CHAPTER ONE

INTRODUCTION

This chapter provides a general background to the study. It describes the research problem, objectives and significance of conducting the study. The chapter also provides operational definition of the key concepts, limitations and delimitations of the study.

1.1. Background of the Study

Globally, the well-being of children has been a subject of great concern. For many years, multilateral organsations such as the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), bilateral organisations, non-profit groups and charitable foundations have focused their resources on improving the health and well-being of children. Nonetheless, the health needs of millions of children still remain unmet. Children under the age of 18 constitute a third of the world population (UNICEF, 2012). According to World Population Awareness (2010), 2.2 billion of the people living in the world are under 18 years with 2 billion from developing countries. Children are one of the groups at the risk of diverse health problems which sometimes become worsened when they lose either of or both parents who take responsibility for ensuring that they are physically, psychologically, emotionally and spiritually healthy. Therefore, the loss of parents has been identified as a major threat to the health of children in general (Segendo and Nambi, 1997; Manuel, 2002; Atwine, *et al.*, 2005 and Nyamukapa, *et al*., 2008).

Out of the two billion children in the developing countries, over 140 million under the age of 18 have lost one or both of their parents. And sub-Saharan Africa where Nigeria is located has the largest orphan burden of over 70 million children (State of the World's Children, 2011). In Nigeria, out of the total population of 140 million in 2008, total orphans and vulnerable children (OVC) were estimated at 17.5 million, constituting 24.5% of the children's population (Federal Ministry of Women Affairs and Social Development, 2008). Although the HIV/AIDS epidemic has been reported to be the main cause of orphanhood and vulnerability, most children are orphaned and made vulnerable

by other causes such as natural disasters, family or communal conflicts, poverty and other health conditions (Gulaid, 2008).

Aday (2001) defined vulnerability as being susceptible to neglect or harm, or being at the risk of poor, social, psychological and or physical health outcomes. On the other hand, Leight (2003) defined vulnerable population as groups who have a heightened risk for adverse health outcomes. One important category of such groups in Nigeria is the orphans and vulnerable children which include children affected by HIV or other chronic illnesses, children in need of alternative family care, the abused and neglected children, physically challenged ones, children affected by armed/communal conflicts and children in need of legal protection (National Guidelines and Standards of Practice on Orphans and Vulnerable Children, 2007).

These children often face a lot of adversities in their pathway of development to full adulthood (Brooks, 2006). The adversities may compromise their health or assist them to develop resilience that enhances their well-being depending on the resources at their disposal. The process of growing up in itself is a task that children often learn how to cope with. Besides, the diverse challenges experience by OVC further deepened their vulnerability, exposing them to varying degrees of psychosocial health problems which may hamper their ability to cope with life challenges. Conversely, some individual among the vulnerable children may not exhibit poor psychosocial health outcomes despite all the varying risk factors that they are continually exposed to (Alvord and Grados, 2005; Brooks, 2006 and Masten, 2007, 2011). The risk factors may be internal or external hazards or threats that increase the child's vulnerability or susceptibility to negative developmental and health outcomes (Engle, Castle and Menon, 1996). When individuals made vulnerable are able to cope with life challenges as to attain optimal health with good health outcomes, the individual is said to be resilient (Masten, Best and Garmezy, 2005).

Resilience as a concept has often been used to describe a person's ability to cope with living in spite of stresses and problems while building strengths that protect and promote well-being (Luthar, Cicchetti, and Becker, 2000; Masten, 2001 and Boyden and Mann, 2005). Ungar (2008) defined resilience as the individual capacities, behaviours and protective processes associated with health outcomes despite exposure to a

significant number of risks. Resilience is recognised as depending on both individual and group strength, and is highly influenced by supportive elements in the wider environment. Those positive reinforcements in children's lives are often described as "protective factors" or "protective processes" (Boyden and Mann, 2005). They operate at different levels and through different mechanism – individual, family, communal, institution and they frequently correlate with and complement one another. Their effects are shown only in their interaction with risk (Boyden and Mann, 2005).

According to Crawford, Wright and Masten (2005), resilient children are expected to adapt successfully even when they experience stress or trauma that is against their health and development. However, some vulnerable children may not have the necessary resources (protective factors) to help them cope well thus they become more susceptible to negative health outcomes most importantly those that affect their psychosocial well-being. However, major responses addressing the needs of OVC have been focused on their physical well-being while neglecting their psychosocial well-being. The last situational assessment and analysis of OVC in Nigeria by Federal Ministry of Women Affairs and Social Development (2008) found that OVC were significantly more likely to experience psychosocial distress than non-OVC.

Common psychosocial distress reported in literatures among this population include symptoms of anxiety, depression, hopelessness, low self esteem and suicidal ideation (Williamson, 2000; Makame, *et al*., 2002; Atwine, *et al*., 2005; Zhao, *et al*., 2007 and Boris, *et al*., 2008). Past studies have consistently linked orphanhood to psychosocial distress among the vulnerable children (Nyamukapa, *et al*., 2008 and Gilbborn, *et al*., 2006). Most comparative studies have shown that orphans are more at risk for impairment on some psychological dimensions such as depression, anxiety, low self esteem than non orphans' vulnerable children (Segendo and Nambi, 1997; Manuel, 2002 and Atwine, *et al*., 2007).

The conclusion that could be drawn from several literatures reviewed in this study is that loss of parents and other causes of vulnerability are likely to endanger the psychosocial health of a child. In the light of this, providing physical or material support in the form of clothes, food, shelter and money will not be enough if psychological well-being as well as the social interaction of the child is unhealthy. According to the National

Standard of Practice for OVC in Nigeria (2007), psychosocial needs of orphans and other vulnerable children have often been ignored, superficially handled or seen as a specialised low priority type of intervention. Without their psychosocial health needs being met, the OVC cannot eat, learn and relate well. It is, therefore, pertinent that this aspect of care be handled with care for children to enhance their performance in other areas of life.

Protecting and enhancing psychosocial well-being of children is recognised as a major priority in Nigeria for ensuring healthy growth and development of capacity of vulnerable children to achieve their full potential while increasing attention is also being given to workforce development across a broad range of professions in helping to protect and nurture children (Federal Ministry of Women Affairs and Social Development, 2008). The care of vulnerable children is a significant public health issue that must be addressed through public health values and concepts, principally universal access to public health professionals through child health promotion programme (Hall and Elliman, 2003, Department of Health and DfES, 2004). Therefore, /there is need to educate and support public health care practitioners so that they can have the necessary values, knowledge and skills to work effectively with vulnerable children and their families. Public health nurses and school teachers are uniquely placed to increase key protective factors that can assist children to be psychologically and socially stable in the face of adversity.

Review of the effects of various interventions designed to promote resilience and improve psychosocial health outcomes across different countries shows that most interventions have been very useful (Cowen, Wyman, Work and Iker, 1995; Gance-Claveland, 2000; Houck, Darnell and Lussmann, 2002; Brown, *et al.*, 2009a; Karthik-Lakshman and Mythili, 2010, Jordan, *et al*., 2010 and Miller, *et al*, 2011); however, the outcome measures differ from study to study. Common psychosocial interventions explored by researchers in previous studies include counselling, memory book, peer support or kids clubs, and resilience games. Out of all these interventions, resilience building has been neglected in most interventions addressing the psychosocial health needs of OVC in Nigeria. Focus of support has been on peer support club and counselling. However, studies have shown that people with high level of resilience are

likely to notice positive meaning within the problem they face, endured fewer depressive symptoms and experienced more positive emotions (Fredrickson, *et al.*, 2003 and Bonano, *et al.*, 2007). Also, building resilience has been found to be central in personal, social, mental and physical developments (Wagnild, 2009).

In spite of the previous findings on the usefulness of various interventions in use to promote psychosocial well-being of children, psychosocial support interventions are still poorly understood among different stakeholders offering the services and there is still limited information in the developing countries on the intervention programme that will be effective in alleviating psychosocial distress among orphans and vulnerable children (Boston University Centre for Global Health and Development, 2009). Also, little research had been done and few tools were available to measure psychosocial manifestations of vulnerability and evaluate approaches to reduce their negative outcomes (Schenk, Mikchaelis, Sapiano, Brown and Weiss, 2010). This could be confirmed by the recent submission of Eggenberger (2012) that the effectiveness of programmes on psychosocial health of vulnerable children had rarely been evaluated and that most psychosocial interventions had been based on anecdotal evidences.

As Nigeria review its National Plan of Action for OVC (NPA) in the coming years, there is need for research input to address psychosocial health needs of OVC.

1.2. Statement of Problem

Orphans and vulnerable children are part of the most disadvantaged population in society. They face diverse health challenges depending on the variation in social environment where they found themselves. There is an increasing body of evidence illustrating the adverse consequences for children of a failure to address their needs effectively, linked to negative outcomes in terms of their social and emotional development (Macdonald, 2002). There is also a growing recognition that children who are especially vulnerable need additional interventions and support, including those that promote healthy social and emotional development, and address mental health problems early in life (Knitzer and Lefkowitz, 2006).

Scientific evidences from empirical literatures have shown some negative psychosocial health outcomes among OVC population. In general, they suffer increased

psychological distress in sub-Saharan African settings (Foster, Makufa, Drew, and Kralovec, 1997 ; Nampanya-Serpell, 2000 ; Basaza and Kaija, 2002 ; Makame, Ani, and Grantham-McGregor, 2002; Oburu, 2004; Atwine, Cantor-Graae, and Banjunirwe, 2005;; Chatterji, *et al*., 2005; and Cluver and Gardner, 2007). The conclusion drawn from existing studies is that vulnerable children most especially orphans are at risk of psychosocial distress such as depression, anxiety and low self-esteem (Segendo and Nambi, 1997; Manuel, 2002; Atwine, *et al*., 2005; Nyamukapa, *et al.*, 2008, and Gilborn, *et al.*, 2006).

If children's psychosocial health needs are not met, they have potential for mental breakdown and poor participation in school work which may make them to drop out of school. When these children become dropouts from schools, they are vulnerable to such risky behaviours as sexual and substance abuse among others. Generally, this will lead to increased demand for health and social services for the affected children, and loss of human capital investment.

However, many children have been found to be resilient by being emotionally stable and relating well with people despite the challenges and exposure to the varying divers risk factors (Crawford, Wright, and Masten, 2005; Seccombe, 2002, and Masten, 2001). This has been linked to availability of resources both within the family and in the schools which enhanced such child's ability to be psychologically and socially healthy to be able to cope with life situation (Germane and Gitterman, 1996). However, not all children have access to these resources. Thus, the reason why this intervention programme is utilising a public health approach within an existing educational and health infrastructure is to reach large numbers of children who are in need of support.

To date, the response to the orphans and vulnerable children's crisis has been driven by civil society organisations through the support of international organisations in Nigeria. For the most part, these responses have been limited with focus on peer support group, counselling and development of life skills as a way of promoting psychosocial health among these children with focus on out-of-school youths. The roles of resilience in most intervention targeting these children have been neglected. However, a research among Norwegian adolescents revealed a strong association between diminished resilience and psychological symptoms such as anxiety and depression (Hjemda, *et al*. ,

2007; Hjemdal, *et al*., 2011,) while other studies confirmed that resilience protects against depression, anxiety, fear, helplessness and other negative emotions (Wagnill, 2010; Fredrickson, *et al*., 2003; and Bonano, *et al.*, 2007)). In addition, the current structure for provision of psychosocial interventions in Nigeria as highlighted in the standard of practice (SOP) for caring for vulnerable children did not lay emphasis on resilience building as a means of promoting children's psychosocial health (National Guidelines and Standard of Practice, 2007) thus one of the reasons for conducting this study.

Furthermore, there have been no intervention study conducted in this environment that links resilience building to improve psychosocial health outcomes among vulnerable school children. Also, literature review in this area showed that major researches conducted on resilience have dealt with life outcomes and not necessarily on health (Gitterman, 2001). Apart from introducing resilience building as one of the psychosocial interventions to address psychosocial well-being of OVC, this study will evaluate its usefulness alongside the existing intervention (peer support). This is necessary due to documented evidences that effectiveness of programmes on psychosocial well-being of vulnerable children has rarely been evaluated by the stakeholders offering the services (King, *et al*., 2009 and Engle, 2012). Most reports on psychosocial interventions have often been based on anecdotal evidences to document their impact (Eggenberger, 2012). Thus only few *evidence-based answers* have emerged to basic questions such "what interventions are most effective?" (Schenk, *et al*., 2010 and Eggenberger, 2012). While some valuable research has been conducted on OVC in Nigeria, there is very limited rigorous research evidence and data on OVC and intervention to inform policies and programme (Boston University Centre for Global Health and Development, 2009). An additional finding by this university in Nigeria shows that vast majority of studies (67%) were situational analyses or needs assessment; there have been few longitudinal cohort studies of their well-being and there was no study on the effectiveness and impact of various OVC interventions.

Reaching vulnerable population is an important aspect of community health nursing. Vital to the art of providing effective and appropriate nursing care is the nurses' ability to convey recognition, understanding, sensitivity and compassion to people who

have a negative self-concept or who confronts stressful life events (Allender, Rector and Warner, 2010). With the increasing number of orphans and vulnerable children, there is increasing demand for greater knowledge about lives and needs of OVC (Schenk, Mikchaelis, Sapiano, Brown and Weiss, 2010). However, a general lack of knowledge about the care of vulnerable population has been found among nurses due to the lack of formal training in nursing education (Fisher, Frazer, Hasson and Orkin, 2010). It is expedient for nurses to recognise the impact of stressors on children and support them to develop a healthy self image and esteem to mitigate the impact of their stressful experiences. On the other hand, little is known by nurses and teachers about psychosocial support of orphans and vulnerable children and only few of them are already involved in their care (Olowokere and Okanlawon, 2013). On the whole, there has been a downplay of the roles that nurses and teachers can play to promote psychosocial well-being of vulnerable children.

The need for children to be physically and psychologically healthy to be successful in school has been found to be very important because healthy children are more motivated and prepared to learn (CDC, 2008A and O'Connell, 2005). However, most programmes addressing the needs of OVC have failed to integrate psychosocial support into existing education and health infrastructure (Engle, 2008). To do this effectively, public health nurses and teachers are strategically placed to provide individual as well as group support to enhance healthy outcomes among vulnerable children during school health visiting programme.

The main question that this study seeks to address is: what are the effects of a nurse-led resilience-based training and peer support activities on resilience and selected psychosocial outcomes among Orphans and vulnerable children.

1.3. Research Questions

1. What is the level of knowledge of nurses' and teachers' about psychosocial support of orphans and vulnerable children?
2. Are public health nurses and secondary school teachers involved in the psychosocial support of OVC in the school setting?
3. What is the level of resilience of OVC in the study setting?

4. What are the psychosocial conditions of OVC in relation to anxiety, depression, self-esteem and social connection?
5. Is there any association between OVC characteristics (age, gender, orphan type, living structure and living with siblings) and both resilience and psychosocial health outcomes?
6. Is there any relationship between the level of protection of the children and their resilience and psychosocial health outcomes?
7. Which protective factors predict resilience among the children?
8. What is the effect of psychosocial training on nurses and teachers' knowledge about psychosocial support of OVC?
9. What are the effects of the resilience-based training and peer support activities on resilience and psychosocial health outcomes of OVC?

1.4. Research Objectives

1.4.1. Broad Objective

To evaluate the impact of resilience-based training and peer-support activities moderated by nurses and teachers on resilience and psychosocial health outcomes of orphans and vulnerable children in selected junior secondary schools in Osun State.

1.4.2. Specific Objectives

The specific objectives of the study were to**:**

1. assess the knowledge of public health nurses (PHN) and school teachers on psychosocial support of OVC
2. explore public health nurses and teachers' involvement in psychosocial support of OVC in the school settings.
3. determine the level of resilience of OVC in the study setting.
4. determine psychosocial conditions of OVC in the school setting in relation to anxiety, depression, self-esteem and social connection.

5. explore the association between OVC characteristics (age, gender, orphan type, living structure, and living with siblings) and both resilience and psychosocial health outcomes.
6. ascertain the relationship between the level of protection possessed by OVC and both resilience and psychosocial health outcomes
7. identify factors that predict resilience among the children
8. evaluate the effect of psychosocial training on nurses and teachers knowledge about psychosocial support of OVC
9. evaluate the effects of resilience-based training and peer support activities on OVC's resilience and selected psychosocial health outcomes.

1.5. The Significance of the Study

The study focuses on helping OVC acquire the resources needed for better psychosocial health and adaptation in the face of risks which is often unavoidable in their pathway to adulthood. Building resilience is central in personal, social, mental and physical development. Review of several studies on resilience has shown that resilience protects against (and reverses) depression, anxiety, fear, helplessness and other negative emotions, and thus has the potential to reduce their associated physiological effects (Hjemdal, *et al*., 2007; Hjemdal, Vogel and Solem, *et al*., 2011 and Wagnild, 2009). Thus, it is believed that resilience building training will enhance children's resilience and psychosocial health.

Apart from increasing the body of knowledge in the area of nursing care for this subset of vulnerable population, it will help to establish a structured support system within the public health institutions (schools and primary health care) that can enable public health nurses and teachers to harness relevant resources to take responsibilities for the care and protection of vulnerable young school children. These interventions are also expected to provide a practical guideline for use by public health nurses, teachers and other relevant stakeholders for provision of psychosocial support for vulnerable children as early as possible.

The use of the school as a site of intervention will contribute to children's retention in school because children need not drop out of school due to life challenges such as loss of parents, poverty and other stressors if they have the necessary support for them to be psychosocially healthy and resilient. These interventions are of great value to school children because literature has shown that experiences involving supportive peers, positive teacher influences and opportunities for academic success or otherwise have been positively link to resilience (Olsson, *et al*. 2003). The implementation of the study within the government structure (schools and PHC) will facilitate continuity and sustainable response. In addition, the intervention packages if found effective could be adapted to support other vulnerable populations.

This study will also help public health nurses and teachers to function as community change advocates for children at disadvantaged situation. The findings from this study would further enhance theoretical knowledge about resilience and psychosocial health among this population in Nigeria.

1.6. Delimitations

The study was delimited to in-school orphans and vulnerable children while excluding out-of-school OVC. The school was the focus because of convenience to reach a larger number of OVC between ages 9-18, and also because vulnerable children in schools are often neglected in most interventions in the country while focus had been on the out-of-school ones. This study was also delimited to selected public secondary schools in two local government areas of Osun state. Study was limited to the public health nurses based at the primary health care level, those at the primary health care arms of the teaching hospitals and teachers in government-owned public schools. Public health nurses working at the secondary and tertiary health facilities (GOPD and wards) and teachers in private-owned schools in the selected LGAs were excluded from the study.

1.7. Operational Definitions of Key Terms

For the purpose of this study, the following terms are defined as follows:

1. Resilience: Resilience in the context of this study refers to OVC capacity to cope with stressors (such as parental's death, poverty, family separation) which is indicated by the total score obtained by the children on the resilience scale.

2. Nurse-led Intervention: These are activities initiated and moderated by a nurse to promote resilience and psychosocial health outcomes of OVC. These include:

i. **Psychosocial support training**: This is a training programme designed to improve public health nurses and teachers' knowledge to provide psychosocial support to OVC.

ii. **Resilience-based training**: These are training activities that focus on instilling attitudes, knowledge and skills to develop core resilience characteristics that can assist OVC to cope with psychosocial distress.

iv**. Peer support activities**: These are activities designed to promote group dynamics, sharing of feelings and life skills development.

3 **Orphans and Vulnerable Children (OVC)**: They are male and female in-school children who are between ages 9-18 and who are rated as more or most vulnerable on OVC vulnerability index and are in junior secondary classes as at the time the study was conducted.

4. **Public Health Nurses**: These are nurses that are trained and licensed by the Nursing and Midwifery Council of Nigeria to provide public health services, and that are employed to provide primary health care services.

5. **Teachers**: These are people who have educational qualification to teach and that are currently teaching in the selected public junior secondary schools.

6. **Psychosocial** H**ealth Outcomes**: These refer to psychosocial status of OVC in relation to their scores on anxiety, depression, self-esteem and social connectedness scales.

7**. Protective factors**: These are resources possessed by the children that can promote resilience and psychosocial health outcomes.

8. **Protection:** The level of protective factors possessed by the children to promote resilience and psychosocial health outcomes.

9. **Effects**: Change in resilience and psychosocial health outcome scores as a result of the resilience-based training and peer support activities.

10. **Knowledge**: It is the level of understanding that public health nurses and teachers have about psychosocial support of OVC. Respondents who scored 50% and above ($\geq$47) out of a total score of 94 are categorised to have good knowledge while those who scored below 50% are categorised to have poor knowledge.

CHAPTER TWO

LITERATURE REVIEW

This chapter presents the review of relevant literature in sub-headings to facilitate understanding of the various concepts under study and to present logically the empirical findings which are relevant to the objectives of the study. The theoretical framework underpinning the study was also discussed.

2.1. The Concept of Vulnerability, Vulnerability Assessment and Implication for Intervention among School-Age Children

The term vulnerability is derived from the Latin verb, "vulnerare" which means "to cause damage" or injury (Aday, 1993). It is an important concept for nursing research because it is intrinsically connected to health and health problems (Rogers, 1997). Its specific connotation in terms of health care is "at risk for health problems." According to Aday (2001), vulnerable populations are those at risk for poor physical, psychological or social health. Literature has also shown that anyone can be vulnerable at any given point in time as a result of life circumstances or response to illness or events (Chesnay, 2008). This is because vulnerability is dynamic and relates to all entities even the universe (Michaels and Moffett, 2008). However, some groups of the population have been found to be more vulnerable and thus have worse health outcomes than the rest of the population (Sebastian, 2008). One of such groups is the children population.

The term vulnerable child is used frequently in health and social care practice and has been used interchangeably with disadvantaged child, cause for concern, high dependency, high risk or child in need (Appleton and Clemerson-Trew, 2007) and children who would benefit from extra help from public agencies in order to make the best of their life changes (Department of Health, 1999). Explaining vulnerability among children is a bit technical. Evans (2002) stated that defining vulnerability among children is epistemologically problematic because it is a complex issue that depends on a specific milieu. Thus, vulnerability is usually conceptualised by different settings based on specific criteria. According to the National Plan of Action (2007) for vulnerable children

in Nigeria, identification of vulnerable children is dependent on a particular setting and vulnerability may denote different things to different people and communities.

However, research evidences have acknowledged that a range of predisposing factors can contribute to vulnerability amongst school-age children. Such factors include age, sex, loss of parents, poverty, family living structure, child labour, disability, orphanhood and being in a child-headed household, hunger, insecurity, emotional problems and poor supervision of children by parents (Aggleton, 1996; Stewart-Brown 1998; Adler and Newman, 2002; Hall and Elliman, 2003, Shi and Stevens, 2005a,b, and Olowokere and Okanlawon, 2013). It is important to mention that poverty is a primary cause of vulnerability (Shi and Stevens, 2005a). A correlation has been found between individual indicators of socio-economic status (e.g. income, education and occupational status) and a range of health indicators. This correlation is called socio-economic status gradient (Sebastian, 2008). Having knowledge of these lists of vulnerability risk factors can be helpful for public health professionals to determine whether a child or young person could be vulnerable or in need of support.

Olowokere and Okanlawon (2013) in a preliminary assessment of vulnerability among school children identified poverty as a major factor in the study setting. The proportion of school children who were the sole source of household income or the household living between or below poverty level was a major concern. This may not be unconnected to the fact that the public schools are mostly attended by the children of people of low class while the private schools are presumably patronised by children of the elite, medium or high socio-economic group in society as submitted by Opara, Ikpeme and Ekanem (2010). Lower socio-economic status of household can also affect health outcomes throughout life (Blackwell, Hayward and Crimmins, 2001).

It is widely recognised that there are different levels or degrees of vulnerability. Early assessment of a child or young person's needs is essential to ensure that sources of stress for children are identified and appropriate interventions offered (HM Government, 2006c). The assessment of vulnerability will also be useful to identify characteristics or condition to potentialise the available resources to cope with health problems (Miller, 1995)

Vulnerability could be viewed from individual level in which the individual child is examined within a system context and intervention is directed at the individual based on assessed needs (Chesnay, 2008). Put differently, it could be viewed as an aggregate issue where collections of individuals are grouped together based on common health problems and intervention provided to them collectively (Chesnay, 2008). Whichever way it is viewed, it is important for public health nurses to have the necessary capacity to care for both the individual and groups. However, public health services could be more cost effective when it is directed at group because epidemiological patterns can be detected in groups and appropriate interventions developed that provide better quality health care to more people (Chesnay, 2008).

Anecdotal evidences show that the phenomenon of vulnerability has received extensive attention among the out-of-school youths due to civil society response and donor agencies support in Nigeria but no work had been done to explore vulnerability among in-school children for appropriate intervention. This creates a knowledge gap which must be addressed to avert the consequences of unaddressed vulnerability which may impact on the children's health, academic performance and future development. Early vulnerability assessment and intervention can help keep the children in school and reduce the number of out-of-school children.

Moreover, the school is the second home of children because they spend more time in the school than other places and it is therefore an ideal place to support children who are vulnerable to promote their well-being, academic success, and lifelong achievement. Public health nursing in schools is posited to have a significant influence on health and education of school-age population (Trim, 2011; MacDougall, 2004; Mitchell, Laforet-Flesser and Camiletti, 2009; Dalgreen and Whitehead, 2006 and Falk-Rafael, Fox and Bewick, 2001).

In Nigeria, school health services are provided by the local government. It is among the primary health care services and they are one of the tasks of public health nurses. Due to reasons such as lack of personnel and heavy workload, these services are limited to health education, screening and management of minor ailments. Not enough importance is given to services that protect or improve psychosocial health. Although school health nurses have a great deal of responsibility for health protection and

improvement, nurses are not employed in public secondary schools in Nigeria except for colleges, universities and private schools. Therefore, public health nurses function as school nurses and offer these services as part of primary health care. Thus, the need to strengthen their capacity to implement appropriate interventions to address psychosocial health problem among school children cannot be over-emphasised.

Major interventions for responding to OVC needs in Nigeria have always been through the non-governmental organisations (NGOs), the sustainability of which may not be guaranteed as it is often donor dependent. Focus of psychosocial intervention in Nigeria has also been more on children that are made orphans or vulnerable by HIV while neglecting large numbers of children that are made vulnerable by other means such as parental death, poverty, parental conflict and war, to mention but a few. In addition to this, focus has been majorly on OVC outside of the school settings while neglecting those within the school settings who could drop out due to lack of prompt attention to their basic physiological and psychosocial needs.

Given the current attention to vulnerable children in the school setting in Nigeria, a comprehensive response is necessary among different stakeholders to meet the physical and psychosocial needs of the children. Failure to do this may result into a short term effect on their physical and psychosocial health which includes poor health, poor school attendance, and psychosocial distress. Long-term consequences may be dropping out of school, chronic trauma, mental breakdown, risk behaviour (sexual and substance use,) family disintegration and social isolation. These can have national consequences which may include increase demand for health and social services, loss of human capital investment, political and social instability.

Researchers and authors define vulnerable populations in their own way and there are different categories of vulnerable populations. For the purpose of this study, a vulnerable child is a school child who because of circumstances of birth or immediate environment, is prone to deprivation of basic needs related to health, nutrition, education, protection, psychosocial, shelter and economic support and thus disadvantaged relative to his or her peers and are currently in public schools.

The Centre for Disease Control Prevention (CDC, 2013) recommended coordinated school health programme as a strategy for improving students' health and

learning in nations' schools. A standard comprehensive school health programme can be helpful in addressing vulnerability among the school-age children. This is because it provides holistic approach to care for all school children. A standard coordinated school health programmes consists of eight components which are health education, physical education, health services, nutrition services, counselling, psychological and social health services, healthy and safe environment , and health promotion for school staff.

Out of all these services, a preliminary assessment by Olowokere and Okanlawon (2013) in the study setting shows that psychosocial health support is lacking in all the components of care in the selected primary health care facilities in the study settings. This could have a lot of consequences on the children if nothing is done to ensure that the children are healthy psychosocially. The proportion of children who missed school (32.1%, n=797) or verbalised wanting to leave school (1.2%, n=31) from the vulnerability assessment done in the study setting confirms Lekule and Beckford (2013) submission that vulnerable children continue to lead in school dropout. Quite a number of the children (37.6%, n=931) in the assessment were experiencing psychosocial distress and the need to factor psychosocial support into school health programme became highly important to the health of the children. These preliminary findings in the study settings further reinstate the emphasis the National Plan of Action (2006) for vulnerable children in Nigeria placed on mainstreaming psychosocial support into all programmes that support children. However, the review of the existing school health programmes by the researcher shows that psychosocial support is deficient while nurses claimed not to have enough time to identify children that are distressed.

Failure of providing adequate psychosocial support to vulnerable children could lead to psychological, social, physical and mental challenges that can jeopardise their learning abilities and potential success in life. However, a study conducted in South Africa by McGrath and Noble (2010) revealed that teachers and school leaders expressed doubts about their ability to meet the challenge of supporting vulnerable children and that nothing was done to support such children. This was also confirmed by the preliminary assessment by Olowokere and Okanlawon (2013) in a pilot study conducted among nurses and teachers in a local government area in Osun State. This has been linked to lack of formal or informal training in caring for this population coupled with doubt about

their ability to meet the challenges of supporting vulnerable children (Wilson, *et al*., 2008; McGrath and Noble, 2010;, Fisher, Frazer, Hasson and Orking, 2010; Pryimachuc, *et al.*, 2012; Brezner, 2013 and Olowokere and Okanlawon, 2013). In Nigeria, empirical studies on the knowledge of nurses and teachers about psychosocial support of OVC in school settings have not been documented and there is no information on the extent to which they are involved in providing psychosocial support to these children. These shortcomings have led to an information gap which has constituted a great barrier to effective psychosocial programming for school-age OVC.

Also, Williams (2010), having explored the viability of school-based support for vulnerable children, concluded that vulnerable children have particular needs and require intervention that will enable them to overcome emotional stress, anxiety, fear and hopelessness. It is therefore imperative that a comprehensive school programme that includes psychosocial support be encouraged for the children to have optimum health. One of the roles of the public health nurses is to assist individual through "difficult life transitions" or stressful events (Gitterman, 2001). For example, research has shown the effectiveness of social support provided by nurses and health visitors in promoting positive social and health outcomes among some vulnerable populations (Shepard, Williams and Richardson, 2004).

This section of the literature review shows that there is a growing body of literature pertaining to vulnerability as a key factor of concern to public health practitioners who work with population with many different kinds of presenting problems. The concept of vulnerability is both an individual and a group concept. However, in public health, the group concept is dominant and intervention is directed towards aggregates.

2.2. Outcomes of Vulnerability on Population

Outcomes of vulnerability on population may be negative, such as lower health status than the rest of the population, or they may be positive with effective interventions (Sebastian, 2008). For example, a community-focused nursing intervention may improve vulnerable populations' health status and provide such groups with the tools and resources to promote their own health (Sebastian, 2008).

Vulnerable populations have worse health outcomes than more advantaged population (Sebastian, 2008). Such health outcomes may include functional health status, overall perception of physical and emotional well-being, quality of life and satisfaction with health services. Nursing interventions should target strategies aimed at increasing resources or reducing health risk in order to reduce health disparities between vulnerable populations and populations with more advantages (Flaskerud and Nyamathi, 2002).

Vulnerable populations cope with multiple stressors and doing so creates a sort of "cascade effect", with chronic stress likely to result. This can lead to feeling of hopelessness and the resultant psychological effects (Sebastian, 2008). The factors that predispose people to vulnerability and the outcomes of vulnerability create a cycle in which the outcomes reinforce the predisposing factors, leading to more negative outcomes (Sebastian, 2008). Unless the cycle is broken, it is difficult for vulnerable populations to change their health status. Nurses identify areas where they can work with vulnerable populations to break the cycle. The nursing process guides nurses in assessing vulnerable individuals, families, groups and communities; developing nursing diagnoses of their strengths and needs; planning and implementing appropriate therapeutic nursing interventions in partnership with the vulnerable clients and other relevant stakeholders; and evaluating the effectiveness of the interventions (Sebastian, 2008).

2.3. The "OVC" Concept in Nigeria

Orphan in Nigeria is a child who has lost either or both parents (Federal Ministry of Women Affairs and Social Development, 2008 and National Plan of Action, 2006)). In the international community, the term "Orphans and other Vulnerable Children," or "OVCs," sometimes refers only to children with increased vulnerabilities because of HIV/AIDS, and at other times, refer to all vulnerable children, regardless of the cause which may be abject poverty, armed conflict or famine (PEPFAR, 2010).

