FAMILY TYPE AND PHYSICAL AND MENTAL HEALTH AMONG IN-SCHOOL FEMALE ADOLESCENT IN ADO EKITI, NIGERIA

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CERTIFICATION

This is to certify that ENIOLA MERCY EGBEYEMI, of the Department of Demography and Social Statistics, Faculty of Social Sciences, carried out a Research on the Topic **"Family Type and Physical and Mental health among in-school Female Adolescent in Ado Ekiti, Nigeria"** in partial fulfillment of the award of Bachelor of Science (B.Sc) in Federal University Oye-Ekiti, Nigeria under my Supervision

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DEDICATION

The project is dedicated to the Almighty God (Alpha and Omega), who has been with me from the beginning of my Academic pursuit in FUOYE till the completion of it and has crowned all my efforts with success. In the same vein, this project work is as well dedicated to my parents, Mr. & Mrs. Egbeyemi and Mr. Dada Godwin Adedeji.

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ABSTRACT

Physical and mental wellbeing is one of the major part of health which may contribute to the increase or decrease of illness, disability and death of adolescents. Several research conducted on adolescent well-being revealed that family types and its characteristics have positive and negative influences on the health of adolescents. Although, different studies have been conducted on adolescent health in different family contexts, adequate attention has not be given to mental and physical well-being of adolescents in Nigeria. This study examined the relationship between family type, other family-related and personal characteristics and the self-reported physical and mental health of in-school female adolescents in Ado-Ekiti, Nigeria. The source of data was a structured questionnaire that contained a scale for measuring self reported physical and mental health of in-school female adolescents. The sample size was 421 in-school female adolescents within the ages of 10-19 years. The uni-variate result revealed that female adolescents in Ado-Ekiti, Nigeria, commonly live in monogamous families, had good physical health and poor mental health The bivariate analysis showed that there was significant relationship between family type and physical health of female adolescents (x^2=8.8972, p=0.012), while there was no significant relationship between family type and mental health of female adolescents (x^2=3.7805, p>0.05). Other family-related and personal characteristics such as school, age, class, religion, skill acquisition, number of siblings, parents' education and occupation do not significantly relate to physical health of adolescents except ethnic origin (x^2=4.6867, p<0.05). Other than class (x^2=9.1723, p<0.05), there was no significant relationship between other family-related and personal characteristics and mental health. At the multivariate level, compared to monogamous family type, polygynous family was significantly related to physical health of adolescents (OR=9.16, p<0.01), while single parent family (OR=1.39, P>0.05) do not significantly relate to physical health of adolescents. Among other family-related and personal characteristics, only ethnic origin was significantly associated with physical health (OR=0.40, p<0.05). There was no significant relationship between family type and mental health of female adolescents, but respondent's class and father's occupation were significantly related to mental health.. The study concludes that family type matters for physical health of in-school female adolescents. Further research on a wide range of issues and aspects related to families and adolescent physical and mental health is recommended that will help in designing necessary policies and intervention programs.

Keywords: Family, Physical and Mental health, Female Adolescents, In-school, Ado-Ekiti.

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND OF THE STUDY

Family is a close domestic group comprising of people related to one another by ties of blood, sexual mating or legal ties. It is known as the smallest, most basic social and primary group commonly found in all society. It is the most immediate and enduring group a child is exposed to, which has tremendous influence on the life of a person from birth to death (Mondal, 2016).

Family type is the way in which a group of individuals are organised according to roles, rules, power and hierarchies (Keane, 2013). It is the way a family is built, arranged and organised. It also refers to the combination of relatives that makes up a family. It is the composition and membership of the family, the organisation and patterning of relationship among individual member of a family (Louis & Elsevier, 2013.) There are four most prevalent family types in all societies. They include nuclear (intact first married family units), divorced single parent families, extented/step families and childless.

The word *health* interprets differently to people, depending on the situation. It originates from an Old English word *hale*, meaning "wholeness, to be whole, sound or well". The World Health Organisation (1948) defined health as, *"a state of physical and mental well-being and not merely the absence of disease or infirmity"*. In otherwords, there is no health without mental health. During the Ottawa Charter for Health Promotion in 1986, the WHO revised the definition of health to include "the extent to which an individual or group is able to realise aspirations and satisfy needs, and to change or cope with environment". Health is a resource for everyday life, not the objective of living. It is a positive concept, stressing social and individual assets, and in

addition physical capacities (WHO, 1986). Health can be divided into two broad aspects - physical and mental health.

Physical health also known as physical well-being is a state of being free from sickness, tiredness, dizziness, pain and ache in the body. It is referred to a good body health, which is healthy as a result of frequent physical activity, good nutrition and diet, adequate rest and high quality sleep. It is critical for general well-being and is the most visible of all the various dimensions of health. It includes social, intellectual, emotional, spiritual and environmental health. Some of the most obvious and serious signs that are unhealthy appear physically. Physical well-being consists of the feeling of fitness and ability, not limited by discomfort or disability (Koshuta, 2015 & Ray, 2017).

Mental health also known as mental well-being refers to the cognitive and emotional wellness of a person. It consists of the feeling of happiness, hope, energy, and enthusiasm. According to World Health Organisation (2004), it is "a state of well-being in which a person realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make contributions to his or her community" (WHO, 2004 & Ray, 2017).

Mental health has been referred to the "absence of mental illness". It has been said to include the ability to enjoy life, the ability to bounce back from adversity, the ability to achieve balance (moderation), the ability to be flexible and adapt, the ability to feel safe and secure, and self-actualization (making the best of what you have). In particular, satisfaction with one's lot does not necessarily indicate well-being. Satisfaction implies a convergence of aspiration and achievement that reflects resignation as much as it does accomplishment, whereas distress often results from deprivation, dissatisfaction results from deprivation relative to one's expectations (Ross, Mirowsky & Goldsteen, 1990).

Physical and mental health are highly correlated. They affect each other, share common causes and are often signs of each other. They are fundamentally linked. There are several connections between people's mental health and chronic physical conditions that go a long in affecting their quality of life, demand on health care and other publicly funded services. Poor mental well being is a hazard factor for endless physical conditions and furthermore individuals with incessant physical conditions are in danger of developing poor psychological well being. Hence, there is a central connection between the psyche and the body (Kolappa, Henderson & Kishore-WHO, 2013).

The well being of young people is unequivocally affected by social elements at individual, family, community and national levels. The way that these social determinants influence adolescent healthcare is vital to the health of the entire populace and the economic improvement of countries (Viner, Ozer, Denny, Marmot, Resnick, Fatusi & Currie, 2012). Right from time immemorial, the family has been the foundation of human life and the cradle of development and well-being. It is the centre-piece of every individual's life experience. In other words, there is hardly any person who did not pass through a family type at one point in their lifetime. As humans (social beings), we spend most of our life-time in the family type that we are born into (Nweze, 2004)

There are different types of family existing in major societies globally: Single-parent family, monogamous family (two-biological parent family) and polygamous/step families (Thompson, 2008). Single-parent family may affect an adolescent's physical health adversely in such a way that a single mother/father might not be entirely capable of catering for the needs of the adolescent with regards to proper nutrition, educational needs, social integration (socialisation), etc (Langton & Berger 2011). Such deficiencies may extend to affect the adolescent's mental

health in the long-run. Adolescents in monogamous homes have more advantage over their counterparts in other family types, in terms of the deficiencies earlier sighted in single-parent families (Amato, 2005; McLanahan & Sandefur, 1994; Sigle-Rushton & McLanahan, 2004). In the polygamous setting, child abuse and adverse treatment is a likely occurence which usually translate to emotional distress. The overall effect of such adverse treatment is deteriorated emotional well-being of the adolescent relatively. On the average, adolescents who grow up in stable monogamous families benefit from greater economic resources, higher parental quality, closer emotional ties to parents, fewer stressful events than adolescents exposed to other family types (Amato, 2005).

In another context, family size can as well influence an adolescent's health positively or negatively. It has effect on the physical and mental aspects of an adolescent's health. In a family where the number of children is relatively large, there arises a need to cater for the needs of more children as necessitated by the large family size. In this case, children are likely to strive more before their basic needs can be met, and are likely to develop inferiority complex around their peers who are better catered for. Adolescents in large families will be disadvantaged relative to those from small families in many developmental areas (Leventhal and Newman 2010). Studies of the effect of overcrowding on behaviour have shown that the demand which overcrowding make on family and group life determines the support family members usually provide to one another under normal conditions. Generally, with overcrowding relationship becomes more impersonal (Lesinski, 1976; Caldwell and Bradley 1984). Cramped living conditions harm family relationships; negatively affect adolescents' education and cause depression, stress and anxiety (Reynolds, 2005).

The role of the family and the type of its establishment cannot be overemphasized as regards its influence on an adolescent and the society at large. This explains why the family remains the most significant and enduring human group affecting both physical and mental health of an adolescent (Nweze, 2004).

Family type is an important aspect of the family context that has been linked with many child development outcomes. In order to understand family type, we realize that it may change over the lifespan of a child and may vary from, two parents at home to one parent of either sex or to a relative. More importantly, it is necessary to understand that family type in the African context and globally have changed over the years for various reasons such as economic conditions, education and disease. With the increasing women joining the labour force in Africa, single female-headed households have become a popular phenomenon. In addition, this phenomenon has also led to an increasing number of grandparents rearing their grandchildren to allow mothers to be breadwinners (Frantz, Sixaba & Smith, 2015).

Therefore, this study examined the influence of family type on the physical and mental health of in-school female adolescents in Ado Ekiti, Nigeria.

1.1 STATEMENT OF THE PROBLEM

The World Health organization (WHO) defines adolescents as those aged 10-19 years. Adolescents are usually thought of as a healthy group, yet, 80% of them are insufficiently physically active (not active enough), and many of them die prematurely and suffer illness and disability resulting from mental disorder and other physical conditions (WHO, 2017). Among the major causes of death for adolescents are road traffic accidents, suicide, violence, pregnancy related complications, HIV, lower respiratory infection and other illnesses that are either preventable or treatable. For instance, 330 adolescents died every day in 2012 due to road traffic

injuries, and in 2015, an estimated 1.3 million adolescents died from causes that were either preventable or treatable. According to the WHO, many serious diseases in adulthood have their roots in adolescence. For example, tobacco use, sexually transmitted infections including HIV, poor eating and exercise habits, lead to illness or premature death later in life (WHO, 2016). Mortality is higher in young men than in young ladies and in older adolescents (15–19 years) than in the younger group (10–14 years). While there are many reasons of mortality common to young men and young ladies, violence is a particular problem in boys; and maternal causes and suicide in girls (WHO, 2014). With regard to physical health, globally, 80% of adolescents are insufficiently active physically.

One-third of the world's population is constituted by children and adolescents and almost 90% live in low-income and middle-income countries (LMIC), where they form up to 50% of the population. Of this population, 10-20% of children and adolescents experience mental disorder (Kieling, Baker-Henningham, Belfer, Conti, Ertem, Omigbodun, Rohde, Srinath, Ulkuer & Rahman; 2011).

Physical health problems occurring during adolescence can often complicate adolescent development. Illness, injury, medical treatments, hospitalization, and surgery can all intensify concerns about physical appearance (Stanford Children's Health, 2017).

Of all mental distresses experienced generally, half of them start at age 14 and three-quarters by mid-20s, but in most cases remain undetected and untreated. Adolescents experiencing mental disorders face major challenges with stigma, isolation and discrimination, as well as lack of access to health care and education facilities, in violation of their fundamental human rights. If these conditions are not attended to and left untreated, an adolescent's well-being, development,

educational attainments and potential to live fulfilling and productive life will be continuously negatively affected (WHO, 2017).

A key determinant of adolescent mental and physical health status is the family. There are several problems adolescents face as a result of the family type they find themselves in. Most of the health problems adolescents suffer from are associated with poverty and inequality inherent in their family type. For instance, single-parent family may affect an adolescent's physical health adversely in such a way that a single mother/father might not be entirely capable of catering for the needs of the adolescent with regards to proper nutrition, educational needs, social integration, that is, socialisation, etc. Also, adolescents in monogamous homes have more advantage over their counterparts in other family types, in terms of the lack and deficiencies experienced in single-parent families (Amato, 2005; McLanahan & Sandefur, 1994; Sigle-Rushton & McLanahan, 2004). Such deficiencies in single parent families may extend to affect the adolescent's mental health (depression in the long-run) and also lead to stress (Musick & Meier, 2010). In a polygynous family, adolescents of the least favoured wife are likely to be less important, and least cared for by their father. In this kind of setting, child abuse is a likely occurence and the overall effect of such adverse treatment is deteriorated emotional well-being of the adolescent relatively.

Using data from the 1995 National Longitudinal Survey of Adolescent Health, results indicate that adolescents in single-parent families have lower health traits than their counterparts residing with two biological, married parents (Demuth & Brown, 2004). Furthermore, in a single parent family where there is just one person catering for the needs of the entire family, some of these adolescents might not be well-fed, which might affect their mental behaviour and development.

Furthermore, it should be noted that adolescents in monogamous families sometimes experience mental and physical health issues, especially when the family size is large or when one/both parents are jobless. Aside the family-type feature highlighted above, other family characteristics such as the family size and socio-economic status contribute immensely to the shapening of an adolescent's physical and mental health status.

The failure to address physical and mental health issues, including developmental and intellectual disorder in children and adolescents in low-resource settings is a public health issue with wide-reaching consequences, because such failure also impedes the achievement of basic development goals in low-income and middle-income countries.

In spite of the influence of family type on adolescent physical and mental health, most studies on family and adolescents in Nigeria focused on their sexual and reproductive health. Little attention has been paid to the physical and mental health of adolescents in Nigeria. Therefore, this study will examine the influence of family type on the self-reported physical and mental health of female adolescents in Southwestern Nigeria. Due to the existence of norms that promote gender inequality in Nigeria, female adolescents may experience more disadvantages in receiving family support and attention that promote their physical and mental well being.

1.2 RESEARCH QUESTIONS

- What type of family do in-school female adolescents in Ado Ekiti, Nigeria live in?
- What is the physical and mental health status of in-school female adolescents in Ado Ekiti, Nigeria
- What is the relationship between family type and the physical health of in-school female adolescents in Ado Ekiti, Nigeria?

- What is the relationship between family type and the mental health of in-school female adolescents in Ado Ekiti, Nigeria?

1.3 RESEARCH OBJECTIVES

1.3.1 General Objective:

- To examine the influence of family type on female adolescents' mental and physical health.

1.3.2 Specific Objectives

- To describe the family type in which in-school female adolescents in Ado-Ekiti, Nigeria live in.
- To examine the self-reported physical and mental health status of in-school female adolescents in Ado-Ekiti, Nigeria
- To examine the influence of family type on female adolescents' physical and mental health.

1.3.3 Hypotheses Testing

- **H0:** There is no significant relationship between family type and female adolescent physical and mental health in Ado-Ekiti, Nigeria.
- **H1:** There is significant relationship between family type and female adolescents' physical and mental health in Ado-Ekiti, Nigeria.

1.4 JUSTIFICATION OF THE STUDY

Most recent studies discovered that adolescents living arrangements varies across societies. The proportion of adolescents living in monogamous homes has continuously experienced decline in a great dimension while the percentage of those in polygynous families and other outside

marriage families such as single parent and cohabiting families has been on increase as a result of high rate of divorce/separation-broken homes, the proliferation of complex polygynous families and cohabitation (Demuth & Brown, 2004). The drastic increase in single parent households and family diversity prompted this present study. Gaining appropriate knowledge on the relationship between family type and adolescents' health is crucial as many adolescents' principal developmental climacterics are examined in terms of physical ability and activity; and the limitations that may substantially affect health related quality of life (Ness et al. 2008). In otherwords, a significant development in adolescents at some points are measured and examined with respect to their physical abilities and their exposure to limitations that may significantly affect their quality of life.

