessed simultaneously.

1.7 OPERATIONAL DEFINITION OF CONCEPTS

1.8.1 CHILDHOOD PSYCHOPATHOLOGY

Childhood psychopathology is the umbrella term for the presence of mental illness in children and adolescents. Psychopathology is generally described as a mental, emotional or behavioural problem which prevents the effective functioning of an individual in more than one domain of life including, interpersonal relationships, education or career. Psychopathology also involves behaviours and temperaments which deviate from what is considered normal in the society and which causes significant distress to the person (sufferer).

The four disorders investigated in this research study are discussed below, drawing on the Diagnostic and Statistical Manual of Mental Disorders (DSM) of the American Psychiatric Association (APA, 2000).

1. ANXIETY DISORDER
It is characterized by inappropriate and excessive anxiety manifested in various ways such as pathological worrying; exaggerated fears about wellbeing of parents or loved ones; obsessions and compulsions; and phobias. Symptoms of anxiety include extreme fear, agitation and nervousness which can be elicited by persons, situations or traumatic experiences. Anxiety disorder is often described as an internalizing disorder because the symptoms are expressed internally.
2. DEPRESSION (OR DEPRESSIVE DISORDER)

This is characterized by the presence of depressed mood or loss of interest in pleasure (normal daily activities) which is not due to significant loss, such as bereavement. It is manifested in feelings of sadness; hopelessness; decreased activity and energy; negative beliefs and thinking. Children with depression usually also exhibit clingy behaviour, school refusal, somatic (bodily) complaints such as headaches or stomach pains; and exaggerated fears. Depressive disorder is an internalizing disorder which is often co-morbid (existing simultaneously) with anxiety disorder.

3. DISRUPTIVE BEHAVIOUR DISORDER

It is characterized by violent or aggressive behaviour and manifested in aggression to people and or animals; destruction of property; deceitfulness or theft; serious violation of rules and the rights of others. It is classified as an externalizing disorder because the symptoms are manifested in observable behavioural problems. The common feature is disregard for authority and social norms, manifestation of delinquent and impulsive behaviours and hyperactivity.

4. ANGER DISORDER

It is an intense emotion characterized by frequent and prolonged emotional outbursts, accompanied by feelings of frustration and lack of control over the outbursts. Its defining features are that it persists well after the ages of seven or eight years, and is
more pronounced than tantrums exhibited by young children. Although it is classified as an internalizing disorder, it is most commonly manifested in aggression and defiance associated with disruptive behaviour disorders. Anger disorder causes significant distress and interferes with everyday functioning, particularly interpersonal relationships.

1.8.2 PARENTS’ OCCUPATION

Occupation is defined by the International Labour Organization (ILO, 2008) as a ‘set of jobs whose main tasks and duties are characterised by a high degree of similarity’. Parents’ occupation for the purpose of this study is defined simply as the type of work the father and mother engage in, categorized into three groups:

1. BUSINESS

This category includes those who are skilled and self-employed.

2. FORMAL

This category includes those who are skilled and work in public or private organizations. They include professionals as well as those in service-oriented professions but excludes those in manual occupations.

3. ARTISAN

This category includes those in unskilled and semi-skilled and manual occupations.

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1.8.3 FAMILY FUNCTIONING

Family functioning involves the assessment of the quality of the family environment along six domains or tasks: communication, roles, behaviour control, affective involvement, affective responsiveness and problem-solving. These tasks or domains are guided by the interactions among members of the family. If these tasks are performed well the family is referred to as healthy. On the other hand, if these tasks are not carried out well the family becomes unhealthy or dysfunctional. Family functioning would be categorized as Dysfunctional or Healthy.
CHAPTER TWO

LITERATURE REVIEW

5.1 INTRODUCTION

This chapter will focus on the in-depth discussion of childhood psychopathology and the influence of environmental factors, notably family functioning and parents’ occupation. First, various theoretical frameworks relevant to this study will be reviewed. This will be followed by the empirical review which will evaluate existing studies on the relationship between family functioning and childhood psychopathology, and also parents’ occupation and childhood psychopathology. The review of theory and empirical works will be merged in the conceptual framework, which will guide the methodology of this research study.
5.2 THEORETICAL FRAMEWORK

The following theories and perspectives will be discussed in this section:

1. Lifespan development theory
2. Models of developmental psychopathology
3. Systems theory
4. Models of family functioning

2.2.1 LIFESPAN DEVELOPMENT THEORY

The period of childhood occupies the second and third stages in lifespan development. Early childhood begins after infancy, at age two. Middle and late childhood begins from age six to twelve years, after which comes adolescence. Childhood development is significant because it is the foundation of adulthood (Santrock, 1995). According to lifespan development theory, human development has three components: physical, which involves growth in the body; cognitive, which involves changes in the brain and intellectual faculties; socioemotional, which involves emotional and identity development as well as adaptation to increasing levels of social interaction. These factors are all interwoven and essential for normal development.

Physical development in middle and late childhood is mainly characterized by increase in height and weight. However, the most significant changes during this period take place in cognition. Fatty layers in the brain called myelin increase significantly causing information to be transmitted faster across nerve cells (Comer, Gould, &
This period also corresponds to the attainment of ‘Industry’ as espoused in Erik Erikson’s psycho-social theory. The task at this stage is the mastery of knowledge and intellectual skills. As children’s thinking becomes more logical, they develop the need for achievement, ‘the desire to accomplish something, to reach a standard of excellence, and to expend effort to excel’ (Santrock, 1995). The development of intellectual skills boosts their self-confidence and promotes their wellbeing. If on the other hand they are hindered from pursuing intellectual interests, they develop a sense of inferiority and incompetence.

Concurrently, the child’s ability to interpret and form impressions about self, emotions and the environment also develops. The social world of the child also expands to include peers and teachers at school. Gender and self-esteem issues become more prominent as a result of these cognitive and socioemotional changes. The challenges of school achievement and social interactions have implications for the mental health of children in this developmental stage. Children who are able to navigate these tasks and challenges successfully have higher probability of success in later developmental periods, while for those who do not development can be greatly hampered.

2.2.2 MODELS OF DEVELOPMENTAL PSYCHOPATHOLOGY

Developmental psychopathology adopts a lifespan development perspective in investigating psychopathology, with a particular focus on maladaptive development
Developmental psychopathology can therefore be considered the bridge linking clinical psychology and developmental psychology. There are various models within developmental psychopathology, according to Drabick and Kendall (2010):

1. **NORMATIVE VERSUS ATYPICAL DEVELOPMENT**

   This model suggests that the understanding of what constitutes normal development will aid the identification of abnormal behaviour. Indeed, one of the criteria for diagnosis of psychopathology is that the behaviour is deviant from the developmental norm or societal norm. Additionally, the various models or theories of personality and development – Freud, Erikson and Piaget – adopt a stage approach, outlining the milestones that should be achieved at each stage. For example, temper tantrums in children under seven years is considered normal, however when it persists beyond that age then it can be classified as abnormal. This model is therefore very relevant for diagnosing psychopathology in children.

   *Freud’s psychosexual theory of development:*

   Sigmund Freud (1856-1939), an Austrian neurologist explained abnormal and normal behaviour in terms of psychological processes which were mostly unconscious. He coined the idea of the unconscious mind, which mostly directs behaviour and personality, as opposed to the observable behaviour stance of the behaviourists. Freud’s theory differentiates three psychological forces that shape personality: the ‘id’ – innate
needs which are mainly sexual in nature; the ‘ego’ – the rational part of the mind which controls the id; and the ‘superego’ – which determines moral values.

Freud opined that psychopathology develops when these three psyches are in conflict. Additionally, he described five stages of development: oral stage (0 to 18 months); anal stage (18 months to 3 years); phallic stage (3 to 5 years); latency stage (5 to 12 years); and genital stage (12 years to adulthood). According to Freud, development is shaped by sexual instincts (the id) manifesting in various forms for each stage; normal development occurs when the sexual needs of each stage are successfully met while fixation or frustration can lead to psychopathology (Davey, 2008). In latency stage which corresponds to the period of middle/late childhood, the sexual instincts lie dormant and the child is preoccupied with developing skills and acquiring knowledge.

Erikson’s psychosocial theory of development

Erik Erikson (1902-1994) a German psychologist developed the psychosocial theory of development based on the principle that development is not influenced only by internal needs and mechanisms but significantly by social and cultural processes (Comer, Gould & Furnham, 2013). Erikson strongly believed that social and cultural factors are important in personality and identity development. The psychosocial theory outlines eight stages of development across the lifespan with a specific task attached to each stage. The mastery of this task leads to continued healthy development while failure to do so can hinder emotional wellbeing.
The task at the first stage of development (0 to 18 months) is to master trust [versus mistrust]; the second (18 months to 3 years) is to master autonomy [versus shame]; the third (3 to 5 years) is to master initiative [versus guilt]; the fourth (5 to 12 years) is to master industry [versus inferiority] – at this stage children are expected to develop their knowledge and skills in various domains of life. Children in middle and late childhood develop the need for achievement (Santrock, 1995) which corresponds with their increasing cognitive capabilities and academic demands. The ability to successfully accomplish this will enhance their self-development and ability to work with others, and prepare them for the challenges of identity development and independence associated with the period of adolescence.

The task at the fifth stage (12 to 18 years) is to achieve ego identity [versus role confusion]; the sixth (18 to 40 years) is to develop intimacy [versus isolation]; the seventh (40 to 65 years) is to master generativity [versus stagnation] and the eighth and final stage (65 years to death) is to achieve ego integrity [versus despair].
Piaget’s theory of cognitive development

Jean Piaget (1896-1980), a Swiss clinical psychologist developed the four stage theory of cognitive development in children and adolescents, which revolutionized the way that thinking in children is perceived. Through his observational studies, Piaget showed that thinking in children, though not as advanced as in adults, is still systematic. He opined that cognitive capability is built upon the development of schemas (mental categorizations) which enable us to perceive and interpret the world, and which become advanced as individuals mature (Comer, Gould & Furnham, 2013).

Piaget’s stages of development include the sensorimotor stage (0 to 2 years) – thinking is confined to things that can be seen; preoperational stage (2 to 7 years) – children acquire the ability to think about things symbolically; concrete operational stage (7 to 11 years) – thinking advances to the ability to develop ideas in the mind as opposed to perceiving only tangible things. In this stage children are able to grasp complex ideas and they can take other people’s perspective; although their schemas are more developed than at earlier stages they are still unable to grasp abstract ideas and test hypotheses. This ability is developed in the fourth stage (11 years and above), the formal operations stage.

2. CATEGORICAL VERSUS DIMENSIONAL MODEL

This model involves the classification and diagnosis of psychopathology. The categorical model assumes that psychopathology falls into discrete categories; this is the model upon which the Diagnostic and Statistical Manual of Mental Disorders (DSM) is
based. The dimensional model, on the other hand, assumes that psychopathology exists on a continuum based on symptom severity. In this case, individuals who do not meet the criteria for a specific diagnosis but are at risk can also be identified and helped.

Within these models also falls co-morbidity, that is, when a person concurrently exhibits the symptoms of two or more disorders. Typically, anxiety and depressive disorders are co-morbid just as are disruptive behaviour and anger disorders. The implication of this is that different disorders share similar risk factors.

3. NATURE VERSUS NURTURE

The nature-nurture paradigm is a long-standing debate in the field of developmental psychology. The nature perspective avows that biological factors determine learning and development. Within this framework the medical model of psychopathology sits comfortably, and maintains that psychopathology is caused by neurological and biochemical abnormalities in the brain as well as the influence of genes. Conversely, the nurture school of thought attests to the role of the environment – the family, school and larger society – in shaping behaviour and development. Thankfully, there is now the consensus that the interplay of both nature and nurture shapes both normal and atypical behaviour and development.

Within this hybrid paradigm falls individual-contextual factors or influences. Individual influences, as the name implies, are the intra-psychological factors such as personality, self-esteem and thought patterns as well as neurological and genetic factors. Contextual influences exist in the environment and include not only the family and
community but also larger environmental factors – such as economic, political, cultural and religious influences. This approach is similar to the Bronfenbrenner model, which posits that child development is influenced by the relationship or ‘mutual shaping’ of the individual and the ecological context (1979, as cited by the United Nations University, n.d.). Developmental psychopathology affirms that mental illness is determined by both individual and contextual influences, interacting in complex ways. These factors also influence mental wellbeing (Herrman, Saxena, Moodie & Walker, 2005) and therefore can be said to exist on a continuum – of protective versus risk factors.