The National Guidelines and Standard of Practice on orphans and vulnerable children (2007) in Nigeria reported that a vulnerable child is a child who, because of circumstances of birth or immediate environment, is prone to abuse or deprivation of basic needs, care and protection, and thus disadvantaged relative to his or her peers**.**

Vulnerable children are further categorised based on stakeholders' consultation from the six geopolitical zones of Nigeria as reported in the National Plan of Action (2006) as:

i. **Children affected by HIV or other chronic illnesses:**

- Children living with HIV or other chronic illnesses
- Children living in household where breadwinner is living with HIV or other chronic Illnesses and are impoverished.
- Children living in household with recent deaths of a working age adult (breadwinner)
- Children in poor household and are caring for orphans and vulnerable children.

ii. **Children in need of alternative family care**:

- Children in child headed household
- Children who are homeless or unaccompanied
- Children in institutional care
- Children living with aged grandmothers or caregivers
- Children who have lost one or both parents
- Abandoned children
- Children whose parents are alive, but are extremely poor.
- Children whose parents are divorced or separated and deprived of care.
- Children living with teenage unmarried parents.
- Children whose parents are commercial sex workers, drug addicts or convicted persons.
- Children in prison with their mothers

iii. **Children who are abused or neglected**

-Children who are working (child labour) or are exploited
- Children who are subjected to harmful cultural and religious practices
- Children who are sexually abused
- Children who are physically abused
- Child parents, especially child mothers
- Children who are neglected
- Exploited children "Almajiri"
- Child beggars
- Trafficked children

- Children who get married before 18years
- Children in ‘hard-to-reach’ areas
- Children belonging to transient communities, such as fishing and nomadic communities
- Children whose parent(s) are in prison
- Children living in difficult-to-reach terrains

iv**. Disability related vulnerability**

- Children with disabilities (e.g. mental, physical or other forms of disability)
- Children whose parent(s) or care giver(s) has disability in poor setting.

v. **Children affected by armed/communal conflict**

- Children whose safety, well-being or development is at direct risk by armed conflict
- Child militant (e.g. egbesu and so on)
- Children who are abducted
- Children who are refugees
- Children who are internally displaced
- Children whose parent(s) dies as a result of conflict

vii. **Children in need of legal protection**

- Children in conflict with the law
- Children who are institutionalised (e.g. in remand homes, rehabilitation centres, babies homes and children’s home
- Children who are denied their inheritance rights
- Children who are forcefully denied access to either of a living parent

This classification recognises that not all orphan children are vulnerable and it equally recognises that children living with a parent can be most vulnerable. Due to limited resources available for meeting the needs of this category of children, most vulnerable ones are usually identified for intervention through the use of OVC vulnerability index tool (Appendix VII) developed by the Federal Ministry of Women Affairs and Social Development.

2.4. Vulnerable Children as Significant Public Health Issue

Vulnerable school-age children has been viewed as a public health issue because of the negative impact that unidentified or unresolved vulnerability could have on the individual child, school community and society (Department of Health, 2004a). Thus, a model of prevention that identify problem early or intervene to reduce their initial occurrence or subsequent escalation has been described as central to any agenda designed to promote child health (HM Government, 2004).

There is an increasing body of evidence illustrating the adverse consequences for children of a failure to address their needs effectively, linked to negative outcomes in terms of their future social and emotional developments (Macdonald, 2001). Children living in difficult circumstances such as poverty are more likely to suffer disadvantage including emotional and behavioural problems than those from more affluent backgrounds (Seccombe, 2000). These children and other vulnerable young ones are more likely to experience peer relationship difficulties, suffer depression or social withdrawal, have low self-esteem and self-confidence and do badly at school (Seccombe, 2000). The inter-generational cycle of disadvantage is well reported, with children born into disadvantaged or at risk families having a greater chance of experiencing similar difficulties to their parents (Social Exclusion Unit, 2004).

There is also considerable evidence that certain groups of vulnerable children are more likely to suffer negative outcomes. For example, looked-after children and young people are at increased risk of mental health problems (Meltzer, *et al*., 2003; and Stanley, *et al*., 2005), they often have poor access to health services and are in greater need of effective health promotion interventions particularly in relation to emotional well-being (Department of Health, 2002b; Fleming, *et al*., 2005; and Simpson, 2006).

While it is clearly well documented that chronic poverty and social disadvantage do increase the likelihood of negative outcomes for children and young people, it is important to stress that not all children growing up in such vulnerable family households will experience poor outcomes (Seccombe, 2000, 2002; and Barrett, 2003). In spite of considerable adversity, young people can and do rise above past abuse, poverty, loss and relationship problems to become mature and well-balanced individuals (Bifulco and

Moran, 1998; Heller, *et al*., 1999; and Masten, *et al*., 1999). Waller (2001) has argued that resilience is not the absence of vulnerability but the presence of protective factors and a positive adaptation in response to adversity. Public health is about health promotion and prevention of illness. Enhancing children resilience will help avert negative outcomes, promote psychosocial health and future development.

The need for improved identification of vulnerable children, through services that are developed from sound public health principles and a whole population approach had been emphasised (HM Government, 2004; Department of Health and DfES, 2004 and HM Government, 2006c). In the UK for example, the Child Health Promotion programme implemented in schools primarily through the work of school nurses working in conjunction with teachers and other professionals has been found to be important because it provides the gateway to identifying school-age children who are experiencing health difficulties (Hall and Elliman, 2003; and Department of Health and DfEs, 2004).

Such collective approaches have been required to ensure that those vulnerable children who are in need (and their families) are reached and offered appropriate services. Individual work with a child and family would only take place once a health, development or learning need has been identified and this individual focus is not reached unless the whole population has access to such universal provision (Appleton, 2007). The identification and care of vulnerable school-age children must be addressed through public health values and concepts, principally universal access to public health professionals through the child health promotion programme (Hall and Elliman, 2003, and Department of Health and DfEs, 2004), which includes the whole population and should ensure targeted follow-up of children who are missing from school and who (potentially with their families) do not initially take up interventions or services offered.

2.5. Understanding Risk, Resilience and Health Outcomes

Children's individual responses to adversity have been described in research in terms of "risk" and "resilience" (Boyden and Mann, 2005). Risk refers to variable that increase individual likelihood of psychopathology or their susceptibility to negative developmental outcomes (Goyos, 1997). Some risks are found internally; they result

from the unique combination of characteristics that make up an individual such as temperament or neurological structure, other risks are external that is they result from environmental factors, such as poverty, educational level of parents, family conflict and war which inhibit an individual's healthy development (Boyden and Mann, 2005; Brooks, 2006 and Masten, 2011). Other risk factors that could predict negative outcomes in children and youth include negative life experiences such as neglect and maltreatment (Brooks, 2006 and Masten, 2011) or racial discrimination (Brooks, 2006). Risks for general or specific problems in development often co-occur (Masten, 2001).

Accumulation of these risks at one point in time or over time is inherently related to poor outcomes (Brooks, 2006 and Masten, 2001), poor academic performance, and school dropout (Brooks, 2006), mental health disorders and emotional distress (Resnick, 2000). Risk typically implies the potential for negative health outcomes (Rak and Patterson, 1996). However, there is evidence in previous works on child and adolescent resilience that negative outcomes may be circumvented (Zolkoski, Lyndal, and Bullock, 2012); meaning that, despite the varying difficulties and odds faced by these children, not all children exposed to risks and adversities will develop problem later on (Boyden and Mann, 2005). These children are deemed resilient. As Schaffer (1996) notes " whatever stresses an individual may have encountered in early years, he or she need not forever more be at the mercy of the past.

Resilient children seem to do well in life, appearing to have the ability to bounce back and cope well in the face of profound problems (Seccombe, 2002). In fact, studies have shown that 50-66% of children growing up in circumstances of multiple risk appear to overcome the statistical odds to live a life that manifest resilience (Masten, 2001). These children provide researchers with clues about how to assist others, as they seem to either have a natural ability to cope in the face of difficulties or receive help that facilitates a positive outcome. Studies also suggest, however, that children have varying degrees of resilience at different points in their lives. Children who seem resilient in one set of circumstances may suffer when other difficulties arise, or *vice versa*. This suggests that it is the interaction and accumulation of individual and environmental risk factors that contributes to both risk and resilience (Howard and Dryden, 1999).

Historically, the notion of resilience entered the health sciences from applied physics and engineering, where it refers to the ability of materials to "bounce back" from stress and resume their original shape or condition (Boyden and Mann, 2005). This term seems to have been first used in medicine to characterise the recovery of patients from physical trauma such as a surgery or accidents (Boyden and Mann, 2005). Somewhat later it was adopted into psychology first for the study of children of mentally ill mothers. It is now understood to indicate an individual's capacity to recover from, adapt and remain strong in the face of adversity (Egeland, Carlson and Sroufe, 1998; Luthar, Cicchetti, and Becker, 2000; and Masten, 2001). Hence literature ascribes resilience to three kinds of phenomena: good outcomes despite high risk status; sustained competence under threat and recovery from trauma (Masten, Best, and Garmezy, 1990). Research with similar population (adolescents) has found that higher resilience predicted low levels of depression and anxiety symptoms (Hjemdal, *et al.*, 2007; and Hjemdal, *et al.*, 2011). Studies have also demonstrated that females demonstrated greater resilience across all scales (Ziaian, *et al*., 2012) while lower resilience among male adolescents may indicate an increased risk of mental health problems.

2.6. Protective Factors as Predictors of Resilience

Protective processes encompass a breadth of experiences and mechanisms that enable positive adaptation despite adversity (Baylis, 2002). There are several protective factors that increase a child's likelihood for resilience and positive health outcomes. These factors are categorised into three groups' namely internal, intrapersonal and extra-personal factors. These are often interrelated and interdependent.

Internal factors could be summarised to include effective coping skills, positive self worth and higher cognitive capacity (Garmezy and Masten, 1991; Mandleco and Perry, 2000; Sandler, *et al*., 2003 and Benzies and Mychasiuk, 2009)). Children who believe in their own ability to cope with difficulties often do better in the face of adversity. These children are also more likely to understand and attribute a deeper meaning to adverse events (Mallam, 2002). A child's level of temperament has also been identified as determinant of resilience (Croom and Proctor, 2005 and Connor and Zhang, 2006). Researchers have identified an easy going temperament and good self-regulation

as being protective factors in resilience (Buckner, Mezzacappa and Beardslee, 2003; Eisenberg, *et al.*, 2003 and Berlin and Bohlin, 2003).

Another source of strength stems from children's interactions with others. This is known as interpersonal strength. The ability to access social support is significant in predicting resilience (Grotberg, 1995). Resilient children trust and enjoy secure attachments to others—confident that people will be there for them. They thus seek and find emotional support and are confident of their right to such support. They relate to others in a positive manner and have the ability to see humour in difficult situations. Having a sense of humour has been identified as a protective resource that enables children to cope well with stressors (Wooten, 1996). Resilient children also discuss difficulties with people whom they trust and respect. Such traits help children to develop relationships and a network of supportive persons which they can draw on when difficulties arise. Such relationships serve as a buffer during adversity and create opportunities for positive interaction, messages and experiences.

Skorvdal, Ogutu., Aoro, and Campbell (2009) conclude in their study that children's ability to cope is determined by the extent to which they are able to participate in their community and negotiate support. Interestingly, such social support systems are especially protective for children from low socio-economic groups (Cicchetti and Nurcombe, 1997). Faith in a higher power, or a religious philosophy of life, has also been identified as a resource (Masten, 1994; Gordon and Song, 1994; and Raghallaigh, 2011) and they have been found to be relatively accessible and afforded a sense of continuity, comfort and meaning in life. A resilient person, adult or child, is likely to have a strong spiritual or ideological belief that there is a God, or one or more Higher Beings, which transcend life on earth. Such belief systems are usually instrumental in creating a vision of moral order and a sense of justice, in which there is a clear distinction between right and wrong and acceptable and unacceptable behaviour (Mallam, 2002). The form that this belief system takes is unimportant—a child may believe in one God, in many gods or in the power of ancestors. The presence of siblings and a good relationship between the parent(s) or guidance and child and effective parenting skills have also been linked to resilience (Lengua, *et al.*, 2000 and Sandler, *et al*. 2003),

External protective factors refer to the extent and nature of the supports, resources and structures available to children which may either build resilience or increase vulnerability. A positive emotional climate and the availability of supports and resources within the family and broader community context can serve a protective function (Hjemdal, *et al.*, 2011). A supportive environment can also help to develop personal qualities that enable children to cope with adversity. These resources often take the form of social relationships, as opposed to facilities that need to be made available. They make children feel important and give them a sense that others are concerned about them.

As already mentioned, feeling secure, loved and accepted by more than one person is an important resilience factor. Beyond infancy, security of attachment is demonstrated by the time spent with children—listening, showing an interest, being actively involved in what they do, think and feel (Grotberg, 1995) – and recognition of their achievements (Cook, 1998). When a parent is terminally ill, it is imperative that the child begins to develop a secure attachment with those who will be responsible for their care once the parent has died. In many African families, care of the child will be vested in several family and community members (Giese, *et al*., 2003). The presence of multiple caregivers who offer consistency, care and secure attachments augurs well for children's emotional development. The disadvantage may be that children lack consistency in care, which may contribute to a lack of security in interpersonal relationships.

The availability of adequate and competent adults who serve as consistent role models and social status have been found to contribute to resilience (Lawford and Eiser, 2001; Masten, 2001; Adejuwon and Balogun, 2004). Positive role models are instrumental in helping children develop strong moral values (Coutu, 2002) and principles to guide them through life and provide structure and form to their dreams and aspirations.

2.7. Psychosocial Health Outcomes of Vulnerability among Orphans and Vulnerable Children

Psychosocial well-being of vulnerable school children is a major area of concern that has received less attention. Psychosocial problems can arise anytime, even years after the

event that led to child's vulnerability has occurred, and can greatly hamper a child's development ability to acquire skills and knowledge (Fox, 2001). Without their psychosocial health needs being met, the OVC cannot eat, learn and relate well. It is pertinent that this aspect of care be handled with care for children to enhance their performance in other areas of life. Study by Williamson (2000) identified anxiety, loss of parental love and nurture, depression, grief and separation of siblings among relatives as common psychosocial distress experience by OVC. For example in a study conducted in Uganda, orphans (aged more than 13 years) when asked explicitly about how they felt about being apart from their siblings, older orphans (n=64) report feeling sad (43.8 percent) and feeling isolated (17.2 percent) (Gilborn, *et al*., 2001).

In one study carried out in rural Uganda, high levels of psychological distress were found in children who had been orphaned by AIDS. Anxiety, depression and anger were more found to be more common among AIDS orphans than other children. 12% of AIDS orphans affirmed that they wished they were dead, compared to 3% of other children interviewed (Atwine, *et al*., 2005). In the same study, it was reported that orphans had greater risk for higher levels of anxiety, depression, and anger. The study concluded that high levels of psychological distress among youth orphaned due to AIDS indicate that material support alone is not sufficient for these children.

Using in-depth interviews, including a 25-question depression index, a study in Rakai district of Uganda also found out that about half of the orphans fell in the depressed range. In reaction to their parents' deaths, 50% felt "very sad and helpless", while another 2% were too young to express themselves. The study reported that adolescents losing a parent are more likely to "experience a special case of identity loss" and the highest depression scores were among those living in child headed households emphasising the need for family connection. (Segendo and Nambi, 1997).

Study conducted by Manuel, *et al*. (2002) showed higher depression scores among orphans compared to non-orphans in rural Mozambique. In the same vein, Wild, *et al*, (2002) showed greater depression and anxiety among orphans than non-orphans with AIDS orphans falling between the two groups and not differing significantly from either. The study also reported low self-esteem among other orphans than non-orphans and AIDS orphans.

In a study conducted by Nyamukapa, *et al*., (2008), all orphans were found to experience depression but few significant groups were significantly different in anxiety and self-esteem. Gilborn, *et al.*, (2006) in a study conducted among OVC aged 14-20 in Bulawayo, Zimbabwe found that orphans have more psychosocial distress, less psychosocial well-being with females having more psychosocial distress than males. However, Cluver and Gadner, (2007) in their own study noted that both orphans and non orphans scored highly for psychosocial distress.

In Nigeria, the National Survey of OVC and their psychosocial well-being revealed that only 12.4% of the children interviewed always have a feeling of happiness, 23% reported expression of aggressiveness, 3.5% always have a feeling of loneliness and 4.2% have a feeling of frustration and 14.6% reported difficulty in sleeping in the last two weeks before the survey (Federal Ministry of Women Affairs and Social Development, 2008). In addition to any personal psychological maladjustment that may be precipitated in children who suffer extreme stress, a number of broader social trends are over the longer term likely to exert insidious and pervasively injurious effects both on children and on society in which they live.

Four of the studies found increased psychosocial distress in girls as compared to boys. One study found being female to be an independent predictor of internalising problems (Makame, *et al.*, 2002) and two others found greater psychosocial dysfunction and anxiety in girls (Nyamukapa, *et al*., 2008). The fourth study found that girls not only reported more psychosocial distress on specific items in the survey instrument, they also scored higher on composite indices for traumatic experiences and daily stress scores (Gilborn, *et al.*, 2006).

Studies have documented the importance of social connection in a variety of spheres in relation to psychosocial outcomes. Connectedness is the perception that one can reliably count on others to provide emotional and instrumental support (Frauenglass, Routh, Pantin and Manson, 1997). Social connectedness, on the other hand, refers to the relationship people have with others. These relationships and connection can be a source of enjoyment and support that help people to feel they belong and have a part to play in society (Spellerberg, 2001) and it is integral to well-being. General studies have documented links between social connectedness and positive outcomes for individual

health and well-being (Resnick, Harris, and Blum, 1993; Resnick, Bearman, Blum, Bauman, Harris and Jones, 1997; Berdger-Schmitt and Noll, 2000) and more importantly mental health outcomes (Renick, *et al.*, 1997)

A recent large study confirmed that people with more friends and connections are generally happier, healthier and better off (Christakis and Fowler, 2009) than others. However, the study also found that social networks can influence health behaviours both negatively and positively. The submission above may not be the case of most orphans as confirmed by studies conducted by Manuel (2002) and Cluver and Gardner (2007) who posited that orphans were more likely to report having no good friends.

This section reviewed literatures on the four psychosocial health outcomes variables of interest in this study. The literatures have shown a significant link between OVC and psychosocial distress. The summary that could be drawn from this section is that orphanhood is a factor in vulnerability and this subset of the vulnerable children may need early and prompt intervention to avert the likely effect of orphanhood and the lifelong impact on children's psychosocial well-being.

2.8. OVC Characteristics and Psychosocial Health Outcomes

Most of the comparative studies indicated that orphans are more at risk and have higher levels of psychosocial distress than non orphans. (Makame, *et al*., 2002, Atwine, *et al*., 2005; Zhao, *et al*., 2007; Cluver, *et al.*, 2008 and Killian and Durrheim, 2008).

While some studies indicated little difference in the psychosocial well-being between the three types of orphans (Baaroy and Webb, 2008; Cluver, Fincham, and Seedat, 2009; and Fang, *et al*., 2009), others reported that maternal and double orphans are more vulnerable than their paternal orphan counterparts (Baaroy and Webb, 2008; Kang, 2008; and Qun Zhao, 2010). In particular, maternal and double orphans are more likely to experience behavioural and emotional difficulties, suffer abuse, and report lower rates of trusting relationships with caregivers (Baaroy and Webb, 2008; Kang, 2008; and Qun Zhao, 2010). They also have higher levels of psychosocial distress than their paternal orphan counterparts (Wood, *et al*., 2006; Yucelen, 2007 and Ruiz-Casares, *et al*., 2009).

Besides orphan type, the literature indicated that other individual-level factors such as age, gender, self-esteem, and cognitive development are also highly correlated with psychosocial health (Li, *et al.,* 2008). Past researches have demonstrated that gender and age are the most strongly associated with psychosocial outcomes. In particular, girls and older OVC are especially vulnerable to psychosocial distress (Wood, *et al*., 2006, Nyamukapa, *et al*., 2008; Cluver, *et al*., 2009; and Onuoha and Munakata, 2010).

Past study by Seccombe (2000) have also shown that children living in poverty are more likely to experience relationship difficulties, suffered depression and social withdrawal, have low self-esteem and self-confidence and do badly in school.

Studies have confirmed the harmful effects of separating siblings in relation to psychosocial distress (McKerrow and Verbeek, 1999 and Nampanya-Serpell, 2001). Breaking up siblings has seen a high prevalence in countries such as Zambia and Congo-Brazzaville. In Zambia, the previously cited study shows that 56% of orphaned children who are taken in were separated from their siblings. Furthermore, there is an extremely low frequency of reunion between siblings who were once separated (USAID/SCOPE-OVC/FHI, 2002). Psychological problems can become more severe if a child is forced to separate from their siblings upon becoming orphaned. In some regions, this occurs regularly. In Congo, a study carried out on orphaned children in Brazzaville found that 63% of them were separated from their siblings, causing serious psychological difficulties for these children (Makaya, *et al*., 2002. A survey in Zambia however showed that 56% of orphaned children no longer lived with all of their siblings. (USAID/SCOPE-OVC/FHI, 2002). Studies by Gong, *et al*., (2009) found that orphans separated from siblings had significant higher scores in anxiety, compared with those living with their siblings.

Finally, care arrangements and living standards may influence the psychosocial health of OVC. Makame, *et al.,* (2002) reported that orphans living alone, with grandparents, or with non-relatives have significantly higher levels of internalising problems than do orphans who reside with close kin. These findings were supported in a study by Nyamukapa, *et al*., (2008), which also suggested that being unrelated to the caregiver is positively associated with psychosocial distress whereas residing in a household of a close relative is a protective factor.

2.9. Public Health Nurses' and Teachers' Knowledge about Psychosocial Support of Orphans and Vulnerable Children

There is scarcity of literatures on nurses' knowledge about the psychosocial support of OVC. Few literatures found are generally on vulnerable children and are as articulated below.

A report of the review by Community Development and Justice Standing Committee (2009) explored the adequacy of services to meet the developmental needs of Western Australian children. The study revealed that current resource allocation within the public sector for Community Health and Child Development Services is extremely inadequate, and needs to be expanded, however the framework, skill level, experience and ability to provide early intervention services to this cohort already exists within the sector. They further stated that Community Health Nurses in Western Australia believe that community health nurses are ideally placed to provide an exemplary service to families with infants and young children. According to them, a range of culturally appropriate health promotion, early identification and intervention programmes and services were offered. These focused on antenatal health, optimal growth and development in the early years and promoting physical, emotional and mental wellness during childhood, adolescence and parenthood. They are experienced professionals who provide services to children in different settings, and for many families they are the only link into health services, and they provide ongoing assessments of child health.

In a qualitative study of emergency nurses' knowledge and experience in caring for vulnerable children in the United States, nursing knowledge and attitudes regarding vulnerable population is described as a topic not well articulated in the nursing literature (Fisher, Frazer, Hasson and Orkin, 2010). This qualitative, descriptive case study explored the experiences of a purposive sample of 23 nurses. The interview consisted of mostly open-ended questions that were tape recorded and transcribed verbatim. The transcribed interviews were content analysed and the result shows that a general lack of knowledge about this population was most evident and referred to the lack of formal training in nursing education coupled with limited experience in actually caring for vulnerable children. (Fisher, Frazer Hasson and Orkin, 2010). Participants were asked

whether they had formal training, including any classes or education, in working with vulnerable children. In addition, they were asked about their experiences since graduation and whether they had attended any continuing education on caring for vulnerable children. Most nurses could not recall classes in nursing school related to the topic of vulnerable children or commented that it may have been briefly addressed (i.e. "touched on") in either their pediatric or psychiatric rotations. Only one person identified a continuing education programme related to information about group homes. They gave responses like:

- "You know I honestly don't remember. They probably touched on it in like psychology and stuff like that."
- "From what I remember it was in pediatrics....you know like a discussion may be about it, but not how to deal with....may be just like a brief history on vulnerable groups."
- "Um, definitely not in continuing education, may be in my psych courses in my undergraduate nursing."

According to Wilson, *et al*., (2008), few community based nurses had received specific training in child and adolescents mental health. School nurses have also reported a limited education and training opportunities to perform their role (Pryjmachuc, *et al.* (2012). Eventhough, primary health care nurses have been found to have little preparation and training in promoting mental health (Secker, Pidd and Parham, 1999), they however value their involvement with mental health of young people recognising this as an important area of practice for them (Pryjmachuc, *et al*., 2012). This was in line with the submission of Haddad, *et al.,* (2008) that nurses are interested in developing knowledge and skills pertinent to psychological problems.

Thus, nurses in primary health care settings need to be strengthened to plan and execute care and support services for the well-being of the vulnerable populations. Knowledge of care and support for vulnerable populations will assist them to advocate for and implement holistic care within the context of school health framework. This was in line with the suggestion of Mead, Bowen and Crask (1997) that the role of primary

care and community nurses should be expanded in order to assist in the prevention of emotional disorders such as depression and anxiety.

Empirical studies exploring teachers' knowledge and involvement in the care and support of OVC were scarce. This further confirmed the downplay of utilisation of these professionals to meet the needs of school children. However, the Regional Psychosocial Support Initiatives (REPPSI) from their assessment reported that teachers are not well equipped to provide care and support to school children (Brezner, 2013). Similar result was also found by Olowokere and Okanlawon (2013) in a pilot study among teachers in a similar setting where teachers were found to have low level of knowledge about psychosocial support of orphans and vulnerable school children.

2.10. Roles of Public Health Nurses and Teachers in the Support of Vulnerable Children

Historically, community and public health nurses have focused their efforts on the most vulnerable populations (Allender, Rector and Warner, 2010). Nurses are expected to provide **effective caring** by helping vulnerable children to take charge of their own lives and make their own choices (Allender, Rector and Warner, 2010). This can be done by helping them identify all possible choices that can promote their health, guiding them to think through all of the issues and possible consequences, providing honest feedback and affirming their reality (Zerwekh, 2000). To provide effective care, engagement and development of rapport are reported to be essential. This is because vulnerability often equates with feelings of powerlessness and the actions of public health nurses can either promote engagement or destroy any chances for rapport. Some authors have also documented that advocacy for vulnerable population is an ethical responsibility for nurses who may need to help individuals or families find needed assistance (Erlen, 2006).

Empowerment has also been reported in the literature as one of the roles of public health nurses for vulnerable population. Public health nurses describe the process of empowerment as a two-way street, with clients gaining knowledge and skills and acting on informed choices. Falk-Raphael (2001) through a qualitative study identified public health nurses activities or actions that are most effective in promoting

empowerment among vulnerable clients to include having a client-centre approach, developing a trusting relationship, employing advocacy, being a teacher and role model and capacity building towards attainment of health goals. According to Falk-Raphael (2001), the outcome of empowerment for clients included increased self-esteem, and confidence, improved self-efficacy and the ability to "reframe situations in a positive way". Clients also subsequently made better choices regarding health and utilised resources more appropriately.

Another role of public health nurses as highlighted in the literature include **making a difference** in client's life by supporting them through difficult life transitions or stressful events to build their inner strength. Resilience can be accentuated by external support from nurses and teachers to help vulnerable people to face their challenges and cope well (Allender, Rector and Warner, 2010). The authors further stated that public health nurses may need to re-examine the way in which public health nursing services are organised and delivered to support the vulnerable population more effectively. According to Pritchard and de-Verteuil (2007), an innovative approach may be necessary and political advocacy to influence health policy should also become a component of community health nursing practice (SmithBattle, Diekemper and Drake, 1999; Falk-Raphael, 2005 and Salinsky and Gursky, 2006).

For example, because of the long-researched strong connection between education and health outcomes noted in many classic studies (Marmot, Ryff, Bumpass, Shipley and Marks, 1997), nurses and other public health professionals could become engaged with schools to promote school children psychosocial health to enhance school retention and achievement. Nurses through advocacy may also influence government policy to recognise the importance of supporting school-age children by factoring policy issues that can promote children physical and psychosocial health into their programmes. The nurse may also be responsible for referring a school child and their family for specialist assessment and input depending on the nature of need identified (Appleton, 2007). Appleton also stated that along the continuum, programmes promoting the development of parenting skills may be offered through extended school projects or children's centres.

School teachers are also very important in the support of children going through difficult moment. The teachers are in the best position to facilitate children's recovery from trauma and stressful events (Alisic, 2012) and they have a significant impact on student's well-being (Winthrop and Kirk, 2005). Wolmer with colleagues (2005) have found that teachers promote peer interactions and support in the most natural support system outside of the family. In emergency contexts, teachers play a key role in facilitating integration of children in schools as well as in helping children and attending to children's physical, cognitive and psychosocial needs (Gasic-Pavisic, 2005). There is also a growing awareness of the need for more concrete action to provide more support to teachers in their critical role with respect to, first, identifying vulnerable children and secondly, providing care and support within a more holistic learning environment in the classroom (Boler and Carroll, 2003). Other activities that teachers could engage in include timely referral for appropriate treatment in the primary health care facilities which will likely improve health outcomes for many of these children.

A public health professional may be involved in reviewing health needs across the school-age population as part of baseline preventive work or early intervention work to identify vulnerable children (DfES and Department of Health, 2006). This is important in order to identify health needs particularly physical, emotional and social needs so that appropriate interventions can be delivered such that children are better able to reach their potential (DfES and Department of Health, 2006).

2.11. Effects of Resilience-based Training and Peer-support Activities on Resilience and Psychosocial Health Outcomes among Orphans and Vulnerable Children

Children are the most dependent and vulnerable members of society, and have only limited coping strategies (Trebjesanin, Hanak, and Kopunovic, 2000 and Vymetal, 2010), therefore, there is a growing recognition to find effective ways to support and promote children's well-being and recovery from experiences of trauma (Toros, 2013).

The National Plan of Action for the care of orphans and vulnerable children in Nigeria recommended that there should be capacity building in psychosocial support

interventions by training all actors responsible for responding to the needs of orphans and vulnerable children at all levels. (NPA, 2006). This is evident by mainstreaming psychosocial interventions into all responses at country level designed to meet the needs of OVC. Without intervention, children facing significant adversities have a greater likelihood of encountering problems as they navigate their developmental paths (Luthar and Cicchetti, 2000).

Evaluating the impact of various interventions on resilience and psychosocial health outcomes across different communities in other countries shows that most interventions have been very helpful in promoting resilience and some psychosocial outcomes in children. In a study by Cowen, Wyman, Work and Iker (1995), in their work on preventive intervention for enhancing resilience among highly stressed urban children conducted in New York revealed that a significant improvement was found post-intervention with children showing improved perceived self-efficacy and realistic control attributions and evidenced a strong tendency ($p<.08$) towards less anxiety.

Karthik-Lakshman and Mythili, (2010) in their study conducted in India on the effect of resilience-based psychological intervention on resilience among early adolescent girls in Chennai Corporation School, study revealed that psychological intervention has a significant impact on resilience among early adolescent girls. A similar finding was also noted in a study conducted by Jordan, *et al*., (2010) on a classroom-based psychosocial intervention in conflict affected Nepal using a randomised control trial. The result shows that a school-based psychosocial intervention demonstrated moderate short-term beneficial effects for improving social, behavioural and resilience indicators among subgroups of children exposed to armed conflict. According to them, the intervention reduced psychological difficulties and aggression among boys, increased pro-social behaviour among girls and increased hope for the older children. Also Gance-Claveland (2000) found improved resilience and relationship among school children in a school based intervention.

Current psychosocial support for vulnerable children in Nigeria majorly focused on peer support group meetings for young children which some people called kids club with focus on life skills development which include coping with emotions, self-awareness, communication skills, empathy, creative thinking, interpersonal relationship

skill, coping with stress, problem solving and critical thinking. The life skills training programme (Botvin and Griffin, 2002) is a school-based prevention programme focusing on enhancing social and personal competence skills.

A 2006-2007 post test study of 6,127 children ages 8-14 in four OVC programmes in Kenya and Tanzania by Brown, *et al*., (2009a) found that kids club had mixed results in improving psychosocial outcomes. One successful kids club which met once a month and had a standardised curriculum and an OVC supervisor on staff was associated with higher perceptions of having adult support, improved pro-social behaviour and fewer emotional problems. Similar study on school-based peer group support meetings intervention of AIDS orphans (aged 10-15) in Uganda, however found that peer group intervention when led by teachers and complemented by health care checkups significantly decreased anxiety, depression and anger among intervention group (Miller, *et al.*, 2011). In another study by Houck, Darnell and Lussman (2002), peer support programme was found to decrease stress and distress among depressed adolescents.

The literature reviewed in this session have shown that resilience based and peer support psychosocial intervention have been linked to improved resilience and psychosocial health outcomes. However, it was noted that most interventions were provided for OVC in different age categories with the researchers looking at different health outcomes. Thus, it may be difficult to compare variation across studies since different psychosocial outcomes were explored by the different authors.