Since health and health behaviours correspond strongly from adolescence into adult life (Viner, Ozer, Denny, Marmot, Resnick, Fatusi & Currie; 2012), it is therefore pertinent to examine how adolescent health is affected by existing family type. This study will help create awareness on the influence of family on a adolescent's health and will therefore encourage programmes for building life skills in children and adolescents, providing them with psychological and social support in schools and other community settings, which can help promote good mental health. Promoting mental health programmes is essential in order to enhance positive mental health (Lehtinen et al., 2005). Evidence mostly from developed nations shows that life skills education is efficient in averting substance abuse, adolescent pregnancy, bullying; also improves academic performance and school attendance; and the promotion of mental well-being and healthy behaviours of adolescents (World Health Organization, 1997).

Examining the variation in family type and its major influence on adolescents is important for social researchers as it amplifies our understanding of how families matter for adolescent

development and outcomes. It is also important for the broader public, as a tool for improving adolescent outcomes (Nock, 2005). This study will extends literature on family type and adolescent health by examining the roles played by different family type in accounting for differences in adolescent well-being.

The survival, health and well-being of adolescents are crucial to enhancing prospects of demographic dividend in developing countries, ending extreme poverty, promoting development and resilience and achieving the sustainable development goals (WHO, 2015).

1.5 DEFINITION OF TERMS

FAMILY: Family is defined as constituting two or more individuals related by blood, marriage, or adoption who reside in the same household (Cherlin, 1981). Family is a close domestic group comprising of people related to one another by ties of blood, sexual mating or legal ties. It is known as the smallest, most basic social and primary group commonly found in all society. Family is the most important social group that human life offers, it is always with us or more precisely, we are with it. Family is a group comprising parents and children (Robert Brestedt, Mondal, 2016).

FAMILY TYPE: It is the composition and membership of the family, the organisation and patterning of relationship among individual member of a family (Mesby's Medical Dictionary, 9th edition, 2009). There are four most prevalent family type in all societies. They include nuclear (monogamous family/intact first married family units), divorced single parent families, extented/polygynous families and childless.

SINGLE PARENT FAMILY: According to Pollitt (1994), a single parent family is a household in which only one parent lives with a child or children. Single parenthood as viewed by Achakpa (1999) is the taking of family responsibility (which includes caring for children) without either the father's or mother's contribution. There are three major subgroups of one-parent family as identified by Burge (1997). They include: displaced home markers (Divorced), adolescent mothers and single fathers. There are two main routes of entry into single parenthood. These include relationship breakdown and birth of a child outside marriage (Adelani and Ogunbanwo, 2008).

MONOGAMOUS FAMILIES: This refers to families or households in which the husband and wife are married to each other or living together in the same household. It is also referred to as two parents family where parents who are married to each other and are living together (child trends databank, 2015).

POLYGYNOUS FAMILIES: A polygynous family is a family in which a man is being married to multiple wives (Smith-Greenaway, 2014).

ADOLESCENTS: These are young individuals going through the stage of adolescence. They are different from both young children and adults. United Nations (2011) defined adolescents as individuals being 10-19 years old.

ADOLESCENCE: WHO (2017) recognizes adolescence as the period in human development and improvement that happens after childhood and before adulthood, from ages 10 to 19. It represents one of the critical transitions in the life time and is portrayed by a tremendous pace in development and change that is second just to infancy. Biological procedures drive numerous

aspects of this development and advancement, with the beginning of puberty denoting the passage from childhood to adolescence.

HEALTH: This is a condition of physical and mental well-being and not merely the nonappearance of illness or sickness (WHO, 1948). Health can be divided into two broad aspects ***- physical and mental health.***

PHYSICAL HEALTH: This is the overall physical condition of a person at a particular time. It is the soundness of the body, freedom from disease or abnormality, and the condition of optimal well-being which is as a result of good nutrition, regular exercise and adequate rest. It is when the body is functioning as it was designed to function (Ron Kurtus, 2017).

MENTAL HEALTH: This, also known as emotional well being, has been defined as a condition of well-being in which every individual understands his or her own particular potential, can adapt with the normal stresses of life, can work profitably and productively, and is capable of making a contribution to her or his community (WHO, 2004).

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

Various studies have been conducted on different aspects of family, such as family type, processes, structure and its socio-economic status in relations to some aspects of adolescent health. From early and most recent researches, a meaningful literature has been developed on the effect of family type and family change on a child's well-being. This literature review records an gathered body of confirmation that the pattern of outcomes of children brought up in various family settings differ over an extensive variety of developmental areas. Especially, children brought up in single parent families have been found, on average, to do less well over a scope of measures of well being than their peers in monogamous families (Mackay, 2005).

Much of the existing research on adolescent health has limited information on adolescent mental and physical health, concentrating more on adolescent sexual & reproductive health and behaviour, academic performance, delinquent behaviour, with less focus on their mental and physical well-being of adolescents.

It is the aim of this research study to throw some light on the reasons why family type matters for adolescent outcomes, particularly their mental and physical well-being.

2.1 LITERATURE REVIEW

This section provides background knowledge of other research on family type and adolescent health .

From a study conducted in USA titled "Parents & families' influence on adolescent health" the family is considered the keystone of any society. It is known as a place of refuge from trials and tribulations of everyday life. It is a safe harbor, a supportive environment for personal growth and expression. And undoubtedly, for most people, the family is a place of help and sustenance- if not always, then at least more often than not. Adolescent development (well-being) are profoundly influenced by the family condition in divers and enduring ways- for good and for ill. From findings, family types and its characteristics have positive and negative influences on the health of adolescents. The mutual relation and influence of siblings, grandparents and other significant individuals in the different family types are important for adolescent health (Princeton, 2016).

2.1.1 FAMILY TYPE AND ADOLESCENTS WELL-BEING (PHYSICAL AND MENTAL WELL-BEING)

Essentially, family types have been theorized to be of several benefits and also of disadvantage to children, depending on the circumstances prevailing in the particular family (Akanbi, Gbadebo, Adekola, Olawole, Sowunmi & Godwin, 2015). For several years, research studies have focused attention on investigating the effect of family dynamics and characteristics on children and adolescents' well-being. Particularly, most studies have engaged in the comparison of children and adolescents in intact, first married families with those in single parent and step families on their developmental outcomes. Also, other studies have also started to include children living in cohabiting families.

Several family types have been associated with adolescent health with each type having a wide range of effects on children's well-being. Family type relates to an adolescent's well-being

through the interplay of three primary mechanisms; the family's access to resources, the quality of parenting & the home environment to which the children are exposed; and family stress & parental psychological well-being (Amato 2005, Cartson & Corcoran 2001). Consistent findings have emerged from previous researches that children growing up in single parent families are associated with negative developmental outcomes. Studies further state that adolescents in family types other than two biological parent families, tend to fare worse in a range of health related measures and developmental outcomes (Dawson, 1991; O'Connor et al, 2000; Amato, 2005; Goesling & Avellar, 2007; Bramlett & Blumberg, 2007; Liu and Heiland, 2007). In otherwords, adolescents living and raised in two biological parent families tend to fare better than others (McLanahan & Sandefur, 1994; Sigle & McLanahan, 2004; Amato, 2005). Growing up without both parents is associated with a lot of poor child outcomes. Children from single parent and polygynous families have higher poverty rates and lower levels of educational and occupational attainment than children who grow up with both their biological parents (Wojtkiewicz, 1993; Astone, McLanahan & Sandefur, 1994). They report greater substance use, risk taking behaviour, such as smoking, drinking and drug use (Hoffmann & Johnson, 1998; Deleire & Kalil, 2002; Carlson, 2006). This in turn can be linked to child health and well-being. Parental behaviours further account for differences in child well-being by family type. Single parents manage to work and also care for their children without the help of a second resident parent (Grall 2007). They balance the provision of financial support with lone care for children which can result to time pressure and stress (McLanahan & Booth, 1989; McLanahan & Percheski, 2008). Children in polygynous families also compete with new spouses for parent's time and attention, and stepparents may be less interested in non-biological children (White 1994). Compared with married parents, single parents are less emotionally supportive of their kids, have

less rules yet apportion harsher discipline and gives less supervision, step parent invest less time with kids and offer more negative reaction and less support (Astone & McLanahan, 1991; McLanahan & Curton, 1992; McLanahan & Sandefur, 1994). Children normally fare best when their parent keep up a solid parent-child bond, apply consistent discipline & react firmly but warmly to circumstances at home (Baumrind 1991). Averagely, children who are brought up in stable monogamous families benefit from noteworthy monetary assets, higher parental quality, closer emotional connections to parents, fewer stressful occasions than do children exposed to other family types (Amato 2005). They also tend to have greater access to health care facilities (Simspon et al. 1997) and this family type have the ability to meet children's health related and other basic needs (Hack & Parker, 2002).

Furthermore, four perspectives explain the differences in well-being of adolescents and children from different family types. The first one is the **economic deprivation perspective**, which argues that poverty is the major cause of much of the differences that occur in children's well-being across all family types. McLanahan and Sandefur (1999) found out that the economic resources of a family account for one-half of the differences in child outcomes between single mother families and two parent families. Hence, economic deprivation can be strongly associated with adverse mental and physical health outcomes across the life course of an adolescent (Duncan & BrooksGunn, 1997; Conley & Bennett, 2001). The second perspective is the **socialization perspective**, which argues that the presence of two parents in a family is essential for the provision of an optimal childrearing environment. It further argues that the presence of a male figure is beneficial to children in a two parent families. The third perspective is the **stress perspective**, which placed emphasis on the effects of changes in family types, which are presumed to cause disruption and lack of balance of relationships within and outside the family.

The accumulation of these changes is assumed to cause poor developmental outcomes among children (Wu et al, 1991; Aquilino, 1996; Wu, 1996). Lastly on the perspectives is the **community resource** which may vary across family types and have influence on children's development (Furstenberg et al, 1999; McLanahan & Teitler, 1999).

Langton & Berger(2011) in their study highlighted some reasons why adolescent's physical health is adversely affected by the time he/she spends in a particular family type he or she lives in. They stated that economic resources are positively associated with physical health and they established in their study that single parent family are less economically advantaged than the two biological parent families. In addition to this, analyses by Case, Lubotsky & paxson (2002), identified a distinct relationship between household income and child health. They found out that this relationship becomes increasingly pronounced as children age. Also, adolescents in single parent families may also receive lesser investments as regards health and implicitly less parental supervision than their peers in two biological parent families which on the long run affects their physical health. As such, they may have greater exposure to health related risk factors, they may be vulnerable to illness, accidents and injury (Case et al 2000, Case & Paxson 2001).

In contribution to literature, a study by DeLeire & Kalil (2001), examined ten family types including married and non-married families in relations to child health: never married single mothers in multigenerational homes, divorced single mothers in multigenerational homes, two biological cohabiting parents, polygynous families, never married single mothers, divorced single mothers, single mothers with male cohabiters, single father families, grandparent headed families with no parent present and married parent families. Contradictory findings have been reported regarding teenagers residing with single mother and at least a grandparent in a multigenerational household. Results show the followings:

- Relative to children living in married parent families, children in other family types (excluding those with a never married single mother in a multigenerational households), display poorer outcomes.
- Children living with never-married single mothers in multigenerational households were observed to have at least good and better outcomes than children in married parent families; furthermore, no significant differences were observed between children of divorced single mothers in multigenerational household and those in married-parent families.
- As earlier stated, differences in family economic resources, parental behavior; and home and school characteristics across family types contribute to youth outcomes and account for relatively little of the family structure effects.

Contradictory findings have identified a group of single mothers whose children fare well due to the favorable effect of multigenerational co-residents, which may be either the grandfather or grandmother (Aquilino, 1996; Jayakody & Kalil, 2001; Brown, 2004). This positive association observed implies remarkable causal role of multigenerational family type. One of the explanations for positive outcomes of children in multigenerational households is that having a grandparent with a low income single mother in an underprivileged neighbourhood serves as a resource that alleviates the adverse outcome that children would otherwise experience. In addition to this, grandparents might help in ways that will benefit children relative to what a single mother can do all by herself. A grandparent's presence in non-married families might be more advantageous than the presence of the biological father, particularly if the marital relationship is unstable or conflicted due to social forces affecting many low-income urban families, for example, high rates of male unemployment (Wilson 1996; Edin 1999).

David and Acock (1996) examined the influence of family type and relationship on adolescent health. They examined socio-economic adjustment, academic performance, global well-being among adolescents (ages 12-17) living in four most prevalent family types in the United States: intact first married family unit; divorced single parent families; polygynous families; and continuously single mothers and their children (one of the fastest growing type of household). These four family types vary dramatically on socio-economic characteristics and measures of family relations. The central objective of this study was to examine the influence of family structure and family relationship on adolescent well-being. Factors such as parental support, inter-parental conflict and parent-adolescent conflict were examined to account for the differences in adolescent's well-being. They also noted a common assumption in many social psychological, developmental, sociological and anthropological theories that two biological parents provide the optimal environment for healthy child development. Worthy of note are the two representative and highly influential views of the Freudian position and Parsons' structural-functional theory. The Freudian posited that a two-parent family unit forms the essential group for appropriate sex-typed identification and, in sociology, Parsons' structural-functional theory emphasized the importance of role differentiation within nuclear families for healthy family functioning and child socialization (Parsons & Bales, 1955). It is argued that any departure from this family type are problematic for children. For example, lower levels of parent-child interaction, parental supervision, support, and control (family dynamics) is commonly evident in single-parent family type and this has been shown to have damaging effect on adolescents' health (Dornbusch et al, 1985; Furstenberg, Morgan, & Allison, 1987). Nock (1988) further argued that adolescents in polygynous families may be underprivileged in two ways: first, they might have lived in single parent families for a period of time as a result of their parent's divorce

and because of this, they may have been negatively affected by the disruption in their family type or reductions in parental interaction, monitoring, support preceding the formation of the polygynous family. Secondly, family system theories posit that polygynous families' living arrangements tends to be complex and stressful (Crosbic-Bumett, 1989), especially for step-parents and step-children (Mills, 1984). Furthermore, adolescents raised in families where the two biological parents are not present such as the divorced families, polygynous families and continuously single parent families are more likely to exhibit more adjustment problems and academic difficulties than their counterparts in monogamous families while adolescents brought up in families where their mothers and fathers are both present have the fewest problems with respect to socio-emotional adaptation, academic performance and global well-being. In otherwords, adolescents whose mothers are divorced or remarried experience more problems than their counterparts in monogamous families.

According to Whitehead (1993); young people (adolescents) do not recover after parental separation and the havoc of the family can have long-term emotional effects on them. For example, studies on divorce demonstrate that it is a life-changing experience for a child who must bear the actions of their parents (Wallerstein & Lewis, 2004). Of course, the immediate effects of single parents have been found in adolescent's wellbeing, especially when measured up to adolescents from monogamous families (Amato, 2000). No doubt, adolescents who have experienced parents' separation are more prone to a variety of problems ranging from emotional to academic, including other physical problems (Hetherington & Stanley-Hagan, 1999).