2.2.3 SYSTEMS THEORY

This theory was developed in 1928 by Ludwig von Bertalanffy. It emphasizes the interaction of the parts that make up a whole. According to Durkin (1972, p. 11, as cited in Grodner, 1977), general systems theory states that ‘organized systems are the product of the dynamic interaction among their parts. The whole or characteristics of a system cannot be explained by the nature of the parts themselves but only by the continuous interchange of matter, energy, and information among these parts’. General systems theory has been applied in various disciplines. Within psychology, it has been adapted as the basis of the family systems theory.

FAMILY SYSTEMS THEORY

Family systems theory views the family as a system characterized by the interplay of relationships and reciprocal transactions among members within a family. The family,
according to this theory, is more than the constituent members. The family system is viewed as dynamic, encompassing the interrelationships and interdependencies of family members (Anderson & Sabatelli, 2010). It is characterized by multiple levels of relationships: spousal; parent-child; sibling-sibling; and the extended family, and the performance of role behaviours proper to these relationships. The family system is therefore more than its structure or composition. Framo (1972, as cited in Grodner, 1977) states that ‘whenever a group of people are loosely related to each other, as in a family, they reciprocally carry part of each other’s psychology and form a feedback system which in turn regulates and patterns their individual behaviours’. The family is therefore part of a complex system of relationships within and outside the family, and these influences shape the health and wellbeing of the members.

One of the proponents of this theory is Murray Bowen (Kerr, 2000). Bowen opined that the family is an emotional unit and hence an emotional system; therefore, the way this emotional system is managed will influence the individual and also the family. Bowen also prescribed eight underlying principles for his family systems theory:

i. Triangles, the concept that a stable relationship is built around a three-person relationship system.

ii. Differentiation of self, the principle that there is the individual self, shaped by the family, and also the family identity shaped by the members of the family.

iii. Nuclear family emotional system, describes the emotional bond between couples, parents and children, and also between siblings.
iv. Family projection process, implies that parents can project their emotional problems unto their children.

v. Multigenerational transmission process, the concept that socialization processes within families ultimately cause them to be unique and therefore different from generation to generation.

vi. Emotional cutoff, the process of reducing emotional tension by cutting-off emotional relationships with family members.

vii. Sibling position, the rationale that sibling position affects both development and behaviour.

viii. Societal emotional process, the principle that emotional systems also apply beyond the family to the society.

The family systems theory of Bowen is relevant because it emphasizes the family as an emotional unit which shapes the behaviour and development of its members and is also influenced by extended and generational factors.

### 2.2.4 MODELS OF FAMILY FUNCTIONING

While there is no universally accepted definition of family functioning, the general principle is that it encompasses how a family meets the needs of its members and copes with challenges throughout its lifecycle. These needs or tasks, according to Anderson and Sabatelli (2010), include: a) establishing a clear identity for the family and its members; b) establishing clear internal and external boundaries; c) meeting material and emotional needs and d) adapting to contextual conditions and stressors. According to
Ryan and Keitner (2009), as cited in Staccini, Tomba, Grandi and Keitner (2015), family functioning refers ‘to the ability of the family to work together as a unit to satisfy the basic needs of its members’.

A healthy or functional family is typically characterized by the presence of love and support, sense of belonging and security, open communication, coping and adaptability. Several models have been developed for assessing family functioning, three of which will be discussed:

1. Stress and coping model
2. Parental functioning model
3. McMaster model

1. STRESS AND COPING MODEL

Within this model family functioning is characterized by the family’s ability to cope with environmental stressors. Two concepts are associated with this model:

i. Vulnerability: the family is not immune to environmental stressors but rather experiences various forms of stress throughout its lifecycle.

ii. Regenerative power: this refers to the ability to adapt to and overcome environmental stressors.

Families are continuously confronted with numerous sources of stress – work, economic factors, cultural and religious demands and community characteristics – which can impact positively or otherwise on the parents, children and the family (Edwards, 2002). According to Lazarus (1990 as cited by Louw & Viviers, 2010) there are also
several coping resources available to families, which include individual characteristics like personality and resilience, the social environment characterized by a sense of cohesion and also the physical environment characterized by security, good living conditions and infrastructure. A healthy or functional family is therefore one that takes advantage of these coping resources in dealing with stressors.

Bernice Moos and Rudolf Moos are two of the advocates of this model. Their model provides a detailed framework of the dynamic relationship between stress and coping processes (Louw & Viviers, 2010). The framework identifies environmental and personal systems through which individuals experience stress and cope with them. These systems are perceived and interpreted through the individual’s cognitive appraisal system, which determines how they process and deal with stress. The dynamic relationship between the environmental and personal systems and the cognitive appraisal system invariably influences health and wellbeing. Furthermore, there is a reciprocal relationship among these factors such that ability to successfully deal with stress increases capacity to overcome future stressors and enhances the psychological wellbeing and vice-versa whereas poor psychological wellbeing limits this ability.

2. PARENTAL FUNCTIONING MODEL

Parental functioning focuses on parental wellbeing and its influence on family functioning. Two perspectives within this model will be considered:

PARENTING PROCESS MODEL
This model is based on the work of Belsky (1984). He postulated that parental functioning is influenced by parent’s personality, child characteristics and also the environmental context. The major factors of influence within the environmental context are early experiences, the marital relationship, social networks and occupation. These factors are significant because of their level of influence on psychological wellbeing. Furthermore, they also influence parenting ability which in turn shapes child behaviour and psychological wellbeing.

According to this model parent personality, child characteristics and the environmental context do not influence parenting in the same way; rather competent parental functioning is determined mostly by parental personality and psychological wellbeing (because these factors mediate the influence of the environmental context on child and family wellbeing).

**PARENTAL STRESS THEORY**

This model draws on the large body of work on the influence of stress on health. Grant, Compas, Thurm and Gipson (2004), define stress as ‘environmental events or chronic conditions that objectively threaten the physical and/or psychological health or well-being of individuals’. Parental stress theory, according to Cronin, Becher, Christians, Maher and Dibb (2015), refers to the stress parents experience as a result of various individual, social and environmental factors, which can affect the wellbeing of parents as well as their families (Mayer, 2002). This is distinct from the stress associated with parenting, although in reality the two can hardly be separated. The stress model has
been consistently supported in the literature (Campbell, 1996; McLaughlin, 2016; Pianta & Egeland, 1990).

3. McMaster Model

The McMaster model of family functioning originated at McGill University in Montreal, Canada, from the work of Nathan Epstein and his associates using family therapy to treat psychopathology in children. Their work evolved from a focus on the intra-psychic individual factors associated with psychopathology to a family systems approach in treating patients and subsequently the development of the McMaster model of family functioning in 1983 by Epstein, Baldwin and Bishop.

This model conceptualizes the family ‘as a system of interacting individuals as well as a system involving a number of other systems – cultural, social, political, economic and biological’ (Ryan, Epstein, Keitner, Miler, & Bishop, 2005). The model further avows that the family has three broad tasks to perform:

i. Basic tasks: it is the most fundamental and involves provision of material needs (food, clothing, shelter, amongst others).

ii. Developmental tasks: it involves adaptability in responding to needs peculiar to the stage of the family lifecycle. For example, problems at the beginning of marriage are distinct from those that occur during the empty-nest stage.

iii. Hazardous tasks: this relates to negative occurrences such as illness, accident, loss of income, or death of a family member, and how the family handles such experiences.

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The success of the family in performing these tasks is determined by six interdependent factors:

i. Problem-solving, a family’s ability to resolve [emotional, financial or material] problems.

ii. Communication, the pattern of verbal exchange of information within the family.

iii. Roles, the repetitive patterns of behaviour by which family members fulfil various family functions (material, psychological, financial, emotional and sexual). It also involves the allocation of roles and accountability in performing these roles.

iv. Affective Responsiveness, the quality, quantity and appropriateness of bonding and attachment among family members.

v. Affective Involvement, the extent to which members are involved in and concerned about each other. The focus is on the degree of interest in each other and the manner in which this interest is expressed.

vi. Behaviour Control, the standards of acceptable behaviour within the family as well as the degree of tolerance in abiding by them, including child discipline.

When these six factors are positively expressed in the performance of the family’s obligations (or tasks) then the family is considered healthy or functional. On the other hand, failure to manage these factors produces a dysfunctional family. The efficacy of this model lies in the fact that it is based on decades of research using nonclinical,
medical and community samples, and these factors have been found to be consistent and significant in all family types. Additionally, the needs of every member of the family, child and adult, are accommodated in the conceptualization of family tasks, making it a holistic model of family functioning.

2.3 EMPIRICAL REVIEW

2.3.1 PARENTS’ OCCUPATION AND PSYCHOPATHOLOGY

The relationship between occupation and psychopathology is well documented in literature, with the consensus being that occupational stress is a predictor of psychopathology. For example, a secondary data analysis of the Psychiatric Morbidity Survey in Britain (1993-2000) comprising almost thirteen thousand individuals between the ages of 16 and 74 found higher prevalence of mental disorders among professionals in service, sales and clerical occupations as well as managers in both private and public organizations compared to those in elementary occupations (Stansfeld & Singleton, 2003). The decreased risk among those in elementary occupations was maintained even after adjusting for demographic factors. The authors also reported that the results for high risk occupations were similar to those obtained in the US and Europe; however, some low risk occupations – machine operators/assemblers – in the British study were found to be high risk in the US study.

These findings are significant for several reasons. Apart from confirming that stress associated with occupation can trigger psychopathology, they also suggest that
certain occupations can be classified as high risk and others as low risk. Some Nigerian studies have also found that occupations in the healthcare and financial sectors are associated with high levels of stress and invariably high prevalence of psychopathology (Somoye, Babalola & Adebowale, 2015; Yussuf, Balogun & Kuranga, 2006). However, occupational stress, according to the literature, is determined by several factors, namely high levels of work demands and expectations, emotional factors associated with the work environment and psychological factors such as locus of control. The interplay of these factors will vary depending on the context and job. Nonetheless, existing literature seems to support the stance of high risk and low risk occupations.

The influence of parents’ occupation on psychopathology in children is however unclear. Existing literature on this relationship adopts the socioeconomic perspective in which parental occupation is conceptualized, along with education and income, as a measure of socioeconomic status (SES). For example, Chen and Paterson (2006) investigated the relationship between parents’ occupation, education and income, and physical and psychological measures among two hundred and fifteen adolescents. Parents’ occupation, income and education were analyzed independently as measures of SES. Parental occupation was measured using occupational titles which were coded based on Hollingshead’s Four Factor Index of Social Status. The authors found significant correlations between the manifestation of hostility, occupation and income.

In this regard, there is strong backing for the negative influence of low income occupations (poverty) on children’s mental health (APA, 2015; Chen, 2004; Proper &
Similarly, low income families have been found to experience higher levels of stress – and invariably psychopathology – than middle and high income families (Gureje, Lasebikan, Kola & Makanjuola, 2006; Ponnet, 2014, as cited in Cronin, Becher, Christians, Maher & Dibb, 2015). Grant, Compas, Thurm and Gipson (2004) reviewed several empirical articles on the relationship between various stressors – in the family, school and community – and psychopathology in children and adolescents; they found that there is a significant bi-directional relationship between the variables.

Another perspective considers the influence of occupation on parenting. Heinrich (2014), based on comparison of mothers who work versus those who do not, avows that employment influences parenting in opposing ways: on the positive side, it provides the financial means to meet parenting obligations while the disadvantage is that it reduces the time available to spend with family. Frick and Jackson (1993) investigated family functioning as a determinant of antisocial disorder; they found that lack of parental involvement, described as limited time spent together and lack of interest in the child, was consistently associated with the manifestation of conduct problems. Work-life balance issues will certainly continue to be the focus of research attention.

Nonetheless, parents’ occupation as a discrete determinant of child psychopathology also requires research attention. As Diemer, Mistry, Wadsworth, Lopez and Reimers (2013) advocate, parental occupation should be investigated as an independent variable. This is germane because of the existing literature on occupational stress and psychopathology, particularly the categorization of high risk and low risk
occupations. The family systems model affirms that the health of families is determined by the patterns of interactions within the family; it therefore follows that parents who are distressed as a result of occupational stress will transfer this stress to their families which can trigger the manifestation of psychopathology in children. This hypothetical perspective is further supported by the Stress and Coping model and the Parental Stress theory. This study will explore the validity of this relationship.

2.3.2 FAMILY FACTORS AND PSYCHOPATHOLOGY

Vulic-Prtoric and Macuka (2006) in a study of 331 children and adolescents aged 10 to 16 years found that parental rejection and family dissatisfaction were significantly correlated with childhood anxiety and depression. The authors attributed their findings to the parental acceptance-rejection theory (PART), which states that parents who are loving and affectionate towards their children imbibe in them feelings of self-worth and self-regard, whereas parents who are not elicit feelings of rejection and hostility in their children. A similar study by Santiago and Wadsworth (2011) found that Latino middle school children whose families were closely-knit experienced significantly fewer symptoms of externalizing disorders. The families’ influence on internalizing disorders was however not significant. Rivera, Guarnaccia, Mulvaney-Day, Lin, Torres, and Alegria (2008) also report similar findings.