2.12. Theoretical Framework for the Study

2.12.1 Neuman's Health Care System Model

Neuman system model provided the conceptual framework for this study. Neuman Health Care System Model (Neuman, 1995) is related to the metaparadigm of the discipline of nursing. Like other models of nursing, the major concepts are person, health, nursing and the environment but Neuman uses a system approach to explain how these elements interact in ways that provide nurses with guidance to intervene with clients, families or communities.

The client, according to Neuman, is defined as an open system that interacts with the environment by making behavioural adjustments or by adjusting the environment to meet personal needs (Neuman and Fawcett, 2002). Client may be a person, family, group, or community. A system is open when its elements are continuously exchanging information and energy within its complex organisation and stress and reaction to stress are basic components of an open system. According to Neuman, the clients have a number of physiological, psychological, socio-cultural, developmental and spiritual qualities. These qualities between them contribute to a set of survival factors unique to that person but which operate within a range of values shared with other individuals. A person's core structure of survival factors, or *basic structure (e.g. innate or genetic features),* is protected by a number of internal *lines of resistance* (a series of broken rings surrounding the basic core structure which represents the resource factors that help the client defend against a stressor), for example, the immune response system. When the lines of resistance are effective, the client system can reconstitute; but if they are ineffective, ill health or death may ensue. The amount of resistance to a stressor is determined by the interrelationship of the five variables (physiological, psychological, socio-cultural, developmental and spiritual) of the client system. These help to establish a *normal line of defence,* or state of adaptation, which the individual is able to maintain over time.

Normal line of defence represents a stability state for the individual or system. It is maintained over time and serves as a standard to assess deviations from the client's usual wellness. This includes system variables and behaviours such as the individual's coping patterns, lifestyle and developmental stage. Expansion of the normal line of defence reflects an enhanced wellness state; contraction however shows a diminished state of wellness. Beyond this, however, people are protected by a *flexible line of defence* (sometimes called a flexible line of resistance), which acts as a buffer to prevent stressors breaking through the normal line of defence. Neuman describes the flexible line of defence as the client system's first protective mechanism. When it expands, it provides greater short-term protection against stressor invasion and when it contracts, it provides less protection. The strength of this flexible line of defence fluctuates, however, and lack

of sleep, malnutrition and a number of stressors working together can weaken it considerably (See Fig.2.1).

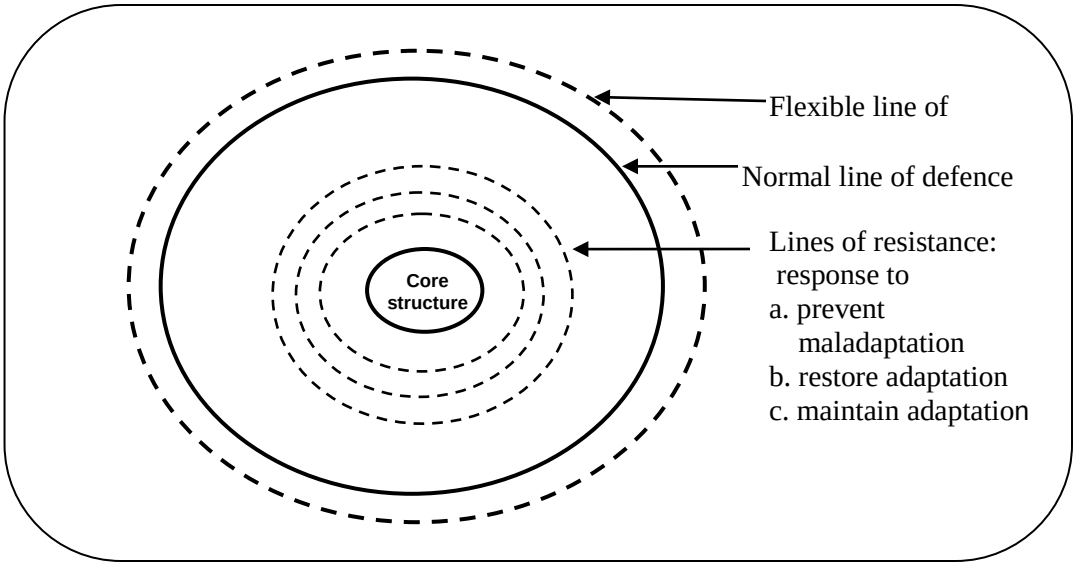

Fig. 2. 1: Neuman's View of the Person (source: Nursing Models & Nursing Practice by Aggleton P. and Chalmers, H. (2000). 2nd edition p. 150.

2.12.2. The Causes of Problems Likely to Require Intervention

According to this model, *stressors* are tension-producing stimuli that have the potential to disrupt system stability, leading to an outcome that may be positive or negative. Three broad types of stress can be experienced:

- Stress resulting from intrapersonal factors, for example, in a child, it may be lack of self-esteem or fear of the unknown
- Stress linked to interpersonal processes e.g. not having someone who cares
- Stress from extra-personal factors (for example, life events) over which an individual may have little direct control. Example here may be lack of health programmes that address the individual needs.

Whenever stress is experienced, people react, and reaction is usually followed by a process of reconstitution (adaptation) as the person returns to a state of relative wellness. Nursing is called for when the cushioning provided by the flexible line of defence can no longer protect against a stressor or combination of stressors. In these circumstances, the

stressor (or stressors) breaks through the normal line of defence, causing disequilibrium as the lines of resistance surrounding the central core attempt to restore balance. The circumstances in which disequilibrium occurs will vary between individuals (some being very resilient whereas others are not) this depending upon the physiological, psychological, socio-cultural, developmental and spiritual aspects of an individual's make-up.

2.12.3. Prevention as Intervention to Enhance Adaptation

Interventions are purposeful actions to help the client retain, attain or maintain system stability. They can occur before or after protective lines of defence or resistance are penetrated. Neuman supports beginning intervention when a stressor is suspected or identified. Interventions are based on possible or actual degree of reaction, resources, goals and anticipated outcomes. Neuman identifies three levels of intervention which are primary, secondary and tertiary. Primary prevention is used when a stressor is suspected or identified. A reaction has not yet occurred but the degree of risk is known. The purpose is to reduce the possibility of encounter with the stressor or to decrease the possibility of a reaction. Neuman (1995) recommends intervention even when client is not currently reacting adversely to the factors affecting the situation but is deemed at risk.

Secondary prevention involves interventions or treatment initiated after symptoms from stress have occurred. The client's internal and external resources are used to strengthen internal lines of resistance, reduce the reaction and increase resistance factors.

Tertiary prevention occurs after the active treatment or secondary prevention stage. It focuses on readjustment towards optimal client system stability. The goal is to maintain optimal wellness by prevention recurrence of reaction or regression. Tertiary prevention leads back in a circular fashion towards primary prevention. An example would be avoidance of stressors known to be hazardous to the client.

Reconstitution occurs after treatment for stressor reactions. It represents return of the system to stability which may be at a higher or lower level of wellness than before stressor invasion.

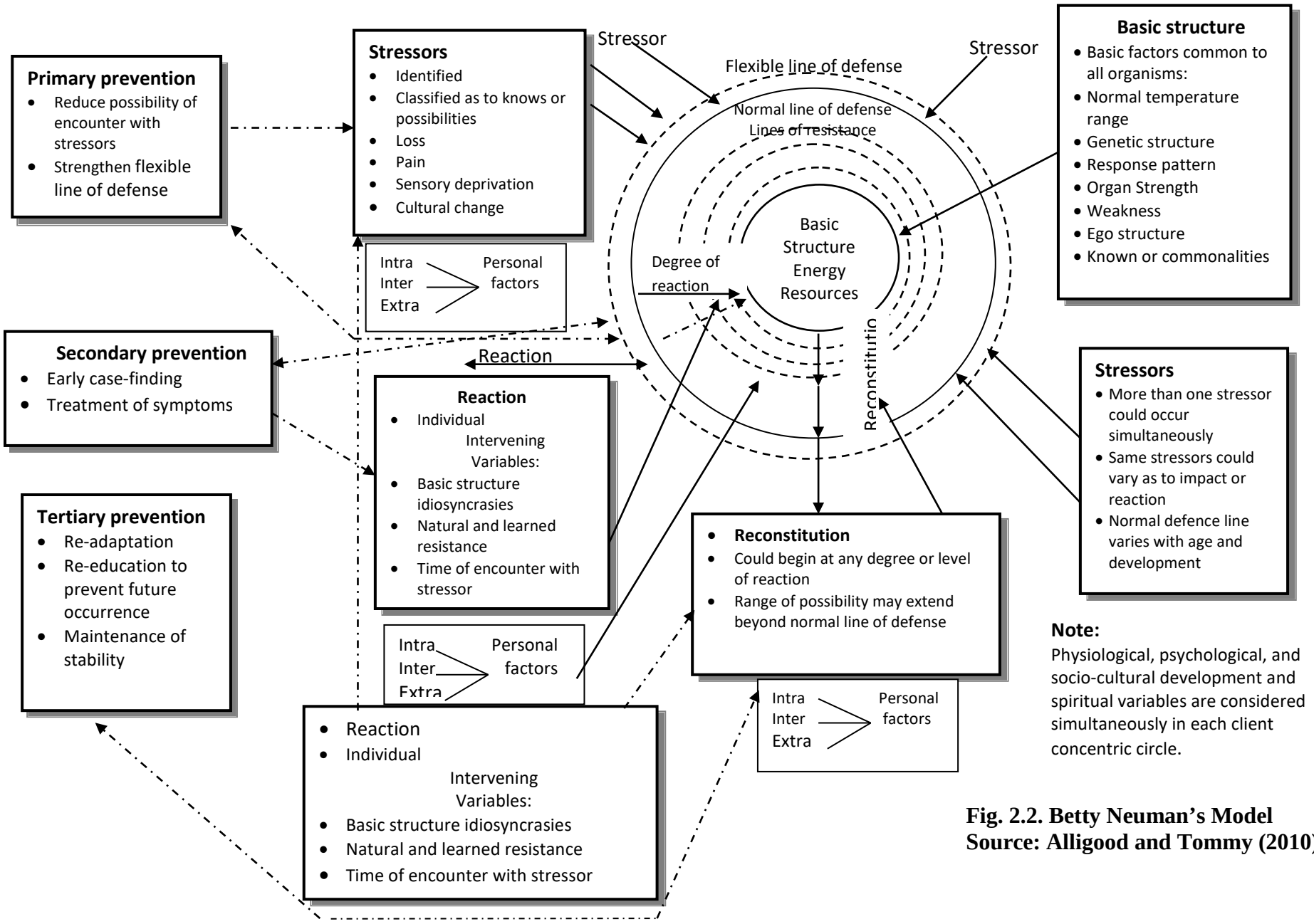

Fig. 2.2. Betty Neuman's Model
Source: Alligood and Tommy (2010)

2.12.4. Application of Neuman's Model to the Study

Neuman's model can be used to facilitate or provide psychosocial care and support to vulnerable school children. Vulnerability within the context of Neuman's model ensues when an individual is exposed to stressors that can affect his/her health. According Neuman, the health of individual is affected when he/she cannot adapt to the stressor. This can cause a state of disequilibrium which may lead to physical or psychological breakdown if no intervention is put in place. For example, everyone experiences stressful events, but when such events over-extend a person's resources (protective factors) for responding to them, distress occurs. As Germaine and Gitterman (1996) point out, all organisms require resources from their environments to survive and develop. How individuals do this depends on the resources available to them, their capacities to respond to these resources and the goals they value (Boyden and Mann, 2005).

According to Neuman framework, intervention can be provided before the development of any psychosocial or poor coping symptoms (primary prevention). This focuses more on possibility of reducing child's exposure to stressors. Some of the stressors to which the children are exposed may be beyond the reach of the nurses'/teachers' control. For example, parents death, poverty, parental discord or disability. But the knowledge of these factors can help the professionals to identify children that are likely prone to psychosocial distress and provide an opportunity to intervene (primary intervention) by building their resilience through training and counselling for them to cope with the stressors without any negative psychosocial outcomes. If primary prevention is not put in place as Neuman stated which mostly is the case with majority of VC, the normal line of defence and line of resistance may be attacked and thus penetrating the basic structure of OVC.

As demonstrated by the model, there are stressors constituting a major challenge in a child's life. Such stressors described above and listed in the left upper box of Figure 3. There are also intervening factors listed on the right upper box (Fig. 3). These are variables that influence children's adaptation in the face of stressors. They are available to a child to assist in responding to stress to promote favourable outcomes.

The child's core structure is protected by a number of internal lines of resistance (series of broken rings) which represents the resource factors that help the child defend

against stressor. When these resource factors (protective factors) which constitute line of defence are effective for example, presence of caring adult in a child's life, the child can easily reconstitute or adapt. But if this is absent, the line of resistance becomes ineffective. The result is poor adaptation or resilience. For example in this case, when stressors over-extend the child's resources (protective factors), then distress will occur. But when a child have access to and make use of all these resources, the child will easily adapt to life challenges with good psychosocial health outcomes. In other words, when a child lacks the necessary resources, it becomes very difficult to adapt thus showing symptoms of psychosocial distress. In the case of OVC with psychosocial distress symptoms, the stressors have penetrated the line of defence; Neuman stated that secondary intervention is necessary for early case findings and treatment of symptoms of psychosocial distress.

Secondary intervention could be achieved through early vulnerability assessment of school children by public health nurses and appropriate interventions such as resilience training, peer support or cognitive behavioural therapy may be offered in collaboration with other health care professionals like clinical psychologist and social workers. Resilience training has been found to reduce the psychosocial impact of vulnerability among vulnerable children by helping to promote adaptation, self-esteem, social connection, positive emotions and relief of depressive and anxiety symptoms (Olowokere and Okanlawon, 2013; Hjemdal, *et al*., 2011; Bonanno, Galea, Bucciareli, and Vlahov, 2007; Hjemda, *et al*., 2007; and Fredrickson, Tugade, Waugh, and Larkin, 2003). Building resilience has also been found to be central in personal, social, mental, and physical developments (Wagnild, 2010).

Another role that the public health nurse could play is to facilitate child's access to protective resources within the family and the community that could help the child withstands stressor and averts the associated consequences. For example a trusted adult, a peer support group and community-based organisations. This could be done by helping the child navigate the fragmented resources within the community as a case manager to make the process easy.

Tertiary level of intervention is concerned with maintaining and supporting existing strengths of the client, to prevent further regression. This is best achieved

through intensive conversation of the nurse or other concern individuals to emphasise existing strength. For all the levels of prevention to achieve its goal, the provider must have sufficient knowledge and skills about the different kinds of interventions that could be used at the different level.

For Neuman, the primary goal of nursing is the attainment and maintenance of the client's system stability (resilience) in the face of adversity. Overall evaluation of the model therefore involves assessing the extent to which system stability has been restored following nursing intervention. For example in case of a child with psychosocial health problems, the nurse established how child's resilience (adaptation) and psychosocial health have been restored and improved following interventions. And for Neuman, she views nursing as a "unique profession" that is concerned with all of the variables affecting individual's response to stress.

A crucial aspect of the nurses' role when working with the Neuman's model is the need to remain sensitive to children' perceptions of their needs, and what is happening to them. Therefore for effective response using Neuman's model, a thorough assessment of the child or children must be done so that interventions are directed towards meeting their needs.

The applicability of Neuman system model in this study suggests that it effectively describes client adaptation within the context of available resources within the environment. It emphasises support for client to facilitate reconstitution (adaptation) through primary, secondary and tertiary levels of preventions. The information provided in this study suggests that the model offers a useful framework for designing and testing school-based interventions with vulnerable children**.** Public health nurses and other healthcare professionals can decrease the consequences of vulnerability of children which may include psychosocial health problems or other health issues by exploring available resources within the child environment that could be used to promote adaptation.

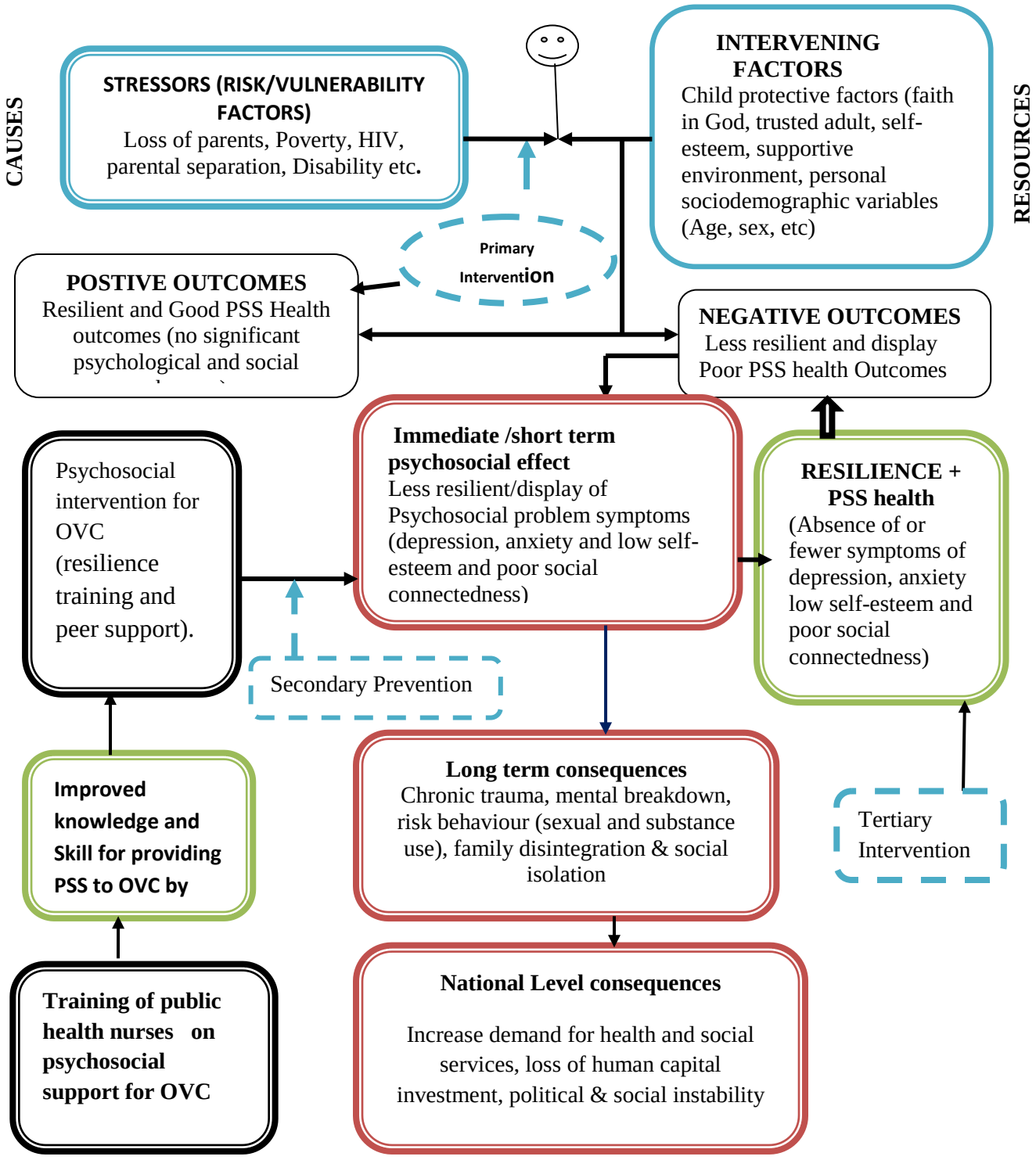

Fig. 2.3: A Conceptual Model of a Nurse-led School-based Psychosocial (PSS) Intervention on Resilience and Psychosocial Health Outcomes among Orphans and Vulnerable Children in the School Settings (Adapted from Betty Neuman's Model, 1995)

2.13. Summary of Literature Review

The chapter presents literatures on concepts of orphans and vulnerable children, vulnerability in children and youths, protective factors that promote resilience in children, common psychosocial distress in children, empirical studies on psychosocial interventions and the conceptual model for this study.

The term vulnerable child is used to describe children with additional health and social care needs who would benefit from additional support and services. Vulnerable children were identified as population that is affected by adverse life experiences which are perceived as stressors in this study. The literature review also provided evidence that numbers of protective factors or processes can help vulnerable children to cope and adapt well in difficult situation and reduce effect of risk factors (stressors) on health outcomes.

Key findings from the review showed that OVC are prone to psychosocial distress and that the females are more affected than the males. Resilience studies reviewed however showed that females are more resilient than the males. Knowledge deficit of the care of vulnerable populations among nurses was also noted as well as the dearth of information on teachers' knowledge and involvement in the care of vulnerable population. Psychosocial interventions programme reviewed was found to be helpful in promoting resilience and psychosocial health outcomes among vulnerable children. The key finding however from most of these interventions is that psychosocial variables explored differ from one study to the other, thus making comparison of findings difficult. However, three key psychosocial outcomes were consistently explored by most researchers alongside other variables. These are depression, anxiety and self-esteem. Social connection was an additional outcome measure for this study.

The care of vulnerable young children was presented as a key public health issue in this review. The main argument for viewing vulnerable school-age children as a population for public health concern is the impact that unidentified or unresolved vulnerability can have on individual child, school, community and society as reflected in the conceptual model for the study. Review shows that a public health approach in a school health programme will ensure that potentially vulnerable children are identified promptly for support and care that they need to navigate life challenges in a good state of

psychosocial well-being. This support was also linked to school retention, academic performance and future development in previous studies.

The literature review also reflected that there are currently limited documented evidences related to resilience and psychosocial interventions among OVC in Nigeria particularly studies related to OVC in the school settings which may have limited the background literature review of this study. This further confirms that there is little research efforts in this area in Nigeria. The literature review also showed that there is poor evaluation of psychosocial interventions currently in use for vulnerable children. The review also observed that past work among vulnerable children had been focused on orphans and vulnerable children as a result of HIV while neglecting children that are vulnerable by other means. The conceptual model underpinning the study reflected that failure to respond to the psychosocial health needs of orphans and vulnerable children can lead to chronic trauma, mental breakdown and exposure to risky behaviour such as substance use or unprotected sexual exposure. This as described in the model can lead to increase demand for health, and social services, loss of human capital investment, political and social instability in later years.

2.14. Research Hypotheses

Based on the literature reviewed on resilience and selected health outcomes, the study hypothesised that**:**

1. There is no significant difference in the knowledge of psychosocial support of OVC between nurses in the experimental and control group pre- and post-intervention.

2. There is no significant difference in the knowledge of psychosocial support of OVC between teachers in the experimental and control group pre- and post-intervention.

3. There is no significant difference in the resilience and psychosocial health outcomes scores between orphans and vulnerable children in the study pre- and post-intervention.

4. There is no significant difference in the resilience and psychosocial outcomes scores between OVC in the experimental and control group pre- and post-intervention.

5. There is no significant difference in the resilience and psychosocial outcomes among OVC in the study groups pre- and post-intervention.

CHAPTER THREE

METHODOLOGY

This chapter discusses the methods adopted in conducting this study. The research design, research settings, target population, sample and sampling techniques, instruments and procedure for data collection, ethical consideration for the study and methods used for data analysis were also described.

3.1**. Research Design:** The study utilised quasi-experimental design (pretest-posttest non-equivalent group design) as shown in Fig. 3.1. The quasi-experimental design was used to evaluate the effectiveness of the intervention packages on the study participants.

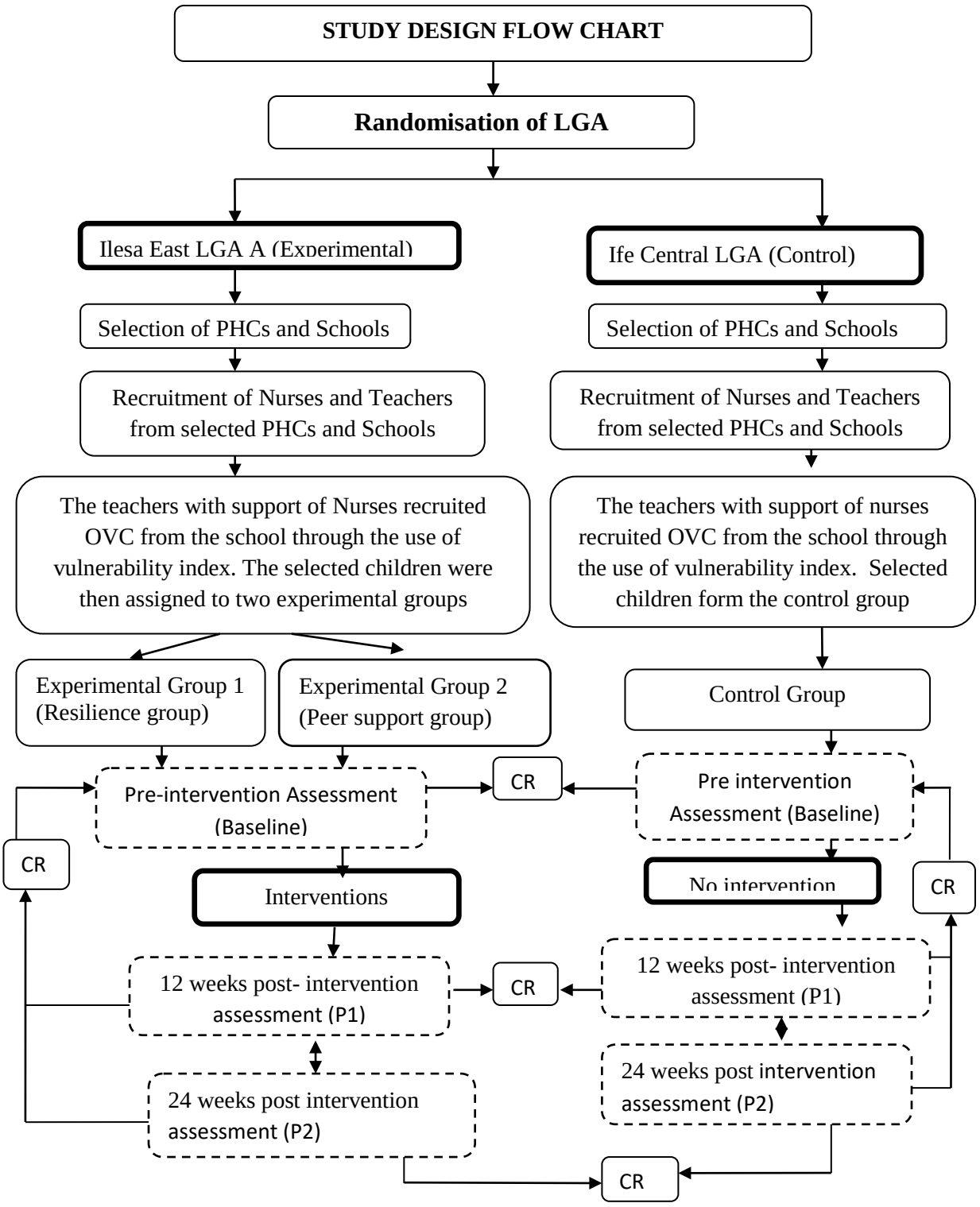

Fig.3.1: Study Design and Flow Chart

***Key**: **PSS**- Psychosocial Health; **CR**- Compare Result; + - and; OVC – Orphans & Vulnerable Children; P1- first post-intervention evaluation, P2- Second post-intervention evaluation, LGA – Local Government Area,*

3.2. **Study Setting**: The study was conducted in Osun State, a state in Southwestern zone of Nigeria with its capital in Oshogbo. The state is located in the heartland of the Yoruba people and shares the distinctive high urbanisation attributes of most parts of Yoruba land. Osun State is landlocked and occupies 9,251 square kilometers and it is bounded in the West by Oyo State; Ondo and Ekiti States in the East; Kwara State in the North and Ogun State in the South. The official 2006 census population estimate for the state was 4, 137, 627 (Osun State Government, 2010).

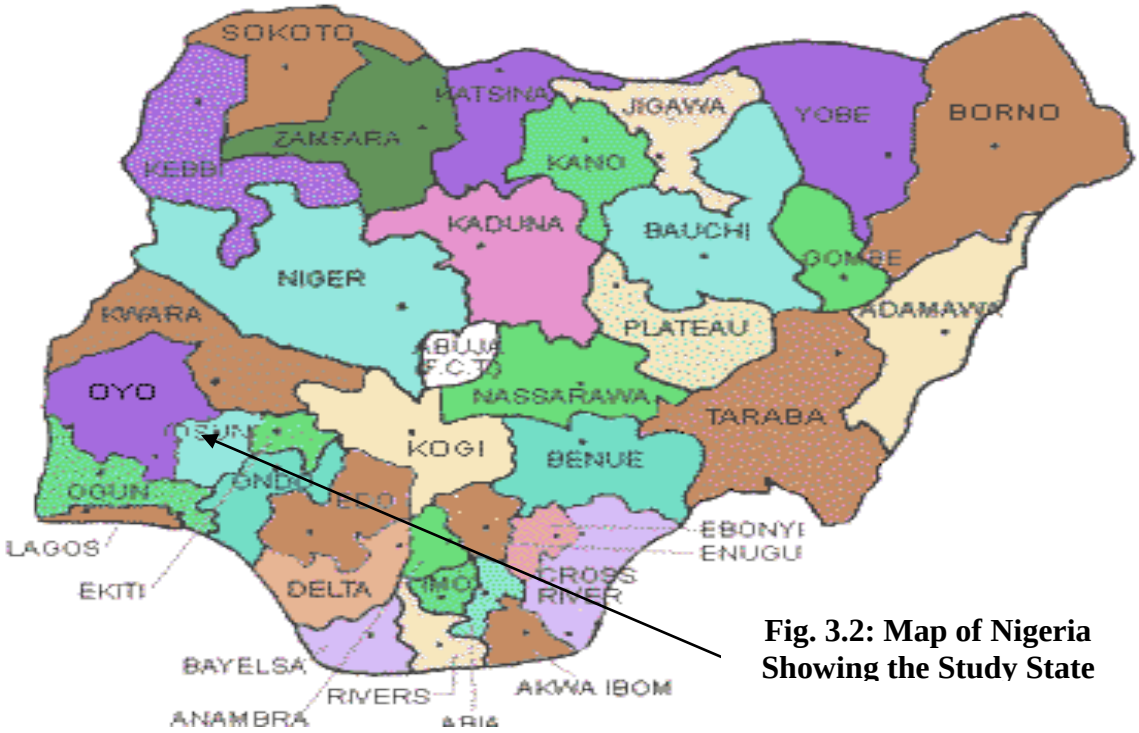

Fig. 3.2: Map of Nigeria Showing the Study State

There are more than 200 towns, villages and other settlements in the State. The state has a considerable number of highly urbanised settlements and some of the major towns are Osogbo, Ile-Ife, Ilesa, Ikirun, Iwo, Ede, Ila Orangun and Ikire. Others include Ipetumodu, Ejigbo, Ilobu, Gbongan, Okuku, Inisa, Ijebu Ijesa, Ipetu Ijesha and Ifon Osun. The people of the State are mainly traders, artisans and farmers and other occupations include making of hand woven textiles, tie and dye clothes, leather work, carving and mat weaving. In addition, Osun State is blessed with vast mineral resources which include gold, clay, limestone, kaolin and granite. Osun State is a repository of

Yorubas and they trace their origin to Oduduwa and the town of Ile-Ife. For Administrative convenience, Osun State is divided into six zones namely: Osogbo, Ede, Iwo, Ikirun, Ilesa and Ile-Ife and these six zones were further divided to comprise thirty (30) local government areas.