2.1.2 PARENT'S MARITAL AND COHABITING HISTORIES AND ADOLESCENTS HEALTH

Another line of research has devoted attention to parents' marital status and adolescents' health. Research supports that parent's marital and cohabitation status, at the time of a birth, will be associated with offspring's mental and physical health years later, during adolescence. Several research studies document that children raised by cohabiting parents and never or unmarried mothers are less advantageous, more likely to live in poverty (Huang, Mincey & Garfinkel, 2005), have smaller networks and receive less social support (Eggebeen, 2005; Harknett & Hartnett, 2011), at high risks of experiencing potentially stressful conditions, including multiple residential moves (Murphey, Bandy & Moore, 2012) and mothers' partnership instability (Osborne & McLanahan 2007); and at higher risk of poor outcomes (Parke, 2003) than those in parental marriage and even those whose parents later divorce, partially because they have fewer socio-economic resources (Manning & Lichter, 1996) and partially because of unstable living situations (Manning, Smock, & Majumdar 2004; Osborne & McLanahan 2007; Goodman & Greaves, 2010). A study conducted associated substantial economic strain with non marital fertility, and linked exposure to chronic stressors to family and residential instability (Williams, Sassler, Frech, Addo, and Cooksey, 2013). Pearlin et al. 2005 noted further that chronic stress exposure, in turn, has cumulative negative effects on health through numerous biological and psycho-social pathways.

As explained by Hewlett (2000), parents have direct and indirect impact on their children's mental and physical health as they make investments on them by providing material resources, engaging in care giving activities, transferring knowledge, maintaining home enviment and supplying other social and economic supports. Family type may directly and indirectly influence

the differences in parenting qualities and home environment. Just like it is always said "two is better than one", the constraints on the time and effort that can be invested in parenting by single mothers are likely to be more stringent than those faced by two-parent families (Carlson & Corcoran 2001).

2.1.3 FAMILY TRANSTION AND INSTABILITY AND ADOLESCENT'S HEALTH

Some studies have been conducted as regards family instability and transitions on adolescents' well-being. Many studies suggest that family transitions are very harmful for both children and adults (Cherlin et al, 1991; Wu & Martinson, 1993; Wu, 1996). In this view, it results to a change in living arrangement and residence and this requires children to acclimatize to the new environment, schools, peer groups and the likes. A change in living arrangement in turns involves a change in household membership and the re-organization of family roles which also disrupts family patterns, leading to inadequate parenting (Brown, 2004). In other words, family instability may be as essential as the family type for child health (Wu & Martinson, 1993; Wu 1996; Sandefur & Mosley, 1997; Hill, Yeung & Duncan, 2001; Hao & Xie, 2002).

In relations to this, Aquilino (1996), explored the complex sequence of living arrangements among children born to unmarried mothers and the impact of childhood living arrangement on young adults' life course. This study from previous researches suggested three machanisms by which changing family types might affect child outcome: socialization (quality of child rearing environments), childhood stress and the socioeconomic status of the family. The socialization perspective on the effects of family type emphasizes the importance of having two parents rather than one for the adequate support, supervision and control of children (Haurin, 1992; Thomson et al, 1992; Wu & Martinson, 1993). Amato (1993), noted that the absence of one parent means

deficiency in terms of the time available for the lone-parent to do the work of parenting and moreso, there will be constraint on the time avaliable for parenting as a result of other activities in the household. Single parent are more likely to experience work overload; and have limited time and energy to supervise children than parents in two-parent families (Thomson et al, 1992). In addition to the transition patterns, the stress perspective opined that the number and timing of transitions may be a critical aspect of childhood experience. Several researchers have argued that any change in family type may be stressful for children and emphasized the implicitly detrimental effects of manifold transitions in children's lives (Haurin, 1992; Wu & Martinson, 1993; Amato, 1993). For a family's socio-economic status, the household type is a major determinant of the economic situation of a family. A much greater proportion of single parent than two-parent families have income below poverty line (Bumpass, 1984). On the average, children in two parent families (including adoptive and step-families) have access to more economic resources than children living with a single parent (Bachrach, 1983; McLanahan & Sandefur, 1994). Adopted children and step-children are much less likely to live below poverty line than children living with a single parent. Two parent adoptive families have the highest socio-economic status compared with other family types (Bachrach, 1983).

From a study on the impacts of family issue on adolescents, many factors influence adolescents' health and well-being. They include;

- ❖ attachment experiences, family type, patterns of relationship, structural factors, traumatic events, genetic factors, etc.

Also, there are several family-related risk factors that can influence an adolescent's health. Some of these will be the entrenched characteristics of a young person's life that cannot be modified. These include;

- ❖ less than two years between siblings, difficult temperants, family size, early childhood experiences, e.g malnutrition,proverty,parenting style.

A review presented by Ross, Mirowsky & Goldsteen (1990) on the impact of family on the health of adults, presents a general model of understanding family and health that describes patterns of well-being. Through the explanations gotten from the causal chain, conditional effects and structural amplification model; ideas and discoveries about four factors were condensed and combined which include: marriage and parent-hood (which characterize the family), and the wife's or mother's employment and the family's societal position (which connect it to the larger social order). Overall, the married are in better health than the non-married, but parents are not better off than non-parents. Women's employment and high family socio-economic status tend to be associated with good mental and physical health. Economic well-being and social support are seen as the basic explanations for the link between family type and health. It was discovered during this review process that the family is a basic channel through which the larger social structure (larger society) influences the well-being of individuals, being an economic and social unit.

Also, a study aimed at collecting data on mental health and to determine the prevalence and factors associated with mental illness in rural and urban Oyo state, Nigeria discovered that unemployment, living below average level, physical health and large family size were associated with increased risk for psychiatric morbidity, that is, mental illness (Amoran, Lawoyin & Oni, 2005).

2.2 THEORETICAL FRAMEWORK

Recent studies suggest three theoretical perspectives through which family type might influence a child's physical and mental health and developmental outcomes. These theoretical perspectives include the stress perspective (exposure to strain), socialization perspective (the childrearing environment) and the economic deprivation perspective (the socio-economic situations of families).

2.2.1 STRESS PERSPECTIVE

Stress is a serious problem for many adolescents. It is depicted as a feeling of pressure, dissatisfaction, worry, dejection and withdrawal that usually last from a couple of minutes to a couple of days. It has also been depicted as the variety of negative feelings and responses that accompany threatening or challenging circumstances. For several reasons, adolescents get stressed and restless because of their emotional immaturity (Ingrid, 1997 & Walker, 2005). Although it has been noted that being exposed to different stressors is a central and normal part of the growth, and may be a stimulant for growth and development process during adolescence, the aftermath of experiencing cumulative and simultaneous negative stressors remains a potential threat to the mental and physical well-being and healthy growth of adolescents (Grant et al., 2003). Furthermore, as reported in a study on the stress and health in adolescents (Moksnes, 2011), it was reported that higher levels of stress, more emotional symptoms and subjective health complaints were more common among girls than boys, especially those that fall in the 15-16 years age group. It has been recognized that individuals experience strain under many circumstances. Problems and health issues arise when youngsters experience major stress in their lives which is or might be as a result of being born into and exposed to unfavourable atmosphere. The exposure to strain majorly affects the mental health of adolescents, which also adversely

affects their physical health. And this relationship has been demonstrated in studies with different populations showing significant support for an association between stress and coronary heart disease and inflammatory bowel disease (Rozanski, Blumenthal, Davidson, Saab, & Kubzansky, 2005; Caltabiano et al., 2008). As identified by Grand strain theory, strain may evolve from the presentation of adverse situations. Such strain reflects the problems that arise for individuals when they go through negative situations that they cannot legally break free from, such as family conflict, victimization or child abuse. For the last 20 years, research with children and adolescents has linked stress to poor mental and physical health and dangerous behavior. Research has shown that social conflict at several levels, ranging from societal levels to specific social groups or units, such as the family or peer groups, can contribute to stress which has harmful consequences on the mental and physical health of young people (Sigfusdottir, Kristjansson, Thorlindsson and Allegrante; 2016).

Stressful occurrences are majorly centered on the two most important domains of an adolescent's life which are: family and school. Every family undergoes stress at one time or another, but there lies a difference in the type of stress and the resources available to aid coping with the stress. Family history and biology can cause a predisposition for dealing poorly with stress. This can make a person susceptible to depression, which affects the mental and physical health of that person (Dius, Summers & Summers; 1997; Walker, 2005).

According to Holroyd and Lazarus (1982), psychological stress happens when "the environmental and/or internal needs surpass the resources an individual possesses to manage them". Several researchers have investigated how stressors and available resources differ among the various family types (Dyson & Fewell, 1986; Mahoney, O'Sullivan & Robinson, 1992 and Seligman, 1991). Their findings have shown that unique stressors are dominant in some families

compared to the others (Hanson & Hanline, 1990; Williams, 1988). Monogamous families were hypothesized to experience lower child and parent related stress compared to the other family types. Single-parent families have been identified with significant levels of stress. Parents in these families have smaller financial resources, undergo more work overload, and experience more challenges in managing parenting functions compared to their counterparts in monogamous families (Sanik & Mauldin, 1986; Williams, 1988; Duis, Summers & Summers; 1997). Polygynous family is a complex and less clear family type. Strife, jealously, conflict and power relation abound in polygynous families compared to its counterparts. This contributes to the stress experienced by children born into this family type (social system). Life in polygynous family can be traumatic and children brought up in such family type often suffer some emotional problems such as lack of warmth and love despite availability of money and material resources. Children are subjected to such unhealthy family conditions which they have no control over. On the other hand, children raised in monogamous families are often stable emotionally and they suffer less emotional problems (Adesehinwa, 2013). Many adolescents end up in single parent households by the reason of the separation or divorce of their parents that occurred one time or another in their lifetime. A major concern is that adolescents who live in divorced households may be susceptible to various health problems usually blamed on the fact that both parents no longer live in the same household. Frequently related consequences of divorce for adolescents include anxiety, depression, psychological withdrawal, lower self esteem, behavior problems, alcohol, drug use, and difficulties in school, all these problems affecting children's mental and physical well-being (Amato & Keith, 1991; Buchanan, 2000; Cherlin, 1999; Hetherington & Stanley-Hagan, 2002; Jeynes, 2002; Wallerstein, Lewis, Blakeslee, 2000).

From the findings stated in the previous paragraphs of this study, we can infer that stress is a mental tension that does not occur without being exposed to several stressors coming from both **biological factors** and **social factors**. Encoded in each person's DNA is the specific genetic traits inherited from their parents, some of which may come with disabilities (mental and physical) leading to stress for such individuals. Family, as identified earlier, has a major influence on the health of its members, especially the young people therein. There is rarely anyone who does not have a connection with family at one time or the other in their lifetime. The relationship with parents, siblings and other family members contributes either positively or negatively to the mental and physical health of the children. The presence of discord, lack of warmth, tension, pressure and economic depression in families result in stress, thereby affecting the mental health of an individual. Once the mental health of a person is affected, it will surely cause a change (deterioration) in the physical health of such individuals.

2.2.2 SOCIALIZATION PERSPECTIVE

Traditionally, the conceptions about socialization within the family are usually constituted with the idea that the influence of the parents and other family members is of importance for young individuals to internalize and become responsible to societal expectation (Inkeles, 1968; Parsons & Bales, 1955). A more accurate view of socialization identified that adolescents, to some extent, are initiated into the society by parents (Corsaro, 1997; Kuczynski, 2003; Peterson & Hann, 1999). According to the deterministic conception of socialization, the young are conceptualized as passive recipients of parental influence or the influence of other social agents in the society (Kuczynski, 2003; Peterson & Hann, 1999). It was noted that none of the socialization experience within the major social institutions including specific biological factors (such as genetic influences) can be isolated as sole factors that contributes to mental and physical

health of adolescents, instead, a combination of youthful socialization, genetic and maturational factors from the overall structure of adolescent development (Lerner, 2002).

The mental and physical health of adolescents depends on socialization process in the family, that is, the quality of the child-rearing environment. There lies a pattern of dynamic relationship between developing adolescents and their social environs which includes influential factors from different levels of ecological analysis at the biological, physical, psychological and socio-cultural levels (Bronfenbrenner, 1979 & 1994; Lerner, 2002). Socialization is an intricate, multiple procedure which has the family, as possibly the major social group with the most important source of influence. This procedure also involves all the social settings and major institutions in which people (i.e., adolescents) have direct or indirect experiences such as: religious, economic, educational, political institutions, the mass media as well as neighbourhoods (Peterson, 2015). Families have large influence on adolescents either through the process of socialization or through the social dynamics that enhance the young in participating in interpersonal relationships through which a society reproduces itself (Elkin & Handel, 1988).

Despite the different conceptions of socialization, the oldest and still dominant perspective of parent and adolescent research is the **parental influence perspective**, which examines the degree to which the socialization strategies in the family (such as parental styles, behaviours and characteristics) contribute to various social and psychological qualities in the young and also affect their mental and physical health. These socialization strategies are the central components used by parents to encourage or discourage their young to either participate effectively or ineffectively in the major institutions in a society. From the parental influence perspective, parents are the conveyors of social reality which "molds" or "shape" the young into functional or deviant participants in the society (Macobby & Martin, 1983; Peterson & Bush, 2003; Peterson

& Hann, 1999; Peterson & Rollins, 1987; Rollins & Thomas, 1979). Moreover, parents are social agents who teach social norms and models of behaviour, manage conduct and provide emotional comfort to their children.

Although, much of the association that exists between family types and a child's mental and physical health can be accounted for by the differences in the socio-economic status of different parents (McLanahan, 1985). The variations in parental socialization may account for a large scale of the remaining difference in a child's emotional and physical health. Consistent findings from the studies of family type and socialization show that married parents exert adequate controls and make higher demands on children than single parents. On the other hand, children in polygynous families experience less warmth and less communication with step-parents (Amala, 1987; Astone & Mclanaham, 1991; Furstenberg & Nord, 1985; Hetherington, Cox & Cox, 1982). Adequate control, reasonably high demands, warmth and open communication between parent and children are all necessary for the mental and physical health of a child (Thomson, Mchanahan & Gurtin; 1992). The socialization perspective argues that monogamous families help to provide an effective environment for child-rearing. Furthermore, children in these households benefit from the presence of a male figure (DeLeire & Kalil, 2001).

The socialization perspective placed emphasis on the significance of having two parents in a household instead of a single parent for adequate supervision, support and control (Haurin, 1992; Thomson et al., 1992; Wu & Martinson, 1993). A single parent has a high tendency to experience work overload and has less time, physical and emotional strength for supervising children than their counterparts in families with two or more parents (Thomson et al., 1992). Literature on remarriage shows that life in polygynous families is problematic for both parents

and children. Likewise, parenting in polygynous (step) families is more difficult than in monogamous (biological parent) families (Furstenberg, 1987).

Essentially, for the purpose of this research, we relate socialization as the sum-total of all social interactions an adolescent undergoes which eventually influences his/her mental and physical health status. Such an influence may be positive or negative for the health, depending on the effect of such impact on behavioral tendencies and responses of adolescents to different stimuli in the socialization process as engrained in the family, peer group and society at large.

2.2.3 ECONOMIC DEPRIVATION PERSPECTIVE

The economic situation of a household is greatly related to the family type (Aquilino, 1996). Family socio-economic status is another aspect of family life that either reduces or increases the risk for a variety of problems and creating stressful circumstances. Economic disadvantages in families involves dealing on a daily basis with poor housing (or even lack of shelter), insufficient food, risky neighborhoods and untreated illnesses, all of which are the origin of chronic stress, demoralization and depression for parents and children (McLoyd, 1998). Conger & Conger (1999) found that parental depression and stress resulting from poverty places adolescents at risk, thereby increasing the levels of marital conflict and inefficient parenting. Furthermore, economic distress undermines effective and quality parenting as parents who experience stress and suffer from depression become more corrective, monitors less efficiently and are less supportive of children. Also, problematic child-rearing practices used by parents have been linked to higher level of adolescents behavioural problems such as anxiety, depression, hostility and conduct problems, as well as, decrease in academic performance (Conger & Conger, 1999; Conger, Conger, Elder,Lorenz, Simons & Conger, 1991; McLoyd, Jayaratne, Ceballo & Borquez, 1994).