Wang and Zhao (2013) investigated the relationship between family functioning and depression in an adult Chinese sample. The participants were categorized into matched groups of those with a clinical diagnosis of depression, healthy controls, and
their respective spouses. Family functioning was assessed using the McMaster Family Assessment Device while the Beck Depression Inventory was used to evaluate depression. They found that family dysfunction was significantly higher not only in patients with depression but also in spouses of individuals with depression, compared to their healthy control (and spouse) counterparts. This study, though based on an adult population, confirms that family functioning is a significant determinant of depressive disorders.

In a study on multi-problem families in the Netherlands, that is, families having a child with a psychiatric challenge, Bodden and Dekovic (2015) found that family dysfunction, characterized by low cohesion and organization, high conflict and poor communication was significantly higher in families of children with mental disorders compared to controls. Brandenburg and Puts (2002, as cited in Bodden & Dekovic, 2015), define multi-problem families as ‘families in which long-term problems exist on multiple domains of family functioning’. The results suggest that the presence of psychiatric problems in a child can negatively impact family functioning, attesting to the bi-directional relationship between family factors and child psychopathology.

Another study by Siqueland, Kendal and Steinberg (1996) investigated anxiety disorder in children and its relationship with three elements of family factors (warmth, autonomy and control). They hypothesized that families of children with an anxiety disorder would perform poorer in these domains than the controls. The study consisted of a sample of seventeen children with a clinical diagnosis of anxiety disorder and twenty-
seven controls. Significant differences were not found between the two groups. The authors, drawing on the work of Rubbin and Mills (1991), suggest that other determinants of anxiety disorder such as temperament may have confounded the study results. Similarly, Cunningham, Benness and Siegel (1988) in their study of functioning in families of children aged 9 to 10 years with ADHD, found no significant differences between ADHD and normal families. Family functioning was assessed using the McMaster Family Assessment Device (FAD) and was based on parents’ report of family functioning. The small sample size used in these studies may have contributed to the non-significant outcomes.

A later study by Kashdan, Jacob, Pelham, Lang, Hoza, Blumenthal and Gnagy (2004) which investigated the same variables found significant influences. Specifically, both parental and child psychopathology were significantly influenced by family functioning. This study considered family functioning using two factors, cohesion and conflict. Additionally, the sample size was larger.

Feeny, Silva, Reinecke, McNulty, Findling, Rohde, Curry, Ginsburg, Kratochvil, Pathak, May, Kennard, Simons, Wells, Robins, Rosenberg and March (2009) considered the influence of family factors on treatment outcomes for 439 youth diagnosed with Major Depressive Disorder (MDD). Their study was part of the US National Institute of Mental Health funded Treatment for Adolescents with Depression Study (TADS) which reviewed the effectiveness of pharmacological and psychotherapeutic treatments on adolescents aged twelve to seventeen years with a clinical diagnosis of MDD. Family
functioning, conceptualized as general family functioning and parent-child conflict, was investigated as a moderating variable after 12 weeks of treatment. Only parent-child conflict was found to be a significant predictor of treatment outcome.

A similar study by Brent, Kolko, Birthmaher, Baugher, Bridge, Roth and Holder (1998 as cited in Feeny et al, 2009) found similar results at 12 weeks. After 16 weeks of treatment, however, family functioning was also found to be a significant predictor. Foster, Webster, Weissman, Pilowsky, Wickramaratne, Talati, Rush, Hughes, Garber, Malloy, Cerda, Kornstein, Alpert, Wisniewski, Trivedi, Fava, and King (2008) also investigated treatment outcome following clinical diagnosis of MDD and its relationship with family functioning. This time however, the diagnosis of depression was in mothers and the relationship with the manifestation of internalizing and externalizing disorders in their children aged seven to seventeen years was investigated. Foster et al (2008) found that remission of depression was significantly associated with improvements in child mental health, even after controlling for demographic factors. More significantly, mother’s treatment outcome and family functioning was significantly associated with internalizing symptoms but not externalizing symptoms in children. Overall, the study results confirmed that improvements in maternal mental health and family functioning were significant predictors of improvements in symptomatology for children with internalizing disorders.

A more recent longitudinal study by Calzada, Barajas-Gonzalez, Huang and Brotman (2015) investigated the role of cultural socialization and parenting practices
among Hispanic-American children. Their research studied 661 Hispanic-American families and their children for twelve months from the time when they enrolled in pre-kindergarten. They found that parenting style conceptualized as authoritarian, authoritative and permissive, was a significant predictor of internalizing disorders. This pattern was also observed in the study by Overstreet and Dempsey (1999) which investigated whether family support moderates the influence of community violence on the mental health of children. Family support was investigated as the presence of the mother and the child’s perception of the parent-child relationship. They found that family support was a protective factor against depression but not post-traumatic stress disorder (PTSD). Furthermore, they found that good communication between parent and child, particularly regarding community violence, was a more powerful moderator of psychopathology.

Kashani, Shekin, Burk and Beck (1987) investigated the role of family abuse and neglect in the development of psychopathology in children and parents. Abuse and neglect were conceptualized as physical and psychological maltreatment of children with the former being an extreme manifestation of family dysfunction. The study employed a matched-control design of fifty cases and fifty controls. They found that abuse and neglect in the family was a more significant predictor of child psychopathology than parental psychopathology, confirming that family dysfunction is a significant risk factor in child psychopathology.
A study by Peris and Emery (2004) considered family functioning and divorce, and their relationship with psychopathology in children. Using data from the National Longitudinal Study of Adolescent Health, they examined whether family dysfunction (characterized by marital discord, lack of cohesiveness and parent-child conflict) was predictive of internalizing and externalizing disorders in youth in intact and disrupted families. The sample size was 6,416. They found that while youth in disrupted homes had higher levels of psychopathology than their counterparts in intact homes, family dysfunction was more predictive of psychopathology than divorce itself.

Jellett, Wood, Giallo and Seymour (2015) investigated the mental health of parents whose children had Autistic Disorder and the relationship with family functioning. They found that parental stress, fatigue and depressive symptoms were associated with poorer family functioning. They describe this pathway in the light of the transactional model, which suggests that child development is ‘a process occurring through continual transactions between children and their environments’ (Sameroff, 2009, as cited in Jellett et al, 2015). These findings support the family systems theory, which emphasizes the dynamic nature of interactions among family members.

From the foregoing, the general trend in the literature is the investigation of various family factors; indeed studies which investigated more than one family functioning factor had significant outcomes. The McMaster model of family functioning adopts this approach and therefore forms the basis of investigating family functioning in this study. Additionally, a lot of studies investigated both internalizing and externalizing
disorders and found differing outcomes. This study will also investigate both disorders in order to add to existing literature.

In summary, the literature confirms that family dysfunction is a determinant of child psychopathology. This is not surprising since the family plays a very significant role in child development. However, most of these studies were conducted in foreign countries. Consequently, there is the need to investigate the relationship between family dysfunction and child psychopathology in Nigerian children.

2.3.3 GENDER AND CHILDHOOD PSYCHOPATHOLOGY

Gender has been established as a determinant of psychopathology, in both adults and children. As an individual factor, it has a strong influence on shaping development and behaviour, because it has both biological and socio-cultural components. The influence of gender on psychopathology in early childhood is not pronounced (Beesdo, Knappe & Pine, 2009). In middle and late childhood the differences are inconclusive, as some studies found no difference while others found gender differences, with emotional disorders, notably anxiety and depression, being more prevalent among females and disruptive behaviour disorders being more prevalent among males (American Academy of Child & Adolescent Psychiatry, 2009; Davey, 2008).
2.4 CONCEPTUAL FRAMEWORK

The study conceptual framework is based on the review of literature and theories in the previous sections, and specifies the hypothesized relationship among the study variables:

- **INDEPENDENT VARIABLE 1:** Family functioning
- **INDEPENDENT VARIABLE 2:** Father’s occupation, Mother’s occupation
- **MODERATOR VARIABLE:** Gender
- **DEPENDENT VARIABLES:** Anxiety, Depression, Disruptive behaviour, Anger

*Figure 2.1. Conceptual framework of the study variables*

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1. That there is a direct relationship between family functioning and childhood psychopathology; and specifically that family dysfunction will influence the manifestation of anxiety, depression, disruptive behaviour and anger disorders.

2. That there is a hypothesized direct relationship between parents’ occupation and childhood psychopathology, which is hypothesized to be moderated by occupational stress.

3. That gender is a significant determinant of childhood psychopathology because it moderates how the independent variables (parents’ occupation and family functioning) influence the manifestation of psychopathology.

2.5 RESEARCH HYPOTHESES

1. Father’s occupation will have a significant influence on the manifestation of childhood psychopathology.

2. Mother’s occupation will have a significant influence on the manifestation of childhood psychopathology.

3. Family dysfunction will significantly predict the manifestation of childhood psychopathology.

4. Male children will manifest significantly higher levels of childhood psychopathology than their female counterparts.
CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

In this chapter, the research method will be discussed. This will focus on the research design, study area and sampling procedure. Also, the independent and dependent variables will be outlined as well as a description of the two instruments used for data collection, the revised General functioning scale of the McMaster Family Assessment Device and the Beck Youth Inventories. The method of data collection will also be succinctly described. The chapter will end with the ethical consideration and study limitations.

3.2 RESEARCH DESIGN

An exploratory, cross-sectional research design was applied in the study. This design was selected because the study was exploratory. It permitted the collection of data from numerous participants at the same point in time.

3.3 STUDY AREA

The location of the study was Lagos Metropolis in Lagos State, South West of Nigeria. Lagos Metropolis is a section of Lagos State, a metropolitan city and the commercial hub of Nigeria, which comprises two divisions and thirteen local government areas.
3.4 SAMPLING PROCEDURE

The target population of this study was children in Junior Secondary Classes 1 and 2 in secondary schools across Lagos Metropolis. This group was selected for two reasons: 1) they fall into the developmental period of middle/late childhood and 2) they have the ability to read and write. The study adopted a multi-stage sampling procedure, which is outlined in Table 3.1.

Table 3.1.

Study multi-stage sampling frame

<table>
<thead>
<tr>
<th>STAGE 1: SELECTION OF STUDY POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENTS IN SECONDARY SCHOOLS IN LAGOS METROPOLIS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STAGE 2: SELECTION OF LOCAL GOVERNMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagos Metropolis comprises 13 local governments: Agege, Alimosho, Apapa, Ifako-Ijaye, Ikeja, Kosofe, Mushin, Oshodi-Isolo, Shomolu, Surulere, Eti-Osa, Lagos Mainland and Lagos Island</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ALIMOSHO, ETI-OSA AND LAGOS ISLAND</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>STAGE 3: SELECTION OF SCHOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of schools in the three local governments based on data from the Lagos State Schools Project: 429</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FIVE SCHOOLS</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>STAGE 4: SAMPLE SIZE CALCULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on 95% confidence level, 0.5 standard deviation and 5% margin of error = 385</td>
</tr>
</tbody>
</table>
The first stage involved selection of the study area, which is Lagos Metropolis. The next stage involved selection of local governments within Lagos Metropolis; this process, which was based on judgmental sampling, resulted in the selection of three local governments – Eti-Osa, Lagos Island and Alimosho. Eti-Osa is the extension of Lagos Island to the east and consists of a good number of highbrow locations. Lagos Island local government is located in the western part of Lagos Island and constitutes the central area of Lagos Metropolis. Alimosho is located in the mainland and is the largest local government in Lagos State. Both Eti-Osa and Lagos Island local governments are located in Lagos Division while Alimosho is located in Ikeja Division.

The third stage involved the selection of secondary schools in each local government. The choice of schools was determined by accessibility and therefore the sampling technique was purposive. One school was chosen from Alimosho local government; it was a government owned co-educational school (School A). In Lagos Island two mission schools were selected; one was girls-only (School B) and the other boys-only (School C). And in Eti-Osa two privately owned co-educational schools were selected (Schools D and E).

The third stage involved selection of participants in each school. Inclusion and exclusion criteria were framed to guide this process:
i. Inclusion criteria: participants must be: a) in JS1 or JS2 and b) 12 years and below, that is, within the developmental period of childhood.

ii. Exclusion criteria: all students in other classes apart from JS1 and JS 2 were excluded from the study. Students in JS 1 and JS 2 who were above 12 years were also excluded.