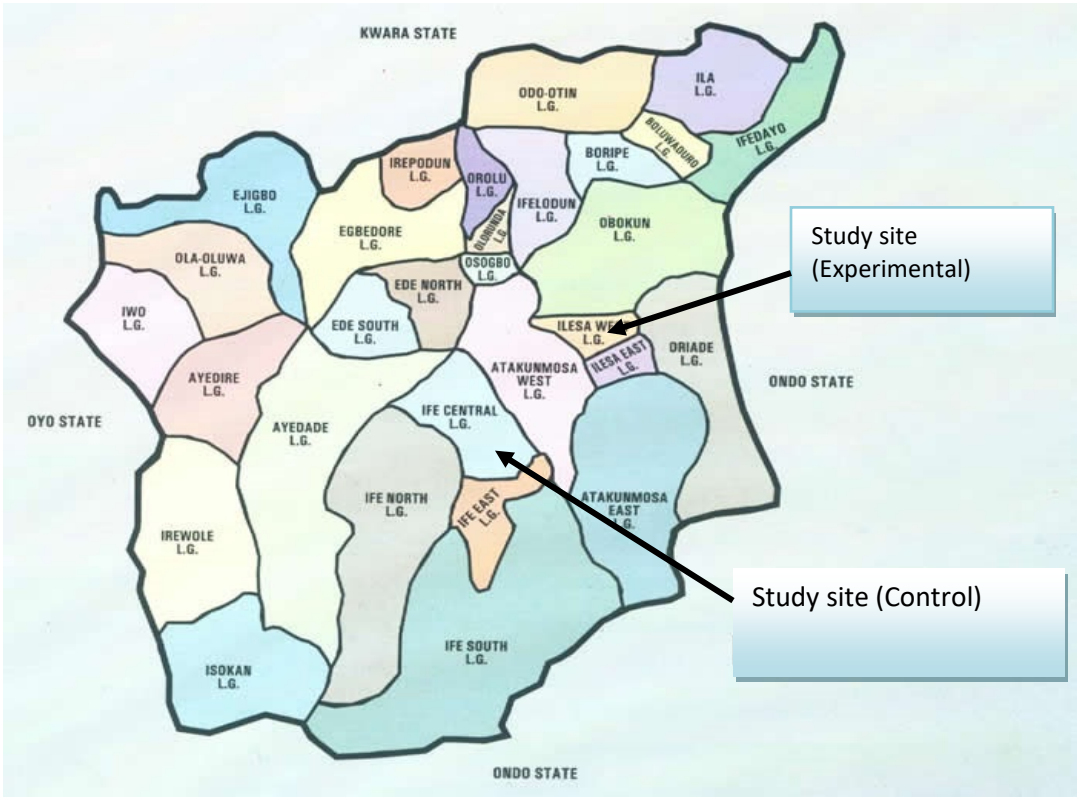

Fig. 3.3: The Map of Osun State Showing the Study Sites (LGAs) with the Related LGAs and States

Two of the thirty local government areas in the state were used for the study. These are Ife Central and Ilesa East local government areas.

Ife Central Local Government is located within the heart of Ile-Ife on longitude 46 degree east, at latitude 7.5 degrees North with an elevation of about 275 meters above sea level (Federal Surveys, 1966). The headquarter is located in the city of Ile-Ife to the south of the area. It is an area of 111km^2 and a population of 167,254 at the 2006 census. Within Ife Central local government area, there are sixteen public junior secondary schools out of which fifteen is a mixed sex schools and one is a single sex school. Ile-

Ife, where the LGA is situated, is popularly known as the cradle of Yoruba race and is only thirty minutes drive from Osogbo, the State Capital.

Ilesa East Local government area is located in Ilesa in Osun state. The Local government area has its headquarters in Iyemogun in the city of Ilesa. It is an area of 71km^2 and a population of 105,416 at the 2006 census. Within Ilesa East Local Government Area, there are seventeen junior secondary schools out of which sixteen are mixed schools and one is a single sex school. Ilesa where the LGA is situated is located between longitude 4^0 3^0', and $4^0$34', East and latitude $7^0$5' North and covered an area of about 1,850square kilometers. It shares boundaries with Ekiti and Ondo States in the East, Osogbo and Ede in the West, Igbajo and Oke-Ila in the North and Ile-Ife and Ifetedo in the South.

3.3. Target Population

The target populations are in two categories. The primary target included the orphans and vulnerable children identified in the selected schools from JSS1 to JSS3, while the secondary targets include the public health nurses from Primary Healthcare Centres and the teachers that are teaching in the selected schools. The secondary targets were needed to provide the intervention designed for the study as part of their professional duty.

3.4. Sample

The sample for the study included male and female orphans and vulnerable children in the secondary schools, secondary school teachers and community health nurses. The school is selected for this study because it has been identified as a major site of building resilience in children and that children spend larger part of their days at school with their teachers. Also, because the study is using a public-based approach to responding to the needs of vulnerable children. Public health nurses were considered because school health falls within the domain of community health and one of the roles of community health nurses is to respond to the needs of the vulnerable population.

3.4.1. Sample Size Determination

a. Public Health Nurses and Teachers

The total number of public health nurses available at the selected Primary Health Care facilities participated in the study. Teachers who participated in the study were nominated by the school principals as shown in Table 3.1.

b. Children

The sample size for OVC was calculated using sample size formula for comparison group in which the prevalence of psychosocial distress among OVC in Nigeria was taken to be 50.0%. (This prevalence was assumed because there was no prior data on prevalence of psychosocial distress among these groups).

$$n = \left(z_{1-\alpha/2} + z_{1-\beta}\right)^2 \frac{\pi_0(1-\pi_0) + \pi_1(1-\pi_1)}{\left(\pi_0 - \pi_1\right)^2}$$ **Source: Kirkwood and Sterne, 2003**

Where:

n = Minimum number of participants required in each group (unexposed and exposed)

π_o = Proportion or percentage of unexposed/control group hypothesised to have the outcome of interest =50% (0.5)

π_1 = Proportion or percentage of exposed/intervention group hypothesised to have the outcome of interest = 35% = 0.35

$\pi_1 - \pi_o$ = Effect size (is the hypothesised difference between the two groups attributable to the intervention= (0.50-0.35)=0.15.

$Z_{1-\alpha/2}$= Percentage point of the normal distribution corresponding to the (two sided) significance level=1.96 (95% level of significance)

$Z_{1-\beta}$ = One sided percentage point of the normal distribution corresponding to 100% minus power, 1.28 for 80% power.

Substituting the value in the formula, a total of 246 was obtained. To allow for 10% non-response rate, a total of 273 was obtained per group.

3.5. Sampling Methods

Multi-stage sampling technique which comprises three stages was utilised for the selection of samples for the study:

3.5.1. Selection of Zones and Local Government Areas

This stage of sampling includes the selection of zones and local government areas for the study. Ife and Ilesha zones were purposively selected out of the six zones in Osun State. Purposive sampling was also used to select one Local government area from each of the zone. Ilesa East LGA was selected from a total of six LGAs (Atakumosa East, Atakumosa West, Ilesa East, Ilesa West, Obokun and Oriade) in Ilesha zone while Ife central LGA was selected from a total of four LGAs (Ife East, Ife Central, Ife North and Ife South) in Ile-Ife zone The criteria for purposive selection of the zones and LGAs include:

- Presence of primary health care centres controlled at either primary, secondary or tertiary levels
- Presence of public secondary mixed schools in zones and LGA
- Presence of school health programme in the LGA

3.5.2. Selection of PHCs and Schools

All the PHCs that have public health nurses in Ilesa East and Ife central LGAs were purposively selected. The two LGAs have seventeen and sixteen secondary junior schools respectively. Using a general thumb's rule, thirty percent (30%) of the schools in each LGA were selected by simple balloting. Thus, the study was conducted in six public mixed secondary school from each of the LGA as shown in Table 3.1. Criteria for selection of PHCs and schools were based on:

- Primary Health Care centre must have School Health visiting programme
- Schools are within the same LGA as selected PHCs
- Schools are owned by government
- Schools must be a junior school

- Schools must have both gender
- Schools must be a-day school

3.5.3. Selection of Study Participants

The last stage of the sampling was the selection of study participants which include public health nurses, teachers and orphans and vulnerable children.

3.5.3.1. Selection of Public Health Nurses and School Teachers

The third stage of the sampling involves the selection of nurses and teachers that participated in the study as shown in Tables 3.1 and 3.2. All public health nurses available at the selected primary health care facilities in the LGAs participated in the study. Six public health nurses working in the school health unit of the primary health care arms of the teaching hospitals also participated in the study. Teachers who participated in the study were nominated by the principals because the study was conducted during the teaching session and all teachers could not be allowed to participate in the study. Teachers who teach subjects such as social studies, physical health education or those in charge of counselling children were requested and nominated by the principals.

Table 3.1: Samples of Junior Secondary School Teachers Nominated for the Study

Schools	Sample
Ilesa East Local Government Area	
Ilesa Grammar School (Junior School I)	3
St Lawrence's Grammar School	2
The Apostolic College	2
Biladu Grammar School	1
United Anglican-Methodist School (school I)	3
Cherubim and Seraphim Junior Secondary School	2
Ife Central Local Government Area	
Oduduwa College	4
Oranmiyan High School (School 1)	4
Urban Day Grammar School	4
Oluorogbo Junior High School	4
Moremi High School (School 1)	4
St David's Grammar School (School 1)	3
Total	**36**

Table 3.2: Samples of Public Health Nurses Who Participated in the Study

Schools	Sample
Ilesa East Local Government Area	
Irojo Primary Health Care Centre	3
Ijamo Primary Health Care Centre	1
Anaye Primary Health Care Centre	1
Oke-Iro Primary Health Care Centre	1
**Multipurpose Primary Health Care centre	4
Ife Central Local Government Area	
Enuwa Primary Health Care Centre	7
Igboya Primary Health Care Centre	1
Akarabata Primary Health Care Centre	1
Gbalefefe Primary Health Care Centre	1
**Urban Comprehensive Health Centre Eleyele	2
Total	**22**

***Primary Health Care (PHC) arms of the Teaching Hospital. Public health nurses working in the School Health Unit were nominated to participate in the study.*

3.5.3.2. Selection of Orphans and Vulnerable Children

Selection of OVC that participated in the study was done through the use of OVC vulnerability index. The vulnerability index is a simple assessment tool developed by the FMWA&SD (2008)—a government body in charge of children and women affairs in Nigeria. The instrument defines the level of exposure to stressor known as vulnerability and it is a resource used to determine children most in need of support based on six verifiable criteria which are health, education, shelter, protection, nutrition, and economic support. The original vulnerability index developed by FMWA&SD was more appropriate for out-of-school youths and it was difficult to place the children within two of the six indices used in measuring their vulnerability status. The vulnerability index was revised with the teachers and the public health nurses for its appropriateness for in-school children and an additional index was added on psychosocial well-being. Children were categorised into three groups based on this instrument: most vulnerable (16-24), more vulnerable (11-15) and vulnerable (1-10). For this study, children with higher vulnerability scores were selected.

Vulnerability index form was administered to all the students from JSS1-JSS3 in the selected schools in the two LGAs. Children who participated in the study were selected based on their level of vulnerability (11 above). Seven hundred and fifty (750) students who were able to submit a duly-signed consent form by parent/guardian were recruited into the study. The stages of the selection process are as stated in Tables 3.3 and 3.4. The flow of the selected children through each stage of the quasi-experimental study is as shown in Fig. 3.3.

Table 3.3: Selection of Children from Ilesa East Local Government Area

School	Class	Given Pop	Acces-sible Pop	**VULNERABILITY LEVEL** Vulne-rable (1-10) **A**	More Vulnera ble (11-15) **B**	Most Vulne rable (≥16) **C**	Total no of children eligible for study **(B+C)**	Total Number of children with full consent (Parent and child)
Ilesa	JSS 1	188	180	130	42	8	50	38
Grammar	JSS 2	292	253	210	38	5	43	41
School	JSS 3	243	230	175	54	1	55	44
St.	JSS 1	150	129	91	34	4	38	38
Lawrence's	JSS 2	93	84	67	17	0	17	17
Grammar	JSS 3	74	65	41	21	3	24	24
School								
	JSS 1	142	160	134	26	0	26	19
The	JSS 2	156	95	82	13	0	13	13
Apostolic	JSS 3	110	53	44	9	0	9	9
College								
Biladu	JSS 1	46	39	16	12	2	14	10
Grammar	JSS 2	51	50	31	14	5	19	17
School	JSS 3	15	16	7	8	1	9	0
United	JSS 1	109	93	73	20	0	20	15
Methodist	JSS 2	143	110	86	23	1	24	14
School	JSS 3	152	150	126	23	1	24	21
Cherubim	JSS 1	31	30	22	7	1	8	7
and	JSS 2	33	29	15	13	1	14	14
Seraphim	JSS 3	24	14	7	7	0	7	7
School								
Total		2,052	1,771	1,357	381	33	**414**	**339**

Table 3.4: Selection of Children from Ife Central Local Government Area

School	**Class**	**Given Pop**	**Acces-sible Pop.**	**VULNERABILITY LEVEL**			**Total no of children Eligible (B+C)**	**Total Number of children with full consent (Parent and child)**
				Vulne-rable (1-10)	More Vulnera ble (11-15) **B**	Most Vulnera -ble (≥16) **C**		
Oduduwa College	JSS 1	60	45	22	23	0	23	22
	JSS 2	67	49	38	11	0	11	8
	JSS 3	73	48	24	24	0	24	16
Oranmiyan High School	JSS 1	58	52	24	23	5	28	24
	JSS 2	78	59	37	21	1	22	20
	JSS 3	97	59	38	17	4	21	21
Urban Day Grammar School	JSS 1	52	72	46	24	2	26	16
	JSS 2	90	69	45	20	4	24	29
	JSS 3	75	50	35	14	7	21	21
Oluorogbo Grammar School	JSS 1	88	63	39	14	10	24	24
	JSS 2	103	68	39	25	4	29	27
	JSS 3	93	57	31	24	2	26	18
Moremi High School	JSS 1	84	68	41	27	0	27	20
	JSS 2	83	65	51	14	0	14	0
	JSS 3	78	62	50	10	2	12	1
St. David"s Grammar School	JSS 1	156	131	76	47	8	55	55
	JSS 2	156	124	77	44	3	47	40
	JSS 3	463	124	62	55	7	62	49
		1954	**1265**	**769**	**437**	**59**	**496**	**411**

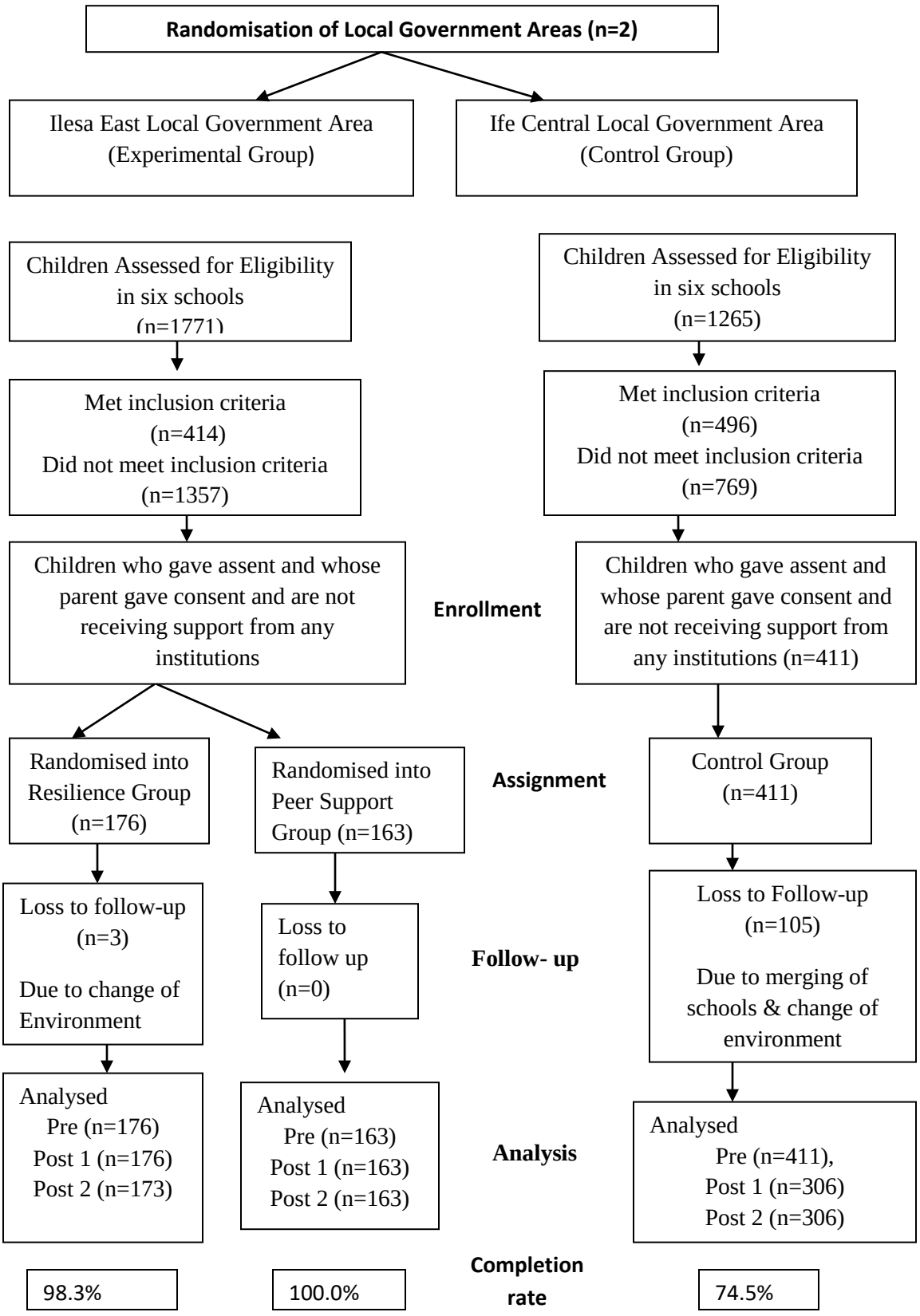

Fig. 3.4: Flow of Participants through Each Stage of the Quasi-Experiment

3. 6. Instruments

Two instruments were used for the study. These are children Questionnaire containing questions on Resilience and psychosocial health outcomes of orphans and vulnerable children. The second instrument was a questionnaire on nurses/teachers' knowledge about psychosocial support of orphans and vulnerable children.

The **children's** questionnaire, designed to determine the resilience and psychosocial health outcomes of OVC, consisted of four sections. Section A assessed the demographic characteristics of OVC. Section B assessed the protective factors possessed by OVC in a 70-point likert scale. Section C was a 140-point resilience scale that measured the level of resilience of OVC. The resilience scale adapted for this study was developed by the Resilience Centre in 1990 based on both quantitative and qualitative study and extensive review of literature. It measured the degree of individual resilience by looking at individual personal skills, relationship with primary caregiver and contextual levels. Section D was designed to evaluate selected psychosocial outcomes which are anxiety, depression, self-esteem and social connectedness. Anxiety, depression and self-esteem were measured by adapting a standardised scale:

- **Anxiety scale** was adapted from Spencer Children's anxiety scale and Depression Anxiety Scale (DASS). It consists of a 54-point anxiety scale.
- **Depression scale** was adapted from Center for Epidemiological Studies Depression Scale for Children (CES-D). The scale consists of a 45-point depression scale.
- **Rosenberg self-esteem scale** was used for measuring self-esteem among the children. It is a 30-point scale.
- **Social connectedness scale:** A self-developed questionnaire was used to measure social connectedness among the children. The instrument was developed based on extensive literature review and focus group discussion with selected children on what social connectedness means and what it means to be socially healthy. It is a 24-point scale.

The **s**econd instrument was a self-developed semi-structured 94-point knowledge scale used to determine nurses' and teacher's knowledge of psychosocial support of orphans and vulnerable children as well as their involvement in their care. It consists of three sections. Section A assessed the demographic characteristics of nurses and teachers. Section B verified their knowledge of psychosocial support of OVC, and Section C explored their involvement and perceived roles in the support of OVC.

3.7. Pilot Study

A pilot study was conducted between July and December 2012 in Ife North and Oriade Local Government Areas of the state. These two LGAs were selected using purposive sampling due to their similarities with the two study settings selected. The LGAs were randomly assigned into experimental and control group and three schools were selected from each LGA by simple balloting to participate in the study. The purpose of the pilot study was to determine the feasibility of the research study, enhance instrument fidelity and to test the usefulness of the intervention before it was rolled out on a larger scale. A total of fifteen (15) nurses, fourteen (14) teachers and one hundred and nine (109) vulnerable school children participated in the study. The pilot study was conducted in four phases:

Phase 1: The phase was for a period of twelve weeks. During this phase, content validity and reliability of all the instruments used were established. In addition to this, the fidelity of the standard questionnaires to be used for the children questionnaire was established using a focus group discussion (FGD) with fifty five (55) vulnerable school children. (Appendix XIV). The summary results of the FGD are as presented in Appendix XIII. The children were selected from three different junior schools from the ones used for the pilot study in the same settings.

The FGD was also used to understand the phenomenon of resilience and what it means to be psychosocially healthy among the children. The outcome of the focus group discussion was used to maximise appropriateness of instruments in local context and also to modify the intervention package.

As a result of the focus group discussion, items 1, 5, 6, 7, 9, 17, 18, 19 of the standardised resilience scale instrument (Appendix IV) were replaced with item 11-19 of the children questionnaire used for the study (Appendix II). The replacement was done because the items were not seen as a measure of resilience by the school children. Rather, the children saw them as resource factors that could help them to cope with adversity. These findings were also similar to what was found with experts in psychology, school health nursing and sociology during the content validity exercise.

The final instrument was translated to Yoruba language and back translated to English to enhance validity of the translation process. The reliability of the instrument was done using internal consistency. For the psychosocial outcomes variables, the children were in agreement with the items however slight modifications were made on the way the scale were stated to suit local context.

Phase II: This phase involved the collection of baseline data from all the target populations. This was implemented over a period of two weeks.

Phase III: This phase involved the collection of post-intervention data from all the study groups six weeks post-intervention. The data was collected over a period of two weeks.

The result of the pilot study showed that both public health nurses and teachers were deficient in knowledge about psychosocial support of vulnerable school children. It also showed that the vulnerable school children were facing one form of psychosocial problems or the other. The result showed a significant increase in the knowledge mean scores of both nurses and teachers 6 weeks post-intervention. Children's depression scores significantly reduced post-intervention. Their resilience, self-esteem, and social connection were also significantly improved, while no significant reduction was found in their anxiety scores. The results of the pilot study suggested that a more rigorous study be conducted to further ascertain the effectiveness of the various interventions used in the study.

The pilot study was also used to:

i. assess the flow of the questions
ii. examine the clarity of the instructions for filling the questionnaires

iii. estimate the time needed for responding to the questionnaire
iv. identify logistical problems that are likely to be encountered and how to resolve them
v. assess the feasibility of administering the questionnaire
vi. modify the questions to avoid repetitions and dropping of irrelevant questions

3.8. Reliability of the Instruments

This study utilised internal consistency and test retest reliabilities to ensure the reliability of all the instruments. The internal consistency reliability was used to measure the extent to which responses to the scale were similar and related. This was used because a scale consisting of several items or questions was being used to measure same variable while asking similar questions in a different way. Because all the items were used to measure same variable, it is expected that there should be a consistent pattern in how subjects respond to or answer the items. The correlation coefficient and internal consistency reliabilities of the instruments were measured by calculating the coefficient alpha (α) or Cronbach's alpha. An alpha coefficient of greater than 0.7 indicates strong relationship or connection among the responses to different items on the scale used in this study. Alpha coefficient range from 0-1.0.

Table 3.5: Reliability of the Instruments Used in the Study

Instruments	Number of items	Chronbach Alpha	Test Retest method
Resilience scale	28	.86	-
Protective Factors Scale	14	.76	-
Anxiety Scale	18	.69	-
Depression Scale	15	.87	-
Self-esteem Scale	10	.78	-
Social Connection Scale	8	.82	-
Knowledge Questionnaire for Nurses and Teachers	17	-	.79

3.9. Validity of the Instruments

Content validity of the instruments was established through expert panel review and face validity before the actual study was implemented. All the materials for this study were given to experts in the field of nursing, psychology and sociology who have been involved in research in this area to review the instruments for completeness and appropriateness. Face validity was conducted to judge how clearly the items on the instrument reflect the concept that they are intended to measure. Selection threat was a major threat to internal validity in this study. Control mechanism was put in place to counteract this threat by using a standard and approved vulnerability index scale to assess the level of all the children. Those who have higher level of vulnerability were selected for the study. The effect of pre-testing and intervention were also a main threat to external validity of the study. The use of control group and adequate sampling techniques was used to minimise this effect.

3.10. The Intervention and Data Collection Process

The study was implemented between January 2012 and December 2013. The phases of this study were as follows:

Phase I – The Planning Phase

This phase involved familiarisation visits to the study sites which included selected Local Government Areas (LGAs), the Primary Health Care Centres and selected schools. Also, during this phase, nurses and teachers who participated in the study were recruited. The approval of the relevant authorities such as the local health authority, educational board and institutional review board was sought.

Phase II: Pre-intervention Assessment Phase

During this phase, a baseline data was collected from all the samples of the target populations to allow for comparison with the end line data. The phase involved collection of quantitative data using instruments developed for the study.

Phase III: Intervention Phase

The phase is also known as the implementation phase where all the intervention packages developed were utilised for the target populations.

The interventions are:

a. **Psychosocial Support Training for Nurses and Teachers**: A training curriculum on psychosocial support for OVC was developed by the researcher. This curriculum was used by the researcher for the training of nurses and teachers. The package treated topics such as understanding the concept of psychosocial support, identification of children that need support among school children, resilience in children (identifying resilient children and core resilience characteristics), challenges for OVC, listening to the children, dealing with difficult behaviour/psychosocial health problems and caring for OVC caregivers.

b. **Resilience Training for OVC:** The training utilised a resilience-based training curriculum developed to instill knowledge and skills in core resilience characteristics in the children by the trained teachers. The package was structured in a way to improve knowledge of resilience and skills in six core characteristics of resilience – equanimity, meaning, perseverance, self-esteem, self-reliance and existential aloneness. The package made use of autobiography of legends, songs that promote resilience, lecture, discussions, brainstorming and assignments. The package was a six-session lecture of one lecture per week. Each core characteristics of resilience was taken on a weekly basis for a period of two hours using participatory approach which focused on active involvement of the children during the training programme.

c. **Peer Support Group Activities for OVC:** Peer support group has been most widely used in providing psychosocial support to orphans and vulnerable children by both non-governmental and community-based organisations. A support group was used to facilitate interaction between OVC and sharing of feelings, ideas and information on coping techniques in different situation. Basic life skills which include self-awareness, empathy, coping with stress, coping with emotions,

communication, relationship, problem solving, critical thinking, decision making and interpersonal skills were taught during the support group meetings. The sessions were facilitated by the teachers.

Phase IV: Post-intervention Assessment Phase

This phase is also known as the evaluation phase. It involved the collection of end line data using the same instruments used in phase II above. Data was collected 12 weeks and 24 weeks post-intervention. The data collected in this phase was compared with previous data collected in Phase II. The diagrammatic sketch below shows the study activities *viz-a-viz* the different phases of the study.

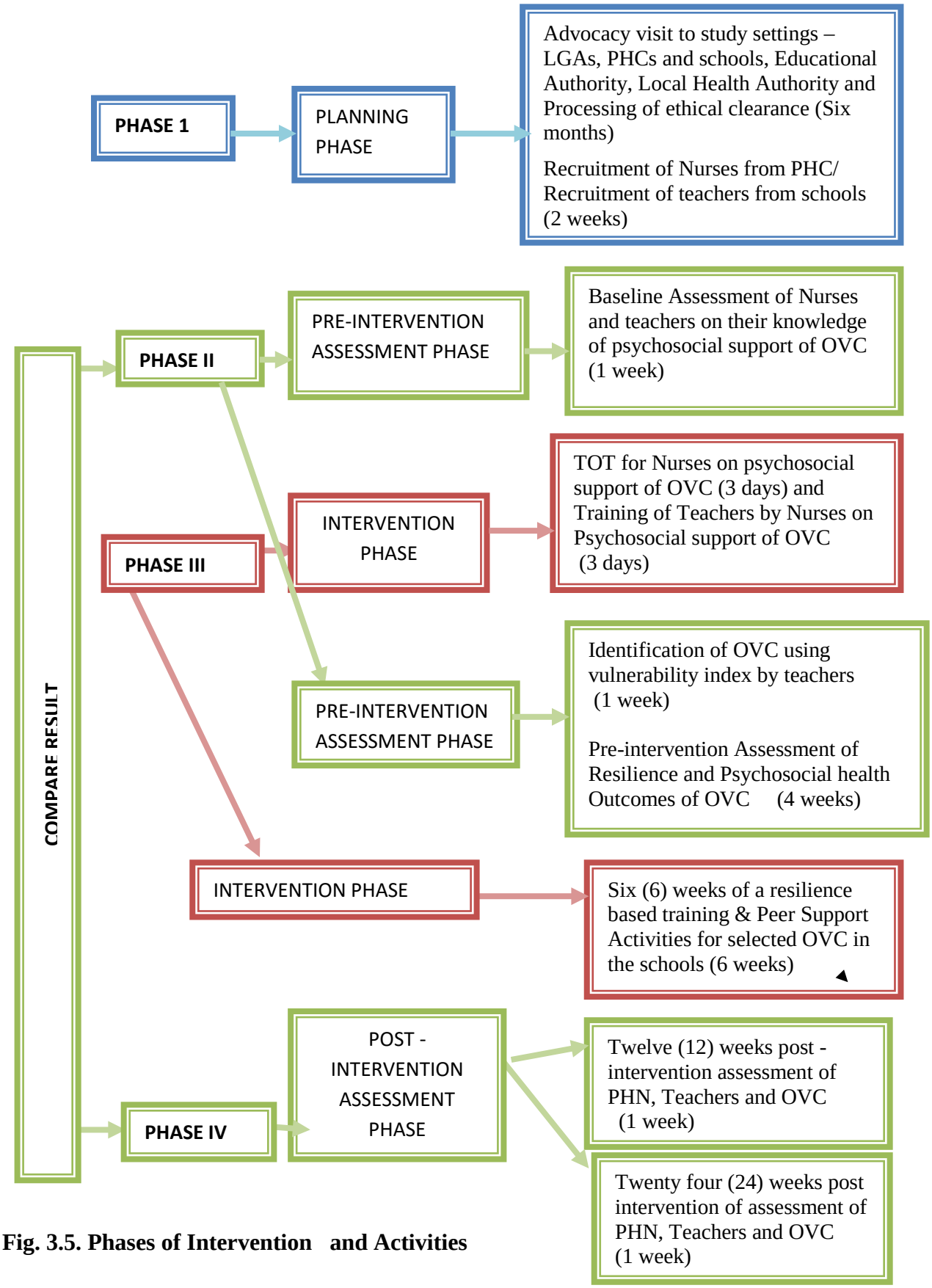

Fig. 3.5. Phases of Intervention and Activities

3.11. Training of Research Assistants

A two-day training was conducted for two research assistants. The training focused on research ethics, interviewing skills, data checking and screening and interpersonal relationship with research respondents. The two research assistants were taken through the proposal to intimate them with the key concepts and variables under study. They were also taken through the various research instruments for effective administration on the field. Other activities performed by the research assistants included:

- Organisation of training venues
- Advocacy visits to schools and relevant places with the principal researcher
- Training logistics
- Follow-up activities of nurses and teachers

3.12. Ethical Consideration

Ethical clearance for the study was obtained from institutional review board of the Obafemi Awolowo University Teaching Hospital, Ile-Ife. Letter of permission to conduct study was collected from appropriate authority such as the local inspectors of education (LIE) of the respective local government area. Informed consent of all participants was sought through consent form signed by each person. For the children, consent was taken from their parents while assent was taken from them. Information sheet on the study was designed to provide brief information on the project to the study participants and their parents. Confidentiality of information gathered through the research process was met by assigning each participant a code number as the mean of identification on the questionnaire. All information gathered in this study was kept confidential. All records related to the study had been stored in the locked cabinets which can be accessed by only authorised persons which include the researcher and the supervisor.

3.13. Control of Extraneous Variables

OVC that were receiving one form of psychosocial support or the other from non-governmental organisation, individual or any other institutions were excluded from the

study. Other extraneous variables that could affect the outcomes of the study were controlled through the use of appropriate statistical tests.

3.14. Method of Data Analysis

Data from the questionnaires was coded and entered into statistical package for social sciences (SPSS) version 16 for descriptive and inferential statistical analysis. Descriptive statistics was used in summarising the demographic data of the respondents using frequency, proportions, mean, standard deviation and range. It was also used to summarise knowledge responses of public health nurses and teachers and other key areas of interest such as the causes of vulnerability among OVC; protective factors possess by OVC, summary of resilience and psychosocial distress scores.

The data from this study met the assumption of hypothesis of Gaussian distribution. Thus, parametric tests were used to test for and predict relationship between variables. The student t-test was used to evaluate the effectiveness of the training on the target population pre- and post-intervention. Chi-square was used to test for association between categorical variables. Hypotheses were tested through both descriptive (frequency and percentages) and inferential statistics such as correlation, student t-test and ANOVA at a significant level of $P<0.05$. Post-hoc LSD test was used to explore the differences among groups in detail where ANOVA indicated a significant difference.