Some evidence was found that two adults are more effective than one, in terms of economic contribution and that step parents are relative strangers to children. Averagely, children in two or more than two-parent households have access to more economic resources than those in single-parent households. Children raised by single parents or in polygynous families are disadvantaged on several indicators, compared to children raised by both original parents (Bachrach, 1983; Demo & Acock, 1988; Emery, 1988 McLanahann & Booth, 1989; Chase-Lansdale & Hetherington, 1990; McLanahan & Sandefur, 1994).

The economic deprivation perspective argues that much of the differences in child mental and physical health outcomes in several family types are a result of poverty and family socio-economic challenge. McLanahan and Sandefur (1994) discovered that one-half of the differences in child mental and physical health and outcome are as a result of family economic resources in single-mother families and their counterparts in other households (DeLeire & Kalil, 2001).

To a large extent, the economic strength of a household contributes to the level of comfort experienced by the children. Certainly the economic well-being of the family has a direct relationship with the mental and physical health of an adolescent. The economic strength of a family is made up of a number of factors such as: parent's occupation, financial support from relatives or other sources, number of parents' sharing the responsibility of survival etc. Summarily, the economic deprivation perspective seeks to explain the mental and physical health of adolescents from the angle of economic strength the family has. A family lacking the necessary funds to cater for productive feeding, good shelter, hospital bills and the likes would probably have adolescents with lesser mental and physical health in comparison with their counterparts in well-to-do families. On the other hand, a single-parent family would usually experience more of economic deprivation relative to monogamous and polygynous families. This

is because the burden of survival in a single-parent family is bore by one parent, as against the possibility of such task being shared among couples in other family types. Though, we might have cases whereby there is sound mental and physical health of adolescents found in a single-parent family due to factors such as: gainful employment of the single parent, lesser mouths to feed (family size) etc, the usual case is relatively poor mental and physical health of adolescents of single-parent families. This may be a result of low educational attainment and insufficient income by the single-parent. In a monogamous family type, the bread winner has lesser burden than in polygynous family type. The means of survival in monogamous families is cheap and less expensive than in polygynous families. Another case might exist whereby the economic resource of a monogamous family is lower than average. This might be as a result of one employed parent bearing the burden of the household by reason of the other person being jobless. In this case, adolescents may be deprived of some basic needs for their physical and economic development, since the liability is on just one person.

2.3 CONCEPTUAL FRAMEWORK

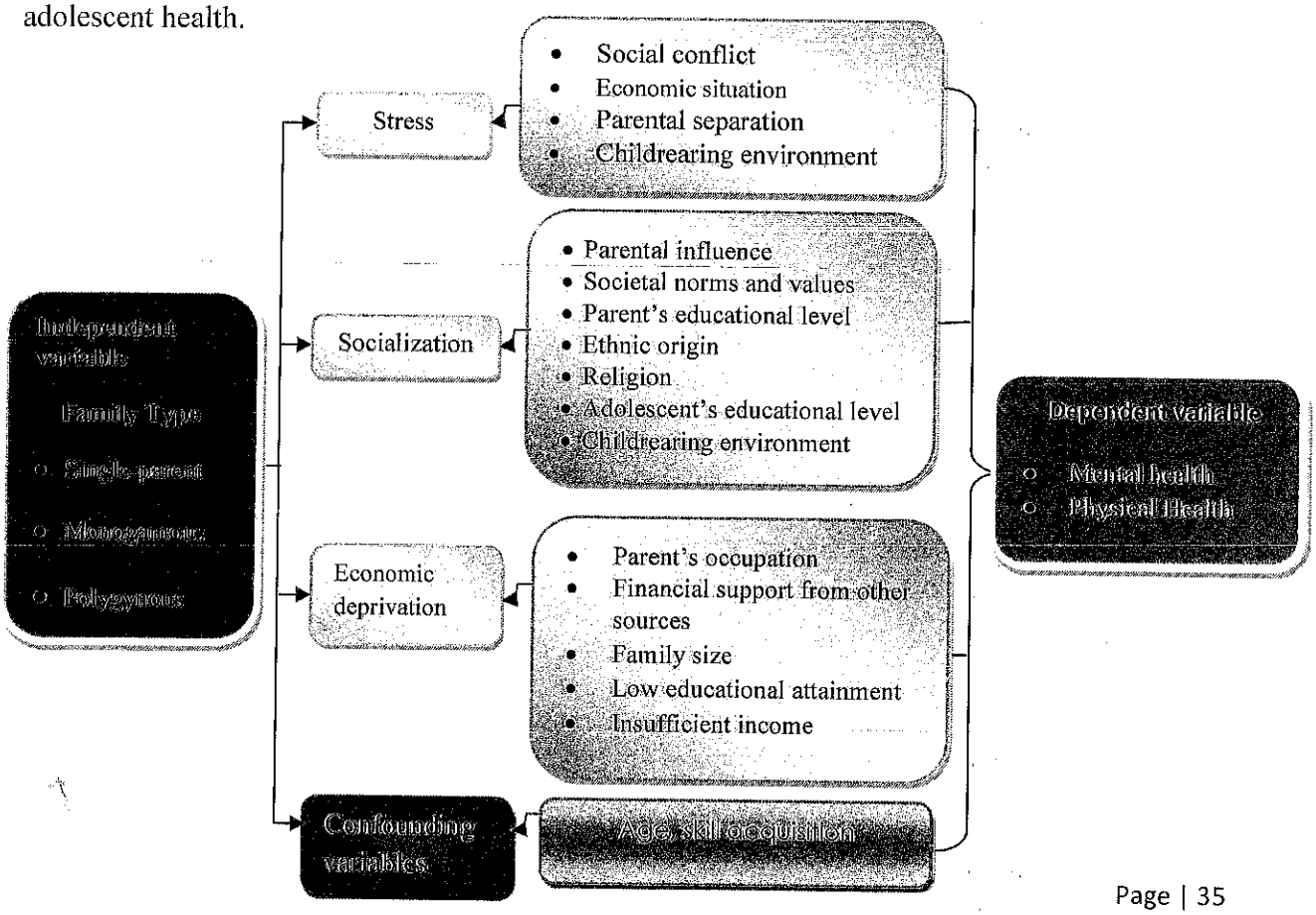
The figure below is the diagrammatic illustration that depicts the relationship between family type and adolescents' mental and physical health. The independent variables as indicated below are the different family types which include single parent, monogamous and polygynous family type. Family type has been said to affect the mental and physical health of adolescents whether positively or negatively. Furthermore, family type does not just affect adolescents' health in isolation but there are mechanisms through which family type affect health. Three perspectives drawn from literature were used to explain the influence of family type (independent variable) on adolescent health (dependent variable). These perspectives include stress, socialization and economic deprivation, all of which are explained in the theoretical framework.

Adolescents experience stress as a result of exposure to social conflict, economic deprivation, parental separation; all which affect the mental and physical health of adolescents.

Socialization factors such as parental influence, peer group, societal norms and values, religious institution, educational institution, childrearing environment, etc., are the mechanisms through which family type affect mental and physical health of adolescents.

Economic deprivation as a result of parent's occupation, financial support from other sources, family size, low parental educational attainment, insufficient income, etc., are the major factors that contribute to the socioeconomic status of a particular family, which in turn affect the mental and physical health of adolescents.

There are other confounding variables, such as age which are not expressed under the three theoretical perspectives used but they all influence the relationship between family type and adolescent health.



CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 INTRODUCTION

The chapter discusses the procedure of investigation, as well as the methodology applied in this study. The research design was descriptive and analytical in nature. The research design, study location, study population, sample size and sampling procedure, variable description and measurements, methods of data collection and analysis and, the field experience are presented below.

3.1 RESEARCH DESIGN

The adopted design is a cross sectional study of a representative sample of a selected female adolescents in secondary schools in Ado, Ekiti state capital. Four secondary schools were purposively selected, two public and two private schools.

3.2 STUDY LOCATION

The study was conducted in Ekiti State, in South Western Nigeria. Except the capital (Ado-Ekiti), the rest of the state is rural and majorly an agrarian setting. Its population form one of the largest ethnic groups in Yorubaland. Ekiti people are homogenous and they speak Yoruba dialect known as Ekiti. The state comprises 16 Local Government Areas.

3.3 STUDY POPULATION

The study was conducted among never-married, in-school females ages 10-19 years in Ado, Ekiti State.

3.4 SAMPLE SIZE AND SAMPLING PROCEDURE

Cross sectional data were obtained during secondary schools' academic session. Data were obtained from adolescents (10-19 years) recruited from four secondary schools in Ado Local Government Area, Ekiti State. The schools are: (i) Christ Girls' School, (ii) Ekiti State Government College, Ado Ekiti, (iii) Holy Child Catholic secondary school and (iv)New Model International Group of schools. A subset of participating classes was selected on the basis of eligibility for participation; and the eligible students were selected through random sampling. Adolescents consented before completing written surveys during their classes. Using the formula for deriving a small sample when population is known proposed by Krejcie and Morgan in 1970, a sample size of 383 was derived from the population of in-school female adolescents in Ekiti state.

$$S = \frac{X^2NP\,(1-P)}{d^2\,(N-1) + X^2P\,(1-P)}$$

Where:

S = *Required Sample size*

X = *Z value (e.g. 95% confidence level which is 1.96)*

N = *Population Size*

P = *Population proportion (expressed as decimal and assumed to be 0.5, that is, 50%)*

d = *Degree of accuracy (5%), expressed as a proportion (.05); the margin of error.*

To cover for non-response in the data collection, 10% of the sample size (38) was added to the original sample size to make 421 respondents. The sample size (421) was divided among the selected schools proportionally on the basis of the population of female students in each school. The percentage of the female population of each school was derived and questionnaires were administered to the representative proportion in the sample size. Christ Girls School has 1260

female students which takes 76% of the sample size- 320 respondents, Ekiti State Government College, Ado Ekiti has 139 female students which takes 8% of the sample size- 35 respondents, Holy Child Catholic secondary school has 167 female students which takes 10% of the sample size- 43 respondents and New Model International Group of schools has 90 female students which takes 6% of the sample size- 23 respondents.

3.5 DATA COLLECTION METHODS

For the purpose of this study, primary data was used. The primary data (relating to family type and adolescent physical and mental health) was collected to cover every aspect of the study. For the collection of primary data for this research work, survey method was used.

The source of data was a structured questionnaire that contained a scale for measuring self reported physical and mental health of in-school female adolescents. Questions that were used to measure physical and mental health were adapted from previous studies on physical and mental aspects of health. The questionnaire was divided into five sections. Each section provided necessary questions relating to the research topic. Section 1 provided questions relating to the background (socio-demographic) characteristics of respondents such as age, highest educational level (class), religion, ethnic origin, source of income, etc. Section 2 provided questions relating to the respondents' parental background characteristics such as highest level of education of parents (father and mother), parents' occupation and religion, etc. Section 3 provided questions relating to the family characteristics of respondents such as family type, marital status of parents, number of siblings and respondents' position in their families. Section 4 provided questions relating to the physical health of respondents. It also measured how often respondents experienced sickness, tiredness, dizziness, chest pain, head ache, muscle or joint pain and

stomach ache in a month prior to the interview. Options such as: never, once, two times, more than two times and everyday were given. Section 5 provided questions relating to the mental health of respondents. This section measured depression and anxiety by asking respondents to indicate how often they experienced the following: feeling sad, discouraged, lonely, hopeless, worthless, wishing you were dead, having trouble concentrating, having trouble sleeping, not feeling like eating, crying, feeling run-down and unable to get going, fear of what might happen, restless, worried, irritable, afraid, acid stomach, sweaty palms, cold sweats, heart beating hard and fast, shortness of breath and feeling hot all over when not exercising or working hard. Options such as: never, rarely, sometimes, most times and everyday were given.

3.6 VARIABLES DESCRIPTION AND MEASUREMENT

The variables are classified into independent, dependent and control variables. The variables are described below:

Dependent Variable: The dependent variable of this study is the physical and mental health of in-school female adolescents in Ado Local Government Area, Ekiti State.

I. Physical health: This was also measured to be good or poor. The analyses utilized adolescents' self-reported measure of physical health. The measure of physical health symptoms asked adolescents to report how often they experienced each of seven physical problems in a month prior to the interview: feeling sick, tired, dizzy, and having chest pain, a headache, muscle or joint pain, and stomach ache. Responses to items were scored on a five-point scale; possible responses range from "never" (coded as 5) to "every day" (coded as 1). Responses to items scored on a five point scale were dichotomized to indicate whether the adolescent have good or poor physical health and coded, such that higher score represents a

lower physical health. Good physical health = 0; that is, the adolescent is considered to be physically healthy if her responses to each of seven physical problems are either never or once. Poor physical health = 1; that is, the adolescent is considered to be physically unhealthy if she experienced each of seven physical problems two times, more than two times or every day.

II. Mental health: This was measured to be good or poor. This study examined adolescents' self-reported measure of mental health. The analyses utilized adolescents' self-reported measure of depression and anxiety. The measure of depression and anxiety asked adolescents to report how often they experienced each of twenty-two mental problems: feeling sad, discouraged, lonely, hopeless, worthless, wishing you were dead, having trouble concentrating, having trouble sleeping, not feeling like eating, crying, feeling run-down and unable to get going, fear of what might happen, restless, worried, irritable, afraid, acid stomach, sweaty palms, cold sweats, heart beating hard and fast, shortness of breath and feeling hot all over when not exercising or working hard. Responses to items were scored on a five-point scale; possible responses range from "never" (coded as 5) to "every day" (coded as 1). Responses to items scored on a five point scale were dichotomized to indicate whether the adolescent has good or poor mental health and are coded accordingly, such that higher score represents a lower mental health and vice versa. Good mental health = 0; that is, the adolescent is considered to be mentally healthy if her responses to each of seven physical problems are either never or rarely. Poor mental health = 1; that is, the adolescent is considered to be mentally unhealthy if she experienced each of twenty-two mental problems sometimes, most times and every day.

Independent Variable: The independent variable of this study is the family types of in-school female adolescents in Ado Local Government Area, Ekiti State.

Family Type: The analyses coded family type in three distinct categories which includes– Single-parent family, monogamous family, and polygamous family.

I. Monogamous family: This was coded as 1 and was measured from two categories which include- Married (coded as 1) and Living together (coded as 2).

II. Single-parent family: This was coded as 2 and was measured as Father (coded as 1) or Mother (coded as 2) who is never married (coded as 1), widowed (coded as 2), divorced (coded as 3) or separated (coded as 4).

III. Polygynous family: The polygamous family was coded as 3 and was measured by the number of the wives of respondent's father.

Control Variables: These include personal and family background characteristics of adolescents.

Background characteristics of respondents

Age: This is a nominal variable. It was measured in single ages and grouped into two age groups using five-year age group e.g. 10-14 (coded as 1), 15-19 (coded as 2).

Highest educational level: This was measured by the classes of the respondents, e.g JS 1, JS 2, etc.

Religion: This was measured in categories which includes; Christianity (coded as 1), Islam (coded as 2) and Traditional (coded as 3).