All students who met the inclusion criteria were eligible to participate in the study. The same size calculation using confidence level of 95%, standard deviation of 0.5 and margin of error of 5% produced an estimated sample size of 385. In School A, two hundred and two students (202) participated in the study. In School B there were one hundred and eighty-six (186) students and in School C one hundred and eighty-three (183) students. Participants from School D were fifteen (15) and from School E one hundred and two (102). These figures represent the entire population of JS 1 and JS 2 students in each of the schools. Total sample size was six hundred and eighty-eight (688).

3.5 VARIABLES

3.5.1 INDEPENDENT VARIABLES

The study investigated two independent variables: Parents’ occupation and Family functioning.

3.5.2 DEPENDENT VARIABLES
Four dependent variables were investigated: Anxiety, Depression, Anger and Disruptive behaviour.
3.5.3 MODERATOR VARIABLE

Gender is regarded as a moderator variable, since it influences the relationship between the dependent and the independent variable.

3.6 RESEARCH INSTRUMENTS

Two psychological research instruments were used in this study:

I. Revised General Functioning Scale of the McMaster Family Assessment Device:

For this study a revised version of the General Functioning scale was used. This version was adapted from the original so that it can be administered to children aged 12 years and younger. The General Functioning scale is the short version of the McMaster Family Assessment Device (FAD), with 12 items, which can be administered independently to assess general family functioning. The FAD, a 60 item instrument, is an established measure of family functioning developed by Epstein, Baldwin and Bishop in 1983. It is a reliable, valid and widely used family assessment tool for individuals from age 12 and above (Mansfield, Keitner & Dealy, 2015). It has been translated into twenty-seven languages.

The General Functioning scale has equally been established as a valid measure of overall family functioning (De-Haan, Hafekost, Lawrence, Sawyer & Zubrick, 2015). It contains fewer items than the FAD which makes it easier to administer, particularly in
large scale studies. Scoring is based on a four-point Likert-type scale of strongly agree to strongly disagree, with higher scores indicating family dysfunction.

The FAD has a reliability coefficient of 0.92 based on a study of five hundred and three participants. Its validity was also established using discriminant analysis; significant differences in family functioning were found in a sample of clinical, medical and nonclinical participants – the sample size was three hundred and sixteen. Those in the clinical group had significantly higher scores compared to the medical and nonclinical groups (Epstein, Bishop & Levine, 1983). Similar results were also found by Speranza, Guenole, Revah-Levy, Egler, Negadi, Falissard and Baleyte (2012) using a sample of three hundred and twenty-three French adults. Various studies investigating the factorial structure of the FAD have found that the General Functioning scale is consistent with the McMaster model and therefore a suitable independent measure of family functioning (Barroilhet, Canoprous, Cervera-Enguix, Joao-Foriaz & Guillen-Grima, 2009; Speranza et al, 2012).

The revised version of general functioning scale used in this study was validated by this author through a pilot study which comprised a sample of one hundred and two participants within this age range. Reliability analysis resulted in Cronbach’s alpha coefficient of 0.64. The scale was correlated with the Strengths and Difficulties Questionnaire (SDQ) Prosocial scale and this produced statistically significant negative correlation (r (102) =-0.3, p=0.006). In a separate study the revised scale was also
correlated with the original version and a statistically significant positive correlation was found ($r (635) = 0.72, p < 0.001$).

II. **Beck Youth Inventories:**

The Beck Youth Inventories are a battery of five scales which assess Depression, Anxiety, Disruptive behaviour, Anger and Self-concept in children aged 7 to 18 years. The scales, developed by Beck, Beck, Jolly and Steer (2005), can be used independently or jointly. Each inventory contains 20 items measured on a three-point scale and assesses symptoms or attitudes associated with the respective construct. A separate score is computed for each inventory and then converted to T-scores, with high scores indicating psychopathology.

Four inventories were used in this study:

1. Beck Anxiety Inventory (BAI)
2. Beck Depression Inventory (BDI)
3. Beck Anger Inventory (BANI)
4. Beck Disruptive Behaviour Inventory (BDBI)

Good psychometric properties have been established for the inventories. Among females aged 7 to 10 years the reliability coefficients were 0.91 for the BDI; 0.89 for BAI; 0.87 for BANI and 0.86 for BDBI. For males aged 11 to 14 years reliability coefficients were 0.92 for BDI; 0.91 for BAI; 0.92 for BANI and 0.90 for BDBI. Construct validity was established using the Revised Children’s Manifest Anxiety Scale for the BAI ($r (192) = 0.70, p < 0.001$); Children’s Depression Inventory for the BDI ($r$...
(128) = 0.72, p < 0.001); and the Conners-Wells’ Adolescent Self-Report Scales for the BANI and BDBI (r (108) = 0.69 to 0.73, p < 0.001).

The inventories were also validated by this author before administration through a pilot study which comprised one hundred two participants aged 8 to 12 years. Cronbach’s alpha reliability coefficients were 0.86 for BDI; 0.82 for BAI; 0.84 for BANI; and 0.86 for BDBI. The validity was ascertained by correlating the inventories with the Strengths and Difficulties Questionnaire which assesses emotional problems, peer problems, hyperactivity and conduct problems in children aged 4 to 17 years. Significant correlation coefficients were found for BAI (r (102) = 0.22, p=0.028); BDI (r (102) = 0.35, p<0.001); BANI-Y (r (102) = 0.41, p<0.001); and BDBI (r (102) = 0.25, p=0.013).

3.7 METHOD OF DATA COLLECTION

The study was conducted in two phases; the first phase involved the pilot study while the second stage was the main study.

I. Pilot Study

A pilot study was conducted prior to the main study to validate the instruments. Two secondary schools were purposively selected from Eti-Osa local government area. Participants were students in JS1 and JS2. Total sample size was one hundred and two. The following instruments were administered: the revised and original versions of the (FAD) General Functioning scale, the four Beck Youth Inventories and the Strengths and Difficulties Questionnaire. The Strengths and Difficulties Questionnaire contains 20
items which measure five domains namely, emotional problems, peer problems, conduct
problems, hyperactivity and prosocial relations. Socio-demographic information on age
and gender was also collected.

Permission was gained from the School Administrators to conduct the research. In
the first school, the study took place in the school hall. Rapport was established and the
purpose of the study was also explained. Verbal informed consent was obtained before
the battery of tests was administered. The same procedure was followed in the second
school. However, the study setting was in the classroom and the Class teachers assisted in
administering the instruments.

II. Main Study

Participants of the main study were students of five secondary schools
purposively selected from three local governments – Alimosho, Lagos Island and Eti-Osa
in Lagos Metropolis. The schools included government, private and mission-owned
educational institutions and also included a mix of co-educational and single-sex schools.
This selection was necessitated because the study was descriptive and cross-sectional.

A letter requesting consent to conduct research was submitted to the School
Administrators along with a copy of the psychological tests to be administered. The
battery of tests comprised of three sections namely, Section A (demographic questions on
age, gender, father’s and mother’s occupation); Section B (revised version of the General
Functioning scale); and Section C (BAI, BDI, BANI and BDBI). Subsequently, the
researcher was called for a meeting with the Administrator to discuss the study protocol.
following which approval was given and the researcher was referred to the School Counsellor or Sectional Head who supervised data collection.

The research was conducted during break/free periods. The study setting was the classroom. Each school had between two and five classes per year (JS 1 or JS 2). The researcher introduced herself and the purpose of the study, explaining that the research was voluntary and confidential. After this exercise the test packet was administered to the students. Some students who declined were permitted to leave the class. The researcher read out items and clarified words or phrases for some students who had difficulty completing the tests. The duration of the administration of the tests was between 20-30 minutes per child. Class teachers assisted in some schools with the administration of the tests, that is, distributing the test packets and calling the attention of the principal investigator to any child who required assistance with completing the test. Between two and three days was spent in each school, and a total of two weeks for the entire duration of the data collection exercise.

3.8 METHOD OF DATA ANALYSIS

Data was analyzed using Statistical Package for the Social Science (SPSS) version 20. The first level of statistics was descriptive, to provide an initial overview of the variables. Percentages were computed for categorical data while mean and standard deviation scores were computed for numerical data. Prevalence statistics were also computed using percentages and chi-square tests. The next step of analysis was inferential statistics. Hypotheses 1 and 2 were tested using One-way Analysis of
Variance. Further analysis was also conducted using Scheffe’s Post-Hoc Comparisons test. Hypothesis 3 was tested using Simple Linear Regression. Hypothesis 4 was examined using the Independent t-test.

### 3.9 ETHICAL CONSIDERATION

The relevant ethical procedures were adhered to in this study, as follows:

1. Compulsory online West African Bioethics Training Program was completed.
2. The self-report assessments administered to the participants were suitable to their ages and contained no violent or sexual or other untoward language or phrases. Although the instruments are standardized and globally recognized they were further validated for use in the Nigerian setting.
3. The study methodology was scrutinized and approved by relevant University faculties.
4. Approval to conduct the study was obtained from the School Administrators. In addition, verbal consent was also obtained from the participants.
5. The School Counsellor or Sectional Head supervised the data collection process to ensure that the students were comfortable with the research process.
6. Confidentiality of the students was maintained; no names were collected and the data was analyzed as a pool rather than individually.
7. Debriefing was done after data collection was completed.
3.10 STUDY LIMITATIONS

Some limitations are worthy of note, which should be considered in evaluating the study findings:

i. The sampling design was purposive and this could have introduced some level of bias in the study findings.

ii. The assessment of family functioning and childhood psychopathology was based on the self-report of the participants alone. Inclusion of interviews or the reports of significant persons, specifically the parents, would have provided more robust results.

iii. The assessment of parents’ occupation was nominal, that is based on occupational title alone. This was because the investigation of the relationship between parents’ occupation and childhood psychopathology was exploratory. Further research should take into consideration job sector/industry, income and also education (professional training). For this line of research however, assessment by the child may not be feasible. Therefore, parents should be involved as co-participants in future studies.

Despite the above, the large sample size and rigorous analysis suffice to validate the study findings.
CHAPTER FOUR

RESULTS

The results of the study are presented in this chapter. The first section contains the descriptive statistics. The second section contains analysis of the mental health status of the respondents; data on the prevalence of psychopathology in the sample and its association with socio-demographic variables (gender and parents’ occupation) is presented in this section. The third section focuses on the influence of parents’ occupation on the manifestation of psychopathology in children; the results of the analysis of variance to test hypotheses 1 and 2 are presented in this section.

The fourth section centres on the influence of family dysfunction on the manifestation of psychopathology; the results of the linear regression to test hypothesis 3 are presented herein. The fifth and final section is the examination of gender differences in the manifestation of psychopathology in children. The results of the independent t-test for hypothesis 4 are presented in this section.

4.1 DESCRIPTIVE STATISTICS

Data was collected from a total of 688 students. Fifty three questionnaires were discarded for being incomplete or irregular during the process of data cleaning and entry. A total of 635 questionnaires, representing a response rate of 92.3%, were entered into SPSS and analyzed.
Table 4.1

**Descriptive statistics**

<table>
<thead>
<tr>
<th>Variables</th>
<th>N=635</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>311</td>
<td>49.0</td>
</tr>
<tr>
<td>Female</td>
<td>324</td>
<td>51.0</td>
</tr>
<tr>
<td><strong>Father’s occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>194</td>
<td>30.6</td>
</tr>
<tr>
<td>Formal</td>
<td>331</td>
<td>52.1</td>
</tr>
<tr>
<td>Artisan</td>
<td>110</td>
<td>17.3</td>
</tr>
<tr>
<td><strong>Mother’s occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>178</td>
<td>28.0</td>
</tr>
<tr>
<td>Formal</td>
<td>227</td>
<td>35.8</td>
</tr>
<tr>
<td>Artisan</td>
<td>230</td>
<td>36.2</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>10.50</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Family functioning

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family functioning</td>
<td>1.73</td>
<td>0.44</td>
</tr>
<tr>
<td>Anxiety</td>
<td>50.38</td>
<td>9.35</td>
</tr>
<tr>
<td>Depression</td>
<td>48.24</td>
<td>10.68</td>
</tr>
<tr>
<td>Anger</td>
<td>49.88</td>
<td>10.90</td>
</tr>
<tr>
<td>Disruptive Behaviour</td>
<td>51.23</td>
<td>10.84</td>
</tr>
</tbody>
</table>

The descriptive statistics are presented in Table 4.1. Roughly half of the sample was male. Median age of respondents was 10.50 years. The most reported occupation for fathers was in the formal category followed by business while the least reported was artisan. The frequency of occupations among mothers was fairly evenly distributed, with thirty-six percent of mothers belonging to artisan and formal occupations respectively and twenty-eight percent belonging to the business category.