3.14. 1. Summary of Method of Analysis for Each Objective

Objective 1: To determine the knowledge of public health nurses and school teachers about psychosocial support of OVC

This objective was answered by section B of the nurses and teachers' questionnaire. First, the descriptive of Section B was presented in sub-topics. In analysing the knowledge level of PHN and teachers, questions on knowledge in section B of the nurses and teachers questionnaire was scored. I mark for each correct answer and zero for incorrect answer for option questions and 2 marks for a correct open-ended questions and zero for incorrect response. A total mark of 94 is obtainable. Correct answer to at least 50% or more (i.e. $\geq$47) was classified as good knowledge while scores below 50% was classified as low.

Objective 2: To determine nurses' and teachers' involvement in providing psychosocial support to OVC.

Section C of the nurses and teachers questionnaire provided answer to this objective. The unstructured questions on nurses'/teachers' involvement in the care of OVC were coded and a matrix of responses developed to outline the major themes that emerged from the responses.

Objective 3: To determine the level of resilience among OVC in the study setting

This objective was addressed by Section C of the Children's questionnaire. The objective was measured on a five-point likert scale: Not at all =1, A little =2, somewhat =3, Quite a bit= 4 and A lot=5. A total mark of 140 was obtainable. A score of $\leq$56 signified low resilience, 57-84 scores was adjourned to be moderate resilience while 85-140 signified high resilience.

Objective 4: To determine the psychosocial health condition of orphans and vulnerable children in relation to anxiety, depression, self-esteem and social connection.

The section D of the children's questionnaire provided answer to the above questions. For each of the outcome variables, a descriptive statistics was first presented using frequency distribution. Thereafter, the responses were categorised as shown below:

- **Anxiety**: Measured on four point likert scale: 0- did not apply to me at all, 1- apply to me some of the time, 2- apply to me good part of the time and 3- apply to me most of the time. A total of 54-point is obtainable. Score 0-18 signifies low anxiety, 19-36 moderate anxiety and 37-54 signifies high anxiety score.
- **Depression:** Measured on four point likert scale: 0- did not apply to me at all, 1- apply to me some of the time, 2- apply to me good part of the time and 3- apply to me most of the time. A total of 45-point is obtainable. Score 0-15 implied low depression score, 16-30 (moderate depression score) and 31-45 (high depression score).

- **Self-esteem:** Measured on four likert scales: 0-strongly disagree, 1-disagree, 2- agree and 3- strongly agree. The scale ranges from 0-30. Scores between 15-25 are within normal range; scores below 15 suggest low self-esteem.
- **Socio-connectedness:** Measured on four likert scales: 0-strongly disagree, 1- disagree, 2- agree and 3- strongly agree. The score ranges between 0-24. A score between 12-24 shows good social connection while a score below 12 signifies poor social connection.

Objective 5: To explore the association between OVC characteristics (age, gender, orphan type, living structure and living with siblings) and both resilience and health outcomes.

Table 3.6: Summary of Method of Analysis for Objective Four

OVC Characteristics	**Resilience**	**Psychosocial health outcomes**			
		Anxiety	**depression**	**Self esteem**	**Social Connectedness**
Age	Correlation	Correlation	Correlation	Correlation	Correlation
Gender	t-test	t-test	t-test	t-test	t-test
Orphan type	Anova	Anova	Anova	Anova	Anova
Family Structure	Anova	Anova	Anova	Anova	Anova
Living with siblings	t-test	t-test	t-test	t-test	t-test

Objective 6: To determine the relationship between the level of protection of the children and both resilience and health outcomes

Answer to this objective was derived from Section B of the children's questionnaire. The descriptive statistics of protective factors possessed by the children was first presented using frequency distribution table. Thereafter, level of protection as possessed by the children was categorised to low (≤28), moderate (29-42), and high (43-70) in a frequency distribution table. Then correlation was used to determine how the level of protection influences children's resilience and psychosocial health outcomes using the raw mean scores**.**

Objective 7: To determine the protective factors that predicts resilience among the children

The responses to the protective factors were categorised into bivariate response. Thereafter, significant protective factors from X^2 analysis were put into a multivariate logistic regression analysis at $p<0.05$ to identify predictors of resilience.

Objective 8: To evaluate effect of psychosocial training on public health nurses' and teachers' knowledge of psychosocial support for OVC

Analysis of hypotheses 1 and 2 provided answer to this objective as shown on table 4.7.

Objective 9: To evaluate the effect of the resilience-based training and peer-support activities on resilience and psychosocial health outcomes of OVC

Analysis of hypotheses 4 and 5 provided answer to this objective as shown on Table 3.7.

Table 3.7: Summary of Method of Analysis of the Hypotheses

S/N	Statement of Hypotheses	Method of Analysis
1	There is no significant difference between nurses in the experimental and control group in their knowledge about psychosocial support for OVC pre- and post-intervention.	Independent T-test
2	There is no significant difference between teachers in the experimental and control groups in their knowledge about psychosocial support for OVC pre- and post-intervention	Independent T-test
3	There is no significant difference in the resilience and psychosocial health outcome scores between orphans and non orphans in the group pre- and post-intervention	Independent T-test
4	There is no significant difference in the resilience and psychosocial outcomes scores between OVC in the experimental and control groups pre- and post-intervention.	Independent T-test
5	There is no significant difference in the resilience and psychosocial health outcomes scores among OVC in the study groups pre- and post-intervention.	ANOVAs +LSD

CHAPTER FOUR

RESULTS

This chapter describes the key findings of the study among all the study populations (public health nurses, teachers and the vulnerable school children). A total number of twenty-two (22) nurses and thirty-six (36) teachers participated in the study. Their mean ages were 40.14 ±8.3 and 42.58±8.9 respectively. There were 750 orphans and vulnerable children that participated in the study. The mean age of the children was 13.63 years (±1.4). The results are presented under the following sub-topics:

4.1. Socio-demographic characteristics of the study populations

4.2. Nurses' and teachers' knowledge of psychosocial health support for the vulnerable school children

4.3. Nurses' and teachers' involvement in psychosocial support for vulnerable children

4.4. Resilience of the school children

4.5. Psychosocial health outcomes of the vulnerable school children

4.6. Relationship between vulnerable children socio-demographic characteristics and both resilience and psychosocial health outcomes

4.7. Relationship between resilience and psychosocial health outcomes

4.8. Protective factors and health outcomes in relation to resilience and psychosocial health outcomes

4.9. Hypotheses testing

4.1. Socio-demographic Characteristics of the Study Populations

4.1.1. Socio-demographic Characteristics of Public Health Nurses (PHN) and Teachers

The demographic characteristics in Table 4.1a and 4.1b. show that majority of the public health nurses (PHN) in the experimental group were middle age adult while those in the control group were young adult. For the teachers, majority of the respondents were middle age adult. However, in comparing the mean age of the experimental and control group of PHN and teachers, a significant difference was found between the experimental group and control group of nurses (p=0.024), but there was no significant difference in age between teachers in the experimental and control group (P=0.440). Most of the nurses and teachers were female.

Majority of the PHN in the experimental group had spent more than 10 years on the job. The reverse was the case for the PHN in the control group as majority of them had only spent less than 10 years on the job. While majority of teachers in the experimental group had spent more than 10 years on the job, most of those in the control group have spent less than 10 years. Also most of the PHN and teachers were married and the study was dominated by Christians, while majority of PHN in the experimental group were graduate with 40.0% (n=4) having higher degrees. Greater proportion of the nurses in the control group were diploma holders (97.0%, n= 9). Most teachers in both experimental and control groups were university graduates. Majority of nurses in the experimental group had combined professional qualification while most of the ones in the control group had only single qualification.

Table 4.1a: Demographic Characteristics of Public Health Nurses and Teachers

Variable	Public Health Nurses		Sig.	Teachers		Sig.
	Experimental Group (n=10)	Control Group n=12)		Experimental Group (n= 13)	Control Group (n=23)	
Age (years)						
Mean age	44.0 (±6.5)	36.6 (±8.2)	0.024	41.2 (±10.5)	43.4 (±8.1)	0.480
Range	30-64	25-56		24-56	25-58	
<40 (Young adult)	2 (20.0%)	9 (75.0%)		5 (38.5)	5 (21.7)	
≥40 (Middle age adult)	8 (80.0%)	3(25.0%)		8 (61.5)	18 (78.3)	
Sex						
Male	1 (10.0%)	1 (10.0%)	0.892	5 (38.5%)	5 (21.7%)	0.282
Female	9 (90.0%)	11 (91.7%)		8 (61.5%)	18 (78.3%)	
Years of Experience						
Median year of experience	11.84	16.39	0.099	15.10	9.50	0.208
Range	0-33	3-26		0-29	0-33	
<10	2 (20.0%)	7 (53.3%)		7 (53.8%)	7 (30.4%)	
>10	8 (80.0%)	5 (41.7%)		6 (46.1%)	16 (69.6%)	
Marital Status						
Married	9 (90.0%)	12 (100.0%)	0.263	10 (76.9%)	21 (91.3%)	0.184
Married but separated	0 (0.0%)	0 (0.0%)		0 (0.0%)	1 (4.3%)	
Single	1 (10.0%)	0 (10.0%)		3 (23.1%)	1 (4.3%)	
Religion						
Christianity	9 (90.0%)	12 (100.0%)	0.599	10 (76.9%)	21 (91.3%)	0.174
Islam	1 (10.0%)	3 (25.0%)		0 (0.0%)	3 (13.0%)	

Table 4.1b: Demographic Characteristics of Public Health Nurses and Teachers

Variable	Public Health Nurses		Sig.	Teachers		Sig.
	Experimental Group (n=10)	Control Group n=12)		Experimental Group (n= 13)	Control Group (n=23)	
Professional Cadre						
Nursing Officer 1	0 (0.0%)	4 (33.3%)	0.105	-	-	
Nursing Officer 2	1 (10.0%)	4 (33.3%)		-	-	
Senior Nursing Officer	3 (30.0%)	2 (16.7%)		-	-	
Principal Nursing Officer	2 (20.0%)	0 (0.0%)		-	-	
Chief Nursing Officer	3 (30.0%)	2 (16.7%)		-	-	
Assistant Director of Nursing	1 (10.0%)	0 (0.0%)		-	-	
Highest Educational Attainment						
Diploma	3 (30.0%)	9 (75.0%)	0.088	0 (0.0%)	0 (0.0%)	0.180
NCE	0 (0.0%)	0 (0.0%)		3 (23.1%)	1 (4.3%)	
BA/BNSc/BSc	3 (30.0%)	2 (16.7%)		10 (76.9%)	18 (78.3%)	
MSc	4 (40.0%)	1 (8.3%)		0 (0.0%)	2 (8.7%)	
PhD	0 (0.0%)	0 (0.0%)		0 (0/0%)	2 (8.7%)	
Professional Qualifications						
RN	1 (10.0%)	8 (66.7%)	0.017	-	-	
RN+RM	4 (40.0%)	3(25.0%)		-	-	
RN+RM+RPHN	5 (50.0%)	1 (8.3%)		-	-	

4.1.2. Socio-Demographic Characteristics of Orphans and Vulnerable Children from the School

Demographic characteristics of the children are as stated in Table 4.2. The mean age of the children across the groups was similar. Thus majority of the children were in their early adolescent stage across the study groups. Similar age range was also found across the groups. Majority of the children in the experimental group were male while it was female for the control group. In general, there were more females in the study than males. Most of the children were either living with both parents, or their mother. This was followed by those who were living with relatives or guardians. Few children were living with father alone, chronically ill parents or living alone.

Majority of the parents of the children were petty traders, artisans and junior government workers in this order. The findings shows that most of the children were from poor household and paternal orphan dominated the study. The result also shows that most of the children were not living with their siblings across the study groups. Most of the children's academic performance was fair, followed by those who were poor. Only few of the students were good or excellent in their academic performances.

Table 4.2: Socio-demographic Characteristics of the Children across the Study Groups

Variable	Resilience Group (n=176)	Peer support Group2 (n=163)	Control Group (n=411)	Total (n=750)	Sig.
Age					
Mean age	13.44	13.63	13.72	13.63	0.097
Standard deviation	1.34	1.42	1.46	1.43	
Range	10-17	10-17	10-17	10-17	
Sex					
Male	94 (53.4%)	85 (52.1%)	166 (40.4%)	345 (46.0%)	0.003*
Female	82 (46.6%)	78 (47.9%)	245 (59.6%)	405 (54.0%)	
Current Grade					
JSS 1	55 (31.3%)	72 (44.2%)	161 (39.2%)	288 (38.4%)	0.128
JSS2	66 (37.5%)	45 (27.6%)	124 (30.2%)	235 (31.3%)	
JSS 3	55 (31.3%)	46 (28.2%)	126 (30.7%)	227 (30.3%)	
Living Structure					0.408
Living with parents	61 (34.7%)	56 (34.4%)	161 (39.2%)	278 (37.1%)	
Living with mother alone	61 (34.7%)	41 (25.2%)	114 (27.7%)	216 (28.8%)	
Living with father alone	15 (8.5%)	11 (6.7%)	26 (6.3%)	52 (6.9%)	
Living with relatives/guardian	35 (19.9%)	49 (30.1%)	97 (23.6%)	181 (24.1%)	
Living with chronically ill parent	3 (1.7%)	5 (3.1%)	8 (1.9%)	16 (2.1%)	
Living alone	1 (0.6%)	1 (0.6%)	5 (1.2%)	7 (0.9%)	
Occupation of Key Parent					0.380
Junior government worker	20 (11.4%)	15 (9.2%)	59 (14.4%)	94(12.5%)	
Senior government worker	14 (8.0%)	15 (9.5%)	13 (5.6%)	52(6.9%)	
Petty trader	70 (40.9%)	72 (44.2%)	216 (52.6%)	360 (48.0%)	
Unemployed	25 (14.2%)	19 (11.7%)	30 (7.3%)	74 (9.9%)	
Retired	9 (5.1%)	9 (5.5%)	13 (3.2%)	31(4.1%)	
Artisans	36 (20.5%)	30 (20.2%)	70 (17.0%)	139 (18.5%)	
***Vulnerability Status**					
Maternal Orphan	23 (13.8%)	22 (13.5%)	51 (12.4%)	96 (12.8%)	0.933
Paternal Orphan	56 (31.8%)	51 (31.3%)	98 (23.8%)	205 (27.3%)	0.061
Double Orphan	18 (10.2%)	21 (12.9%)	34 (8.3%)	73 (9.73%)	0.236
Child is HIV +	0 (0.0%)	5(3.1%)	1 (0.2%)	6 (0.8%)	0.001*
Child is a labourer	40 (22.7%)	42 (25.8%)	134 (32.6%)	216 (28.8%)	0.033*
Child has disability	17 (9.7%)	19 (11.7%)	22 (5.4%)	58 (7.7%)	0.021*
Child is living in poor household	112 (63.6%)	96 (58.9%)	225 (54.7%)	433 (57.7%)	0.128
Child is living alone with grandparents	12 (6.8%)	18 (11.0%)	30 (7.3%)	60 (8.0%)	0.265
Child is in child headed house	13 (7.40%)	12 (7.4%)	27 (6.6%)	52 (6.9%)	0.265
Living with sibling					
No	96 (54.5%)	82 (50.3%)	241 (58.6%)	419 (55.9%)	0.178
Yes	80 (45.5%)	81 (49.7%)	170 (41.4%)	331 (44.1%)	
Academic Performance					0.000*
Excellent	1 (0.6%)	1 (0.6%)	18 (4.4%)	20 (2.7%)	
Good	31 (17.6%)	25 (15.3%)	78 (18.9%)	134 (17.9%)	
Fair	81 (46.0%)	51 (31.3%)	189 (45.9%)	321 (42.8%)	
Poor	63 (35.8%)	86 (52.8%)	126 (30.6%)	275 (36.7%)	

Multiple responses

4.2. Public Health Nurses' and Teachers' Knowledge of Psychosocial Support of Orphans Vulnerable School Children

The knowledge of nurses and teachers are presented using sub-headings which included their understanding of the concept of orphan and vulnerable children in the Nigeria context, categories of vulnerable children, identification and selection of vulnerable children, common health and psychosocial problems among vulnerable children, and knowledge of psychosocial support interventions.

4.2.1. Understanding of Respondents about the Concept of Orphans and Vulnerable Children

The findings from Table 4.3. show that majority of the nurses and the teachers did not know the correct definition of an orphan in the Nigerian context. However, most of them have an understanding of who a vulnerable child is.

Table 4.3: Definition of Orphans and Vulnerable Children as Understood by Nurses and Teachers

	Nurses		Teachers	
Definition of orphan and vulnerable children	Experimental (n=10)	Control (n=12)	Experimental (n=13)	Control (n=23)
An orphan is a child between ages 0 and 18 years who has lost both parents	9 (90.0%)	10 (83.3%)	10 (76.9%)	20 (87.0%)
*An orphan is a child between ages 0 and 18 years who has lost either of the parents	1 (10.0%)	2 (16.7%)	3 (23.1%)	3 (13.0%)
Vulnerable children are :				
*Children that are prone to deprivation of basic needs	8 (80.0%)	11 (91.7%)	12 (92.3%)	19 (82.6%)
Children who steal	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Children who engage in the act of violence	0 (0.0%)	0 (0.0%)	1 (7.7%)	2 (8.7%)
Children who have no parents	2 (20.0%)	1 (8.3%)	0 (0.0%)	2 (8.7%)

Correct response

4.2.2. Identification of Categories of Vulnerable Children

The results in Table 4.4. show that nurses in both the experimental and control group had a fair understanding of the different categories of vulnerable children. However, less than fifty percent (<50.0%) of the respondents in both groups identified children living with teenage unmarried parents, children in a child headed household and child domestic servants as vulnerable. Also less than 40% of the control group among nurses and the experimental group among the teachers recognised children with special challenges or disability or children whose parents have disability as vulnerable. Result also showed that less than 50% of nurses in the experimental and control groups identified child beggars/destitute as vulnerable. Similar pattern was found among the teachers in both experimental and control groups.

Table 4.4: Identification of Categories of Orphans and Vulnerable Children by Public Health Nurses and Teachers

Categories of Vulnerable Children	Nurses		Teachers	
	Experimental (n=10)	Control (n=12)	Experimental (n=13)	Control (n=23)
Children who have lost one or both parents	10 (100.0%)	11 (91.7%)	10 (76.9%)	17 (73.9%)
Children living with terminally or chronically ill parent(s) or caregiver(s)	5 (50.0%)	5 (41.7%)	5 (38.5%)	6 (26.1%)
Children on the street/ child hawkers	6 (60.0%)	5 (41.7%)	7 (53.8%)	16 (69.6%)
Children living with aged or frail grandparent(s)	7 (70.0%)	7 (58.3%)	5 (38.5%)	6 (26.1%)
Children who get married before 18 years	5 (50.0%)	9 (75.0%)	7 (53.8%)	12 (52.2%)
Neglected children	8 (80.0%)	12 (100.0%)	12 (92.3%)	20 (87.0%)
Abandoned children	10 (100%)	12 (100.0%)	13 (100%)	17 (73.9%)
Children in child headed homes	4 (40.0%)	4 (33.3%)	6 (46.2%)	8 (34.8%)
Children infected with HIV	5 (50.0%)	7 ((58.3%)	4 (30.8%)	5 (21.7%)
Child beggars/destitute children (including exploited almagiris)	4 (40.0%)	4 (33.3%)	5 (38.5%)	10 (43.5%)
Internally displaced or separated children	4 (40.0%)	3 (25.0%)	5 (38.5%)	8 (34.8%)
Child domestic servants	2 (20.0%)	5 (41.7%)	6 (46.2%)	11 (47.8%)
Child sex workers	7 (70.0%)	8 (66.7%)	6 (46.2%)	12 (52.2%)
Children with special challenges or disability, or whose parents have disability.	5 (50.0%)	4 (33.3%)	4 (30.8%)	12 (52.2%)
Trafficked children	8 (80.0%)	9 (75.0%)	10 (76.9%)	14 (60.9%)
Children in conflict with the law	4 (40.0%)	5 (41.7%)	4 (30.8%)	8 (34.8%)
Children of migrant workers e.g. fishermen or women	2 (20.0%)	5 (41.7%)	2 (15.4%)	7 (30.4%)
Children living with teenage unmarried parent(s).	4 (40.0%)	3 (25.0%)	5 (38.5%)	9 (39.1%)

All the categories of children listed above are vulnerable according to National Plan of Action for OVC in Nigeria (2006).

4.2.3. Means of Identification of Orphans and Vulnerable Children

Table 4.5 shows that majority of the PHN in both experimental and control groups demonstrated an understanding of the usefulness of physical examination and vulnerability index in identifying vulnerable children. This was in contrast to what was found among teachers as less than 40% of them have knowledge of vulnerability index as a tool for identifying OVC. Less than forty percent of the PHN in both groups agreed that clinical assessment and community and key opinion leaders could be used to identify vulnerable children. This was in agreement with what was found among the teachers in both groups.

Additional result not shown on the table below revealed that only 30% (n=3) in experimental group and 25% (n=3) in the control group of nurses knew vulnerability index as a tool that could be used to select most vulnerable children. Similar result was found among the teachers where only 15.4% (n=2) and 4.3% (n=1) knew vulnerability index as a tool that could be used to select most vulnerable children.

Table 4.5: Means Identification of OVC as Stated by Public Health Nurses and Teachers

Means of Identification	Nurses		Teachers	
	Experimental (n=10)	Control (n=12)	Experimental (n=13)	Control (n=23)
Clinical Assessments	3 (30.0%)	3 (25.0%)	3 (23.1%)	4 (17.4%)
Physical Examination	8 (80.0%)	11 (91.7%)	4(30.8%)	5(21.7%)
Community and Key Leaders	3 (30.0%)	7 (58.3%)	5 (38.5%)	5(21.7%)
Vulnerability Index	6 (60.0%)	7 (58.3%)	5 (38.5%)	10 (43.5%)

4.2.4. Common Problems of Orphans and Vulnerable Children

Table 4.6 shows that low proportion of respondents identified antisocial behaviour as one of the health problems experienced by vulnerable children across all the study groups. Also less than 40% of the respondents among the teachers in both experimental and control groups saw sexual exploitation as problems experienced by OVC.

Additional result not reflected on the table shows that among all the problems identified by respondents, abuse and psychosocial distress were identified by both groups as mostly experienced health problems. In the experimental group, 70% (n=7) and 80% (n=8) of the nurses identified abuse and psychosocial distress as mostly experienced health problems respectively while 75% (n=9) of the control group felt that abuse was the mostly experienced problems followed by psychosocial distress (n=7, 70%). Among the teachers, psychosocial distress was identified as mostly experienced problems in 53.8% (n=7) of the experimental group and 73.9% (n=17) of the control group . This was also followed by abuse in 7.7% (n=1) of the experimental group and 8.7% (n=2) of the control group.

Table 4.6: Common Problems of OVC as Reported by Respondents

Problems	**Nurses**		**Teachers**	
	Experimental (n=10)	Control (n=12)	Experimental (n=13)	Control (n=23)
Abuse	7 (70.0%)	9(75.0 %)	6 (46.2%)	11 (47.8%)
Sexual exploitation	7 (70.0%)	8 (66.7%)	5 (38.5%)	10 (43.5%)
Psychosocial distress	8 (80.0%)	10 (83.3%)	7 (53.8%)	21 (91.3%)
Dropping out of school	6 (60.0%)	7 (58.4%)	7 (53.8%)	10 (43.5%)
Antisocial behaviour	4 (40.0%)	3 (25.0%)	4 (30.8%)	8 (34.8%)
Child labour	7 (70.0%)	8 (66.7%)	3 (23.1%)	8 (34.8%)
Poor academic performance	6 (60.0%)	8 (66.7%)	8 (61.5%)	14 (60.9%)
Poor health	8 (80.0%)	10 (83.4%)	8 (61.5%)	15 (65.2%)

All are common problems experience by OVC according to the National Plan of Action for OVC in Nigeria (2006)

4.2.5. Public Health Nurses' and Teachers' Understanding of Psychosocial Support for Orphans Vulnerable Children

Table 4.7. shows that majority of nurses in both experimental and control groups agreed that psychosocial support is a total help given to meet psychosocial needs of people. However, less than 30% of the nurses in both groups saw psychosocial support as care that can help children to cope with stress or difficult situation. Similar pattern was found among the teachers in both experimental and control groups. Also, less than 30% of respondents across the groups felt that psychosocial support is about giving ones time and attention to the children.

Additional result not included in the table below shows that majority of the nurses in both experimental (n=9, 90.0%) and control groups (n=8, 66.7%) also agreed that psychosocial support must be included in all intervention programmes that address the needs of vulnerable children. This pattern was also observed among the teachers.

Table 4.7: Nurses' and Teachers' Understanding of Psychosocial Support

Psychosocial Support	**Nurses**		**Teachers**	
	Experimental (n=10)	Control (n=12)	Experimental (n=13)	Control (n=23)
*Total help given to children which takes into account their psychosocial needs	7 (70.0%)	9 (75.0%)	8 (61.5%)	11 (97.8%)
*Care that help children to cope with stress or difficult situation	2 (20.0%)	3 (25.0%)	1 (7.7%)	6 (26.1%)
*Psychosocial support entails giving ones time and attention to the children	2 (20.0%)	3(25.0%)	2 (15.4%)	5 (21.7%)
Care that focus on the emotional wellbeing of the children only	1 (10.0%)	0 (0.0%)	1 (7.7%)	4 (17.4%)

Correct options

4.2.6. Signs of Psychosocial Distress that Requires Intervention as Reported by Respondents

In Table 4.8., majority of the nurses were only able to identify isolation from peers, sadness, worries, and low self-esteem as psychosocial distress that require attention. Only few of them identified other variables as signs of psychosocial distress that require attention. Similar trend was found among the teachers in both experimental and control groups. However, majority of the teachers in both groups saw poor concentration in school work and poor performance as signs of distress that must be attended to as against what was found among the nurses.

In addition to the information on the table, forty percent (n=4) of nurses in the experimental group listed substance use, truancy and stealing as other signs of psychosocial problems that require intervention among the children while 16.7% (n=2) of those in the control were in agreement.

Table 4.8: Signs of Psychosocial Distress in Children that Required Intervention

	Nurses		Teachers	
Signs of Psychosocial Distress in children	Experimental (n=10)	Control (n=12)	Experimental (n=13)	Control (n=23)
Aggression	2 (20.0%)	1 (8.3%)	2 (15.4%)	3 (13.0%)
Frequent disobedience to teachers and parent	1 (10.0%)	2 (16.7%)	4 (30.8%)	9 (39.1%)
Isolation from peers	7 (70.0%)	8 (66.7%)	6 (46.2%)	8 (34.8%)
Not having close relationship with people	3 (30.0%)	1 (8.3%)	1 (7.7%)	4 (17.4%)
Engaging in fight with peers	2(20.0%)	2 (16.7%)	2 (15.4%)	5 (21.7%)
Displaying anger	1 (10.0%)	1 (8.3%)	3 (23.1%)	3(13.0%)
Sadness	9 (90.0%)	10 (83.3%)	11 (84.6%)	20 (86.9%)
Poor concentration in school work	2 (20.0%)	1 (8.3%)	11 (84.6%)	20(86.9%)
Poor performance in school work	1 (10.0%)	0 (0.0%)	11 (84.6%)	17 (73.9%)
Worries	9 (90.0%)	9 (75.0%)	7 (53.8%)	12 (52.2%)
Low self-esteem	7 (70.0%)	8 (66.7%)	3(23.1%)	6 (26.1%)
Poor attention to personal hygiene	1 (10.0%)	1 (8.3%)	2 (14.4%)	5 (21.7%)

4.2.7. Psychosocial Interventions Needed by OVC as Reported by PHN and Teachers

Table 4.9. shows that counselling was the only psychosocial intervention mentioned by few of the respondents in both groups. Other core interventions programme such as kids/peer support, memory box, resilience training, and play therapy were not mentioned by the respondents from the two groups. However, 50.0 % or more of respondents across all the groups listed spiritual support and encouragement as psychosocial interventions. The findings show that both groups (nurses and teachers) were deficient in the knowledge of various psychosocial interventions that could be used to address psychosocial distress among OVC before intervention.

Table 4.9: Respondents Reported Psychosocial Interventions for School Children

Psychosocial interventions:	**Nurses**		**Teachers**	
	Experimental (n=10)	Control (n=12)	Experimental (n=13)	Control (n=23)
*Providing counselling	3 (30.0%)	4 (33.3%)	1 (7.7%)	3 (13.0%)
Offering prayer and spiritual support	5 (50.0%)	5 (50.0%)	7 (53.9%)	12 (52.2%)
Encouraging the children to endure	5 (50.0%)	7 (58.3%)	7 (53.9%)	12 (52.2%)

4.2.8. Public Health Nurses and Teachers' Knowledge of Resilience as a Form of Support

In Table 4.10., the knowledge of respondents about the concept of resilience across the groups was generally poor. Additional result not shown on the table shows that none of the respondents across all the groups was able to mention the core resilience characteristics which include setting goals with children, building perseverance skills, maintaining balance and harmony, encouraging self-reliance and existential aloneness.

Table 4.10: Knowledge of Resilience as a Form of Psychosocial Support by Nurses and Teachers

	Nurses		**Teachers**	
	Experimental (n=10)	Control (n=12)	Experimental (n=13)	Control (n=23)
A child is resilient if he or she has capacity to:				
*Navigate in culturally meaningful way the resources that sustain well-being	4 (40.0%)	3(25.0%)	3 (23.1%)	3 (13.0%)
*Cope well in the face of adversity	4 ((40.0%)	3 (25.0%)	1 (7.7%)	2 (8.7%)
*Be psychologically and socially stable despite stresses	4 (40.0%)	3 (25.0%)	4 (30.8%)	7(30.4%)
Usefulness of Resilience				
*Resilience building can help promote psychosocial health of vulnerable children	4 (40.0%)	3 (25.0%)	4 (30.8%)	9 (39.13%)
How can nurses/teachers enhance resilience in children:				
*Create an enabling environment for children to ask for help when they need it	5 (50.0%)	4 (33.3%)	4 (30.8%)	8 (34.8%)
*Build hope in the child for the future	6 (60.0%)	2 (16.7%)	5 (21.7%)	10 (43.5%)
*Assist the child to set realistic goals	4 (40.0%)	3 (25.0%)	6 (46.2%)	10 (43.5%)
*Encourage children to put efforts into their school work	5 (50.0%)	4 (33.3%)	6 (46.2%)	15(65.2%)
*Educate the child to look clean and to be confident	6(60.0%)	5 (41.7%)	5 (38.5%)	7 (30.4%)
*Assist children to continue with routine of school work despite difficulties	4 (40.0%)	2 (25.0%)	6(46.2%)	10 (43.5%)

**Correct Options*

4.2.9. Public Heath Nurses' and Teachers' Level of Knowledge of Psychosocial Support of Orphans and Vulnerable Children at Pre-intervention

Fig. 4.1. shows the summary of the level of knowledge among PHN and Teachers at baseline. Sixty percent (n=6) of the nurses in the experimental group had poor knowledge while 83.3% (n=10) of the control group had poor knowledge. Also 40.0% (n=4) and 16.7% (n=2) of nurses had good knowledge in the experimental and control group respectively. Majority of the teachers in the experimental group (92.3%, n=12) and control group (82.6%; n,=19) had poor knowledge of psychosocial support of OVC. Few proportion of the teachers in both experimental (7.7%, n=1) and control groups (17.4%, n=4) had good knowledge.