Ethnicity: This was measured in categories which includes; Hausa (coded as 1), Igbo (coded as 2), Yoruba (coded as 3) and others to cover for those from other tribes.

Skill acquisition: This was measured in two categories Yes (coded as 1) and No (coded as 2).

Alternative source of income: This was measured in two categories Yes (coded as 1) and No (coded as 2), and if Yes, it was measured by whether the alternative source of income is from Self, Siblings, Other relations.

Highest educational level of parents: This was also measured for parents in categories which include- No education (coded as 1), Primary education (coded as 2), Secondary education (coded as 3) and post-secondary education (coded as 4).

Parent's occupation: This was measured in categories which include- Civil servant, Fashion industry, Commerce and industry, Armed forces, Health sector, Education sector, Agricultural sector, Building and construction works, Finance industry, Engineering works, Transport sector, Religious sector, Law, Media and Others to cover for those whose occupation do not fit into the sector classification adopted. These classifications were re-coded into three categories because some sectors were narrow. Civil servant, Health sector, Education sector and Finance industry were combined and coded as 1. Fashion industry and Commerce and industry were combined and coded as 2. Agricultural sector, Building and construction works, Engineering works, Transport sector, Religious sector, Law, Media, Armed force were combined and coded as 3.

Parent's religion: This was measured in categories which include- Christianity (coded as 1), Islam (coded as 2) and Traditional (coded as 3).

Family size: This was measured by the number of siblings of respondents.

3.7 METHODS OF DATA ANALYSIS

Stata 12.0 was used for data analysis.The Independent and dependent variables: mental & physical health and family types respectively were compared. Analysis was conducted at three levels: (i) univariate using percentages, (ii) bivariate using cross tabulation & chi square, and (iii) multivariate using logistic regression.

Univariate analysis will involve taking the percentage distribution and frequency count of the family characteristics, physical and mental status of the respondents.

Bivariate analysis involved the use of chi-square table and cross tabulation to analyze the relationship between family characteristics of respondents and the dependent variable (physical and mental health of respondents).

Multivariate analysis involved the use of logistic regression to analyze the effect of each family characteristic on the dependent variable.

3.8 FIELD EXPERIENCE

As stated earlier, four secondary schools were purposively selected for the data collection for this study (Christ Girls School, Ekiti State Government College, Ado Ekiti, Holy Child Catholic Secondary school, Ado Ekiti and New Model International Group of schools). My fieldwork commenced on the 15th of May, 2017 with a visit to the four selected schools in Ado Local Government Area, Ekiti Nigeria. For ethical principle of informed consent, a letter for permission drafted by the Department and signed by the Head of the Department in the person of Prof. Ogunjuyigbe was obtained and submitted to the necessary authorities to seek their consent to carry out a research work in their schools. On the 16th of May, 2017, questionnaires were distributed to 10 female students in a nearby school in Oye Ekiti named: St. Augustine's Secondary School. This was to pre-test the instrument prior to the original data collection in order to make necessary corrections to questions that are too ambiguous or double barrelled.

Upon request and explanation of how important the information regarding the population of the girls in each school is in my methodology, I was given the details of female population. Christ Girls School had 1260 girls, Ekiti State Government College had 139 girls, Holy Child Catholic secondary school, Ado-Ekiti had 167 girls also, and New Model International Group of schools had 90 girls in their school. After I had gotten the population of girls in all schools, the sample size (421) was divided among the selected schools proportionally on the basis of the population of female students in each school. Christ Girls School has 1260 female students which takes 76% of the sample size- 320 respondents, Ekiti State Government College, Ado Ekiti has 139 female students which takes 8% of the sample size- 35 respondents, Holy Child Catholic secondary school has 167 female students which takes 10% of the sample size- 43 respondents and New Model International Group of schools has 90 female students which takes 6% of the sample size- 23 respondents.

There were issues with distribution during school hours. I and my colleagues who helped me in the data collection had to wait for the students' free period to be able to distribute the questionnaires so as not to disturb their class sessions. Aside this, it was slightly challenging to get the students' attention and also get them settled in their classes during their free periods. While some of the students showed interest and were glad to collect and fill the questionnaire, some of them were unwilling and uninterested, stating that they have notes to copy and class work to complete.

In administering questionnaires to the respondents, an introduction on the research topic, the purpose and the content of the questionnaire were all explained for them to have a clear understanding of what was required to fill in the options provided. The questions were explained one after another to minimize errors. Also, before the questionnaires were distributed, students'

consent was obtained and questionnaires were distributed using simple random sampling method. In other words, students were randomly picked based on their class size. The students were guided on each of the questions, on what each question mean and on how to answer each of them. Each of the questionnaires was checked for any uncompleted question and for correction of errors.

In virtually all the schools, a member of the staff of the school was appointed to help us in gathering the girls for easy distribution of the questionnaires. Gathering them was sometimes stressful. In Holy Child Catholic Secondary school for instance, as at that time we were told to come, students were in their cultural and recreation period. So, accessing them in their classroom was quite challenging. As a result of this, some students were randomly picked in the school hall across all classes except SS3 to fill a number of questionnaires. Later on, some were settled in three classes for me and my co-researchers to easily distribute and explain the content of the questionnaire to them.

Another challenge experienced was delay in distribution in one of the selected schools, as the Vice principal of Ekiti State Government College did not permit any administration of questionnaire during school hours. He informed us to wait till the closing hour to distribute them. Fortunately, we had the opportunity to get several classes that were in their free periods, which we utilized to accomplish our task.

The data collection was quite stressful and hectic but interesting all the same.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, INTERPRETATION

4.0 Data Presentation and Analysis of Results

This chapter focuses on the presentation of the results of data analysis of the research work on family type and physical and mental health of in-school female adolescents in Ado-Ekiti, Nigeria. The respondents' family-related and personal characteristics such as age, class, religion, ethnic group, skill acquisition, family type, parents' level of education, religion, occupation and marital status are presented. Also presented are the relationship between family type and in-school female adolescent's physical and mental health.

4.1 Univariate Analysis

Table 4.1.1 presents results of univariate analysis conducted to answer research question one. The Table shows the percentage distribution of the study population by family type, other family related and personal characteristics.

Research question 1: What types of family do in-school female adolescents in Ado-Ekiti, Nigeria live in?

Table 4.1.1 Percentage Distribution of the Study Population by Family Type and Selected Background Characteristics

VARIABLE	FREQUENCY (N)	PERCENTAGE (%)
Family type		
Single parent households	40	9.50
Two or more parents households:		
-Monogamous households	367	87.17

-Polygynous households	14	3.33
Residence with single parent		
Living with father only	5	1.19
Living with mother only	35	8.31
Marital status of single parent		
Never married	6	1.43
Widowed	12	2.85
Divorced	2	0.48
Separated	20	4.75
Marital status of monogamous parents		
Married	326	77.43
Living together	41	9.74
School		
Christ Girls school	320	76.01
Ekiti State Government College, Ado Ekiti	35	8.31
Holy Child Catholic secondary school	43	10.21
New Model International Group of schools	23	5.46
Age group		
10-14	381	90.50
15-19	40	9.50
(Mean: 12.25)		
(Standard deviation: 1.71)		
Class		
JSS 1	200	47.51
JSS 2	22	5.23
JSS 3	105	24.94
SS 1	46	10.93
SS 2	48	11.40
Religion		
Christianity	398	94.54
Islam	22	5.23

Traditional	1	0.24
Ethnic origin		
Hausa	1	0.24
Igbo	55	13.06
Yoruba	357	84.80
Respondents acquiring skill		
Yes	129	30.64
No	290	68.88
Alternative source of income		
Yes	138	32.78
No	282	66.98
Other source of income		
Self	21	4.99
Siblings	28	6.65
Uncle/Aunt	85	20.19
Others	3	0.71
Highest level of education of respondent's mother	5	1.19
No education	27	6.41
Primary education	126	29.93
Secondary education	262	62.23
Post secondary education		
Highest level of education of respondent's father:	4	0.95
No education	19	4.51
Primary education	102	24.23
Secondary education	286	67.93
Post secondary education		
Occupation of respondent's mother		
Civil servant/Health/Education	163	45.66
sector/Finance industry	178	49.86

Trader Others	16	4.48
Occupation of respondent's father: Civil servant/Health/Education sector/Finance industry Trader Others	 162 67 126	 45.63 18.87 35.49
Religion of respondent's mother Christianity Islam Traditional	 395 25 1	 93.82 5.94 0.24
Religion of respondent's father Christianity Islam Traditional	 386 33 2	 91.69 7.84 0.48
Number of siblings 0 (No other child) 1-4 siblings 5 and above siblings	 4 309 44	 1.12 86.55 12.32

Family type

Findings from the study revealed that adolescents in Ado-Ekiti, Nigeria majorly reside in monogamous households (87.17%), 3.33% live in polygynous family and 9.50% live in single parent family.

Among the adolescents living in single parent households (9.50%), 1.19% of them live with their father only while 8.31% of them live with their mother only. Most of these single parents are separated (4.75%), 2.85% are widows, 1.43% are never married and 0.48% is divorced.

For those parents in monogamous households, 77.43% are married while 9.74% are living together without marriage.

Personal Characteristics of respondents

The study showed that students attending public and private schools in Ado Ekiti vary to a large extent. The majority of the students attend Government owned schools. 76.01% attend Christ Girls School, 8.31% attend Ekiti State Government College, Ado Ekiti, 10.21% attend Holy Child Catholic secondary school and 5.46% attend New Model International Group of schools.

The majority of the respondents are between the ages of 10-14 (90.50%), while the least are in the age group of 15-19 (9.50%).

Majority of the respondents are in JS 1 class (47.51%) with the least percentage of respondents (5.23%) in JS 2.

According to religion, most of the respondents are Christians (94.54%), while the least are traditionalists (0.24%)

Also, according to ethnic origin, majority of the adolescents are Yorubas (84.80%), with the least percentage (0.24%) from Hausa ethnic origin.

Furthermore, less percentage of adolescents engage in skill acquisition activities after school hours (30.64%) and 68.88% are not engaging in skill acquisition activities after school hours.

66.98% of adolescents do not have an alternative source of income apart from their parents while 32.78% have alternative sources of income apart from their parents.

From the percentage of those with alternative source of income (32.78%), 4.99% earn money themselves (self), 6.65% get income from their siblings, 20.19% get income from either uncle or

aunt and the least percent of adolescents (0.71%) get income from others including their grandparents and friends.

Other Family-related Characteristics of respondents

Looking at the level of education of respondents' parents, 1.19% and 0.95% of mothers and fathers respectively have no education, 6.41% and 4.51% of mothers and fathers stopped at primary level of education respectively, 29.93% and 24.23% stopped at secondary level of education respectively; and 62.23% and 67.93% of mothers and fathers got their education to post-secondary level respectively.

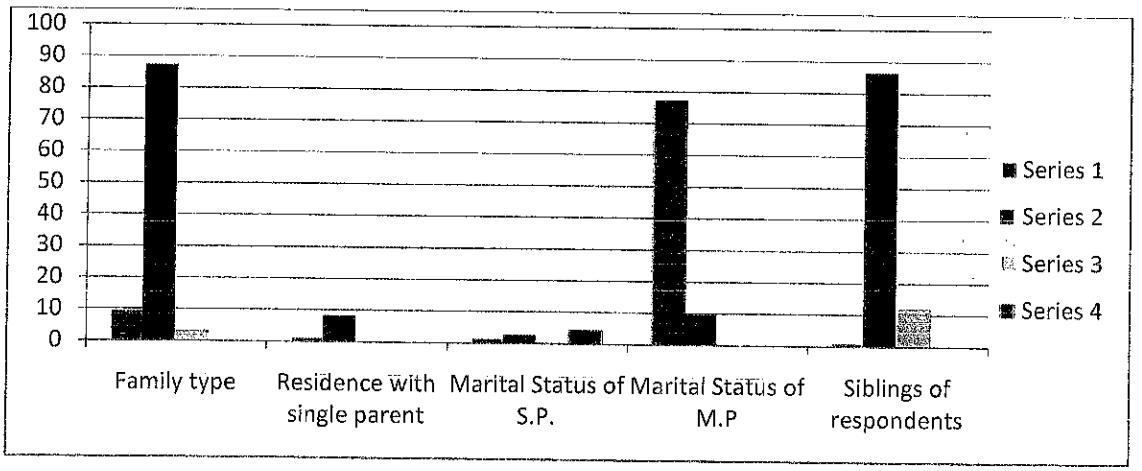
Mothers who are traders have the highest percentage (49.86%), those who are civil servants, doctors, pharmacists, nurses, teachers and bankers have 45.66%, while those mothers who are engaged in other occupation including armed forces, religious sector, media and law have the lowest percentage (4.48%).

Fathers who are civil servants, doctors, pharmacists, nurses, teachers and bankers have the highest percentage (45.63%), while those fathers who are engaged in other occupation including armed forces, religious sector, media and law have the 35.49%, while those fathers who are traders have the lowest percentage (18.87%).

According to religion, respondents' mother and father are majorly Christian, 93.82% and 91.69% respectively.

Most of the respondents have 1-4 siblings (86.55%), 12.32% of the respondents have 5 and above siblings and 1.12% of the respondents are the only child of their parents.

Figure 1: Graphical representation of the percentage distribution of respondents by family type



Key: Family type– series 1 represents *Single parent households*; series 2 represents *Monogamous households* and series 3 represents *Polygamous households.*

Residence with single parent- series 1 represents the *percentage of respondents living with father only* and series 2 represents the *percentage of respondents living with mother only.*

Marital status of single parent- series 1 represents the *Never married single parents*; series 2 represents the *Widowed single parents*; series 3 represents the *Divorced single parents* and series 4 represents the *Separated single parents.*

Marital status of monogamous parent- series 1 represents *Married monogamous parent* and series 2 represents *Not-married monogamous parent (Living together).*

Siblings of respondents- series 1 represents *Zero (No other child)*; series 2 represents *1-4 siblings* and series 3 represents *5 and above siblings.*

Research question 2: What is the physical and mental health status of in-school female adolescents in Ado-Ekiti, Nigeria?

Table 4.1.2: Percentage distribution of mental and physical health status of respondents

DEPENDENT VARIABLE	FREQUENCY (N)	PERCENTAGE (%)
Physical health		
Good physical health	195	54.62
Poor physical health	162	45.38
Mental health		
Good Mental health	140	45.75

Poor Mental health	166	54.25

Table 4.1.2 shows the percentage distribution of the dependent variables: physical and mental health of respondents. From the studied population, 54.62% of the adolescents surveyed have good physical health while 45.38% have poor physical health. And for mental health, 45.75% of adolescents surveyed have good mental health while 54.25% have poor mental health. The difference between the percentage of adolescents with good and poor physical health is 9.24% (more adolescents have good physical health) while the difference between the percentage of adolescents with poor and good mental health at 8.50% (more adolescents have poor mental health).

Figure 2: Graphical representation of the percentage distribution of mental and physical health status of respondents

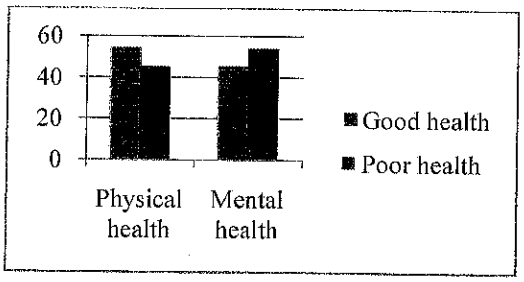


Figure 2 is the graphical representation that depicts the percentage distribution of physical and mental health status of adolescents. From this representation, it can be noted that more adolescents have good physical health with 9.24% higher than the percentage of those with poor physical health. In contrast to the percentage distribution of physical health, more adolescents have poor mental health with 8.50% higher than the percentage of those with poor mental health.