The mean score for family functioning was lower than the norm score of 2. Similarly, the mean scores for all four disorders were lower than the norm score of 55. The interpretation is that the respondents in this study are generally healthy, family-wise and mentally. However, the standard deviation was high for all four psychopathologies suggesting wide variation in the study sample.

### 4.2 MENTAL HEALTH STATUS OF PARTICIPANTS
To understand the mental health status of the participants the scores of the Beck Youth Inventories were transformed into categorical data using the norm scores provided in the test booklet. The norm scores are categorized as follows: average mental health (below 55); mildly elevated psychopathology (55-59); moderately elevated psychopathology (60-69) and extremely elevated psychopathology (70 and above).

Two levels of analysis were performed: first, the inventory scores for each psychopathology were grouped into two: Group 1 comprised of [mentally] healthy children (that is, those with scores below 55) while Group 2 was made up of children with psychopathology (that is, those with scores 55 and above). Percentages were computed to determine the prevalence of psychopathology among the children sampled in this study. Further analysis also involved the distribution of prevalence by gender and mother’s and father’s occupation. Chi-square tests were also computed to establish whether significant associations exist between the variables.
Table 4.2

*Mental health status of participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Healthy n (%)</th>
<th>Psychopathological n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>430 (67.7)</td>
<td>205 (32.3)</td>
</tr>
<tr>
<td>Depression</td>
<td>487 (76.7)</td>
<td>148 (23.3)</td>
</tr>
<tr>
<td>Anger</td>
<td>446 (70.2)</td>
<td>189 (29.8)</td>
</tr>
<tr>
<td>Disruptive Behaviour</td>
<td>421 (66.3)</td>
<td>214 (33.7)</td>
</tr>
</tbody>
</table>

The table shows that majority of the respondents had good mental health. However, about one-third of the respondents scored higher than the test norm (of 55) indicating the presence of psychopathology.

Further analysis was conducted to ascertain the severity of psychopathology. Also, the distribution of mental health was analyzed by gender and parent’s occupation.
Table 4.3

**Severity of psychopathology**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mildly elevated (%)</th>
<th>Moderately elevated (%)</th>
<th>Extremely elevated (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>106 (51.7)</td>
<td>76 (37.1)</td>
<td>23 (11.2)</td>
</tr>
<tr>
<td>Depression</td>
<td>54 (36.5)</td>
<td>53 (35.8)</td>
<td>41 (27.7)</td>
</tr>
<tr>
<td>Anger</td>
<td>67 (35.4)</td>
<td>86 (45.5)</td>
<td>36 (19.0)</td>
</tr>
<tr>
<td>Disruptive Behaviour</td>
<td>73 (34.1)</td>
<td>101 (47.2)</td>
<td>40 (18.7)</td>
</tr>
</tbody>
</table>

Table 4.3 shows the frequency for the severity of psychopathology in the study sample. Eleven percent of those who manifested anxiety were categorized as exhibiting extremely elevated levels of anxiety disorder. This was the lowest percentage of all the four disorders. Nineteen percent of those who manifested anger and disruptive behaviour disorders also fell into the extremely elevated level of psychopathology category. The highest percentage was observed for depression, with almost 30% of the respondents exhibiting extremely elevated levels of depression.

Mildly elevated levels of depression, anger and disruptive behaviour were observed in about one-third of respondents who scored above the norm test score, while about half of the respondents exhibited mildly elevated level of anxiety disorder. Similarly, almost half of respondents exhibited moderately elevated levels of anger and
disruptive disorder, while moderately elevated levels of anxiety and depression were observed in roughly one-third of the respondents who scored above the norm test score (of 55).

Table 4.4

_Distribution of psychopathology by gender_

<table>
<thead>
<tr>
<th></th>
<th>N=6</th>
<th>Health</th>
<th>General psychopathology</th>
<th>$x^2$</th>
<th>d</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>35</td>
<td>hy</td>
<td></td>
<td>f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>223</td>
<td></td>
<td></td>
<td>88 (28.30)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(71.7 0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>207</td>
<td></td>
<td></td>
<td>4.4 1</td>
<td>0.03</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>207</td>
<td></td>
<td></td>
<td>117 (36.10)</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Male</td>
<td>259</td>
<td></td>
<td></td>
<td>52 (16.70)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(83.3 0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fem</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
<td>-------</td>
<td>-------</td>
<td>-----</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>228</td>
<td>244</td>
<td>96 (29.60)</td>
<td>67 (21.50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(70.4)</td>
<td>(78.5)</td>
<td>79</td>
<td>0</td>
<td>&lt;0.0</td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td>Fem</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>202</td>
<td>239</td>
<td>122 (37.70)</td>
<td>72 (23.20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(62.3)</td>
<td>(76.8)</td>
<td>70</td>
<td>0</td>
<td>&lt;0.0</td>
<td></td>
</tr>
<tr>
<td>Disruptive behaviour</td>
<td>Fem</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>182</td>
<td>239</td>
<td>142 (43.80)</td>
<td>72 (23.20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(56.2)</td>
<td>(76.8)</td>
<td>36</td>
<td>0</td>
<td>&lt;0.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.4 shows the distribution of psychopathology by gender. The prevalence of psychopathology was higher among females than males. Thirty-six percent of females exhibited anxiety disorder compared with twenty-eight percent of males. The chi-square was statistically significant ($\chi^2=4.43$, df=1, $p=0.035$). About 30% of females exhibited...
depression compared with sixteen percent of males. The chi-square was also statistically significant ($\chi^2=14.79$, df=1, $p<0.001$). Similarly, almost 40% of females manifested anger disorder while this disorder occurred in 21% of males. The chi-square was also statistically significant ($\chi^2=19.70$, df=1, $p<0.001$). Forty-three percent of females manifested disruptive behaviour disorder compared with twenty-three percent of males. The chi-square was also statistically significant ($\chi^2=30.36$, df=1, $p<0.001$).
Table 4.5

*Distribution of psychopathology by father’s occupation*

<table>
<thead>
<tr>
<th>N=635</th>
<th>Healthy</th>
<th>General</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>psychopathology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Anxiety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>124 (63.90)</td>
<td>70 (36.10)</td>
<td>2.14</td>
<td>2</td>
<td>0.34</td>
</tr>
<tr>
<td>Formal</td>
<td>232 (70.10)</td>
<td>99 (29.90)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artisan</td>
<td>74 (67.30)</td>
<td>36 (32.70)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Depression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>141 (72.70)</td>
<td>53 (27.30)</td>
<td>4.01</td>
<td>2</td>
<td>0.14</td>
</tr>
<tr>
<td>Formal</td>
<td>255 (77.00)</td>
<td>76 (23.00)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artisan</td>
<td>91 (82.70)</td>
<td>19 (17.30)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Anger</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>125 (64.40)</td>
<td>69 (35.60)</td>
<td>4.72</td>
<td>2</td>
<td>0.09</td>
</tr>
<tr>
<td>Formal</td>
<td>239 (72.20)</td>
<td>92 (27.80)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artisan</td>
<td>82 (74.50)</td>
<td>28 (25.50)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Disruptive behaviour</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>113 (58.20)</td>
<td>81 (41.80)</td>
<td>10.89</td>
<td>2</td>
<td>0.004</td>
</tr>
<tr>
<td>Formal</td>
<td>224 (67.70)</td>
<td>107 (32.30)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artisan</td>
<td>84 (76.40)</td>
<td>26 (23.60)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Table 4.5 shows the distribution of psychopathology by father’s occupation. Thirty-six percent of children who exhibited anxiety disorder had fathers who were in business, representing the highest prevalence. This was followed closely by children whose fathers were artisans (32%) and in formal occupations (30%). The chi-square was not statistically significant ($\chi^2 = 2.14$, df=2, p=0.34) suggesting that there is no association between anxiety and father’s occupation.

Children whose fathers were in artisan occupations had the lowest percentage of depression (17%) followed by their counterparts whose fathers were in formal (23%) and business occupations (27%). The chi-square was however not statistically significant ($\chi^2 = 4.01$, df=2, p=0.14) again suggesting that there is no association between depression and father’s occupation. Less than 30% of children whose fathers were artisans and in formal occupations manifested anger disorder (lowest percentage was observed for artisan occupations at 25%) while almost 40% of their counterparts whose fathers were in business manifested the disorder. The chi-square was not statistically significant ($\chi^2 = 4.72$, df=2, p=0.09).

About twenty percent of children whose fathers were artisans manifested disruptive behaviour disorder compared with thirty percent of those whose fathers were in formal occupations and forty percent of their counterparts whose fathers were in business, representing the highest prevalence. Additionally, the chi-square test was statistically significant ($\chi^2 = 10.89$, df=2, p=0.004) suggesting that an there is an association between father’s occupation and the manifestation of disruptive behaviour.
Table 4.6

*Distribution of psychopathology by mother’s occupation*

<table>
<thead>
<tr>
<th>N=635</th>
<th>Healthy</th>
<th>General</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>psychopathology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>117 (65.70)</td>
<td>61 (34.30)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal</td>
<td>151 (66.50)</td>
<td>76 (33.50)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artisan</td>
<td>162 (70.40)</td>
<td>68 (29.60)</td>
<td>1.25</td>
<td>2</td>
<td>0.54</td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>129 (72.50)</td>
<td>49 (27.50)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal</td>
<td>168 (74.00)</td>
<td>59 (26.00)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artisan</td>
<td>190 (82.60)</td>
<td>40 (17.40)</td>
<td>7.19</td>
<td>2</td>
<td>0.03</td>
</tr>
<tr>
<td>Anger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>119 (66.90)</td>
<td>59 (33.10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal</td>
<td>155 (68.30)</td>
<td>72 (31.70)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artisan</td>
<td>172 (74.80)</td>
<td>58 (25.20)</td>
<td>3.66</td>
<td>2</td>
<td>0.16</td>
</tr>
<tr>
<td>Disruptive behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>109 (61.20)</td>
<td>69 (38.80)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal</td>
<td>134 (59.00)</td>
<td>93 (41.00)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Artisan</td>
<td>178 (77.40)</td>
<td>52 (22.60)</td>
<td>20.08</td>
<td>2</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>
Table 4.6 shows the distribution of psychopathology by mother’s occupation. The proportion of anxiety disorder among children in the three occupational categories was roughly equal (between 30%-34%), with mothers who were artisans having children with the lowest prevalence of psychopathology (30%). The chi-square test to examine the association between mother’s occupation and the manifestation of anxiety disorder was not statistically significant ($\chi^2=1.25$, df=2, p=0.536).

Children whose mothers were artisans reported the lowest percentage in the manifestation of depression (17%), followed by their counterparts whose mothers were in formal (26%) and business (27.5%) occupations. The chi-square test was statistically significant ($\chi^2=7.19$, df=2, p=0.03) suggesting that there is an association between mother’s occupation and manifestation of depression in children. A similar trend was observed in the manifestation of anger disorder, with 33% and 32% of children whose mothers were in business and formal occupations respectively manifesting anger disorder. The lowest reported frequency was observed for the artisan occupational category with 25%. The chi-square test was however not statistically significant ($\chi^2=3.66$, df=2, p=0.16).

Forty-one percent of children whose mothers were in formal occupations exhibited disruptive behaviour disorder. This was followed by their counterparts whose mothers were in business (38.8%) while the least observed prevalence was for children whose mothers were artisans (22.6%). The chi-square test was statistically significant
(χ² = 20.08, df = 2, p < 0.001), suggesting that there is an association between mother’s occupation and the manifestation of disruptive behaviour in children.
4.3 INFLUENCE OF PARENT’S OCCUPATION ON THE MANIFESTATION OF CHILDHOOD PSYCHOPATHOLOGY

The analysis in Section 4.2 showed that about one-third of the respondents in this study manifested psychopathology. Furthermore, within this group, parent’s occupation was found to be significantly associated with the manifestation of psychopathology, specifically depression and disruptive behaviour, as shown by the chi-square tests. It was also observed that children whose parents belonged to artisan occupations had the lowest prevalence of psychopathology compared to their counterparts whose parents belonged to business and formal occupational groups. Being an exploratory study, these findings are significant.