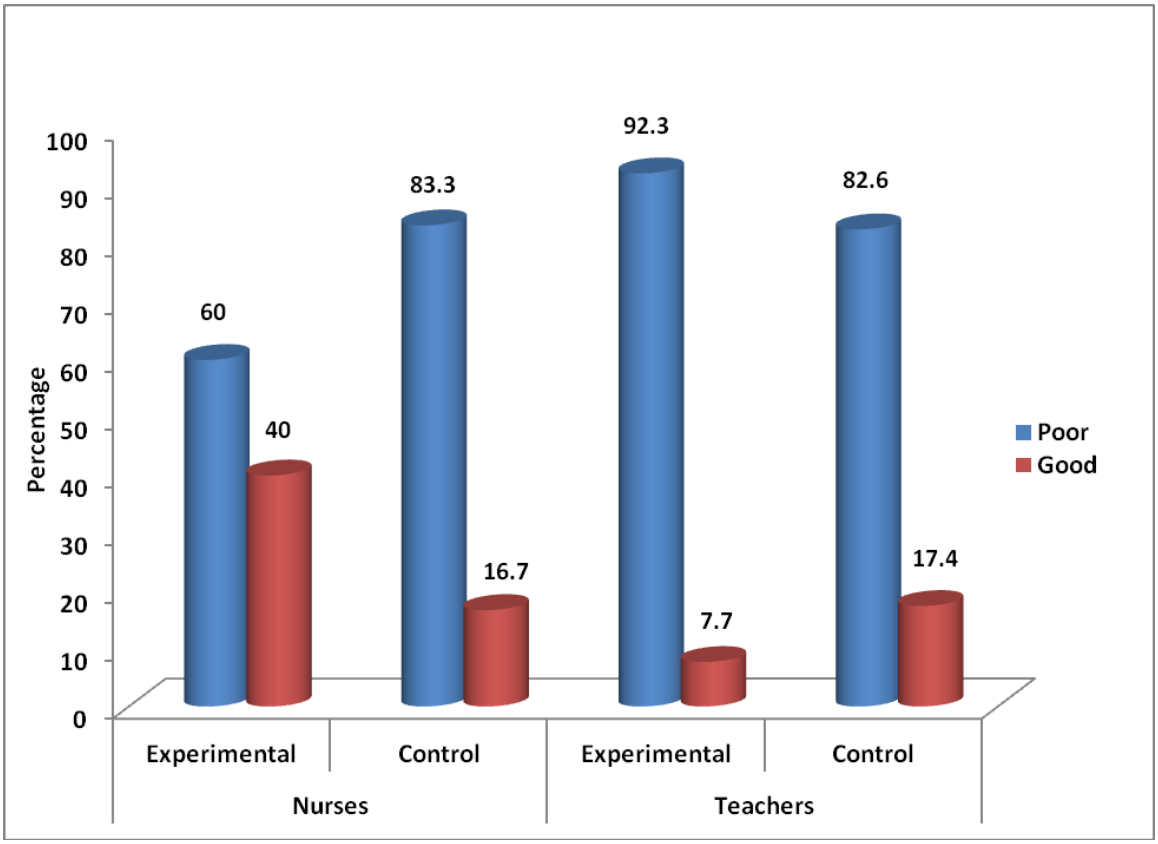

Fig. 4.1: Nurses' and Teachers' Knowledge of Psychosocial Support of OVC

4.3. Public Health Nurses' and Teachers' Involvement in Psychosocial Support of Vulnerable Children Pre-Intervention

From Table 4.11, majority (>50%) of the nurses in both groups felt that psychosocial support to vulnerable school children was a professional obligation. Among the nurses, less than fifty percent (50.0%) of the respondents in both groups claimed to have been involved in psychosocial support of vulnerable children in the past. A larger proportion of the teachers had been involved in supporting vulnerable children compared with nurses.

For those that were involved in both groups, additional result not shown on the table shows that they only provided basic health care, counselling, spiritual support (in the form of prayers) and financial support. The nurses stated that they were trained in school to support vulnerable children in courses like pediatrics and psychology applied to nursing. Teachers who had been taught support of vulnerable children in school reported to have learnt it from a course known as Child Psychology. The table showed that few of the respondents were specifically trained in psychosocial support of vulnerable children by non-governmental organisations across the groups. .

Table 4.11: Nurses' and Teachers' Involvement in Psychosocial Support for OVC

Involvement	Nurses		Teachers	
	Experimental (n=10)	Control (n=12)	Experimental (n=13)	Control (n=23)
Nurses/ Teacher have professional obligation to offer psychosocial support to vulnerable children in school	10 (100.0%)	11 (91.7%)	7 (53.8%)	14 (66.7%)
Involved in support of vulnerable children in the past	4 (40.0%)	2 (16.7 %)	8 (61.5%)	13 (56.5%)
Have been trained in school to provide support to vulnerable children	4 (40.0%)	2 (16.7%)	3 (23.1%)	11(47.8%)
Had on-the-job training	0 (0.0%	0 (0.0%)	1 (7.7%)	2 (8.7%)
Had training specifically on psychosocial support for vulnerable children in the past	3 (30.0%)	2 (16.7%)	2 (15.4%)	2 (8.7%)

4.4. Resilience of Orphans and Vulnerable children (OVC)

4.4.1. Descriptive Statistics of Reported Resilience among OVC Children

Table 4.12a and 4.12b show that most of the children reported low to moderate resilience The table shows that majority of the children reported little skill to cooperate with people around them and inability to solve problems without harming self or others. Also most of them did not know where to go in the community for help, or ask for help when they need it. Other areas where the children reported low resilience include inability to set goals and work towards it, not having the capacity to do things, experiencing fear when there is need to talk to people for help, not being able to put effort into school work and inability to make use of opportunities to develop skills which can be useful in later years.

Table 4.12a: Reported Resilience among Total Sample of OVC across Resilience Scale

Statement on Resilience	Not at all	A little	Somewhat	Quite a bit	A lot	Total
1. I cooperate with people around me	81 (10.9%)	428 (57.4%)	179 (23.9%)	24 (3.2%)	34 (4.6%)	746
2. Getting an education is important to me	33 (4.4%)	251 (33.7%)	354 (47.6%)	29 (3.9%)	77 (10.3%)	744
3. I know how to behave in different social Situations	79 (10.6%)	303 (40.6%)	304 (40.7%)	22 (2.9%)	39 (5.2%)	747
4. I try to finish what I start even If I am faced with difficult situation	127 (17.1%)	311 (41.5%)	237 (31.6%)	30 (4.0%)	38 (5.1%)	743
5. I am proud of my ethnic background	87 (11.8%)	251 (34.1%)	236 (32.0%)	50 (6.8%)	113 (15.3%)	737
6. People think that I am funny to be with	87 (11.6%)	319 (42.6%)	271 (36.2%)	30 (4,0%)	41 (5.5%)	748
7. I talk to my family/caregiver(s) about how I feel	265 (35.5%)	263 (35.3%)	164 (22.0%)	29 (3.9%)	25 (3.4%)	746
8. I am able to solve problems without harming myself or others(for example by using drugs and or being violent)	489 (65.5%)	136 (18.2%)	90 (12.0%)	16 (2.1%)	16 (2.1%)	747
9. I know where to go in my community to get help	444 (59.4%)	180 (24.1%)	91 (12.2%)	19 (2.5%)	13 (1.7%)	747
10. I feel belong at my school	110 (14.9%)	281 (38.0%)	280 (37.9%)	25 (3.4%)	43 (5.8%)	739
11. I can confidently ask for help when I need one	299 (40.1%)	253 (34.0%)	148 (19.9%)	24 (3.2%)	21 (2.8%)	745
12. I am hopeful about my future	78 (9.5%)	233 (31.5%)	341 (46.1%)	30 (4.1%)	65(8.8%)	739
13. I do set goals for myself and work towards achieving it	178 (24.2%)	284 (38.6%)	211 (28.7%)	31 (4.2%)	31(4.2%)	735
14. I do believe in my capability to do whatever I want to do	247 (33.5%)	271 (36.7%)	172 (23.3%)	22 (3.0%)	26 (3.5%)	738
15. I love to look clean and confident	90 (12.2%)	247 (33.6%)	294 (39.9%)	52 (7.1%)	53 (7.2%)	736

Table 4.12b: Reported Resilience among Total Sample across Study Groups

Statement on Resilience	Not at all	A little	Somewhat	Quite a bit	A lot	Total
16. I don't entertain fear when I have opportunity to talk with my teachers , parents/guardian about how I feel	309 (41.5%)	249 (33.4%)	133 (17.9%)	30 (4.0%)	24 (3.2%)	745
17. I love to put a lot of effort into my school work even when I am going through difficult moment	127 (17.0%)	308 (41.1%)	246 (32.8%)	30 (4.0%)	38 (5.1%)	749
18. I love to make myself happy even though the situation around me is contrary	157 (21.0%)	323 (43.1%)	209 (27.9%)	27 (3.6%)	33 (4.4%)	749
19. I enjoy playing with my peers irrespective of their family background or economic status	133 (17.8%)	265 (35.4)	283 (37.8%)	35 (4.7%)	33 (4.4%)	749
20. I make use of any opportunity available to me to show others that I am becoming adults and can act responsibly	122 (16.3%)	314 (41.9%)	253 (33.8%)	27 (3.6%)	33 (4.4%)	749
21. I am aware of my own strengths	117 (15.8%)	319 (43.0%)	237 (32.0%)	26 (3.5%)	42 (5.7%)	741
22. I participate freely in organised religious activities	98 (13.3%)	264 (35.8%)	266 (36.1%)	54 (7.3%)	55 (7.5%)	737
23. I think it is important to be involved in community development activities in my community	151 (20.2%)	270 (36.1%)	255 (34.1%)	37 (4.9%)	35 (4.7%)	748
24. I feel safe when I am with my family/caregiver(s)	159 (21.5%)	275 (37.1%)	180 (24.3%)	36 (4.9%)	91 (12.3%)	741
25. I make use of opportunities that afford me to develop skills that will be useful later in life (like job skills and skills to care for others)	202 (27.0%)	243 (32.5%)	206 (27.5%)	43 (5.7%)	54 (7.2%)	748
26. I enjoy my family's /caregiver's cultural and family Traditions	311 (41.6%)	191 (25.5%)	140 (18.7%)	38 (5.1%)	68 (9.1%)	748
27. I enjoy my community traditions	261 (35.2)	224 (30.2)	155 (20.9%)	45 (6.1%)	57 (7.7%)	742
28. I am proud to be a Nigerian	87 (11.9%)	138 (18.8%)	207 (28.2%)	73 (9.9%)	229 (31.2%)	734

4.4.2. Resilience Mean Scores of Children across the Study Groups at Pre-Intervention

Table 4.13 shows the mean resilience scores and confidence interval across the groups at pre-intervention. The highest mean score was found in the peer support group, followed by control group and then the resilience group.

Table 4.13: Resilience Mean Scores across the Study Groups at Pre-intervention

Study Groups	N	Mean (CI)	Min	Max	Sig.
Resilience	176	65.19 (63.10-67.29)	41.00	135.00	0.380
Peer Support	163	66.63 (63.87-69.39)	38.00	128.00	
Control	411	64.89 (63.44-66.33)	43.00	132.00	
Total	750	65.34 (64.24-66.44)	38.00	135.00	

4.4.3. Resilience Level of Orphans and Vulnerable Children across the Study Groups at Pre-Intervention

Table 4.14 shows that only few of the respondents across the groups had high resilience while about 25% (n=198) have low resilience. Majority (65.1%, n=488) of them had moderate resilience. This trend was similar to what was found in each of study group.

Table 4.14. Resilience Level of Vulnerable Children across the Groups at Pre-Intervention

Resilience Level	Study Groups			Total
	Resilience	Peer Support	Control	
Low	35 (19.9%)	41 (25.2%)	122 (29.7%)	198 (24.6%)
Moderate	132 (75.0%)	101 (62.0%)	255 (62.0%)	488 (65.1%)
High	9 (5.1%)	21 (12.9%)	34 (8.3%)	64 (18.5%)

4.4.4 Resilience Level of OVC between experimental and Control Groups at Pre-intervention

Fig. 4.2 shows the resilience level of respondents in the experimental and control groups. It could be deduced from the barchart that only few of the respondents have high resilience while majority of the children in both groups had moderate resilience**.**

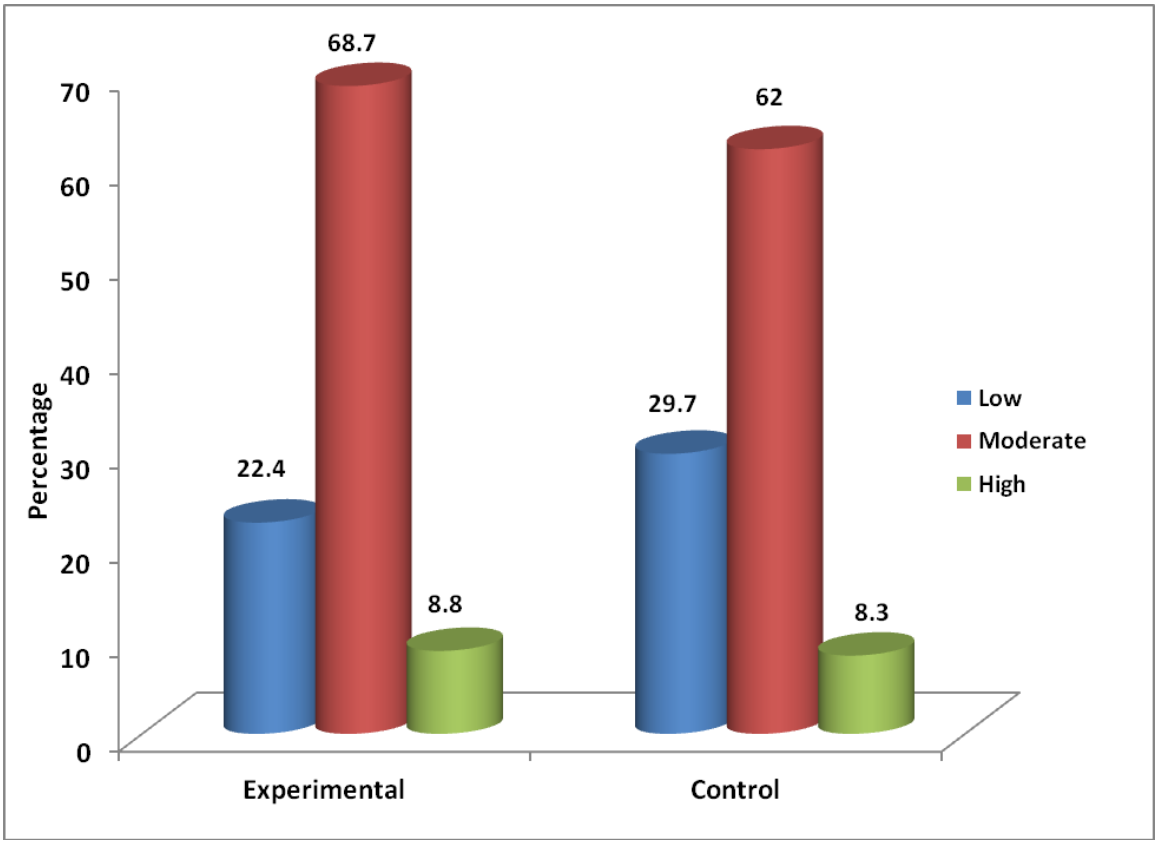

Fig. 4.2. Resilience Level of Respondents in the Experimental and Control Groups

4.5. Descriptive Statistics of Psychosocial Health Outcomes of OVC at Pre-intervention

4.5.1. Self-reported Anxiety Symptoms among the Total Sample of OVC

Table 4.15 shows the self-reported symptoms of anxiety among the total groups of students. Thirty-six percent (n=246) are usually worried about what people think about them a good part of the time and most of the time. A little over 30% (32.8%, n=222) felt scared if they had to sleep on their own while 37.0% (n=250) felt worried that something bad will happen to them a good part of the time and most of the time respectively . Findings shows that 31.5 % (n=215) experienced breathing difficulty without any physical exertion while 33.9% (n=230) did find themselves in situation that made them so anxious a good part and most of the time. Generally, the table shows that most of the respondents experience symptoms of anxiety some of the time.

Table 4.15: Self-reported Symptoms of Anxiety among Total Sample

Anxiety scale	Did not apply to me at all	Applied to me some of the time	Applied to me a good part of time	Applied to me most of the time	Total
1. I found myself getting upset easily with my friends and People	142 (20.7%)	423 (61.8%)	71 (10.4%)	49 (7.2%)	685
2. I worry about what people think about me	123 (18.0%)	313 (45.9%)	125 (18.3%)	121 (17.7%)	682
3. I experience breathing difficulty even without any physical Exertion	188 (27.6%)	279 (40.9%)	119 (17.4%)	96 (14.1%)	682
4. I do have a feeling of shakiness and often feel afraid when there is no reason for this	162 (23.8%)	314 (46.0%)	119 (17.4%)	87 (12.8%)	682
5. I often found it difficult to relax	191 (28.1%)	316 (46.5%)	110 (16.2%)	63 (9.3%)	680
6. I worry that I will do badly at my school work	186 (27.7%)	312 (46.4%)	97 (14.4%)	77 (11.5%)	672
7. I worry about being away from my parents	166 (24.6%)	268 (39.6%)	116 (17.2%)	126 (18.7%)	676
8. I feel scared if I had to sleep on my own	156 (23.1%)	296 (43.9%)	97 (14.4%)	125 (18.6%)	674
9. I feel worried that something bad will happen to me	187(27.7%)	239 (35.4%)	111 (16.4%)	139 (20.6%)	676
10. When I have problem, my heart really beat fast	116 (17.4%)	291 (43.5%)	105 (15.7%)	156 (23.4%)	668
11. I have trouble going to school in the morning because I feel afraid	339 (49.7%)	226 (33.1%)	79 (11.6%)	38 (5.6%)	682
12. I do find myself in situations that made me so anxious	164 (24.2%)	285 (42.0%)	123 (18.1%)	107 (15.8%)	679
13. I feel that I have nothing to look forward to	213 (31.5%)	274 (40.5%)	104 (15.4%)	85 (12.6%)	676
14. I find myself getting upset rather easily	155 (22.9%)	335 (49.4%)	115 (16.9%)	73 (10.8%)	678
15. I feel that I was using a lot of nervous energy	174 (26.2%)	320 (48.2%)	99 (14.9%)	71 (10.7%)	664
16. I find myself getting impatient when I encounter with any Delay	180 (26.5%)	331 (48.7%)	99 (14.6%)	69 (10.2%)	679
17. I perspired noticeably in the absence physical exertion	195 (28.8%)	315 (46.5%)	95 (14.0%)	72 (10.7%)	677
18. I felt scared without any good reason	180 (27.1%)	303 (45.6%)	97 (14.6%)	84 (12.7%)	664

4.5.2 Self-Reported Depression Symptoms among the Total Sample of OVC

Table 4.16. shows the reported depressive symptoms among the children. Findings show that less than 41.0% of respondents were not experiencing depressive symptoms across the scale item. Others experience it at different levels such as some of the time, a good part of the time and most of the time. About 40% of the respondents (39.7%, n=251) did felt sad and depressed a good part and most of the time . The same proportion also felt down and unhappy a good and most of the time. The proportion of children who find it difficult to sleep the way they should (41.4%, n=258) and those that felt like dying was high (33.3%, n=208) considering the implication of this on the well-being of the children.

4.16. Self Reported Symptoms of Depression among total sample of OVC

Depression scale	Did not apply to me at all	Applied to me some of the time	Applied to me a good part of time	Applied to me most of the time	Total
1. I couldn't seem to experience any positive feeling at all in my life	187 (29.4%)	230 (36.2%)	135 (21.3%)	83 (13.1)	635
2. I just couldn't seem to get going with my colleagues and guidance/parents	166 (26.2%)	242 (38.2%)	139 (21.9%)	87 (13.7%)	634
3. I feel sad and depress	170 (26.9%)	210 (33.3%)	146 (23.1%)	105 (16.6%)	631
4. I feel that I had lost interest in just about everything	172 (27.3%)	215 (34.1%)	140 (22.2%)	104 (16.5%)	631
5. I feel I wasn't worth much as a person	180 (28.3%)	204 (32.1%)	142 (22.4%)	109 (17.2%)	635
6. I feel that life is not worthwhile	186 (29.5%)	190 (30.1%)	125 (19.8%)	130 (20.6%)	631
7. I could see nothing in the future to be hopeful about	216 (34.3%)	178 (28.3%)	143 (22.7%)	93 (14.8%)	630
8. I feel that life is meaningless	182 (28.9%)	198 (31.5%)	137 (21.8%)	112 (17.8%)	629
9. I feel down and unhappy	158 (25.2%)	221 (35.2%)	135 (21.5%)	114 (18.2%)	628
10. I feel too tried to do my school work & other assignment	164 (25.9%)	229 (36.2%)	153 (24.2%)	87 (13.7%)	633
11. I feel like crying	176 (28.1%)	208 (33.2 %)	117 (18.7%)	125 (20.0%)	626
12. I have not been able to feel happy even when people/friends tried to help me	194 (28.5%)	185 (27.2%)	212 (31.2%)	89 (13.0%)	680
13. I feel I am not as good as other kids	140 (22.2%)	200 (31.7%)	137 (21.7%)	154 (24.4%)	631
14. I find it difficult to sleep as I should do	192 (30.8%)	174 (27.9%)	147 (23.6%)	111 (17.8%)	624
15.I do feel like dying	254 (40.6%)	163 (26.1%)	112 (17.9%)	96 (15.4%)	625

4.5.3 Self Reported Self-Esteem among the Total Sample of OVC

Table 4.17 shows the self reported self-esteem among the respondents. The result shows that children were experiencing low self-esteem at pre-intervention. From the table, 75.3% (n=562) were not satisfied with themselves. About 51% (50.7%, n=373) agreed that they did not have much to be proud of while majority (64.5%, n=479) felt inferior to their peers and 51.5% (n=375) felt that they were failure**.**

4.17. Self Reported Self-Esteem among Total Sample of OVC

Self Esteem Scale	Strongly disagree	Disagree	Agree	Strongly Agree	Total
1. On the whole I am satisfied with myself	295 (39.5%)	267 (35.8%)	121 (16.2%)	63 (8.5%)	746
2. At times I think I am no good at all	131 (17.6%)	196 (26.4%)	283 (38.1%)	133 (17.9%)	743
3. I feel I have a number of good qualities	213 (29.1%)	243 (33.2%)	177 (24.1%)	100 (13.6%)	733
4. I am able to do things as well as most other people	193 (25.9%)	263 (35.3%)	187 (25.1%)	102 (13.7%)	745
5. I feel I do not have much to be proud of	190 (26.0%)	167 (22.9%)	242 (33.2%)	131 (17.9%)	730
6. I certainly feel useless at times	142 (19.6%)	248 (34.2%)	236 (32.5%)	100 (13.8%)	726
7. I feel that I am a person of worth at least on an equal plane with others	204 (27.5%)	275 (37.0%)	164 (22.1%)	100 (13.5%)	743
8. I wish I could have more respect for myself	59 (7.9%)	100 (13.5%)	310 (41.7%)	274 (36.9%)	743
9. All in all I am inclined to feel that I am a failure	140 (19.2%)	213 (29.3%)	256 (35 2%)	119 (16.3%)	728
10. I take a positive attitude towards myself	179 (24.6%)	230 (31.6%)	179 (24.6%)	140 (19.2%)	728

4.5.4 Self Reported Social Connection among the Total Sample of OVC

Self reported social connection of all the children are as presented in Table 4.18. Majority of the children enjoyed doing things with friends and other people (69.4%, n=517). Few children (39.2%, n=289) reported anger and involvement in fights. Majority of the children (60.0%, n=443) found it difficult to ask for help from guardian or an adult when something bad happens to them. About 56% of the children (55.7%, n=407) reported that they did not have people who love and care for them.

4.18. Self Reported Social Connection among Total OVC

Social Connectedness Scale	Strongly disagree	Disagree	Agree	Strongly Agree	Total
1. I enjoy doing things with my friends and other people	98 (13.2%)	130 (17.4%)	316 (42.4%)	201 (27.0%)	745
2. I get along well with people (peers, guardians and others at home or school	103 (13.8%)	235 (31.6%)	263 (35.3%)	143 (19.2%)	744
3. I get angry these days that I get into fights	177 (23.9%)	272 (36.9%)	216 (29.3%)	73 (9.9%)	738
4. I get into trouble than usual	220 (30.0%)	262 (35.7%)	162 (22.1%)	89 (12.1%)	733
5. I can make up with friends after fight	92 (12.7%)	165 (22.8%)	272 (37.6%)	195 (26.9%)	724
6. If something bad happens to me , I can ask my guidance or anybody concern for help	217 (29.4%)	226 (30.6%)	194 (26.3%)	101 (13.7%)	738
7. There are people who love and care about me	189 (25.9%)	218 (29.8%)	209 (28.6%)	115 (15.7%)	731
8. I am able to make friends easily	122 (16.8%)	178 (24.5%)	262 (35.9%)	166 (22.8%)	728

4.5.5. Descriptive Summary of Mean Psychosocial Outcome scores across the Study Groups at Pre-intervention

Table 4.19. shows the mean psychosocial outcome scores across the three groups at pre-intervention. The table shows that there was no significant difference among the three groups in their anxiety, depression, self-esteem and social connection at baseline.

Table 4.19. Descriptive Summary of Mean Psychosocial Outcome scores across the three Groups at Pre-intervention

Psychosocial variables	Study Group	N	Mean Score (CI)	Min.	Max.	Sig.
Anxiety	Resilience	176	30.35 (29.06-31.63)	3.00	54.00	0.061
	Peer Support	163	29.37 (28.09-30.64)	1.00	47.00	
	Control	411	28.59 (27.78-29.39)	0.00	54.00	
Depression	Resilience	176	12.28 (11.32-13.26)	0.00	28.00	0.640
	Peer Support	163	11.44 (10.46-12.41)	0.00	27.00	
	Control	411	10.88 (10.22-11.55)	0.00	29.00	
Self-Esteem	Resilience	176	12.91 (12.20-13.62)	2.00	27.00	0.135
	Peer Support	163	12.36 (11-63-13.06)	1.00	25.00	
	Control	411	12.36 (11.63-13.08)	1.00	25.00	
Social connectedness	Resilience	176	13.35 (12.79-13.89)	1.00	24.00	0.081
	Peer Support	163	13.00 (12.38-13.63)	2.00	23.00	
	Control	411	12.61 (12.25-12.96)	3.00	23.00	

4.5.6 Level of Psychosocial Health Outcomes across the Study Groups at Pre-Intervention

Table 4.20. shows the categorisation of the level of psychosocial health outcomes across the study groups. Majority of the respondents were between moderate and high anxiety range. Most of them reported low symptoms of depression across the groups. Majority of the respondents reported low self-esteem across the study groups. Conversely, larger proportion of children reported normal social connection across groups.

Table 4.20: Level of Psychosocial Health Outcomes across the Study Groups at Pre-Intervention

Psychosocial Health Outcomes	Resilience Group (n=176)	Peer Support Group (n=163)	Control (n=411)	Total (n=750)
Anxiety Level				
Low	13 (7.4%)	13 (8.0%)	37 (9.0%)	63 (8.4%)
Moderate	128 (72.7%)	122 (74.8%)	315 (76.6%)	565 (75.3%)
High	35 (19.9%)	28 (17.2%)	59 (14.4%)	122 (16.3%)
Depression Level				
Low	118 (67.0%)	121 (74.2%)	316 ((76.9%)	555 (74.0%)
Moderate	58 (33.0%)	42 (25.8%)	95 (23.1%)	195 (26.0%)
High	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Self-esteem				
Low	113 (64.2%)	107 (65.6%)	271 (66.6%)	491 (65.8%)
Normal	63 (35.8%)	56 (34.4%)	136 (33.4%)	255 (34.2%)
Social Connectedness				
Low	55 (31.3%)	53 (32.5%)	154 (37.9%)	262 (35. 2%)
Normal	121 (68.8%)	110 (67.5%)	252 (62.1%)	483 (64.8%)

4.6. Relationship between OVC Socio-demographic characteristics and both Resilience and Psychosocial Health Outcomes

4.6.1. Relationship between Age and both Resilience and Health Outcomes

The correlation result in Table 4.21 shows that there is weak but positive correlation between age and resilience in the resilience group. This mean that as the age increases, there is a slight increase in resilience. A significant negative weak correlation was also observed in the resilience group and peer support group between age and anxiety symptoms. Meaning that as the age increases, there is a slight reduction in anxiety scores. Age was positively correlated with social connection in the control and peer support group but negatively correlated in the resilience group. This correlation although weak was significant in the control group. Meaning that as the age increases, there is a slight increase in social connection. In the resilience group, age was negatively correlated with self esteem and social connection but the correlation was not significant.

4.21. Correlation between Age and both Resilience and Health Outcomes

Study Groups	Resilience	Anxiety	Depression	Self-esteem	Social connection
Resilience	.107*	-.131**	.017	-.065	-.065
Peer support	.062	-.195**	-.057	.079	.031
Control	.022	-.014	.103	.074	.233**

***p<0.05**

4.6.2. Relationship between Sex and both Resilience and Psychosocial Health Outcomes

In Table 4.22, there was no significance difference between male and female in their resilience scores across the three groups. No difference was also observed in their anxiety scores and in the resilience and peer support groups. However, a significant difference in anxiety scores was observed in the control group between male and female. There was no significance difference in their depression scores across the three groups. A significance difference was observed in the self-esteem scores between the male and female in the peer support group with the female having higher self-esteem scores than the male. There was also a significance difference in the social connection scores between male and female in the control group with the male having higher social connection scores than the female.

4. 22. Relationship between Sex and both Resilience and Psychosocial Health Outcomes

Study Groups	N	Resilience Mean (SD)	Anxiety Mean (SD)	Depression Mean (SD)	Self-esteem Mean (SD)	Social Connec-tion Mean (SD)
Resilience						
Male	94	64.86 (14.4)	30.45 (9.5)	12.09 (6.6)	12.93 (4.4)	13.53 (3.6)
Female	82	65.59 (13.8)	30.24 (7.5)	12.51 (6.5)	12.88 (5.2)	13.13 (3.8)
T-test		-0.34	0.16	-0.42	0.08	0.71
p value		p=0.74	p=0.88	p=0.67	p= 0.09	p=0.48
Peer Support						
Male	85	66.47 (17.7)	29.37 (8.2)	11.00 (6.1)	11.40 (4.4)	12.72 (3.6)
Female	78	66.81 (18.1)	29.37 (8.2)	11.91 (6.5)	13.39 (4.7)	13.32 (4.4)
T-test		-0.12	-0.01	-0.92	-2.79	-0.96
p-value		p=0.90	p= 0. 99	p=0.36	p=0.01*	p=0.34
Control						
Male	166	66.37 (16.6)	27.32 (7.9)	10.51 ((6.7)	13.21 (3.5)	13.21 (3.5)
Female	245	63.88 (13.5)	29.44(8.4)	11.14 (6.9)	12.19 (3.7)	12.19(3.7)
T-test		1.67	-2.56	-0.89	1.33	2.79
p-value		p=0.96	p=0.01*	p=0.37	p=0.18	p=0.00*

4.6.3 Relationship between Orphan Type and both Resilience and Psychosocial Health Outcome

Table 4.23. shows an ANOVA result in which there was no significant difference in the resilience and health outcome scores among the three groups of orphans. Meaning that there was a similarity among the three categories of orphans in their resilience and psychosocial outcomes

4.23. Relationship between Orphan Type and both Resilience and Psychosocial Health Outcome

Outcome Variables	N	Mean	SD	95% CI	F-test	Sig. (2 tail)
Resilience						
Maternal orphan	91	65.55	12.9	61.85-67.25	0.06	0.95
Paternal Orphan	200	65.07	14.6	63.02-67.12		
Double Orphan	75	65.24	16.3	61.50-68.98		
Anxiety						
Maternal orphan	91	29.85	9.5	27.87-31.82	1.21	0.30
Paternal Orphan	200	28.74	8.2	27.59-29.88		
Double Orphan	75	27.80	8.1	25.95-29.65		
Depression						
Maternal orphan	91	12.47	7.2	10.97-13.98	1.21	0.29
Paternal Orphan	200	11.48	6.0	10.64-12.32		
Double Orphan	75	10.97	6.5	9.47-12.48		
Self Esteem						
Maternal orphan	91	13.05	4.2	12.18-13.93	0.04	0.96
Paternal Orphan	200	12.96	4.0	12.40-14.52		
Double Orphan	75	13.11	4.3	12.12-14.09		
Social Connection						
Maternal orphan	91	12.91	4.4	11.99-13.83	0.08	0.92
Paternal Orphan	200	12.78	3.7	12.26-13.30		
Double Orphan	75	12.67	3.4	11.87-13.47		

4.6.4. Relationship between Living with Siblings and both Resilience and Psychosocial Health Outcomes

Table 4.24. shows that there was no significance difference between children living with their siblings and those who are not in their resilience and psychosocial outcome scores pre-and post-intervention. This result shows that there was no relationship between living with siblings and both resilience and health outcomes.

4.24. Relationship between Living with Siblings and both Resilience and Psychosocial Health Outcomes

Study Groups	N	Resilience Mean (SD)	Anxiety Mean (SD)	Depression Mean (SD)	Self-esteem Mean (SD)	Social Connection Mean (SD)
Resilience						
Yes	96	64.45(12.9)	29.81 (8.5)	12.14 (6.0)	12.84 (4.9)	13.64 (3.9)
No	80	66.09 (15.4)	31.00 (8.7)	12.48 (7.0)	12.98 (4.5)	12.99 (3.5)
T-test		-0.76 ,	-0.90	-0.34	-0.17	1.18
p value		p=0.45	p=0.37	p=0.74	p=0.8	p=0.24
Peer Support						
Yes	82	66.81 (19.3)	28.71 (8.6)	10.89 (6.8)	12.52 (4.7)	13.17 (4.1)
No	81	66.44 (16.4)	30.02 (7.7)	11.99 (5.8)	12.19 (4.6)	12.83 (3.9)
T-test		0.13	-1.02	-1.09	0.46	0.53
P-value		p= 0.89	p=0.31	p=0.27	p= 0.64	p=0.60
Control						
Yes	241	63.87 (12.8)	29.11 (7.7)	10.71 (6.7)	13.29 (3.1)	12.96 (3.7)
No	170	66.32 (17.2)	27.86 (9.0)	11.12 (7.0)	12-81 (3.4)	12.11(3.6)
T-test		-1.64,	1.54	-0.59	1.46	2.32
p-value		p=0.10	p=0.12	p=0.54	p=0.14	p=0.19

*P<0.05

4.6.5. Relationship between Living Structure and Psychosocial Health Outcomes

Table 4.25 shows the ANOVA test result of the relationship between living structure of the children and their psychosocial health outcomes. The result shows that there was no significant difference in the health outcomes score of children in relation to their living structure for anxiety and depression. However, a significant difference was observed in their social connection scores in the control and peer support group. Significant difference was also observed in their self-esteem in the control group.