4.2 Bivariate Analysis

This section presents the bivariate analysis of the relationship between family type and the physical and mental health of in-school female adolescents with the results of chi-square test of association.

Research question 3: What is the relationship between family type and physical health of in-school female adolescents in Ado Ekiti, Nigeria?

Table 4.2.1 Percentage Distribution of Physical Health by Family Type and Selected Background Characteristics

INDEPENDENT VARIABLES	DEPENDENT VARIABLES %(N)		Chi-square and P-value
	Good Physical Health	Poor Physical Health	
Family type			
Single parent family	8.19(14)	11.11(15)	
Monogamous family	90.54(155)	81.48(110)	x^2=8.8972
Polygynous family	1.17(2)	7.41(10)	p =0.012
School			
Christ Girls school	77.19(132)	80.74(109)	
Ekiti State Government College, Ado Ekiti	9.94(17)	5.93(8)	
Holy Child Catholic secondary school	7.60(13)	10.37(14)	
New Model International Group of schools	5.26(9)	2.96(4)	x^2=3.2042 p=0.361
Age group			
10-14	88.30(151)	92.59 (125)	x^2=1.5690
15-19	11.70(20)	7.41(10)	p=0.210
Class			
JS 1	45.03(77)	57.78(78)	
JS 3	25.73(44)	21.48(29)	
SS 1	15.20(26)	11.85(16)	x^2=5.3078
SS 2	14.04(24)	8.89(12)	p=0.151
Religion			
Christianity	95.91(164)	96.30(130)	x^2=0.0304
Islam	4.09(7)	3.70(5)	p=0.862

Ethnic origin			
Igbo	9.94(17)	18.52(25)	x^2=4.6867
Yoruba	90.06(154)	81.48(110)	p=0.030
Respondents skill acquisition			
Yes	28.65(49)	30.37(41)	x^2=0.1069
No	71.35(122)	69.63(94)	p=0.744
Highest level of education of respondent's mother			
No education	0.58(1)	2.22(3)	
Primary education	6.43(11)	3.70(5)	
Secondary education	29.24(50)	34.07(46)	x^2=3.3541
Post Secondary education	63.74(109)	60.00(81)	p=0.340
Highest level of education of respondent's father			
No education	1.17(2)	1.48(2)	
Primary education	4.68(8)	5.19(7)	
Secondary education	23.39(40)	25.93(35)	x^2=0.4157
Post Secondary education	70.76(121)	67.41(91)	p=0.937
Occupation of respondent's mother			
Civil-servant/Health/Education sector/Finance industry	44.44(76)	46.67(63)	
Trader	48.54(83)	50.37(68)	x^2=2.5053
Others	7.02(12)	2.96(4)	p=0.286
Occupation of respondent's father			
Civil-servant/Health/Education-sector/Finance industry	41.52(71)	49.62(66)	
Trader	21.05(36)	18.05(24)	x^2=1.9850
Others	37.43(64)	32.33(43)	p=0.371
Number of siblings			
No other child	0.00(0)	2.22(3)	

1-4 siblings	88.89(152)	82.22(111)	x^2=5.3301
5 and above	11.11(19)	15.56(21)	p=0.070

Table 4.2.1 shows the bivariate analysis of physical health by family type and selected background characteristics of the study population.

Family Type

From this table, the section showing physical health by family type indicates that more percentage of students with good physical health (90.54%) is from monogamous families, followed by those from single parent family (8.19%), with polygynous family having the least percentage (1.17%). Also, more percentage of students with poor physical health is also from monogamous families (81.48%), followed by those from single parent family (11.11%), with polygynous family having the least percentage (7.41%). Chi-square test of association shows that there is a significant relationship between family type and the physical health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=8.8972 and p=0.012). Furthermore, this shows that family type relates to an adolescent's physical health.

Personal Characteristics of respondents

The section showing physical health by school of respondents indicates that more percentage of students with good physical health (77.19%) attend Christ Girls school with the least percentage (5.26%) of respondents attending New Model International Group of schools. Also, more percentage of students with poor physical health (80.74%) attend Christ Girls school with the least percentage (2.96%) of respondents attending New Model International Group of schools. There is no significant relationship between school of respondents and the physical health of in-

school female adolescents in Ado-Ekiti, Nigeria (x^2=3.2042 and Pr=0.361). In other words, the type of school a respondent attends does not have a significant influence on their physical health.

The majority of the respondents (88.30%) who have good physical health fall in 10-14 age group while the least fall in 15-19 age group (11.70%). For those who have poor physical health, 92.59% fall in 10-14 age group while the least fall in 15-19 age group (7.41%). There is no significant relationship between the age of respondents and the physical health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=1.5690 and Pr=0.210). In other words, the physical health of a respondent is not influenced by the age category he or she belongs to.

The majority of the respondents who are in JS 1 have good physical health (45.03%) while the least are in SS 2(14.04%). For those who have poor physical health, 57.78% are in JS 1 while the least are in SS 2 (8.89%). There is no significant relationship between the class of respondents and the physical health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=5.3078 and Pr=0.151).

Of all those who have good physical health, 95.91% are Christians while 4.09% are Muslims. Of all those who have poor physical health, 96.30% are Christians while 3.70% are Muslims. There is no significant relationship between the religion of respondents and the physical health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=0.0304 and Pr=0.862).

Among the respondents having good physical health, 90.06% are Yorubas while 9.94% are Igbos. Of all those who have poor physical health, 81.48% are Yorubas while 18.52% are Igbos. There is a significant relationship between the ethnic origin of respondents and the physical health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=4.6867 and Pr=0.030). In other words, the physical health of a respondent is influenced by the ethnic origin he or she is from.

For skill acquisition, 71.35% of those who reported good physical health are not engaged in skill acquisition while 28.65% of those who reported good physical health are engaged in skill acquisition. Also, 69.63% of those who reported poor physical health are not learning any skill while 30.37% of those who reported poor physical health are engaged in skill acquisition. There is no significant relationship between the skill acquisition and the physical health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=0.1069 and Pr=0.744).

Other family-related characteristics

For level of education of respondent's mother, 63.74% of respondents who reported good physical health have mothers who have post secondary education as their highest level of education while 0.58% of respondents who reported good physical health have mothers with no education. Also, 60% of those who reported poor physical health have mothers who have post secondary education as their highest level of education while 2.22% have mothers with no education. There is no significant relationship between the level of education of respondent's mother and the physical health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=3.3541 and Pr=0.340).

For level of education of respondent's father, 70.76% of respondents who reported good physical health have fathers who have post secondary education as their highest level of education while 1.17% of respondents who reported good physical health have fathers with no education. Also, 67.41% of those who reported poor physical health have fathers who have post secondary education as their highest level of education while 1.48% have fathers with no education. There is no significant relationship between the level of education of respondent's father and the physical health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=0.4157 and Pr=0.937).

The majority of the respondents (48.54%) who reported good physical health have mothers who are traders while the least percentage of respondents (7.02%) with good physical health have mothers who work in transport, religious, law, media, armed force sectors of the economy. Also, slightly above half of the respondents (50.37%) who reported poor physical health have mothers who are traders while the least percentage of respondents (2.96%) who reported poor physical health have mothers who work in transport, religious, law, media, armed force sectors of the economy. There is no significant relationship between the occupation of respondent's mother and the physical health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=2.5053 and Pr=0.286).

The majority of the respondents (41.52%) who reported good physical health have fathers who are civil servants, doctors, nurses, pharmacists, teachers and bankers while the least percentage of respondents (21.05%) who reported good physical health have fathers who work as traders. Also, the majority of the respondents (49.62%) who reported poor physical health have fathers who are civil servants, doctors, nurses, pharmacists, teachers and bankers while the least percentage of respondents (18.05%) who reported poor physical health have fathers who work as traders. There is no significant relationship between the occupation of respondent's father and the physical health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=1.9850 and Pr=0.371).

Of all those who reported good physical health, majority of them (88.89%) have siblings within the range of 1-4 while none of the respondent who are the only child of their parents reported good physical health. Also, majority of the respondents (82.22%) who reported poor physical health have siblings within the range of 1-4 while least percentage of respondents (2.22%) who are the only child of their parents reported poor physical health. There is no significant

Religion			
Christianity	95.71(134)	96.39(160)	x^2=0.0908
Islam	4.29(6)	3.61(6)	p=0.763
Ethnic origin			
Igbo	15.00(21)	12.65(21)	x^2=0.3540
Yoruba	85.00(119)	87.35(145)	p=0.552
Respondent's skill acquisition			
Yes	33.57(47)	25.90(43)	x^2=2.1508
No	66.43(93)	74.10(123)	p=0.142
Highest level of education of respondent's mother			
No education	0.71(1)	1.81(3)	
Primary education	4.29(6)	6.02(10)	
Secondary education	27.14(38)	34.94(58)	x^2=3.9863
Post Secondary education	67.86(95)	57.23(95)	p=0.263
Highest level of education of respondent's father			
No education	0.00(0)	2.41(4)	
Primary education	3.57(5)	6.02(10)	
Secondary education	23.57(33)	25.30(42)	x^2=4.8746
Post Secondary education	72.86(102)	66.27(110)	p=0.181
Occupation of respondent's mother			
Civil-servant/Health/Education-sector/Finance industry	50.00(70)	41.57(69)	
Trader	44.29(62)	53.61(89)	x^2=2.6450
Others	5.71(8)	4.82(8)	p=0.266
Occupation of respondent's father			
Civil-servant/Health/Education-sector/Finance industry	40.71(57)	48.78(80)	
Trader	19.29(27)	20,12(33)	x^2=2.8178
Others	40.00(56)	31.10(51)	p=0.244

relationship between the number of respondent's siblings and the physical health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=5.3301 and Pr=0.070).

Research question 4: What is the relationship between family type and the mental health of in-school female adolescents in Ado Ekiti, Nigeria?

Table 4.2.2 Percentage Distribution of Mental Health by Family Type and Selected Background Characteristics

INDEPENDENT VARIABLES	DEPENDENT VARIABLES %(N)		Chi-square and P-value
	Good Mental Health	Poor Mental Health	
Family type			
Single parent family	6.43(9)	12.05(20)	
Monogamous family	90.71(127)	83.13(138)	x^2=3.7805
Polygynous family	2.86(4)	4.82(8)	p=0.151
School			
Christ Girls school	75.00(105)	81.93(136)	
Ekiti State Government College, Ado Ekiti	11.43(16)	5.42(9)	
Holy Child Catholic secondary school	9.29(13)	8.43(14)	
New Model International Group of schools	4.29(6)	4.22(7)	x^2=3.8804 p=0.275
Age group			
10-14	91.43(128)	89.16(148)	x^2=0.4433
15-19	8.57(12)	10.84(18)	p=0.506
Class			
JS 1	42.14(59)	57.83(96)	
JS 3	30.00(42)	18.67(31)	
SS 1	16.43(23)	11.45(19)	x^2=9.1723
SS 2	11.43(16)	12.05(20)	p=0.027

Number of siblings			
No other child	1.43(2)	0.60(1)	
1-4 siblings	88.57(124)	83.73(139)	x^2=2.5985
5 and above	10.00(14)	15.66(26)	p=0.273

Table 4.2.2 shows the bivariate analysis of mental health by family type and selected background characteristics of the study population.

Family Type

The section showing mental health by family type indicates that more percentage of students with good mental health (90.71%) is from monogamous families, followed by those from single parent family (6.43%), with polygynous family having the least percentage (2.86%) and more percentage of students with poor mental health is also from monogamous families (83.13%), followed by those from single parent family (12.05%), with polygynous family having the least percentage (4.82%). Chi-square test of association shows that there is no significant relationship between family type and mental health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=3.7805, p=0.151).

Personal Characteristics of respondents

For school of respondents, results indicate that more percentage of students with good mental health (75%) attend Christ Girls school with the least percentage (4.29%) of respondents attending New Model International Group of schools. Also, more percentage of students with poor mental health (81.93%) attend Christ Girls school with the least percentage (4.22%) of respondents attending New Model International Group of schools. There is no significant relationship between school of respondents and the mental well-being of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=3.8804 and Pr=0.275).

The majority of the respondents (91.43%) who have good mental health fall in 10-14 age group while the least fall in 15-19 age group (8.57%). For those who have poor mental health, 89.16% fall in 10-14 age group while the least fall in 15-19 age group (10.84%). There is no significant relationship between the age of respondents and the mental health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=0.4433 and Pr=0.506). In other words, the mental health of a respondent is not influenced by the age category he or she belongs to.

The majority of the respondents who are in JS 1 have good mental health (42.14%) while the least are in SS 2(11.43%). For those who have poor mental health, 57.83% are in JS 1 while the least are in SS 1 (11.45%). There is a significant relationship between the class of respondents and the mental health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=9.1723 and Pr=0.027). In other words, the mental health of a respondent is influenced by his or her class.

Of all those who have good mental health, 95.71% are Christians while 4.29% are Muslims. Of all those who have poor mental health, 96.39% are Christians while 3.61% are Muslims. There is no significant relationship between the religion of respondents and the mental health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=0.0908 and Pr=0.763).

Among the respondents having good mental health, 85% are Yorubas while 15% are Igbos. Of all those who have poor mental health, 87.35% are Yorubas while 12.65% are Igbos. There is no significant relationship between the ethnic origin of respondents and the mental health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=0.3540 and Pr=0.552).

For skill acquisition, 66.43% of those who reported good mental health are not engaged in skill acquisition while 33.57% of those who reported good mental health are engaged in skill acquisition. Also, 74.10% of those who reported poor mental health are not learning any skill

while 25.90% of those who reported poor mental health are engaged in skill acquisition. There is no significant relationship between the skill acquisition and the mental health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=2.1508 and Pr=0.142).

Other family-related characteristics

For level of education of respondent's mother, 67.86% of respondents who reported good mental health have mothers who have post secondary education as their highest level of education while 0.71% of respondents who reported good mental health have mothers with no education. Also, 57.23% of those who reported poor mental health have mothers who have post secondary education as their highest level of education while 1.81% have mothers with no education. There is no significant relationship between the level of education of respondent's mother and the mental health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=3.9863 and Pr=0.263).

For level of education of respondent's father, 72.86% of respondents who reported good mental health have fathers who have post secondary education as their highest level of education while none of the respondents that reported good mental health have fathers with no education. Also, 66.27% of those who reported poor mental health have fathers who have post secondary education as their highest level of education while 2.41% have fathers with no education. There is no significant relationship between the level of education of respondent's father and the mental health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=4.8746 and Pr=0.181).

The majority of the respondents (50%) who reported good mental health have mothers who are civil servants, doctors, nurses, pharmacists and bankers while the least percentage of respondents (5.71%) with good mental health have mothers who work in transport, religious, law, media, armed force sectors of the economy. Also, slightly above half of the respondents

(53.61%) who reported poor mental health have mothers who are traders while the least percentage of respondents (4.82%) who reported poor mental health have mothers who work in transport, religious, law, media, armed force sectors of the economy. There is no significant relationship between the occupation of respondent's mother and the mental health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=2.6450 and Pr=0.266).