In this section, the relationship between parent’s occupation and child psychopathology will be further explored using one-way analysis of variance to test two hypotheses. Section 4.3.1 will focus on father’s occupation while Section 4.3.2 will focus on mother’s occupation.
4.3.1 HYPOTHESIS ONE TO INVESTIGATE THE INFLUENCE OF FATHER’S OCCUPATION ON THE MANIFESTATION OF CHILDHOOD PSYCHOPATHOLOGY

Table 4.7

*Mean psychopathology scores by father’s occupation*

<table>
<thead>
<tr>
<th>Occupation</th>
<th>n</th>
<th>Anxiety (M, SD)</th>
<th>Depression (M, SD)</th>
<th>Anger (M, SD)</th>
<th>Disruptive behaviour (M, SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father N=635</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>194</td>
<td>51.05 (9.45)</td>
<td>48.79 (11.15)</td>
<td>51.18 (11.48)</td>
<td>53.16 (11.63)</td>
</tr>
<tr>
<td>Formal</td>
<td>331</td>
<td>50.12 (9.74)</td>
<td>48.38 (10.50)</td>
<td>49.80 (10.53)</td>
<td>51.13 (10.23)</td>
</tr>
<tr>
<td>Artisan</td>
<td>110</td>
<td>49.97 (7.86)</td>
<td>46.83 (10.32)</td>
<td>47.84 (10.69)</td>
<td>48.11 (10.51)</td>
</tr>
</tbody>
</table>

Table 4.7 shows the mean psychopathology scores by father’s occupational group. Children whose fathers were artisans had the lowest mean scores in all four disorders (anxiety 49.97; depression 46.83; anger 47.84 and disruptive behaviour 48.11). These mean scores are lower than the sample means (anxiety is 50.38; depression 48.24; anger 49.88 and disruptive behaviour 51.23). Children whose fathers were in business had the highest mean scores in anxiety (51.05), depression (48.79), anger (51.18) and disruptive
behaviour (53.16). These mean scores are higher than the sample mean scores for all four disorders. The mean scores for children whose fathers are in formal occupations are anxiety (50.12); depression (48.38); anger (49.80) and disruptive behaviour (51.13), and these means are all lower than the sample mean except for depression. These results suggest that children whose father’s belong to artisan or formal occupational categories are psychologically healthier than their counterparts whose fathers belong to business occupations.

To test hypothesis 1, that is, to determine whether these differences in mean scores across the three occupational groups are significant, one-way analysis of variance (ANOVA) was computed.
### Table 4.8

**ANOVA Results to test hypothesis 1**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Anxiety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>127.14</td>
<td>2</td>
<td>63.57</td>
<td>0.73</td>
<td>0.49</td>
</tr>
<tr>
<td>Within groups</td>
<td>55337.91</td>
<td>632</td>
<td>87.56</td>
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<td></td>
</tr>
<tr>
<td>Total</td>
<td>55465.05</td>
<td>634</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Depression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>285.30</td>
<td>2</td>
<td>142.65</td>
<td>1.25</td>
<td>0.29</td>
</tr>
<tr>
<td>Within groups</td>
<td>72021.27</td>
<td>632</td>
<td>113.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72306.57</td>
<td>634</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Anger</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>786.97</td>
<td>2</td>
<td>393.48</td>
<td>3.34</td>
<td>0.036</td>
</tr>
<tr>
<td>Within groups</td>
<td>74559.94</td>
<td>632</td>
<td>117.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>75346.90</td>
<td>634</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Disruptive behaviour</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>1797.19</td>
<td>2</td>
<td>898.60</td>
<td>7.81</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Within groups</td>
<td>72720.15</td>
<td>632</td>
<td>115.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>74517.35</td>
<td>634</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The table shows the results of the analysis of variance. Significant differences were found between the occupational groups in the manifestation of anger (F=3.34; df=2/632; p=0.036) and disruptive behaviour (F=7.81; df=2/632; p<0.001). These results confirm that father’s occupation has a significant influence on the manifestation of anger and disruptive behaviour disorders in children. Therefore, hypothesis one is accepted.

Scheffe post-hoc test was computed to examine which of the three occupational categories accounted for the significant differences in the mean scores. The results are presented in Table 4.9.

Table 4.9

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Mean difference (95% CI)</th>
<th>Standard error of difference</th>
<th>p</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Anger</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business v</td>
<td>3.34</td>
<td>1.30</td>
<td>0.037</td>
</tr>
<tr>
<td>Artisan</td>
<td>(0.16-6.52)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal v</td>
<td>1.96 (-0.97-4.90)</td>
<td>1.20</td>
<td>0.260</td>
</tr>
<tr>
<td>Artisan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business v</td>
<td>1.38 (-0.98)</td>
<td>0.98</td>
<td>0.376</td>
</tr>
</tbody>
</table>
### Disruptive behaviour

<table>
<thead>
<tr>
<th></th>
<th>Formal v Business</th>
<th>Formal v Artisan</th>
<th>Artisan v Business</th>
<th>Artisan v Formal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disruptive behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>5.05</td>
<td>3.02</td>
<td>2.03</td>
<td></td>
</tr>
<tr>
<td>95% CI</td>
<td>(1.91, 8.19)</td>
<td>(0.12, 5.92)</td>
<td>(0.35, 4.41)</td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>0.001</td>
<td>0.11</td>
<td>0.001</td>
<td></td>
</tr>
</tbody>
</table>

The results of the Scheffe test show that the significant differences in mean scores for anger were found in the relationship between business and artisan (mean difference=3.34, p=0.037). Children whose fathers were in artisan occupations had significantly lower mean scores than their counterparts whose fathers were in business. Also, the significant differences in means scores for disruptive behaviour were found in the relationship between business and artisan (mean difference=5.05, p<0.001) and also between formal and artisan (mean difference=3.02, p<0.001). Children whose fathers were artisans had lower mean scores than their counterparts in both formal and business occupations. The graph depicting the mean scores for anger and disruptive behaviour are presented in Figures 2 and 3.
The results confirm that father’s occupation has an influence on the manifestation of anger and disruptive behaviour disorders in children, and also that children whose fathers are artisans have better psychological health than their counterparts whose fathers are in business or formal occupations.

Figure 2 Scheffe Post-Hoc graph for anger mean scores by father’s occupation
Figure 3 Scheffe Post-Hoc graph for disruptive behaviour mean scores by father’s occupation
4.3.2 HYPOTHESIS TWO TO INVESTIGATE THE INFLUENCE OF MOTHER’S OCCUPATION ON THE MANIFESTATION OF CHILDHOOD PSYCHOPATHOLOGY

Table 4.10

*Mean psychopathology scores by mother’s occupation*

<table>
<thead>
<tr>
<th>Occupation</th>
<th>n</th>
<th>Anxiety (M, SD)</th>
<th>Depression (M, SD)</th>
<th>Anger (M, SD)</th>
<th>Disruptive behaviour (M, SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>178</td>
<td>50.96 (9.80)</td>
<td>48.75 (10.79)</td>
<td>50.34 (11.58)</td>
<td>52.74 (11.39)</td>
</tr>
<tr>
<td>Formal</td>
<td>227</td>
<td>50.52 (9.99)</td>
<td>49.32 (11.33)</td>
<td>50.75 (10.96)</td>
<td>53.29 (11.19)</td>
</tr>
<tr>
<td>Artisan</td>
<td>230</td>
<td>49.78 (8.29)</td>
<td>46.77 (9.77)</td>
<td>48.67 (10.21)</td>
<td>48.02 (9.32)</td>
</tr>
</tbody>
</table>

Table 4.10 shows that children whose mothers were artisans had the lowest mean scores for anxiety (49.78), depression (46.77), anger (48.67) and disruptive behaviour (48.02) compared with their counterparts whose mothers were in business and formal occupations. Additionally, these mean scores are lower than the sample mean (anxiety 50.38; depression 48.24; anger 49.88; disruptive behaviour 51.23). The mean scores for anxiety (50.96), depression (48.75), anger (50.34) and disruptive behaviour (52.74) for
Children whose mothers belong to business occupations were also higher than the sample mean.

Children whose mothers belong to formal occupations had the highest mean scores of all three occupational groups in depression (49.32), anger (50.75) and disruptive behaviour (53.29), except anxiety (50.52) which was lower than the mean score for the counterparts whose mothers are in business (50.96). Furthermore, these scores are higher than the sample mean. The data suggest that children whose mothers are artisans have better psychological health than their counterparts whose mothers are in formal and business occupations.

To test hypothesis 2, that is, to determine whether these differences in mean scores across the three occupational groups are significant, one-way analysis of variance (ANOVA) was computed.
Table 4.11

ANOVA results to test hypothesis 2

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>f</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>148.01</td>
<td>2</td>
<td>74.01</td>
<td>0.89</td>
<td>0.43</td>
</tr>
<tr>
<td>Within groups</td>
<td>55317.03</td>
<td>632</td>
<td>87.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>55465.05</td>
<td>634</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>805.34</td>
<td>2</td>
<td>401.77</td>
<td>3.55</td>
<td>0.029</td>
</tr>
<tr>
<td>Within groups</td>
<td>71503.03</td>
<td>632</td>
<td>113.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>72306.57</td>
<td>634</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>545.55</td>
<td>2</td>
<td>272.28</td>
<td>2.31</td>
<td>0.10</td>
</tr>
<tr>
<td>Within groups</td>
<td>74801.35</td>
<td>632</td>
<td>118.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>75346.90</td>
<td>634</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disruptive behaviour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>3744.49</td>
<td>2</td>
<td>1872.25</td>
<td>7.81</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Within groups</td>
<td>70772.85</td>
<td>632</td>
<td>111.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>74517.35</td>
<td>634</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table shows the results of the analysis of variance. Significant differences were found between the occupational groups in the manifestation of depression (F=3.55, df=2/632, p=0.029) and disruptive behaviour (F=7.81, df=2/632, p<0.001). These results confirm that mother’s occupation has a significant influence on the manifestation of depression and disruptive behaviour disorders in children. Therefore, hypothesis two is accepted.
Scheffe post-hoc test was computed to examine which of the three occupational categories accounted for the significant differences in the mean scores. The results are presented in Table 4.12.

Table 4.12

*Scheffe post-hoc results for mother’s occupation*

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Mean difference (95% CI)</th>
<th>Standard error of difference</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business v</td>
<td>1.97 (-0.63, 4.58)</td>
<td>1.06</td>
<td>0.18</td>
</tr>
<tr>
<td>Artisan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal v</td>
<td>2.54 (0.10, 4.98)</td>
<td>1.00</td>
<td>0.039</td>
</tr>
<tr>
<td>Artisan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business v</td>
<td>0.57 (-3.18, 2.04)</td>
<td>1.07</td>
<td>0.87</td>
</tr>
<tr>
<td>Formal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disruptive behaviour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business v</td>
<td>4.72 (2.13, 7.32)</td>
<td>1.06</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Artisan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal v</td>
<td>5.27 (2.84, 7.70)</td>
<td>0.99</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Artisan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business v</td>
<td>0.55 (-1.06, 0.87)</td>
<td>1.06</td>
<td>0.87</td>
</tr>
</tbody>
</table>
The results of the Scheffe test show that the significant differences in mean scores for depression were found in the relationship between formal and artisan (mean difference=2.54, p=0.039). Children whose mothers were in artisan occupations had significantly lower mean scores than their counterparts whose fathers were in formal occupations. Also, the significant differences in means scores for disruptive behaviour were found in the relationship between business and artisan (mean difference=4.72, p<0.001) and also between formal and artisan (mean difference=5.27, p<0.001). Children whose mothers were artisans had lower mean scores than their counterparts in both formal and business occupations. The graph depicting the mean scores for depression and disruptive behaviour are presented in Figures 4 and 5.