In the control group, children who live with father alone had more socio-connection scores (14.12) followed by those who live with both parents (13.02), chronically ill parent (12.75) and those who live with mother (12.68). In the peer support group, children who live with mother alone had significantly higher social connection score (13.76), followed by those who live with both parents (13.27), then those who live with relatives (13.12). For self-esteem in the control group, children living with father has the highest score (13.35), this was followed by those living with mother (13.32) and children living with both parents (13.18). Thus it was concluded that living with either or both parents had an advantage in promoting child's social connection and self-esteem.

Table 4.25: ANOVA Result Showing the Influence of Living Structure on Psychosocial Health Outcomes

Resilience and Psycho- social Outcomes		Sum of Squares	df	M^2	F	Sig.
Anxiety						
Resilience Group	Between Groups	366.969	5	36.280	0.851	0.469
	Within Groups	12651.823	170	42.652		
	Total	7432.222	175			
Peer Support Group	Between Groups	444.742	5	88.948	1.334	0.253
	Within Groups	10471.172	157	66.695		
	Total	10915.914	162			
Control Group	Between Groups	536.827	5	107.865	1.570	0167
	Within Groups	7698.857	405	68.392		
	Total	28235.685	410			
Depression						
Resilience Group	Between Groups	181.399	5	36.280	0.851	0.516
	Within Groups	7250.823	170	42.652		
	Total	7432.222	175			
Peer Support Group	Between Groups	238.553	5	44.711	1.202	0.311
	Within Groups	6229.521	157	39.678		
	Total	6468.074	162			
Control Group	Between Groups	242.190	5	48.238	1.031	0.399
	Within Groups	18942.435	405	46.771		
	Total	19183.625	410			
Self-esteem						
Resilience Group	Between Groups	98.791	5	19.758	0.871	0.502
	Within Groups	3855.755	176	22.681		
	Total	6468.222	175			
Peer Support Group	Between Groups	94.601	5	18.920	0.865	0.506
	Within Groups	3434.761	157	21.877		
	Total	3529.362	162			
Control Group	Between Groups	96.328	5	19.266	1.859	0.000*
	Within Groups	4156.124	401	10.364		
	Total	4252.452	406			
Social Connection						
Resilience Group	Between Groups	43.998	5	8.800	0.637	0.672
	Within Groups	2349.859	170	13.823		
	Total	2393.853	175			
Peer Support group	Between Groups	255.676	5	51.015	3.388	0.006*
	Within Groups	2363.918	157	15.057		
	Total	2618.994	162			
Control Group	Between Groups	276.203	5	55.241	4.330	0.001*
	Within Groups	5102.528	401	12.756		
	Total	5378.362	406			

***P<0.05**

4.7. Relationship between Resilience and Psychosocial Health Outcomes

Table 4.26 shows the correlation matrix between resilience and the psychosocial health outcomes. In all the groups, resilience was negatively correlated to anxiety and depression. This correlation was only significant for anxiety in all the groups but was only significant in the resilience group for depression. For all the groups, resilience was positively and significantly correlated to both self-esteem and socio-connection. Meaning that as resilience increases, self-esteem and socio connection increase.

Table 4.26: Correlation between Resilience and Health Outcomes

Study Groups	Anxiety	Depression	Self Esteem	Social connection
Resilience	-.239**	-.158**	.222**	.312**
Peer Support	-.276**	-.127	.212**	.234**
Control	-.296**	-.127	.212**	.234**

***p<0.05**

4.8. Protective factors in Relation to Resilience and Psychosocial Health Outcomes at Pre-intervention

4.8.1. Protective Factors as Possessed by OVC

Table 4.27 shows the self-reported protective factors as possessed by the children. Less than forty percent (31.4%, n=235) reported to have good intellectual skills. The reported intellectual skill by the students correspond with what was reported by the teachers that majority of the children were just fair in their academic performance. The proportion (24.1%, n=181) of children who reported that their family was not economically sound to meet their needs and those who reported that the economic level of their household can only meet their needs in a little way (46.6%, n=350) was about 71% of the total population. About 36% (35.5%, n=266) of the children did not receive support from immediate family during difficult times while 50.1% (n=376) are not being supported by friends. About 16% (15.5%, n=116) reported not to have a good rapport with parents at all while 24.2% (n=182) had a little rapport. Also, 7.8% (n=120) and 18.9% (n=142) reported not to have a good adult role model or have a little respectively.

Table 4.27: Self-reported Protective Factors as Expressed by OVC across the Total Sample

Protective factors	Not at all	A little	Some what	Quite a bit	A lot	Total
1. I have good intellectual skills.	52 (6.9%)	361 (48.1%)	102 (13.6%)	173 (23.1%)	62 (8.3%)	750
2. I know that my life has meaning and there is a reason why I am living (self-esteem).	55 (7.3%)	138 (18.4%)	81 (10.8%)	85 (11.3%)	391 (52.1%)	750
3.I have good role model around me who I aspire to be identified with.	120 (7.3%)	142 (18.9%)	91 (12.1%)	103 (13.7%)	294 (39.2%)	750
4. My parent (s)/guardian(s)watch me closely	78 (10.4%)	162 (21.6%)	57 (7.6%)	111 (148%)	342 (45.6%)	750
5. My parent (s)/guardian knows a lot about me	64 (8.5%)	161 (21.5%)	73 (9.7%)	126 (16.8%)	326 (43.5%)	750
6. My family is economically sound and can meet my basic needs.	181 (24.1%)	350 (46.7%)	69 (9.2%)	108 (14.4%)	42 (5.6%)	750
7. Spiritual beliefs are source of strength to me	74 (9.9%)	99 (13.2%)	59 (7.9%)	69 (9.2%)	449 (59.9%)	750
8. I feel supported by my friends.	227 (30.3%)	243 (32.4 %)	67 (8.9%)	79 (10.5%)	134 (17.9%)	750
9. I receive necessary support from my immediate family during difficult times.	269 (35.9%)	261 (34.8%)	64 (8.5%)	67 (8.9%)	89 (11.9%)	750
10. My friend stand by me during difficult times	376 (50.1%)	200 (26.7%)	52 (6.9%)	58 (7.7%)	64 98.5%)	750
11. I am treated fairly in my communities.	266 (35.5%)	225 (30.0%)	81 (10.8%)	84 (11.2%)	94 (12.5%)	750
12. I have a good rapport with my parent (s)/guardian.	116 (15.5%)	182 (24.2%)	72 (9.6%)	87 (11.6%)	293 (39.1%)	750
13. I have easy and appealing temperament.	90 (12.0%)	220 (29.3%)	84 (11.2%)	134 (17.5%)	222 (29.6%)	750
14. I always find something to laugh about in my life	249 (33.2%)	215 (8.7%)	63 (8.4%)	100 (13.3%)	123 (16.4%)	750

4.8.2. Level of Protection Expressed by OVC across the Study Groups

Table 4.28. shows that close to half of the children had high level of protection. Higher proportion of children in the control group has high level of protection compared with the other groups. Majority of respondents in the Resilience and Peer Support Groups had moderate protection. There were more children in the peer support group with low level of protection compared with the other groups.

Table 4.28: Level of Protection of the Children across the Study Groups

Levels of Protection	Resilience Group (n=176)	Peer Support Group (n=163)	Control Group (n=411)	Total (n=750)
Low	11 (6.3%)	35 (21.5%)	22 (5.3%)	68 (9.1%)
Moderate	87 (49.4%)	59 (36.2%)	181 (44.0%)	327 (43.6%)
High	78 (44.3%)	69 (42.3%)	208 (50.6%)	365 (47.3%)

4.8.3: Relationship between Level of Protection of OVC and both Resilience and Psychosocial Health Outcomes

The correlation result in Table 4.29 shows that there was a positive correlation between the level of protection possessed by the child and resilience across the study groups. This relationship was also significant. Meaning that the higher the level of protection, the higher the resilience. Even though, the relationship between level of protection and anxiety was not significant across the groups, the result shows that there was a negative correlation. Meaning that as the level of protection increases, anxiety level reduces.

A significant negative correlation was also observed between the level of protection and depression in the resilience and peer support groups. Meaning that as the level of protection increases, there is a reduction in depressive symptoms. This observation was however not the same in the control group. A positive correlation was observed between the level of protection and both self-esteem and social connection across all the groups. This relationship was also found to be significant. Meaning that, as the level of protection increases, self-esteem and social connection increase.

Table 4.29: Correlation between Protective Factors and both Resilience and Psychosocial Health Outcomes

Group	Resilience	Anxiety	Depression	Self-esteem	Social connection
Resilience group	.542**	-.176	-.207**	.314**	.400**
Peer support group	.480**	-.130	-.250**	.283**	.415**
Control	.154*	-.015	-.065	.153**	.214**

***p<0.05**

4.8.4. Association between Protective Factors and Resilience

Tables 4.30a and 4.30b show the chi-square association between the protective factors and resilience. Table 4.30a shows that only five factors were associated with moderate resilience while ten factors were associated with high resilience as shown in Table 4.30b.

Table 4.30a: Chi-square Results of Association between Protective Factors and Moderate Resilience

Protective factors	Have protective factors	Moderate Resilience No	Moderate Resilience Yes	X^2	Sig.
I have good intellectual skills.	No	158 (60.3%)	255 (52.5%)	4.47	0.035*
	Yes	104 (39.7%)	233 (47.7%)		
I know that my life has meaning and there is a reason why I am living	No	78 (29.8%)	115 (23.6%)	3.44	0.064
	Yes	184 (70.2%)	373 (76.4%)		
I have good role model around me whom I aspire to be identified with.	No	93 (35.5%)	169 (34.6%)	0.06	0.813
	Yes	169 (64.5%)	319 (65.4%)		
My parent (s)/guardian(s)watch me closely	No	99 (37.8%)	141 (28.9%)	6.19	0.013*
	Yes	163 (62.2%)	347 (71.1%)		
My parent (s)/guardian knows a lot about me	No	90 (35.1%)	133 (27.3%)	5.02	0.025*
	Yes	170 (64.9%)	355 (72.7%)		
My family is economically sound and can meet my basic needs.	No	192 (73.3%)	339 (69.5%)	1.20	0.273
	Yes	70 (26.7%)	149 (30.5%)		
Spiritual beliefs are source of strength to me	No	72 (27.5%)	101 (20.7%)	4.42	0.035*
	Yes	190 (72.5%)	387 (39.3%)		
I feel supported by my friends.	No	172 (65.6%)	298 (61.1%)	1.53	0.216
	Yes	90 (34.4%)	190 (38.9%)		
I receive necessary support from my immediate family during difficult times.	No	185 (70.6%)	345 (70.7%)	0.001	0.980
	Yes	77 (29.4%)	143 (29.3%)		
My friend stand by me during difficult times	No	205 (78.2%)	371 (76.0%)	0.47	0.492
	Yes	57 (21.8%)	117 (24.0%)		
I am treated fairly in my communities.	No	183 (69.8%)	308 (63.1%)	3.42	0.060
	Yes	79 (30.2%)	180 (36.9%)		
I have a good rapport with my parent (s)/guardian.	No	120 (45.8%)	178 (36.5%)	6.19	0.013*
	Yes	142 (54.2%)	310 (63.5%)		
I have easy and appealing temperament.	No	118 (45.0%)	192 (39.3%)	2.28	0.131
	Yes	144 (55.0%)	296 (60.7%)		
I always find something to laugh about in my life	No	172 (65.6%)	292 (59.8%)	2.44	0.069
	Yes	90 (34.4%)	196 (40.2%)		

Table 4.30b: Chi-square Results of Association between Protective Factors and High Resilience

Protective factors	Have protective factors	High Resilience		X^2	Sig.
		No	Yes		
I have good intellectual skills.	No	386 (56.3%)	27 (42.2%)	4.69	0.030*
	Yes	300 (43.7%)	37 (57.8%)		
I know that my life has meaning and there is a reason why I am living	No	180 (26.2%)	13 (20.3%)	1.08	0.300
	Yes	506 (73.8%)	51(79.7%)		
I have good role model around me whom I aspire to be identified with.	No	252 (36.7%)	10 (15.6%)	11.48	0.001*
	Yes	434 (63.3%)	54 (84.4%)		
My parent (s)/guardian(s)watch me closely	No	224 (32.2%)	16 (25.0%)	1.58	0.209
	Yes	462 (67.3%)	48 (75.0%)		
My parent (s)/guardian knows a lot about me	No	209 (30.5%)	16 (25.0%)	0.83	0.361
	Yes	477 (69.5%)	48 (75.0%)		
My family is economically sound and can meet my basic needs.	No	496 (72.3%)	35 (54.7%)	8.79	0.003*
	Yes	190 (27.7%)	29 (45.3%)		
Spiritual beliefs are source of strength to me	No	161 (23.5%)	12 (18.8%)	0.74	0.391
	Yes	525 (36.2%)	52 (81.3%)		
I feel supported by my friends.	No	438 (63.8%)	32 (50.0%)	4.79	0.028*
	Yes	248 (36.2%)	32 (50.0%)		
I receive necessary support from my immediate family during difficult times.	No	496 (72.3%)	34 (53.1%)	10.39	0.001*
	Yes	190 (36.2%)	30 (46.9%)		
My friend stand by me during difficult times	No	534 (77.8%)	42 (65.6%)	4.90	0.023*
	Yes	152 (22.2%)	22 (3.4%)		
I am treated fairly in my communities.	No	457 (66.6%)	34 (53.1%)	4.71	0.030*
	Yes	229 (33.4%)	30 (75.0%)		
I have a good rapport with my parent (s)/guardian.	No	282 (41.1%)	16 (25.0%)	6.34	0.012*
	Yes	404 (58.9%)	48 (75.0%)		
I have easy and appealing temperament.	No	292 (42.6%)	18(28.1%)	5.03	0.025*
	Yes	393 (57.4%)	46 (71.9%)		
I always find something to laugh about in my life	No	437 (63.7%)	27 (42.2%)	11.49	0.001*
	Yes	249 (36.3%)	37 (57.8%)		

4.8.5. Factors that Predict Resilience in the Population

Table 4.31 shows a logistic regression analysis table of the factors found to be associated with moderate and high resilience. Among the significant factors in the bivariate relationship, having good rapport with parent(s) or guardian was a major predictor of moderate resilience. Children who have good rapport with their parents are about 2-times more likely to have moderate resilience (OR=1.92, CI=1.02-3.60) than children who do not have good rapport with parents. The table shows that having a good adult role model was a major predictor of high resilience (OR=2.29, CI=1.11-4.68). Children who had a good adult role model are about 2.3-times more likely to have high resilience than children who do not have a good adult role model.

Table 4.31: Factors that Predict Resilience in the Population

Protective Factors	β	OR (CI)	P-value
Moderate Resilience			
I have good intellectual skills	.497	1.64 (.97-2.78)	.065
My parent(s)/guardian watches me closely	.119	1.13 (.60-2.11)	.710
My parent(s)/guardian knows a lot about me	-.034	.967 (.51-1.82)	.917
Spiritual beliefs are sources of strength to me	.093	1.09 (.56-2.15)	.785
I have a good rapport with my parent(s)/guardian	.650	1.92 (1.02-3.60)	.044*
High Resilience			
I have good intellectual skills	.145	1.16 (.66-2.02)	.611
I have good adult role model around me whom I aspire to be identified with	.824	2.29 (1.11-4.68)	.025*
My family is sound economically and can meet my basic needs	.236	1.27(.69-2.31)	.441
I feel supported by my friends	.135	1.15 (.64-2.04)	.647
I receive necessary support from my immediate family during difficult times	.293	1.34 (.73-2.45)	.343
My friend stand by me during difficult times	.198	1.22 (.65-2.27)	.534
I am treated fairly in my communities	.087	1.09 (.61-1.97)	.772
I have good rapport with my parent(s)/guardian	.261	1.29 (.69-2.44)	.415
I have easy and appealing temperament	.354	1.43 (.79-2.57)	.240
I always find something to laugh about in my life (humour) irrespective of situation that I find myself	.525	1.69 (.96-2.97)	.067

Note: *Respondents who reported not to have or those who reported little (Scale 1-2) on the protective factor questions were categorised as the reference group while those who reported to have the protective factors (scale 3-5) were merged as the group of interest.*

4.9. Hypothesis Testing

4.9.1 <u>Hypothesis 1</u>: There is no significant difference between public health nurses in the control group and experimental group in their knowledge about psychosocial support of OVC pre- and post-interventions.

4.9.1.1 Effect of Psychosocial Training on Public Health Nurses' Knowledge of Psychosocial Support for OVC

Fig 4.3. shows the change in the level of knowledge of PHN in the experimental and control groups after intervention. The result shows that the proportion of PHN with good knowledge increased from 40.0% (n=4) to 100.0% (n=10) at Post 1 and Post 2 respectively. In the control group, the proportion with good knowledge increased from 16.7% (n=2) to 25% (n=3) at post 1 and the proportion reduced back to 16.7% (n=2) at post 2.

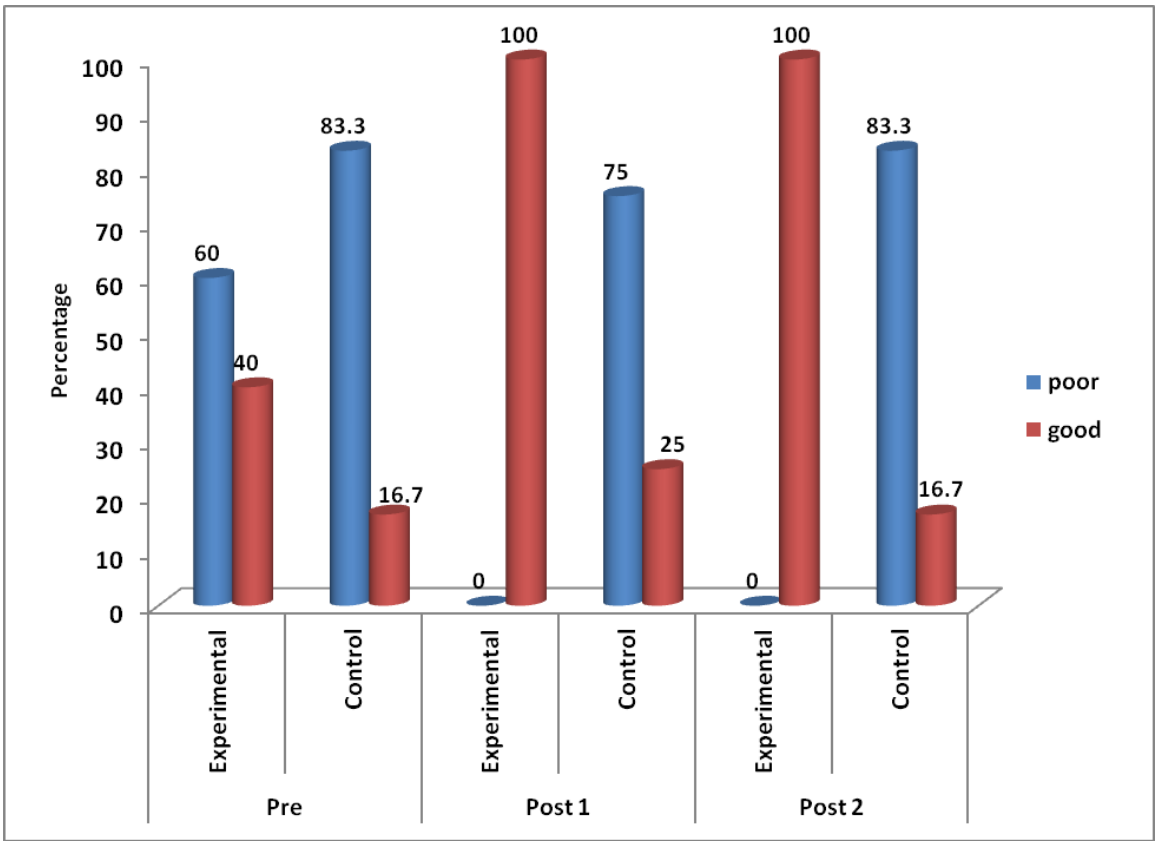

Fig. 4.3. Change in the Level of Knowledge between Nurses in the Experimental and Control Group Pre- and Post-interventions

4.9.1.2. Comparison of Knowledge Scores of Public Health Nurses within Group using the Median Scores

Figure 4.4 shows the median comparison of knowledge scores within group using box plot. In the experimental group, the result shows that there was a significant change in the knowledge scores within the group between pre-intervention median knowledge score and post 1. The median score increased from 39 at pre-intervention to 75.5 at post 1 and 82 .0 at post 2. Between Post 1 and Post 2, the figure shows that there was a difference but the difference was not as much as what was observed between pre-intervention median score and post 1. In the control group, an overlap could be observed at pre, Post 1 and Post 2. The median knowledge score increased from 39 at pre-intervention to 40 at Post 1 and remained 40 at Post 2. This shows that there was no significant change in the median knowledge scores of nurses in the control group.

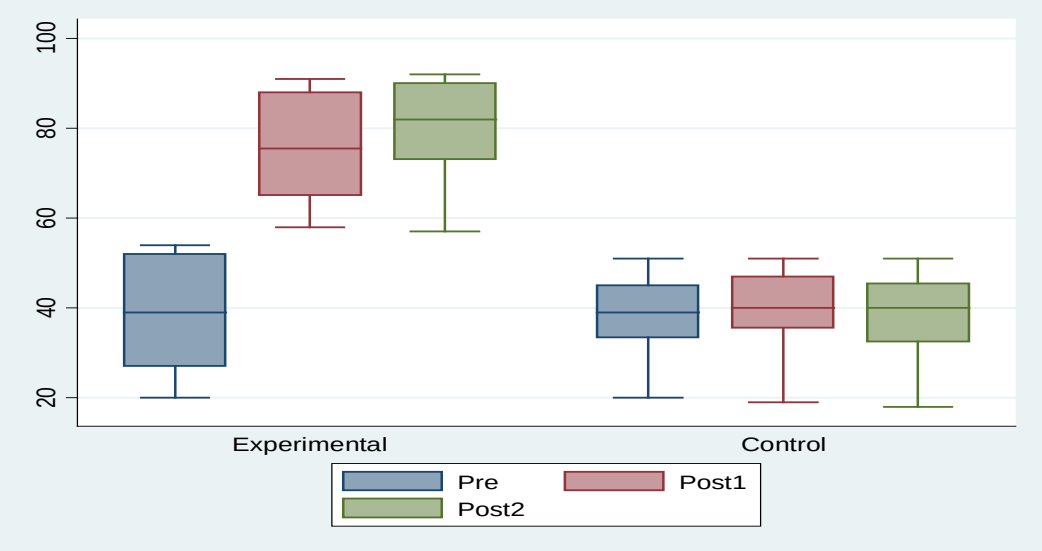

Fig. 4.4: Box Plots Showing the Difference in the Knowledge Scores of Nurses' Pre- and Post-interventions

4.9.1.3 Mean Comparison of Knowledge Scores of Public Health Nurses between Groups

Table 4.32. shows the mean comparison of knowledge scores between the experimental and control group at different points of data collection. There was no significant difference between experimental and control group in their mean knowledge scores at pre-intervention. The mean knowledge score significantly improved at post-intervention 1 and post-intervention 2. Meaning that the training has significantly impact on public health nurses' knowledge of psychosocial support of orphans and vulnerable children.

Table 4.32: Mean Comparison of Knowledge Scores of Nurses between Groups using Independent T-test

Point of Data Collection	Experimental Group (n=10)	Control (n=12)	t-test	Sig.
Pre-intervention	38.80 (13.1)	38.33 (9.1)	0.98	0.928
Post. 1	76.00 (12.1)	39.67 (7.9)	7.9	0.000
Post 2	79.70 (12.2)	38.83 (9.6)	8.8	0.000

4.9.2. Hypothesis 2:

There was no significant difference between the experimental group and control group of teachers in their knowledge about psychosocial support of OVC pre- and post-intervention.

4.9. 2.1. Change in the Level of Knowledge of Teachers in the Experimental and Control Groups Pre- and Post-interventions

Fig. 4.5. shows the change in knowledge level of teachers in the study groups pre- and post-interventions. The proportion of teachers with good knowledge increased from 7.7%% (n=1) to 100% (n=13) at post 1 and 2 respectively. In the control group, the proportion of teachers with good knowledge reduced from 17.4% (n=4) to 13.0% (n=3) at post 1 and post 2 respectively. There was no significant change in the proportion of teachers with good knowledge at post 1 and 2 when compared with the baseline.

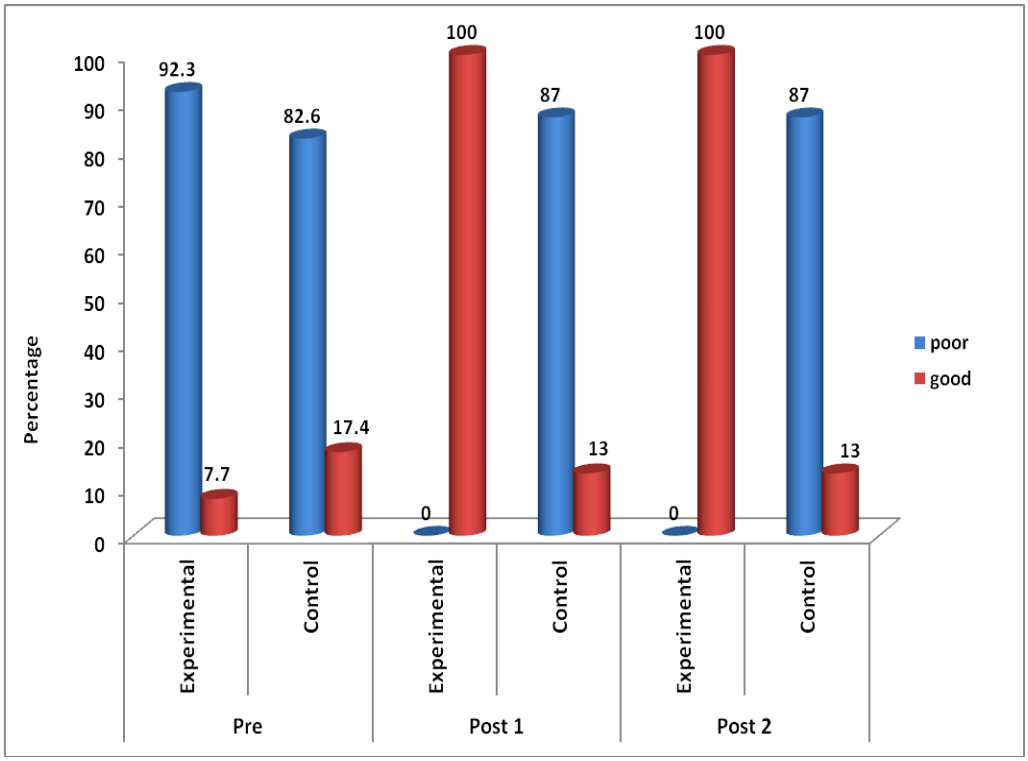

Fig. 4.5. Change in the Level of Knowledge of Teachers in the Experimental and Control groups Pre- and Post-Intervention

4.9.2.2. Comparison of Knowledge Scores of Teachers within Group using the Median Scores

Fig. 4.6 shows the median comparison of knowledge scores within group using box plot. In the experimental group, the result shows that there was a significant change in the knowledge scores within the group between baseline and post 1. The median knowledge score increased from 35 at baseline to 70 at Post 1 and 78 at Post 2. The overlap observed in the figure when compare Post 2 with Post 1 shows that there was a difference but the difference was not as much as what was observed between baseline score and post 1. However, this difference was statistically significant. In the control group, an overlap could be observed in the figure. This shows that there was no significant change in the knowledge scores of teachers in the control group. The median score reduced from 39 at baseline to 37 at Post 1 and increased back to 39 at Post 2.

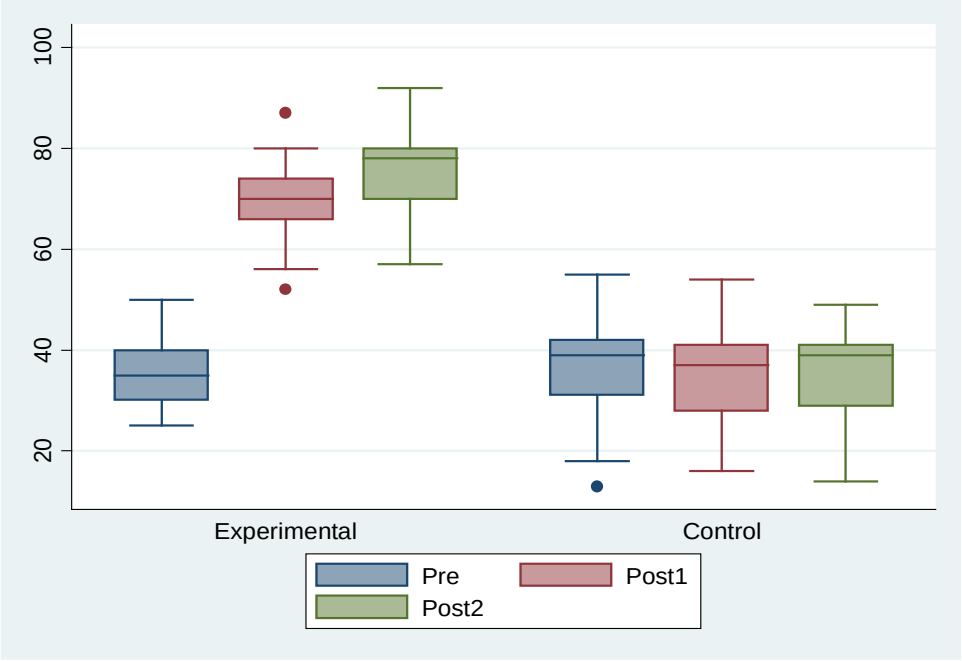

Fig. 4.6: Box Plots Showing the Difference in the Knowledge Scores of Teachers' within Group Pre- and Post- Interventions

4.9.2.3. Mean Comparison of Knowledge Scores of Teachers between Groups

Table 4.33 shows the mean knowledge scores of teachers at pre-intervention, first post-intervention and second post-intervention. Comparing the mean knowledge scores between the experimental and control groups, there was no significant difference between experimental and control groups at pre-intervention. At first and second post-intervention, there was a significant difference between the experimental group and the control group. This shows that the psychosocial support training significantly impact on the knowledge of the teachers. The independent T-test shows that there was a significant difference between the knowledge of teachers about psychosocial support of OVC in the experimental group and control group pre- and post-intervention.

Table 4.33: Mean Comparison of Knowledge Scores of Teachers between Groups

Point of Data Collection	Experimental Group (n=13)	Control Group (n=23)	t-test	Sig.
Pre-intervention	35.84 (7.4)	35.60 (10.8)	0.70	0.94
Post 1	69.39 (9.4)	35.00 (10.2)	9.98	0.00
Post 2	75.30 (9.8)	35.34 (9.4)	12.03	0.00

4.9.3. <u>Hypothesis 3</u>: There is no significant difference in the resilience and psychosocial health outcomes of children in the experimental and control groups pre- and post-interventions.

4.9.3.1: Change in the Level of Resilience between Experimental and Control Groups Pre- and Post-intervention

Fig. 4.5. shows the pattern of change in the resilience level between the experimental and control groups. The figure revealed that the level of resilience of majority of the children in the experimental group changed from moderate to high while the proportion of children with low resilience changed from 22.4% (n=76) to 1.2% (n=4) at post-1 and 1.5% (n=5) at post-2. In the control group, the resilience level of majority of the children remained moderate at post-intervention. Also, the proportion of children with low resilience increased from 29.7% (n=122) at baseline to 35.7% (n=124) at post 1 and 26.1% (n=80) at post 2. The proportion of children with high resilience remained low at post-intervention.