The majority of the respondents (40.71%) who reported good mental health have fathers who are civil servants, doctors, nurses, pharmacists, teachers and bankers while the least percentage of respondents (19.29%) who reported good mental health have fathers who work as traders. Also, the majority of the respondents (48.78%) who reported poor mental health have fathers who are civil servants, doctors, nurses, pharmacists, teachers and bankers while the least percentage of respondents (20.12%) who reported poor mental health have fathers who work as traders. Chi-square test of association shows that there is no significant relationship between the occupation of respondent's father and the mental health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=2.8178 and Pr=0.244).

Of all those who reported good mental health, majority of them (88.57%) have siblings within the range of 1-4 while less than 2% of the respondent who are the only child of their parents reported good mental health. Also, majority of the respondents (83.73%) who reported poor mental health have siblings within the range of 1-4 while least percentage of respondents (0.60%) who are the only child of their parents reported poor mental health. There is no significant relationship between the number of respondent's siblings and the mental health of in-school female adolescents in Ado-Ekiti, Nigeria (x^2=2.5985 and Pr=0.273).

In conclusion, the result revealed that there is significant relationship between family type and physical health while there is no significant relationship between family type and mental health of in-school female adolescents in Ado-Ekiti, Nigeria.

4.2.3 Test of hypothesis

H_0: There is no significant relationship between family type and in-school female adolescent physical and mental health in Ado Ekiti, Nigeria.

H_1: There is significant relationship between family type and in-school female adolescents' physical and mental health in Ado Ekiti, Nigeria.

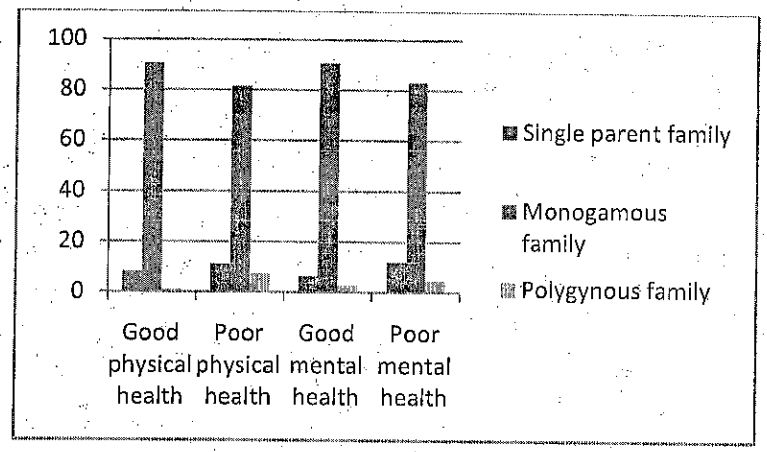
Decision

From the chi-square test, the relationship between family type and physical health is statistically significant (χ^2=8.8972, p=0.012). We can conclude that there is a significant relationship between family type and physical health. Therefore we reject the null and accept the alternate hypothesis.

This study also revealed that the relationship between family type and mental health is not statistically significant (χ^2=3.7805, p>0.05). This implies that family type does not influence mental health. Therefore, we accept the null hypothesis

The above chi-square test only reveals association, to further test the hypothesis for this study with regard to magnitude and direction of association between family type and physical and mental health of in-school female adolescents in Ado Ekiti, Nigeria, multivariate analysis using logistic regression was conducted. The results are presented in the next section.

Figure 3: Graphical Representation of the Percentage Distribution of Physical and Mental Health by Family Type



4.3 Multivariate analysis

The multivariate analysis using logistic regression was done to show the strength and the direction of the relationship between family type and in-school female adolescent physical and mental health. The results are presented in odds ratios, associated p-values and confidence interval.

Table 4.3.1: Logistics Regression of Adolescent Physical Health by Family Type and Selected Background Characteristics

Variable	Model 1	Model 2
Physical Health	**Odds Ratio (Confidence interval)**	**Odds Ratio (Confidence interval)**
Family type		
Monogamous family	1.0(RC)	1.0(RC)
Single parent family	1.51(0.70-3.25)	1.39(0.61-3.17)
Polygynous family	7.05*(1.51-32.79)	9.16**(1.82-49.12)

School		
Christ Girls school		1.0(RC)
Ekiti State Government College, Ado Ekiti		0.75(0.27-2.1)
Holy Child Catholic secondary school		1.75(0.72-4.27)
New Model International Group of schools		0.61(0.15-2.38)
Age group		
10-14		1.0(RC)
15-19		0.91(0.3-2.78)
Class		
JS 1		1.0(RC)
JS 3		0.62(0.32-1.17)
SS 1		0.66(0.28-1.55)
SS 2		0.40(0.14-1.17)
Religion		
Christianity		1.0(RC)
Islam		0.73(0.20-2.63)
Ethnic origin		
Igbo		1.0(RC)
Yoruba		0.40*(0.19-0.84)
Respondents skill acquisition		
Yes		1.0(RC)
No		0.80(0.46-1.41)
Occupation of respondent's mother		
Civil-servant/Health/Education-sector/Finance industry		1.0(RC)
Trader		0.97(0.57-1.65)
Others		0.32(0.09-1.14)
Occupation of respondent's father		
Civil-servant/Health/Education-		1.0(RC)

sector/Finance industry Trader Others		 0.56(0.28-1.14) 0.75(0.43-1.32)

Adolescent Physical Health and Family Type

Without controlling for other confounding variables; Family type was seen to contribute to the likelihood of poor physical health among adolescents. Taking monogamous family as the reference category (1.00), adolescents living in single parent family are 51% more likely than the reference category to have poor physical health (OR=1.51, $p>0.05$) and adolescents living in polygynous family are seven (7) times more likely than the reference category to have poor physical health (OR=7.05, $p<0.05$)

After controlling for other confounding variables; Family type was also seen to contribute to the likelihood of poor physical health among adolescents. Taking monogamous family as the reference category (1.00), adolescents living in single parent family are 39% more likely than the reference category to have poor physical health (OR=1.39, $p>0.05$) and adolescents living in polygynous family are nine (9) times more likely than the reference category to have poor physical health (OR=9.16, $p<0.01$).

Adolescent Physical Health and Personal Characteristics

Those who attend Ekiti State Government College, Ado Ekiti and New Model International Group of schools are insignificantly less likely than those who attended Christ Girls school (reference category 1.00) to have poor physical health (OR=0.75, $p>0.05$; OR=0.61, $p>0.05$

respectively), whereas those who attend Holy Child Catholic secondary school are more likely than the reference category to have poor physical health (OR=1.75, p>0.05).

Taking the age group of adolescents between 10-14 years as a reference category, adolescents in the age group of 15-19 years are insignificantly less likely than the reference category to have poor physical health (OR=0.91, p>0.05).

Those who are in classes JS 3, SS 1 and SS 2 are insignificantly less likely than those in JS 1 (reference category=1.00) to have poor physical health with respective odds ratio and p-value (OR=0.62, p>0.05, OR=0.66, p>0.05 and OR=0.40, P>0.05).

This study also revealed that religion contributes to the likelihood of poor physical health among in-school female adolescents in Ado-Ekiti, Nigeria. Taking Christianity as a reference category (1.00), respondents who were affiliated to Islam are insignificantly less likely to have poor physical health (OR=0.73, p>0.05).

The result also revealed that those who are Yoruabas are 40% less likely than the Igbos (reference category=1.00) to have poor physical health (OR=0.40, p<0.05).

Taking adolescents acquiring skills after school hours as the reference category (1.00), adolescents that are not acquiring skills after school hours are insignificantly less likely to have poor physical health (OR=0.80, p>0.05).

Adolescent Physical Health and Other Family-related Characteristics

For occupation of adolescent's mother, taking those are civil servants, doctors, nurses, pharmacists, teachers and bankers as the reference category (1.00), adolescents whose mothers

are traders and those whose mothers engage in other jobs are insignificantly less likely to have poor physical health (OR=0.97, p>0.05; OR=0.32, p>0.05 respectively).

For occupation of adolescent's father, taking those are civil servants, doctors, nurses, pharmacists, teachers and bankers as the reference category (1.00), adolescents whose fathers are traders and those whose fathers engage in other jobs are insignificantly less likely to have poor physical health (OR=0.56, p>0.05; OR=0.75, p>0.05 respectively).

Table 4.3.2: Logistics Regression of Adolescent Mental Health by Family Type and Selected Background Characteristics

Variable	**Model 1**	**Model 2**
Mental Health	**Odds Ratio (Confidence interval)**	**Odds Ratio (Confidence interval)**
Family type		
Monogamous family	1.0(RC)	1.0(RC)
Single parent family	2.05(0.90-4.66)	1.9(0.8-4.52)
Polygynous family	1.84(0.54-6.26)	1.53(0.43-5.37)
School		
Christ Girls school		1.0(RC)
Ekiti State Government College, Ado Ekiti		0.70(0.26-1.89)
Holy Child Catholic secondary school		1.18(0.49-2.84)
New Model International Group of schools		1.09(0.33-3.6)
Age group		
10-14		1.0(RC)
15-19		1.67(0.59-4.70)
Class		
JS 1		1.0(RC)

JS 3 SS 1 SS 2		0.50*(0.27-0.93) 0.55(0.24-1.26) 0.52(0.19-1.43)
Religion Christianity Islam		 1.0(RC) 0.81(0.23-2.78)
Ethnic origin Igbo Yoruba		 1.0(RC) 1.34(0.66-2.74)
Respondents skill acquisition Yes No		 1.0(RC) 1.16(0.67-2.00)
Occupation of respondent's mother Civil-servant/Health/Education-sector/Finance industry Trader Others		 1.0(RC) 1.61(0.96-2.69) 1.20(0.4-3.6)
Occupation of respondent's father Civil-servant/Health/Education-sector/Finance industry Trader Others		 1.0(RC) 0.74(0.38-1.47) 0.56*(0.32-0.97)

Adolescent Mental Health and Family Type

Without controlling for other confounding variables; Family type was seen to contribute to the likelihood of poor mental health among adolescents. Taking monogamous family as the reference category (1.00), adolescents living in single parent and polygynous family are more likely than the reference category to have poor mental health with respective odds ratio and p-value (OR=2.05, p>0.05 and OR=1.84, p>0.05).

After controlling for other confounding variables; Family type was also seen to contribute to the likelihood of poor mental health among adolescents. Taking monogamous family as the reference category (1.00), adolescents living in single parent and polygynous family are more likely than the reference category to have poor mental health with respective odds ratio and p-value (OR=1.90, p>0.05 and OR=1.53, p>0.05).

Adolescent Mental Health and Personal Characteristics

Those who attend Ekiti State Government College, Ado Ekiti are insignificantly less likely than those who attended Christ Girls school (reference category 1.00) to have poor mental health (OR=0.70, p>0.05), whereas those who attend Holy Child Catholic secondary school and New Model International Group of schools are more likely than the reference category to have poor mental health (OR=1.18, p>0.05, OR=1.09, p>0.05).

Taking the age group of respondents between 10-14 years as a reference category, respondents in the age group of 15-19 years are more likely than the reference category to have poor mental health (OR=1.67, p>0.05).

Those who are in classes JS 3, SS 1 and SS 2 are insignificantly less likely than those in JS 1(reference category=1.00) to have poor mental health with respective odds ratio and p-value (OR=0.50, p<0.05, OR=0.55, p>0.05 and OR=0.52, P>0.05).

This study also revealed that religion contributes to the likelihood of poor mental health among in-school female adolescents in Ado-Ekiti, Nigeria. Taking Christianity as a reference category

(1.00), respondents who were affiliated to Islam are more likely to have poor mental health (OR=0.81, p>0.05).

The result also revealed that those who are Yoruabas are 34% more likely than the Igbos (reference category=1.00) to have poor mental health (OR=1.34, p>0.05).

Taking adolescents acquiring skills after school hours as the reference category (1.00), respondents that are not acquiring skills after school hours are more likely to have poor mental health (OR=1.16, p>0.05).

Adolescent Mental Health and Other Family-related Characteristics

For occupation of respondent's mother, taking those are civil servants, doctors, nurses, pharmacists, teachers and bankers as the reference category (1.00), adolescents whose mothers are traders and those whose mothers engage in other jobs are more likely to have poor mental health (OR=1.61, p>0.05; OR=1.20, p>0.05 respectively).

For occupation of respondent's father, taking those are civil servants, doctors, nurses, pharmacists, teachers and bankers as the reference category (1.00), adolescents whose fathers are traders and those whose fathers engage in other jobs are insignificantly less likely to have poor mental health (OR=0.74, p>0.05 and OR=0.56, p<0.05 respectively).

4.3.3 Test of hypothesis

H0: There is no significant relationship between family type and female adolescent physical and mental health in Ado Local Government Area, Ekiti Nigeria.

H1: There is significant relationship between family type and female adolescents' physical and mental health in Ado Local Government Area, Ekiti Nigeria.

Decision

Family Type and Physical Health

Without controlling for other confounding variables, the logistic regression result revealed that single parent family was not significantly related with physical health. Therefore, we reject the alternate hypothesis and accept the null hypothesis, whereas, polygynous family was significantly related with physical health. Therefore, we accept the alternate hypothesis.

After controlling for other confounding variables, the logistic regression result revealed that single parent family was not significantly related with physical health. Therefore, we reject the alternate hypothesis and accept the null hypothesis, whereas, polygynous family was significantly related with physical health. Therefore, we accept the alternate hypothesis.

Family Type and Mental Health

Without controlling for other confounding variables, the logistic regression result revealed that single parent family and polygynous family were not significantly related with mental health. Therefore, we reject the alternate hypothesis and accept the null hypothesis.

After controlling for other confounding variables, the logistic regression result revealed that single parent family and polygynous family were not significantly related with mental health. Therefore, we reject the alternate hypothesis and accept the null hypothesis.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This study examined family type and physical and mental health of in-school female adolescents in Ado-Ekiti, Nigeria. This chapter presented summary of findings, conclusion and recommendations drawn from the result of the quantitative analysis.

5.1 Summary and Discussion of Findings

The study analyzed data obtained from in-school female adolescents (10-19 years) recruited from four purposively selected secondary schools in Ado Ekiti, Nigeria. The sample size was 421 respondents.

Univariate analysis in this study was carried out using tables of frequency and percentage distribution to describe the background and family characteristics, physical and mental health of the respondents. Bivariate analysis was done using the chi-square table (χ^2) and cross tabulation to analyze the relationship between family characteristics of respondents and the dependent variable (physical and mental health of respondents).

Furthermore, logistic regression model was used for the multivariate analysis to analyze the effect of each family type on the dependent variable.

Family Type of adolescents

This study identified that the adolescents in Ado-Ekiti, Nigeria, commonly live in monogamous families (87.17%). This can be explained in terms of the religion prevailing in this society. Monogamous family is often common among Christians while polygamous family is common

among Muslims and other religions. The majority of the adolescents' parents are Christians which made monogamy a common practice in this area. Among those living in single parent households (9.50%), the majority (8.31%) live in single mother household which indicates that the percentage of single mothers is more than the percentage of single fathers in Ado-Ekiti, Nigeria.

Personal Characteristics of adolescents

The majority of the respondents (76%) attend Christ Girls School, while the least (5%) attends New Model International Group of schools.

Also, most the adolescents sampled fall between the ages of 10-14 (90.50%). According to CIA World Fact book, 0-14 age group has the largest percentage of Nigeria's Population (42.79%). Majority of the respondents are in JS 1 class (47.51%). This is because those in this class fall within the ages of 10-14 years, which is largest age group.

In this study, most of the respondents are Christians (94.54%), while 0.24% are traditionalists.

Yoruba constitute the majority (84.80%) of the study population with the least percentage (0.24%) from Hausa ethnic origin. This is because the area of study is in the South West (Yorubaland), therefore Yoruba ethnic group has the majority of the population.