The results confirm that mother’s occupation has an influence on the manifestation of depression and disruptive behaviour disorders in children, and also that children whose mothers are artisans have better psychological health than their counterparts whose mothers are in business or formal occupations.
Figure 4  Scheffe Post-Hoc graph for depression mean scores by mother’s occupation
Figure 4.4 Scheffe Post-Hoc graph for disruptive behaviour mean scores by mother’s occupation

4.4 HYPOTHESIS THREE TO INVESTIGATE THE PREDICTIVE INFLUENCE OF FAMILY DYSFUNCTION ON THE MANIFESTATION OF CHILDHOOD PSYCHOPATHOLOGY

Linear regression analysis was performed to investigate the predictive influence of family dysfunction, in line with hypothesis three of this study.
Table 4.13

*Results of linear regression to test hypothesis 3*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>1.77</td>
<td>0.85</td>
<td>0.08</td>
<td>2.08</td>
<td>0.038</td>
</tr>
<tr>
<td>F=4.32, df=1/633</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²=0.007</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>3.25</td>
<td>0.97</td>
<td>0.13</td>
<td>3.36</td>
<td>0.001</td>
</tr>
<tr>
<td>F=11.30, df=1/633</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²=0.018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td>1.84</td>
<td>0.99</td>
<td>0.07</td>
<td>1.85</td>
<td>0.064</td>
</tr>
<tr>
<td>F=3.43, df=1/633</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²=0.005</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disruptive behaviour</td>
<td>2.42</td>
<td>0.99</td>
<td>0.10</td>
<td>2.46</td>
<td>0.014</td>
</tr>
<tr>
<td>F=6.05, df=1/633</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²=0.014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.13 shows the results of the linear regression. Family dysfunction significantly predicted anxiety scores (β=0.08, t(632)=2.08, p=0.038); depression scores (β=0.13, t(632)=3.36, p=0.001) and disruptive behaviour scores (β=0.10, t(632)=2.46, p=0.014). Family dysfunction did not significantly predict anger scores.
Family dysfunction also explained a significant proportion of variance in anxiety scores \( R^2 = 0.007, F(1,633) = 4.32, p = 0.038 \); depression scores \( R^2 = 0.018, F(1, 633) = 11.30, p = 0.001 \) and disruptive behaviour scores \( R^2 = 0.009, F(1, 633) = 6.05, p = 0.014 \). The data implies that family dysfunction accounted for about one percent of the variance in the manifestation of anxiety, depression and disruptive behaviour disorders in children. These results are statistically significant and confirm that family dysfunction is a significant predictor of these disorders in children. Hypothesis three is therefore accepted.
4.5 HYPOTHESIS FOUR TO EXAMINE GENDER DIFFERENCES IN THE MANIFESTATION OF CHILDHOOD PSYCHOPATHOLOGY

Table 4.14

*Results of Independent t-test to test hypothesis 4*

<table>
<thead>
<tr>
<th>Psychopathology</th>
<th>Sex</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>Female</td>
<td>50.99</td>
<td>9.896</td>
<td>0.550</td>
<td>1.705</td>
<td>628.458</td>
<td>0.089</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>49.73</td>
<td>8.721</td>
<td>0.495</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>Female</td>
<td>49.57</td>
<td>11.286</td>
<td>0.627</td>
<td>3.240</td>
<td>627.222</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>46.85</td>
<td>9.836</td>
<td>0.558</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anger</td>
<td>Female</td>
<td>52.28</td>
<td>11.253</td>
<td>0.625</td>
<td>5.815</td>
<td>628.730</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>47.38</td>
<td>9.943</td>
<td>0.564</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disruptive behaviour</td>
<td>Female</td>
<td>54.13</td>
<td>11.307</td>
<td>0.628</td>
<td>7.172</td>
<td>621.246</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>48.21</td>
<td>9.446</td>
<td>0.536</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.14 shows the results of the independent t-test. The mean score for males was lower than the mean score for females for all four disorders. A statistically significant effect of gender was found in the manifestation of depression ($t(627.2)=3.24$, $p=0.001$); anger ($t(628.7)=5.815$, $p<0.001$) and disruptive behaviour ($t(621.2)=7.172$, $p<0.001$). (Equal variances were not assumed for the analysis because the Levene’s test...
for equality of variances was statistically significant; this is the reason for the adjustment in the degrees of freedom computed in SPSS). Gender did not have any significant effect on anxiety.

Since the mean scores for males were significantly lower than females on three of the four disorders, hypothesis 4 is rejected.
CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

The discussions on the results of this study will be presented in the first section of this chapter. Four hypotheses were tested in this study, three of which were accepted (hypothesis 1-3) while hypothesis 4 was rejected. Literature support and rationale for these findings will be provided. Subsequent sections will focus on the conclusions of the study as well as the implications for research, policy and practice and finally recommendations.

6.1 DISCUSSION

This study investigated the influence of parents’ occupation and family functioning on the manifestation of childhood psychopathology in a sample of six hundred and thirty-five JS 1 and JS 2 secondary school students in Lagos Metropolis. Four common childhood psychopathologies were investigated: anxiety, depression, anger and disruptive behaviour.

5.1.1 MENTAL HEALTH STATUS OF THE STUDY RESPONDENTS

Two hundred and five of the children in the study sample were classified as manifesting one psychopathology or the other. Of these, eleven percent manifested extremely elevated levels of anxiety disorder; twenty-eight percent manifested extremely elevated levels of depression; and nineteen percent reported extremely elevated levels of
anger and disruptive behaviour disorder respectively. These figures indicate that the manifestation of childhood psychopathology is common among Nigerian children. These findings are supported by epidemiological data which state that children share a significant burden of mental disorders, and particularly emotional and behavioural disorders (Muris & Broeren, 2009). The reality of mental illness occurring in children in the Nigerian setting is something that is not yet accepted. However, this misconception cannot continue; as the findings of this study have proven some children require some form of intervention, either clinical care or psychological support to address the psychopathology they are experiencing.

The review of literature confirms that the presence of psychopathology in children has a negative effect on functioning in several domains, including school performance and interpersonal relations. This means that these children will also struggle with their academics and peer relations, which are very important at this developmental stage. The inability to develop and maintain good social relations can further diminish their psychological and emotional state. School failure can equally lead to the development of juvenile behavioural problems. As a result, there is an urgent need for a reversal of the trend of ignoring mental health in children because the presence and consequence of mental illness is enormous, not only for the child but also for the family and society.

It is important to note that this prevalence was established using a community sample and relying on only the self-report of the children. Other studies which employed multi-informant and clinical assessments found lower rates (National Institute of Mental
Health, 2016). However, a systematic analysis of several studies found prevalence rate of thirty-two percent when assessment was done using child reports, which is very similar to the findings of this study (Roberts, Attkisson & Rosenblatt, 1998). Additionally, the prevalence rate dropped by about twenty-five percent when level of impairment was factored into the assessment. These findings therefore support the validity of the use of child-based assessments as well as the results of this study.

5.1.2 PARENTS’ OCCUPATION AND CHILDHOOD PSYCHOPATHOLOGY

The study findings on the relationship between parents’ occupation and childhood psychopathology have opened up new frontiers in this area of research. Previous research focused on the influence of occupation on the mental health of the person concerned; however the results of this study confirmed that parents’ occupation also has a significant influence on the mental health of children. Father’s occupation was found to have a statistically significant influence on the manifestation of anger and disruptive behaviour, while mother’s occupation significantly influenced the manifestation of depression and disruptive behaviour.

The implication of this finding is that parental occupation is a significant determinant of psychopathology in children. The notion that occupation can negatively affect the mental (and physical) health of the person concerned has been extended to also include the mental health of the person’s child. The literature suggests that occupation can act as a stressor which in turn can influence the psychological, emotional and
physical wellbeing of the individual – and based on the findings of this study this influence also extends to the child.

Moreover, significant differences were found among the three occupational categories, that is, business, professional and artisan. Children whose parents’ were artisans had the lowest mean scores and these were statistically significant for all four disorders. This implies that artisan occupation has the lowest risk level for the manifestation of psychopathology in children. This is supported by the findings of Stansfeld, Rasul, Head and Singleton (2009) that some occupations can be classified as low risk and others as high risk, in terms of their influence on mental health. Professional and entrepreneurial occupations are associated not only with higher levels of skill – compared to artisan occupations – but also higher levels of job demands and responsibilities, and consequently, higher levels of stress. This may be an explanation for the findings of this and similar studies. An article by Jessica Bruder in the September 2013 issue of the INC. Magazine, chronicled the story of several entrepreneurs in their attempts to build successful businesses. They all had common experiences of mood problems (fear, worry, pressure, etc) which was associated with the risks and intense pressure of their work.

This study did not take into consideration the role of education, income and other factors in investigating parental occupation and child psychopathology. Nonetheless, significant influence was established between the two variables confirming that parental occupation should not be viewed mainly as an indicator of socioeconomic status. While it
is accepted that socioeconomic determinants play a significant role in the mental health of children (American Psychological Association, 2007b) lifespan development theory posits that development occurs as a result of the dynamic interactions between biological, social and psychological factors. Without any doubt, one cannot operate without the other; therefore the socioeconomic and psychological dimensions of (parents’) occupation are equally important.

Furthermore, this study has established that the role of the father is as important as the mother’s. Research is usually lopsided, emphasizing the influence of the mother. However, both father’s and mother’s occupation had a significant influence on the manifestation of psychopathology in children. In a study by Dubow, Boxer and Huesmann (2009), they found that mother’s and father’s education significantly predicted not only the educational but also the occupational outcomes of their children. Similar results were found by Gordon and Hinshaw (2015). Therefore, both fathers and mothers have equally important roles to play in the healthy and all-round formation of the child.

5.1.3 FAMILY DYSFUNCTION AND CHILDHOOD PSYCHOPATHOLOGY

Family dysfunction was found to be a significant predictor of the manifestation of anxiety, depression and disruptive behaviour. This confirms that the risk of psychopathology is significantly greater in children whose family environments are dysfunctional. Several studies have found similar results (Fuss, 2012; Guberman & Manassis, 2011; Hughes, Hedtke & Kendall, 2008; Kennedy, Rooney, Kane, Hassan &
These results confirm the important role of the family in determining the mental state of children. The family is a place where strong bonds and attachments are developed; unlike other relationships there is a strong level of commitment among members of a family. This commitment includes to show love and affection, provide security and also to meet material and other needs. The essentiality of this strong bond is supported by Bowen’s family system theory which postulates that the family is an emotional system (Kerr, 2000). Where the family environment is unhealthy, the members are affected both emotionally and psychologically.

This is more significant for children whose minds and personalities are still developing. Children look up to their parents to provide the care, attention and security they require for healthy development and also to model appropriate behaviours and attitudes. Lifespan development theory confirms that children are impressionable; therefore negative family influences, such as low levels of parental involvement and attachment, will no doubt have a detrimental impact on them.

Very few studies adopt the approach of this study of basing the assessment of family functioning only on child reports, because of the impression that children are not cognitively mature enough to make such judgments. This study proves otherwise. The basic principle of the family systems theory is that the family is characterized by the interdependencies and interrelationships among its members. This simply means that
every member, whether adult or child, counts. It is this line of reasoning that informed the use of child-informant for assessment. Children are not only vulnerable to their family environments but they too have an impression about their families. Children in late childhood have the cognitive capacity to describe their family environments just as much as they can describe themselves and their peers – this is more relevant for contemporary children who enjoy exposure to a wealth of information and experiences via various forms of technology and are therefore more intellectually developed than their age. It is important to note that despite their cognitive development they are still emotionally immature; this deficit can inevitably influence their assessment and this may have accounted for the low level of variability in psychopathology accounted for by family dysfunction. Nonetheless, the significant influence of family dysfunction on childhood psychopathology established in this study is valid.

Family dysfunction did not significantly predict the manifestation of anger in this study. A reason for this finding may be because anger is a significant indicator of other psychopathologies, including conduct disorders, depression and anxiety disorders (Fitzgibbons, 2014; Mabe, Treiber & Riley, 1992). This is true particularly for conduct disorders which has aggression as one of the defining symptoms. Similarly, the helplessness experienced by individuals who suffer depression and anxiety disorders, and in fact any (mental) health challenge, can result in feelings and outbursts of anger. It may also be that the conceptualization of anger was not clear to the study participants since the Nigerian culture does not support the expressiveness of children, and anger disorder involves outbursts of temper tantrums. Rolhf and Krahe (2015) suggest that children do
not have the appropriate cognitive and language skills to clearly articulate the experience of anger. Yet, based on the study findings on the high prevalence of disruptive disorders, it is evident that Nigerian children are manifesting unhealthy levels of anger emotions. Therefore, the results of this still suggest that anger disorder is a significant emotional disorder of childhood.

5.2.4 GENDER AND CHILDHOOD PSYCHOPATHOLOGY

Gender differences in psychopathology were established in this study, but not in the way that was hypothesized. Females in this study had higher mean scores than their male counterparts in all four psychopathologies, and these differences were found to be statistically significant for three of the four disorders, namely depression, anger and disruptive behaviour.

The review of literature already suggests that gender is a significant determinant of psychopathology (Kistner, 2009), although the influences of gender are not conclusive. Fossum, Morch, Handegard and Drugli (2007) aver that the prevalence of externalizing disorders is higher among boys than girls while Schaeffer, Ialongo, Hubbard, Petras, Massyn, Kellam and Kellam (2006) found that boys and girls at the elementary school level did not differ in the manifestation of disruptive behaviour while Lin, Tang, Yen, Ko, Huang, Liu and Yen (2008) found that the risk of developing depression was higher in females than in males. Muris and Broeren (2009) found that anxiety disorders were more prevalent among girls than boys.
The literature therefore seems to suggest that internalizing disorders are more prevalent in girls than boys, while externalizing disorders are more associated with boys than with girls. The feminine nature of females which is more emotional and inward directed and the masculinity of males which is aggressive and outward directed may explain this trend. However, this study found that girls manifested significantly higher levels of both externalizing and internalizing disorders. An explanation for these results may be because of the role of gender as a moderator variable, rather than an independent variable. The implication is that other influences, particularly in the environment, determine the influence that gender will have on the manifestation of childhood psychopathology. This is the same pathway of traits or temperaments, which may make the individual susceptible to a particular disorder, but eventually, it is the environmental influences that trigger the manifestation of psychopathology. Developmental psychopathology has already established that the dynamic and unique relationship between individual and contextual factors significantly shapes development and behaviour, and moreover, one cannot operate without the other (Drabick & Kendall, 2010). Therefore, the gender differences established in this study may not be conclusive and would require further research.

### 6.2 Conclusion and Implications of the Study

This study investigated the influence of parents’ occupation and family functioning on the manifestation of childhood anxiety, depression, anger and disruptive behaviour disorders. Four hypotheses were tested, three of which were accepted. Parents’
occupation was found to significantly influence the manifestation of anger, depression and disruptive behaviour disorder. Furthermore, among the three occupational categories, artisan occupation was found to pose the least risk in the manifestation of psychopathology. Family dysfunction was found to be a significant predictor of anxiety, depression and disruptive behaviour. Significant gender differences were found, with females manifesting significantly higher levels of psychopathology than males.

Several conclusions can be drawn from this study. First is that parents’ occupation is a significant determinant of childhood psychopathology. Secondly, among the types of occupations, business and formal jobs pose higher risk than artisan occupations in determining psychopathology in children. The implication then is that parents should not view their occupations only from their own perspective, that is, of achieving career fulfillment and economic empowerment; instead they should realize that their occupation and career also has a significant influence on the mental health and wellbeing of their children and families.

This raises other questions regarding how parental occupation influences childhood psychopathology. The study was based on a cross-sectional research design and this means that causal relationships were not investigated. Further studies are therefore required to investigate the pathway of influence between these two variables. The occupational stress model states that stress moderates the relationship between occupation and mental health. This model can be extended to explain the relationship between parental occupation and child mental health. Indeed, Belsky’s model provides a
pathway of influence for this relationship; it suggests that parent characteristics influence parenting and parental functioning, and these parent characteristics are in turn influenced by environmental influences, of which occupation and occupational stress is a factor. The role of coping and resilience for both parents and children in alleviating the influence of stress is therefore significant, and also requires further research.

With regard to the role of family functioning, this study confirmed its predictive influence on the manifestation of childhood psychopathology. The family unquestionably has a significant role to play in the health and wellbeing of its members. Healthy family environments, characterized by good emotional and psychological support systems, are required to promote mental health and also alleviate mental illness. However, it seems that the contemporary family is under a lot of pressure; financial strain, family conflict, abuse and neglect are commonly reported in the news and literature. These influences affect the family environment negatively, and this may explain the high prevalence of psychopathology reported in the study sample.

As a result, this study has several implications for policy, practice and research. Certainly, mental health should be considered a public health issue in Nigeria, as espoused by Herrman, Saxena, Moddie and Walker (2005). A mental health policy for children is urgently needed; this policy should be evidenced-based and child- and family-centred. Policies that address work-life balance are also required and such should be adopted by both government and private institutions and organizations. The current trend in employment is that both parents are engaged in work and career in order to be able to
adequately provide for their families, given the current economic situation in the country. Therefore, there is also the need for a social welfare policy that will ease the living conditions of all and sundry.

In terms of practice, family therapy should be incorporated in the treatment plan for children with mental illness. The goal is to help families appreciate their dynamic role in facilitating and maintaining mental illness and mental health. Also, since it is incontrovertible that families will face various forms of stressors throughout their life cycle, it is pertinent that they should be trained in coping and resilience skills. Indeed, such life skills training can be incorporated into the school curriculum, as is the practice in developed nations.

The interrelationship between occupation, family, parent factors and child mental health is an important area of research – as this study has proven – which requires further investigation. This line of research should therefore be duplicated in various areas in Nigeria using different age-groups. This will contribute to the build-up of a national database on the prevalence and determinants of child mental health. The limitations of this study should serve as a starting point for such research studies. Apart from investigating the variables in greater detail, the adoption of a longitudinal research design should be considered as this would allow for causal relationships to be established.
6.3 RECOMMENDATIONS

Grotberg (1980) raised concern about the promotion of mental health in children, highlighting the indisputable role of families and governments in this regard. The recommendations made almost forty years ago are still relevant today.

1. Concern for the wellbeing of children should be a national priority. There is an urgent need to draw up and implement a mental health policy for children. The government needs to place the mental health of children as a national priority and draft and implement social policies (social and welfare services, child mental health protection, labour laws, etc) which will promote the health and wellbeing of children and their families.

2. The relevance of parents and the family environment in promoting child mental health is irrevocable. Education and advocacy for parents and families to perform their roles effectively should be promoted by government, civil, educational, religious institutions and other stakeholders. There should also be advocacy for promoting the psychological wellbeing of parents and children, including the teaching of life skills, notably coping with stress and building resilience.

3. There should be more focus on developing and implementing employment policies and practices that support and promote healthy family life and parenting.
4. Educational institutions also have an important role to play in child formation. School environments should be made conducive to promote the mental health of children and focus on imbibing coping and resiliency skills in children.

5. Knowledge is a driver of progress. The conduct of routine behavioural health and epidemiological research should be adopted and sponsored by all levels of government and academic institutions alike. Such empirical information should form the bedrock of policies and laws.

Areas of further research are also recommended as follows:

1. Since a relationship has been established between parents’ occupation and childhood psychopathology, further research should investigate the pathway of influence between these variables. Such investigations should include variables on parent personality, work environment (for example, occupational sector and income), psychological health status and other important demographic factors.

2. Also, further research should consider assessment of family functioning and childhood psychopathology using a multi-informant approach, in order to minimize the influence of test-taker bias.

3. Research should also be carried out to establish prevalence of various childhood psychopathologies. This will mean more studies in Lagos State and other states of the federation. Prevalence data should also include both
lifetime and current prevalence to achieve a robust coverage of the burden of mental illness among Nigerian children.
REFERENCES


Psychiatric Epidemiology, 44, 1051-1065. http://dx.doi.org/10.1007/s00127-009-0022-8


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*Mental Health Situation Analysis in Nigeria*. (2012). Department of Psychiatry, University of Ibadan, Nigeria

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# APPENDIX I

## BATTERY OF TESTS

### A. Socio-demographic data

<table>
<thead>
<tr>
<th>Age: __________________</th>
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</table>

<table>
<thead>
<tr>
<th>Sex:</th>
<th>Male</th>
<th>Female</th>
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<tbody>
<tr>
<td>Male</td>
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<tr>
<td>Female</td>
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</tbody>
</table>

| Father’s occupation: ________________ | Mother’s occupation: ________________ |

### B. How do you see your family?

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Making arrangement in my family is not easy because we do not agree</td>
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<tr>
<td>2. In time of trouble we are there to help one another</td>
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<td>3. We cannot share with one another the things that make us sad</td>
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<td>4. We accept one another the way we are in my family</td>
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<td>5. We run away from discussing our pains together in my family</td>
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<tr>
<td>6. We can tell one another about how we feel in my family</td>
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</tbody>
</table>
7. We quarrel a lot in my family

8. We feel that we are accepted in my family

9. It is not easy to plan together in my family

10. When there is a problem we discuss and plan together as a family

11. We don’t like one another in my family

12. We can tell one another our troubles and secrets in my family

<table>
<thead>
<tr>
<th>C. How do you feel?</th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I worry someone will injure me at school</td>
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<tr>
<td>2. My dreams make me afraid</td>
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<tr>
<td>3. I worry when I am at school</td>
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<tr>
<td>4. I think about things that make me afraid</td>
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<tr>
<td>5. I worry people will make jest (fun) of me</td>
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<tr>
<td>6. I am afraid that I will make mistakes</td>
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<tr>
<td>7. I get tense (nervous)</td>
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<tr>
<td>8. I am afraid I will get injured</td>
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<tr>
<td>9. I worry I will fail in school</td>
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<tr>
<td>10. I worry about the future</td>
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<tr>
<td>11. My hands shake</td>
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<tr>
<td>12. I worry I will go mad</td>
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<tr>
<td>13. I worry people will be angry with me</td>
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<td></td>
<td>I worry I will lose control</td>
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<tr>
<td>15.</td>
<td>I worry</td>
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<td>16.</td>
<td>I have problems sleeping</td>
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<td>17.</td>
<td>My heart beats fast</td>
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<tr>
<td>18.</td>
<td>I get shaky</td>
<td></td>
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<tr>
<td>19.</td>
<td>I am afraid that something bad will happen to me</td>
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<td>20.</td>
<td>I am afraid that I will fall sick</td>
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<tr>
<td>21.</td>
<td>I think that my life is bad</td>
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<tr>
<td>22.</td>
<td>I have trouble doing things</td>
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<td>23.</td>
<td>I feel that I am a bad person</td>
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<tr>
<td>24.</td>
<td>I wish I were dead</td>
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<tr>
<td>25.</td>
<td>I have trouble sleeping</td>
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<tr>
<td>26.</td>
<td>I feel no one loves me</td>
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<td>27.</td>
<td>I think bad things happen because of me</td>
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<tr>
<td>28.</td>
<td>I feel lonely</td>
<td></td>
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<tr>
<td>29.</td>
<td>My stomach pains (hurts)</td>
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<td>30.</td>
<td>I feel bad things happen to me</td>
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<tr>
<td>31.</td>
<td>I feel I am stupid</td>
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<td>32.</td>
<td>I feel sorry for myself</td>
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<td>33.</td>
<td>I think I do things badly</td>
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<td>34.</td>
<td>I feel bad about what I do</td>
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<tr>
<td>35.</td>
<td>I hate myself</td>
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<td>36.</td>
<td>I want to be alone</td>
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<td>37.</td>
<td>I feel like crying</td>
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<tr>
<td>38.</td>
<td>I feel sad</td>
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<td>39.</td>
<td>I feel empty inside</td>
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<tr>
<td>40.</td>
<td>I think my life will be bad</td>
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<tr>
<td>41.</td>
<td>I think people try to cheat me</td>
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<tr>
<td>42.</td>
<td>I feel like screaming</td>
<td></td>
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<tr>
<td>43.</td>
<td>I think people are not fair to me</td>
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<tr>
<td>44.</td>
<td>I think people try to offend me</td>
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<tr>
<td>45.</td>
<td>I think my life is unfair</td>
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<tr>
<td>46.</td>
<td>People bully (oppress) me</td>
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<tr>
<td>47.</td>
<td>People make me very, very angry</td>
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<tr>
<td>48.</td>
<td>I think people disturb me</td>
<td></td>
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<tr>
<td>49.</td>
<td>I get very, very angry at other people</td>
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<tr>
<td>50.</td>
<td>When I am annoyed, I stay annoyed</td>
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<tr>
<td>51.</td>
<td>When I get annoyed, I have trouble calming down</td>
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<tr>
<td>52.</td>
<td>I think people try to control me</td>
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<tr>
<td>53.</td>
<td>I feel people try to ridicule me</td>
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<tr>
<td>54.</td>
<td>I feel I am wicked</td>
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<td>55.</td>
<td>I feel like exploding</td>
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<td>56.</td>
<td>I think people are against me</td>
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<tr>
<td>57.</td>
<td>I get angry</td>
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<tr>
<td>58.</td>
<td>When I am annoyed, I feel it inside my body</td>
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<td>59.</td>
<td>I hate people</td>
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<tr>
<td>60. I get very, very angry</td>
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<tr>
<td>61. I steal</td>
<td></td>
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<tr>
<td>62. Other people get me into trouble</td>
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<tr>
<td>63. I think about running away from home</td>
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<tr>
<td>64. I do bad things</td>
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<tr>
<td>65. I break into cars, houses or other places</td>
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<tr>
<td>66. I fight with others</td>
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<tr>
<td>67. I like making people angry</td>
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<tr>
<td>68. I run away from school</td>
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<tr>
<td>69. I hate listening to other people</td>
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<tr>
<td>70. I quarrel with adults (people older than me)</td>
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<tr>
<td>71. I offend people</td>
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<tr>
<td>72. I like being wicked to others</td>
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<tr>
<td>73. I break the rules</td>
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<tr>
<td>74. I like it when people are afraid of me</td>
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<tr>
<td>75. I like to injure animals</td>
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<tr>
<td>76. I like to bully (oppres) others</td>
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<tr>
<td>77. I tell lies</td>
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<tr>
<td>78. I like to trick (deceive) people</td>
<td></td>
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<tr>
<td>79. I break things when I am angry</td>
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<tr>
<td>80. I swear at (curse) adults</td>
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</table>