More percentage of adolescents (68.88%) do not engage in skill acquisition after school hours. This might be as a result of educational levels of respondents' parents. Majority of the parents are well educated and most educated parents are not usually interested in their children learning a handiwork after school but usually interested in their children doing their school assignment.

Majority of the adolescents (66.98%) do not have an alternative source of income apart from their parents while 32.78% have alternative sources of income apart from their parents. This might be because urban areas are usually heterogeneous and people don't often stay together with their extended family relatives except their immediate families. Therefore, children oftentimes get income only from their immediate family (that is, parents). Also, respondents are still in school and majority of them are not engaged in any work for pay, likewise their siblings.

Other Family-related Characteristics of respondents

Result shows that the majority of adolescents' parents are well educated. 62.23% and 67.93% of mother and father respectively completed education to post secondary level. This contributes to the fact that a higher percentage of Nigerians have at least, a primary education, putting Nigeria's literacy rate at 51.1% (World Bank, 2015)

For parents' occupation, mothers who are traders have the highest percentage (49.86%) while fathers who are civil servants, doctors, pharmacists, nurses, teachers and bankers have the highest percentage (45.63%).

Mental and physical health status of adolescents

The majority of the study population has good physical health (54.62%) while 45.38% had poor physical health. In contrast to this, the majority of the study population has poor mental health (54.25%) while 45.75% had good mental health. The gap between the percentage of adolescents having good and poor mental and physical health vary. More adolescents have good physical health with 9.24% higher than the percentage of those with poor physical health. In contrast to the percentage distribution of physical health, more adolescents have poor mental health with 8.50% higher than the percentage of those with good mental health.

Physical Health by Family Type and Selected Background Characteristics

The bivariate analysis on family type, other family-related and personal characteristics and physical health showed that family type and ethnic origin significantly relate to physical health of respondents. The results revealed that in both single parent and polygynous family, the percentage of adolescents with poor physical health is higher than those with good physical health in these families. In single parent family, approximately 11% have poor physical health while 8% have good physical health. And in polygynous family, approximately 7% have poor physical health while 1% has good physical health. Children who grow up in other family types apart from monogamous familydo not benefit from greater economic resources, higher parental quality, closer emotional ties to parents, and fewer stressful events (Amato 2005). They also tend to have lesser access to health care facilities (Simspon et al. 1997) and these family types might not have the ability to meet children's health related and other basic needs (Hack & Parker, 2002).

Also, the bivariate analysis revealed that school type, age group, class, religion, skill acquisition, level of education of parents, occupation of parents and number of siblings of respondents do not significantly relate to physical health.

Mental Health by Family Type and Selected Background Characteristics

The bivariate analysis on family type, other family-related and personal characteristics and mental health showed that the class of respondents significantly relate to mental health. Whereas family type, school type, age group, religion, ethnic origin, skill acquisition, level of education of respondent's parents, occupation of respondent's parents and number of siblings of respondents do not significantly relate to mental health.

The analysis further revealed that a higher percentage of adolescents have poor mental health than good mental health in both single parent and polygynous families. In single parent family, approximately 12% have poor mental health while 6% have good mental health. And in polygynous family, approximately 5% have poor mental health while 3% have good mental health. This result supports the fact that adolescents in family types other than monogamous families, tend to fare worse in a range of health related measures and developmental outcomes (Dawson, 1991; O'Connor et al, 2000; Amato, 2005; Goesling & Avellar, 2007; Bramlett & Blumberg, 2007; Liu and Heiland, 2007).

Further analysis (multivariate analysis) also supports the previous findings on family type and physical and mental health.

Physical health

The binary logistic regression analyses revealed that family type contributes to the likelihood of poor physical health. It was found out that adolescents living in single parent and polygynous households are more likely to have physical health problems than their counterparts living in monogamous households.

Furthermore, the multivariate result revealed that school, age group, class, religion, skill acquisition, parents' occupation were not significantly related with physical health. While ethnic origin was significantly related with physical health.

Mental health

The binary logistic regression analyses revealed that family type contributes to the likelihood of poor mental health. It was found out that adolescents living in single parent and polygynous

households are insignificantly more likely to have mental health problems than their counterparts living in monogamous households.

Furthermore, the multivariate result revealed that school, age group, class, religion, ethnic origin, skill acquisition and mothers' occupation were not significantly related to mental health.

IMPLICATION OF FAMILY TYPE ON ADOLESCENT HEALTH

All the levels of results support the fact that various family types are associated with adolescents' physical and mental health with each type having a wide range of effects on their health status. Family type is of several benefits and also of disadvantages to adolescents' health. It influences an adolescent's physical and mental health through the interplay of three major mechanisms; family stress & parental psychological well-being (stress factor), the family's access to resources (economic factors) and the quality of parenting & the home environment to which the adolescents are exposed, that is, socialization factor (Amato 2005, Cartson & Corcoran 2001). Every family undergoes stress at one time or another, but there lies a difference in the type of stress and the resources available to aid coping with the stress in different families (Dius, Summers &Summers; 1997; Walker, 2005). Health problems arise when individuals experience stress as a result of being born into and exposed to unfavourable atmosphere. The exposure to strain majorly affects the mental health of adolescents, which in turn adversely affects their physical health (Rozanski, Blumenthal, Davidson, Saab, & Kubzansky, 2005; Caltabiano et al., 2008).

Unique stressors are dominant in some families compared to the others. Children living in monogamous families are less likely to experience child and parent-related stress compared to the other family types. Children living in single-parent families are more likely to experience

significant level of stress because these families have smaller financial resources, undergo more work overload, and experience more challenges in managing parenting functions compared to their counterparts in monogamous families (Sanik & Mauldin, 1986; Williams, 1988; Duis, Summers &Summers; 1997). Stressors like strife, jealously, conflict and power relation are commonly found in polygynous households. This contributes to the stress experienced by children born into this family type. Life in polygynous family can be traumatic for children brought up therein. They often suffer some emotional problems such as lack of warmth and love even if there is availability of money and material resources. On the other hand, children brought up in monogamous households are often stable emotionally and they are less likely to suffer emotional problems (Adesehinwa, 2013). The presence of discord, lack of warmth, tension, pressure and economic depression in families result in stress, thereby affecting the physical and mental health of an individual. Once the mental health of a person is affected, it will surely cause the physical health of such individuals to deteriorate.

The mental and physical health of adolescents is also affected by the socialization process in the family, that is, the quality of the child-rearing environment (Bronfenbrenner, 1979 & 1994; Lerner, 2002).

The economic well-being of a household is greatly related to the family type (Aquilino, 1996). The economic deprivation perspective argues that much of the differences in child mental and physical health outcomes in several family types are a result of poverty and family socio-economic challenge (McLanahan and Sandefur, 1994; DeLeire & Kalil, 2001). A single-parent family would usually experience more of economic deprivation relative to monogamous and polygynous families. This is because the burden of survival in a single-parent family is borne by one parent, as against the possibility of such task being shared among couples in other family

types. Also, in polygynous families, there is often more needs to be met (that is, more children to cater for, large family size) and the resources available might also be limited to reach everyone's need in the family. All of these factors contribute to the physical and mental health status of adolescents.

5.2 Conclusion

This study examined the relationship between family type and in-school female adolescent physical and mental health in Ado-Ekiti, Nigeria. It was found out that family types relate to physical and mental health of adolescents. The findings point out key differences in adolescent physical and mental health by family types. It was revealed that poor physical and mental health were common in single parent and polygynous families than monogamous families. This suggests that family type is a major factor which shapes an adolescent health, for it touches the lives of most adolescents on a daily and deeply personal basis. These findings agree with previous research in suggesting that adolescents in other family types tend to fare worse than those in monogamous families.

5.3 Recommendations

The survival and health of adolescents are essential to strengthening prospects of demographic dividend in Nigeria, ending extreme poverty, promoting development and resilience, and achieving the sustainable development goals. Below are my recommendations for theoretical and practical purposes based on the findings of this study:

1. Additional research is needed on the direct and indirect impacts of family type and other family characteristics (such as family size, parenting styles, household income, etc) on adolescent physical and mental health, in order to discover the ways through which

family-related characteristics affect adolescent health in Nigeria. This will also amplify our understanding of what families contribute to adolescent health.

2. Programs on awareness of how different family types directly and indirectly affect adolescent physical and mental health should be made available to youths so as to help them in decision making as regards the best family type to build. Emphasis should be placed on the benefits of building a stable monogamous family and relationship.
3. Religious leaders should teach the importance of building a stable monogamous family to their followers, and encourage them to practice stable family relationships.
4. Programmes should be organized in government policies to improve the well-being and welfare of adolescents, especially those from polygynous and single parent families.
5. A variety of public and private support measures and programs should be organized to empower as well as relieve polygynous families and single parents, especially those that are single mothers in distress.
6. Parenting education programs, where parenting skills will be enhanced, should be made available and accessible.
7. Life skills education such as seminars and workshops on how to manage one's emotions, cope with stress, maintain interpersonal relationships should be included in the curriculum of schools for the promotion of health and well-being of adolescents.

In conclusion, adolescent health and well-being should be top priorities in all policy formulations and design in government and private sectors.

REFERENCES

Patel, Flisher, Nikapota & Malhotra; 2008: Promoting child and adolescents mental health in low and middle income countries; Journal of child psychology and psychiatry, 49:3, pp 313 334.

World Health Organization 2004: Promoting mental health: concepts, emerging evidence, practice (Summary Report) Geneva: World Health Organization; 2004.

Kolappa, Henderson & Kishore- Bull World Health Organization, 2013: No physical health without mental health; lesson unlearned; 91: 3-3A.

Russell M Viner, Elizabeth M Ozer, Simon Denny, Michael Marmot, Michael Resnick, Adesegun Fatusi, Candace Currie, Lancet 2012: Adolescence and the social determinants of health; 379: 1641–52.

Professor Amechi Nweze 2004: The Nigerian family in health and illness; Issues of national development, Unijos inaugural lecture series 17.

José Frantz, Zinzi Sixaba and Mario Smith, 2015: A Systematic Review of the Relationship Between Family Structure and Health Risk Behaviours Amongst Young People: An African Perspective: Vol. 7, 3-11.

Mohammad Al-Sharfi, Karen Pfeffer & Kirsty A. Miller, 2015, volume 22, 272-286: Journal of family studies- A systematic review; the effects of polygamy on children and adolescents.

World Health Organization 2016: Adolescents- Health risks and solutions; World Health Organization 2017: Physical Activty; World Health Organization 2014: Health for the World Adolescents, a Second Chance in Second Decade.

Walker, 2005: Adolescent Stress and Depression, produced by extension; extension center for Youth Development.

Sigfusdottir, Kristjansson, Thorlindsson, and Allegrante; 2016: Stress and Adolescent well being: The need for an Interdisciplinary Framework.

Duis, Summers & Summers (1997): Parent Versus Child *Stress* in Diverse Family Types: An Ecological Approach; 17(1), 53-73.

Thomson, Mchanahan & Gurtin; 1992: Journal of Marriage and the Family 54, (1992)368-378: Family Structure, Gender And Parental Socialization.

Peterson, 2015 Springer, Boston: Family influences on Adolescent Development, In: Gullotta, Adams, Handbook of Adolescent Behavior Problem.

Henningham, Belfer, Conti, Ertem, Omigbodun, Rohde, Srinath, Ulkuer & Rahman, 2011: Global Mental Health 2, Child and Adolescent Mental Health Worldwide; Evidence for Action: Kieling, Baker, 378: 1515–25.

Stanford Children's Health, 2017; World Health Organization 2017: Child and Adolescent Mental Health.

Kelly Musick & Ann Meier, 2010: Are Both Parents Always Better Than One? Parental Conflict and Young Adult Well-being., USA. Pwp-Ccpr: 2008-022

Unni Karin Moksnes 2011: Stress and Health in Adolescents: The Role of Potential Protective Factors.

Princeton 1991: Parents and Families' Influence on Adolescent Health: Volume II, Chapter 3, 11-51.

Ross Mackay 2005: The Impact of Family Structure and Family Change on Child Outcomes: A personal reading of the Research literature, Ministry of Social Development.

Stephen Demuth and Susan l. Brown, 2004: Family Structure, Family Processes, and Adolescent Delinquency: The Significance of Parental Absence versus Parental Gender: Vol. 41, No. 1, 58-81.

Gail B Slap, Lucy Lot, Bin Huang, Comfort A. Daniyam, Therese M Zink & Paul A. Succop, 2003: Sexual Behaviour of Adolescents in Nigeria: Cross sectional survey of secondary school students: vol 326(15) pg 1-6.

Adesehinwa 2013: Effects of Family Type (monogamy or polygamy) on Students' Academic Achievement in Nigeria: Vol. 5(7), pp. 153-156.

Kristi Williams, Sharon Sassler, Adrianne Frech, Fenaba Addo, Elizabeth Cooksey, 2013 & 2014: Mothers' Union Histories and the Mental and Physical Health of Adolescents Born to Unmarried Mothers. US National library of Medicine, National Institute of Health: Vol. 54(3) 278-295.

Alissa Goodman & Ellen Greaves 2010: Cohabitation, Marriage and Child Outcomes- Executive summary..

Mary Parke, 2003: Are Married Parents Really Better for Children? What Research says about the Effects of Family Structure on Child Well being.

Callie E. Langton and Lawrence M. Berger, Soc Serv Rev, 2011: National Institute of Health Public Access; Family Structure and Adolescent Physical Health, Behavior, and Emotional Well-being: 85(3): 323–357.

Demo, David H. & Alan C. Acock. (1996): Family Structure, Family Process, and Adolescent Well being, Journal of Research on Adolescence: 6, 457-488.

Williams S. Aquilino, 1996: The Life Course of Children Born to Unmarried Mothers; Childhood Living Arrangements and Young Adults Outcomes: vol. 58, 293-310.

Impact of family issues on adolescents, 2009.

Catherine E. Ross, John Mirowsky, Karen Goldsteen (1990): Journal of Marriage and the Family, Vol. 52, No. 4, Family Research in the 1980s: The Decade in Review), pp. 1059 1078: The Impact of the Family on Health

Amoran, Lawoyin and Oni, 2005: Risk Factors Associated with Mental Illness in Oyo State, Nigeria, A community based study.

Thomas Deleire & Ariel Kalil, 2001: Good things come in threes; Single Parent Multigenerational Family Structure and Adolescent Adjustment.

Susan L. Brown: Family Structure Transitions and Adolescent Well-being.

APPENDIX

QUESTIONNAIRE

DEPARTMENT OF DEMOGRAPHY AND SOCIAL STATISTICS

FEDERAL UNIVERSITY OYE EKITI, EKITI STATE, NIGERIA

FAMILY TYPE AND FEMALE ADOLESCENT HEALTH IN ADO LOCAL GOVERNMENT AREA, EKITI NIGERIA

FAMILY AND HEALTH STUDY

TO WHOM IT MAY CONCERN

Dear Miss,

This is a student's research project for the sole purpose of studying the above-mentioned topic. This exercise is purely for academic purpose and for the award of a degree. This also has nothing to do with you as a person and as such, information given by you will be treated confidentially.

I plead that you give sincere responses to these questions as much as you can. Your co-operation is highly needed.

Consent: Yes ☐ No ☐

Serial Number: .....

Date of interview: .....Day .....Month .....Year;

Area of interview: .....

School Name: .....

Interview Outcome: Completed ☐ Not Completed ☐ Refused ☐

SECTION A

This section provides questions relating to the background characteristics of respondents. Please provide answers or tick(√) the most appropriate option as applicable to you.