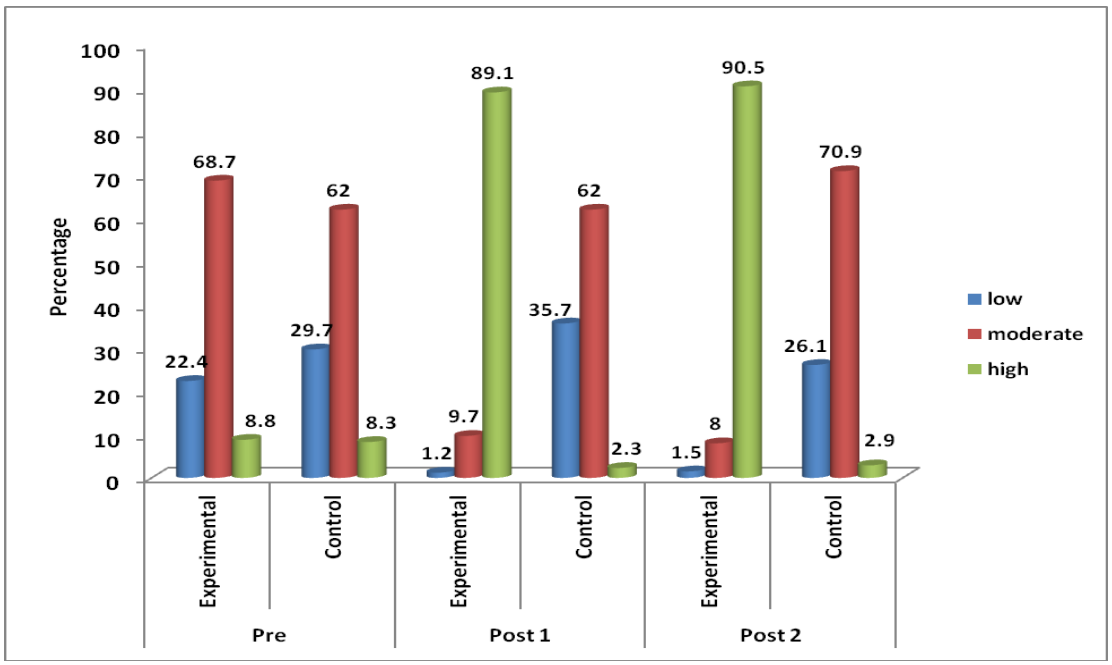

Fig. 4.7: Pattern of Change in the Level of Resilience between Experimental and Control Groups

4.9.3.2 Mean Comparison of Resilience Scores of Children between Experimental and Control Groups

Table 4.34 above shows an independent T-test result of a mean comparison between the experimental and control groups at pre, post 1 and post 2. The result shows that there was no significant difference in the resilience scores of the children between the two groups before intervention. The table however, shows that the difference observed between pre-intervention scores and both post-intervention 1 and 2 results were significant. Meaning that the psychosocial intervention has an impact on the children resilience.

Table 4.34: Mean Comparison of Resilience Scores of Children between Experimental and Control Groups

Point of Data Collection	Experimental Group	Control	t-test	Sig.
Pre-intervention	65.89 (15.9)	64.89 (14.9)	-0.87	0.380
N	339	411		
Post. 1	114.00 (19.8)	60.80 (10.5)	-44.11	0.000
N	339	306		
Post 2	114.81 (19.1)	68.28 (11.1)	-41.31	0.000
N	336	306		

4.9. 3.3: Pattern of Changes in the Psychosocial Health Outcome Scores between Experimental and Control Groups

Fig. 4.8. shows the pattern of change in the psychosocial health outcome variables (anxiety, depression, self-esteem and social connection) pre- and post-intervention between the experimental and control groups. The line graph shows a sharp reduction in the anxiety scores at Post 1 and a slight reduction at Post 2 in the experimental group while there was no observable difference in the control group at post 1 which increased sharply at Post 2. The line graph shows a form of stabilisation in the depression scores in the experimental group at Post 1 and 2 while there was a sharp increase in the depression scores of the children in the control group at Post 1 and this increase continues at Post 2. For self-esteem, there was a sharp increase in the self-esteem scores of the children in experimental group at Post 1 which further increased at Post 2, while there was no significant change in the control group at Pre, Post 1, and Post 2. The social connection scores increased at Post 1 and slightly increase at Post 2 in the experimental group. For the control group, there was a slight reduction at Post 1 and it slightly increased at Post 2.

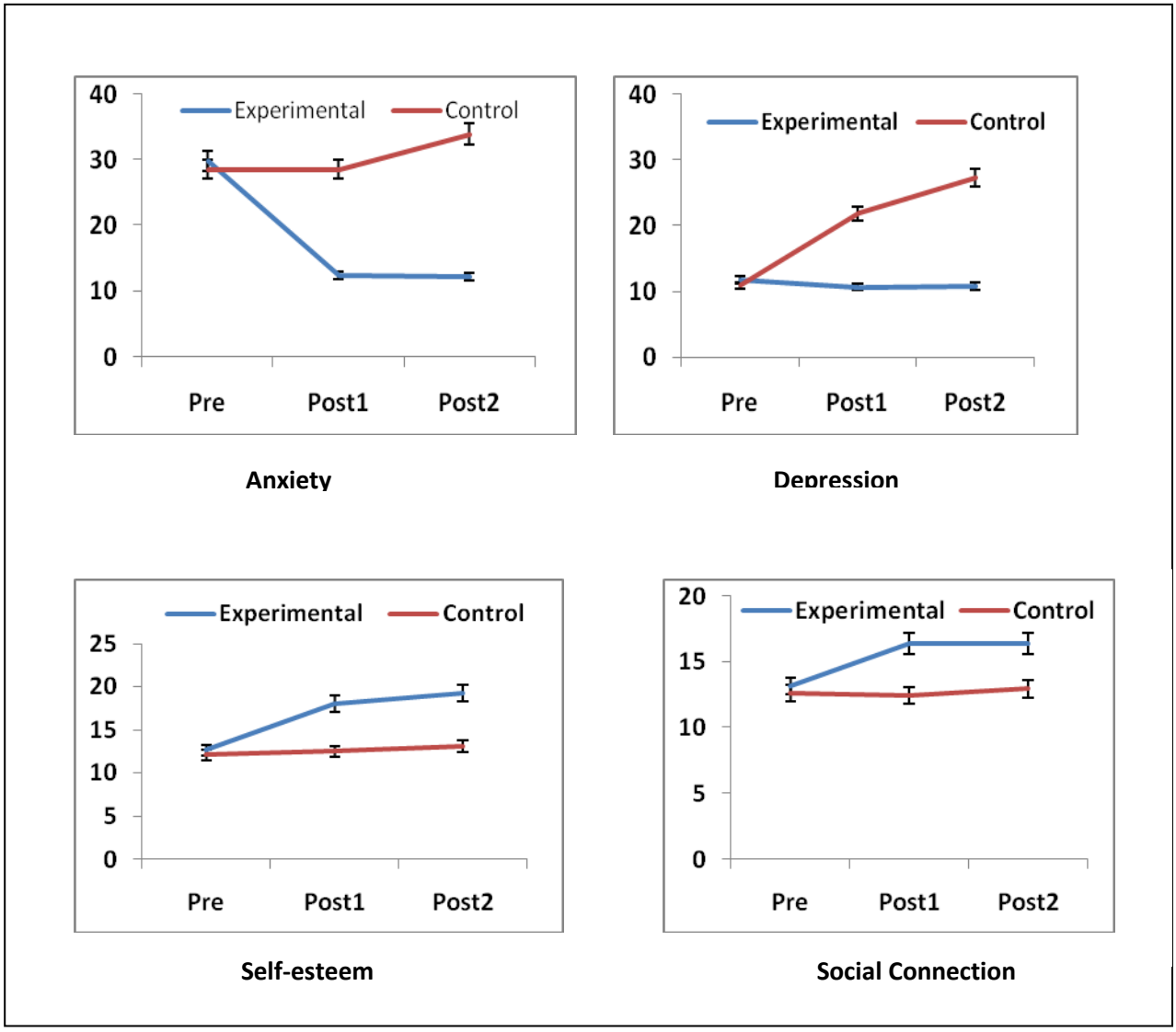

Fig. 4.8: Pattern of Changes in the Psychosocial Health Outcome Scores between Experimental and Control Groups

4.9. 3.4. Mean Comparison of Change in Mean Psychosocial Outcome Scores between Experimental and Control Groups using T-test

Table 4.35 shows that a significant difference was observed at Post 1 and Post 2 for all the psychosocial outcome variables with children in the experimental group showing lower anxiety and depressive symptoms and higher self-esteem and social connection. Although, for both anxiety and depression, a significant difference was observed pre-intervention. However, with the mean score changes at Post 1 and 2, it could be concluded that the intervention has made a significant impact. Generally, the result shows that there was a significant improvement in the psychosocial variable in the intervention group when compared with the control group.

Table 4.35: Mean Comparison of Change in Mean Psychosocial Outcome Scores between Experimental and Control Groups using T-test

Psychosocial Outcomes	Group	N	Mean	Std. Dev.	T-test	P value
Anxiety Pre	Experimental.	339	29.88	8.2	-2.11	0.040*
	Control	411	28.59	8.4		
Anxiety Post 1	Experimental	339	12.38	8.6	-2.03	0.000*
	Control	347	28.68	7.4		
Anxiety Post 2	Experimental	336	12.26	8.8	27.77	0.000*
	Control	306	33.94	10.9		
Depression Pre	Experimental.	331	11.88	6.4	-2.03	0.040*
	Control	411	10.89	6.8		
Depression Post 1	Experimental	339	10.65	8.0	17.97	0.000*
	Control	347	21.82	8.2		
Depression Post 2	Experimental	336	10.81	8.6	22.96	0.000*
	Control	306	27.27	9.6		
Self-esteem Pre	Experimental.	339	12.64	4.7	1.54	0.120
	Control	407	12.09	3.2		
Self-esteem Post 1	Experimental	339	18.04	3.6	-20.07	0.000*
	Control	347	12.55	3.6		
Self-esteem Post 2	Experimental	336	19.25	4.5	-17.72	0.000*
	Control	306	13.14	4.2		
Social Connection pre	Experimental.	407	13.18	3.6	-2.0	0.400
	Control	339	12.61	3.9		
Social Connection Post1	Experimental	339	16.44	4.3	-12.83	0.000*
	Control	347	12.44	3.9		
Social Connection Post 2	Experimental	336	16.41	4.5	-10.19	0.000*
	Control	306	12.96	3.9		

*P<0.05

4.9.4. <u>Hypotheses 4:</u> There is no significant difference in the resilience and psychosocial health outcomes scores between orphans and other vulnerable children in the study pre- and post- interventions.

4.9.4.1. Difference between Orphans and Vulnerable Children (VC) on Resilience Scores

Table 4.36 shows the difference between orphans and vulnerable children on the resilience scores of the children. Pre-intervention result of the independent T-test shows that there was no significant difference in the resilience scores between orphans and non orphans across the study groups. A significant difference was however observed in the resilience group at Post 1 where orphans had more resilience than other vulnerable children. No difference was observed at Pos t1 in the peer support and control groups between them. Post-intervention 2 result shows a significant difference in the resilience scores between the two groups in the peer support group where VC displayed more resilience than the orphans. No significant difference was observed in the resilience and control groups between orphans and other VC at post-intervention 2. Therefore, the hypothesis that stated that there was no significant difference in the resilience scores between orphans and VC pre- and post-intervention is accepted at pre-intervention but rejected at post-intervention 1 and 2 in the resilience and peer support groups respectively.

Table 4.36: Difference between Orphans and Vulnerable Children (VC) in Resilience Scores

Group			N	Mean score	Standard Deviation	T-test	Sig.
Resilience Group	Pre	Orphans	94	65.40	14.7	0.21	0.837
		VC	82	64.96	13.4		
	Post 1	Orphans	94	121.66	11.6	2.42	0.017*
		VC	82	115.28	22.4		
	Post 2	Orphans	94	120.00	14.5	1.49	0.139
		VC	79	115.75	22.8		
Peer Support Group	Pre	Orphans	92	65.11	15.3	-1.24	0.216
		VC	71	68.61	20.4		
	Post 1	Orphans	92	107.41	19.9	-1.07	0.286
		VC	71	110.92	21.6		
	Post 2	Orphans	92	108.09	19.6	-2.57	0.011*
		VC	71	115.59	19.9		
Control	Pre	Orphans	180	64.68	14.2	-0.246	0.806
		VC	231	65.05	15.4		
	Post 1	Orphans	150	60.51	11.3	-0.45	0.656
		VC	197	61.02	9.8		
	Post 2	Orphans	128	63.93	11.3	0.86	0.389
		VC	178	62.82	10.9		

*P<0.05

4.9.4.2. Difference between Orphans and Vulnerable Children (VC) in Anxiety Scores Pre- and Post-interventions

Table 4.37 shows that there was no significant difference between orphans and VC in their anxiety scores at pre-intervention across all the groups. Therefore, the hypothesis that there is no significant difference between orphans and VC in their anxiety scores is accepted at pre-intervention. First post-intervention evaluation however shows that there was a significant difference between orphans and VC in the resilience and control groups with orphans displaying low anxiety scores compared with VC. In the peer support group, no significant difference was observed between orphans and VC at pre- and post-interventions.

Table 4.37: Difference between Orphans and Vulnerable Children in Anxiety Scores

Group			N	Mean score	Standard Deviation	T-test	Sig.
Resilience Group	Pre	Orphans	94	30.83	8.4	0.786	0.433
		VC	82	29.80	8.9		
	Post 1	Orphans	94	9.57	5.5	-2.36	0.019*
		VC	82	12.57	10.8		
	Post 2	Orphans	94	9.86	6.1	-1.91	0.058
		VC	79	12.34	10.7		
Peer Support Group	Pre	Orphans	92	29.08	8.9	-0.516	0.607
		VC	71	29.75	7.1		
	Post 1	Orphans	92	14.66	8.8	1.32	0.190
		VC	71	12.90	7.9		
	Post 2	Orphans	92	14.53	9.2	1.54	0.126
		VC	71	12.41	8.1		
Control	Pre	Orphans	180	24.64	8.2	-0.25	0.806
		VC	231	29.32	8.3		
	Post 1	Orphans	150	27.63	7.5	-2.29	0.023*
		VC	197	29.48	7.4		
	Post 2	Orphans	128	33.17	11.6	-1.045	0.297
		VC	178	34.50	10.5		

***p<0.05**

4.9.4.3. Difference between Orphans and Vulnerable Children (VC) in Depression Scores Pre- and Post-interventions

Table 4.38 shows that there was no significant difference between orphans and VC pre- and post-intervention in the peer support and control groups. Therefore the hypothesis that there is no significant difference between orphans and VC in their depression scores is accepted for peer support group and control group at pre- and post-interventions. The hypothesis was however not accepted for the resilience group at pre-intervention because a significant difference exists between them where orphans have higher depression scores than VC. The reverse was the case at post-1 where other VC have higher depression scores than orphans.

Table 4.38: Difference between Orphans and Vulnerable Children in Depression Scores Pre- and Post-interventions

Group			N	Mean score	Standard Deviation	T-test	Sig.
Resilience Group	Pre	Orphans	94	13.22	6.4	2.05	0.042*
		VC	82	11.22	6.6		
	Post 1	Orphans	94	8.80	6.6	-2.09	0.038*
		VC	82	11.38	9.7		
	Post 2	Orphans	94	9.05	6.9	-1.67	0.096
		VC	79	11.19	9.8		
Peer Support Group	Pre	Orphans	92	11.82	5.9	0.87	0.384
		VC	71	10.94	6.8		
	Post 1	Orphans	92	11.66	7.8	0.57	0.576
		VC	71	10.97	8.1		
	Post 2	Orphans	92	12.60	8.6	1.62	0.107
		VC	71	10.38	8.8		
Control	Pre	Orphans	180	10.69	6.6	-0.51	0.607
		VC	231	11.04	7.0		
	Post 1	Orphans	150	21.65	9.0	-0.32	0.748
		VC	197	21.94	7.5		
	Post 2	Orphans	128	26.80	9.7	-0.73	0.464
		VC	178	27.61	9.5		

***P<0.05**

4.9.4. 4. Difference between Orphan and Vulnerable Children (VC) in Self-esteem Scores Pre- and Post-interventions

Table 4.39 shows that there was no significant difference between orphans and VC in self-esteem scores in the resilience and control groups pre- and post-interventions. Therefore, hypothesis of no difference was accepted in the two groups. However, in the peer support group, there was a significant difference pre- and post-interventions 1. Therefore, in the peer support group the hypothesis of no difference was rejected at pre- and post-intervention 1.

Table 4.39: Difference between Orphan and Vulnerable Children in Self-esteem Scores

Group			N	Mean score	Standard Deviation	T-test	Sig.
Resilience Group	Pre	Orphans	94	12.67	5.0	-0.71	0.477
		VC	82	13.18	4.5		
	Post 1	Orphans	94	18.56	3.7	0.43	0.665
		VC	82	18.33	3.4		
	Post 2	Orphans	94	19.63	4.2	0.313	0.755
		VC	74	19.42	4.6		
Peer Support Group	Pre	Orphans	92	13.05	4.7	2.20	0.029*
		VC	71	11.45	4.4		
	Post 1	Orphans	92	16.88	3.4	-2.93	0.004*
		VC	71	18.52	3.7		
	Post 2	Orphans	92	18.40	4.4	-1.73	0.086
		VC	71	19.66	4.9		
Control	Pre	Orphans	178	13.17	3.1	0.44	0.658
		VC	229	13.08	3.4		
	Post 1	Orphans	150	12.44	3.5	-0.51	0.614
		VC	197	12.63	3.6		
	Post 2	Orphans	128	12.87	4.2	-0.96	0.340
		VC	178	13.33	4.2		

***P<0.05**

4.9.4.5. Difference between Orphan and Vulnerable Children (VC) in Social Connectedness Scores Pre- and Post-interventions

Table 4.40 revealed that there was no significant difference between orphans and VC in their social connection pre- and post- interventions across the study groups. Therefore, the hypothesis that there is no significant difference is accepted.

Table 4.40: Difference between Orphan and Vulnerable Children in Social Connection Scores

Study Groups			N	Mean score	Standard Deviation	T-test	Sig.
Resilience	Pre	Orphans	94	13.14	3.6	-0.79	0.425
		VC	82	13.59	3.8		
	Post 1	Orphans	94	15.83	3.7	-1.03	0.304
		VC	82	16.44	4.1		
	Post 2	Orphans	94	15.88	3.9	0.61	0.544
		VC	79	16.28	4.6		
Peer Support	Pre	Orphans	92	13.13	4.1	0.45	0.655
		VC	71	12.85	3.9		
	Post 1	Orphans	92	16.48	4.8	-0.97	0.330
		VC	71	17.20	4.5		
	Post 2	Orphans	92	16.50	4.7	-0.87	0.387
		VC	71	17.15	4.8		
Control	Pre	Orphans	177	12.43	3.9	-0.87	0.385
		VC	229	12.75	3.5		
	Post 1	Orphans	150	12.24	3.8	-0.83	0.406
		VC	197	12.59	3.9		
	Post 2	Orphans	128	12.70	3.9	-0.968	0.334
		VC	178	13.13	4.1		

***p<0.05**

4.9.5. **Hypothesis 5:** There is no significant difference among the study groups in their resilience and health outcomes pre- and post-interventions.

4.9.5.1. Descriptive Statistics of Mean Scores of Respondents across the Study Groups

Table 4.41 shows the change in resilience and psychosocial health outcome scores across the three study groups pre- and post-interventions. There was an increase in the resilience scores of the children in the two intervention groups at post-intervention 1 and 2 with children in the resilience group having higher scores when compared with the peer support group. Not much difference was observed in the control group.

Table 4.41: Mean Comparison of Change in Mean Resilience Scores Pre- and Post-Interventions Across the Study Groups

Variable		Resilience Group (n=176)			Peer support Group (n=163)			Control (n=411)		
		Baseline (n=176)	Post 1 (n=176)	Post 2 (n=173)	Baseline (n=163)	Post 1 (n=163)	Post 2 (n=163)	Baseline (n=411)	Post (n=306)	Post 2 (n=306)
Resilience	Mean Scores (Std. Deviation)	65.20 (14.1)	118.69 (17.7)	118.06 (18.8)	66.63 (17.8)	108.9 (20.7)	111.4 (18.3)	64.89 (14.9)	60.80 (10.5)	63.28 (11.0)
Anxiety	Mean Scores (Std. Deviation)	30.35 (8.6)	10.97 (8.5)	10.99 (8.6)	29.37 (8.2)	13.90 (8.5)	13.61 (8.8)	29.37 (7.3)	28.6 (7.5)	33.94 (10.9)
Depression	Mean Scores (Std. Deviation)	12.29 (6.5)	10.00 (8.3)	10.03 (8.3)	11.44 (6.3)	11.36 (7.8)	11.63 (8.7)	10.63 (6.8)	21.82 (8.2)	27.27 (9.6)
Self-esteem	Mean Scores (Std. Deviation)	12.91 (4.6)	18.45 (3.6)	19.53 (4.4)	12.36 (4.7)	17.60 (3.6)	18.95 (4.6)	13.09 (3.2)	12.55 (3.6)	13.14 (4.2)
Social Connection	Mean Scores (Std. Deviation)	13.35 (3.7)	16.11 (3.9)	16.06 (4.3)	13.01 (4.0)	16.79 (4.7)	16.79 (4.8)	12.59 (3.6)	12.47 (3.8)	12.96 (3.9)

4.9.5.1. Mean Scores Comparison for Resilience and Psychosocial Outcomes Pre- and Post- interventions Using Analysis of Variance

Tables 4.42. shows a one-way ANOVA result used to explore the difference among groups. The result shows that there was no significant difference among the three groups (resilience, peer support and control) in relation to resilience, anxiety, depression, self esteem and social connection at pre-intervention. The Table however showed that there were significant differences among the three groups at post-intervention 1 and 2.

Table 4.42: Mean Scores Comparison for Resilience and Psychosocial Health Outcomes Pre- and Post-interventions Using Analysis of Variance

Resilience and Psychosocial Outcomes		Sum of Squares	df	M^2	F	Sig.
Resilience_pre	Between Groups	359.495	2	179.747	.759	.469
	Within Groups	176968.8	747	236.906		
	Total	177328.3	749			
Resilience_post 1	Between Groups	4933441.9	2	246670.959	1036.481	0.000
	Within Groups	162546.5	683	237.989		
	Total	655888.4	685			
Resilience_post 2	Between Groups	428893.1	2	214446.538	880.307	0.000
	Within Groups	155663.0	639	243.604		
	Total	584556.1	641			
Anxiety_pre	Between Groups	392.398	2	179.747	.759	0.469
	Within Groups	176968.8	747	236.906		
	Total	177328.3	749			
Anxiety _post 1	Between Groups	46297.390	2	23148.695	361.685	0.000
	Within Groups	43713.578	683	64.002		
	Total	90010.968	685			
Anxiety_post 2	Between Groups	75864.592	2	37932.286	391.617	0.000
	Within Groups	61893.921	639	96.861		
	Total	137758.5	641			
Depression_pre	Between Groups	245.078	2	122.539	2.767	0.064
	Within Groups	33083.921	747	44.389		
	Total	33328.999	749			
Depression_post 1	Between Groups	21516.300	2	10758.150	162.880	0.000
	Within Groups	45111.840	683	66.050		
	Total	66628.140	685			
Depression_post 2	Between Groups	43629.977	2	21814.989	265.513	0.000
	Within Groups	52501.257	639	82.162		
	Total					
Self Esteem_pre	Between Groups	63.406	2	31.703	2.007	0.135
	Within Groups	11736.360	743	15.796		
	Total	11799.765	745			
Self Esteem_post 1	Between Groups	5232.464	2	2616.232	204.994	0.000
	Within Groups	8716.780	683	12.762		
	Total	13949.243	685			
Self Esteem_post 2	Between Groups	6012.409	2	3006.205	157.832	0.000
	Within Groups	12170.918	639	19.047		
	Total	18183.327	641			
Social Connection_pre	Between Groups	70.787	2	35.394	2.527	0.081
	Within Groups	10391.583	742	14.005		
	Total	10462.370	744			
Social Connection _post 1	Between Groups	2784.543	2	1392.272	83.604	0.000
	Within Groups	11374.053	683	16.653		
	Total	14158.596	685			
Social Connection_post 2	Between Groups	1949.492	2	974.746	53.262	0.000
	Within Groups	11694.390	639	18.301		
	Total	13643.882	641			

***P<0.05**

4.9.5.3. Post-Hoc Test at Post-intervention 1

Table 4.43 shows a post-hoc Fisher's LSD test at post-intervention 1. The result shows that in the resilience scores among the three groups, there was a significant difference between the control group and resilience group, and between the peer support group and control group. Meaning that the children in both resilience and peer support groups displayed higher level of resilience at post-intervention 1. The results also showed that there was a significant difference between the children in the resilience group and peer support group. The children in the resilience group displayed higher resilience scores compared with those in the peer support group.

On the anxiety scores of the children, a significant difference was observed between the control group and resilience group. The same was observed between control group and peer support group. A significant difference was also observed between the resilience group and peer support group with the children in the resilience group showing less anxiety symptoms than the ones in peer support group.

For depression, the only observable difference among groups was between the two intervention groups and control group. There was no significant difference between resilience group and peer support group on how the intervention has contributed to reduction in depression symptoms.

For self-esteem, there was a significant difference among the three groups. The control group was significantly different from both peer support group and resilience group. Also, children in resilience group displayed higher level of self-esteem at Post 1 compared with those in the peer support group. Even though, there was a difference between resilience group and peer support group at post 2 in the self-esteem scores, the difference was not statistically significant.

The only significant difference observed in social connection was between the experimental group and control group. There was no significant difference between the two intervention groups in the way they have improved the social connection scores of the children.

Table 4.43: Multiple Comparisons among Groups Using Post-Hoc Fisher's LSD Test at Post-intervention 1.

Dependent variable	(I) group	(J) group	Mean Difference (I-J)	Std. error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Resilience	Control	Resilience	-57.886*	1.428	.000	-60.9	-55.08
		Peer support	-48.137*	1.465	.000	-51.01	-45.26
	Resilience	Control	57.886*	1.428	.000	55.08	60.69
		Peer support	9.749*	1.677	.000	6.46	13.04
	Peer support	Control	48.137*	1.465	.000	45.26	51.01
		Resilience	-9.749*	1.677	.000	-13.04	-6.46
Anxiety	Control	Resilience	17.709*	.740	.000	6.25	19.16
		Peer support	14.784*	.760	.000	13.25	16.28
	Resilience	Control	-17.709*	.740	.000	-19.16	-16.25
		Peer support	-2.924*	.870	.001	-4.63	-1.22
	Peer support	Control	-14.784*	.760	.000	-16.28	-13.29
		Resilience	2.924*	.870	.001	1.22	4.63
Depression	Control	Resilience	11.816*	.752	.000	10.34	13.29
		Peer support	10.454*	.772	.000	8.94	11.97
	Resilience	Control	-11.816*	.752	.000	-13.29	-10.34
		Peer support	-1.362	.883	.124	-3.10	.37
	Peer support	Control	-10.454*	.772	.000	-11.97	-8.94
		Resilience	1.362	.883	.124	-.37	3.10
Self-esteem	Control	Resilience	-5.904*	.331	.000	-6.55	-5.26
		Peer support	-5.045*	.339	.000	-5.71	-4.38
	Resilience	Control	5.904*	.331	.000	5.26	6.55
		Peer support	.859*	.388	.027	.10	1.62
	Peer support	Control	5.045*	.339	.000	4.38	5.71
		Resilience	-.859*	.388	.027	-1.62	-.10
Social connect.	Control	Resilience	-3.676*	.378	.000	-4.42	-2.98
		Peer support	-4.353*	.388	.000	-5.11	-3.59
	Resilience	Control	3.676*	.378	.000	2.93	4.42
		Peer support	-.678	.444	.127	-1.55	.19
	Peer support	Control	4.353*	.388	.000	3.59	5.11
		Resilience	.678	.444	.127	-.19	1.55

**The mean difference is significant at the .05 level.*

4.9.5.3. Post-Hoc Test at Post-Intervention 2

The post hoc LSD test in Table 4.44 shows a similar result in resilience, anxiety and depression scores to what was found at post 1. For both self-esteem and social connection, there was no significance difference between children in the resilience group and peer support group.

Table 4.44: Post-Hoc Test at Post-intervention 2

Dependent variable	(I) group	(J) group	Mean Difference (I-J)	Std. error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Resilience	Control	Resilience	-54.773*	1.485	.000	-57.69	-51.86
		Peer support	-48.072*	1.513	.000	-51.04	-45.10
	Resilience	Control	54.773*	1.485	.000	51.86	57.69
		Peer support	6.702*	1.704	.000	3.36	10.05
	Peer support	Control	48.072*	1.513	.000	45.10	51.04
		Resilience	-6.702*	1.704	.000	-10.05	-3.36
Anxiety	Control	Resilience	22.950*	.936	.000	21.11	24.79
		Peer support	20.337*	.954	.000	18.46	22.21
	Resilience	Control	-22.950*	.936	.000	-24.79	-21.11
		Peer support	-2.613*	1.074	.015	-4.72	-.50
	Peer support	Control	-20.337*	.954	.000	-22.21	-18.46
		Resilience	2.613*	1.074	.015	.50	4.72
Depression	Control	Resilience	17.242*	.862	.000	15.55	18.94
		Peer support	15.639*	.879	.000	13.91	17.37
	Resilience	Control	-17.242*	.862	.000	-18.94	-15.55
		Peer support	-1.603	.989	.106	-3.55	.34
	Peer support	Control	-15.639*	.879	.000	-17.37	-13.91
		Resilience	1.603	.989	.106	-.34	3.55
Self Esteem	Control	Resilience	-6.395*	.415	.000	-7.21	-5.58
		Peer support	-5.814*	.423	.000	-6.64	-4.98
	Resilience	Control	6.395*	.415	.000	5.58	7.21
		Peer support	.581	.476	.223	.35	1.52
	Peer support	Control	5.814*	.423	.000	4.98	6.64
		Resilience	-.581	.476	.223	-1.52	.35
Social connect.	Control	Resilience	-3.100*	.407	.000	-3.90	-2.30
		Peer support	-3.821*	.415	.000	-4.64	-3.01
	Resilience	Control	3.100*	.407	.000	2.30	3.90
		Peer support	-.722	.467	.123	-1.64	.20
	Peer support	Control	3.821*	.415	.000	3.01	4.64
		Resilience	.722	.467	.123	-.20	1.64

**The mean difference is significant at the .05 level.*

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the discussion of the findings from this study in relation to existing literatures. Implications for public health nursing and school health programme are discussed. The conclusion drawn from the findings of the study are enumerated and recommendations for improved school nursing practice are highlighted.

5.1. Discussion of Findings

5.1.1. Study Populations

The study populations for this study consist of public health nurses from primary health care facilities, teachers and orphans and vulnerable children from selected public junior secondary schools in Osun State.

The overall mean age of public health nurses in this study was similar to the mean age (40.8±8.1) reported by Oyetunde (2010) among nurses working in various categories of hospitals in Ibadan, Oyo State. The same proportions of young adult and middle-aged adult were found among the nurses in the study. Majority of the nurses who participated in the study had spent more than 10 years on the job. There were more female nurses than male. On the other hand, majority of the teachers were in their middle age and again there were more females than males. The study has shown that the female gender still dominate the two professions. This observation supported the global trend of predominance of females in the nursing and teaching profession ((Fisher, Frazer, Hasson and Orkin, 2010; Oyetunde, 2010, Okoli and Ajio, 2010). A contrary finding was however found by Ogunjimi, *et al*., (2010) who documented higher percentage (51.5%) of male teachers in their study in Cross River State. The low proportion of public health nurse professionals found in this study was not only peculiar to the study settings alone but it was a global problem in which nurses prefer to work in more populated and well recognised settings such as the secondary and tertiary health care facilities (Bushy and Leipert, 2005).

The number of public health nurses that had degree in this study was encouraging compared with Oyetunde's study (2010) who reported that none of the 161 nurses that she studied across the three levels of health care had degree. However, higher proportion of teachers in the study had degree when compared with public health nurses. This finding was at par with the report of Ogunjimi, *et al.*, (2010) who found that majority of teachers in their study had degree. Acquiring degree in nursing has been reported to contribute to improved practice as posited by Ojo (2010). Specialised education is an important aspect of professional status and the trend in education for nursing profession has shifted towards programmes in colleges and universities (Berman, Snider, Kozier and Erb, 2008). Thus, nurses in Nigeria need to key into this global trend. .

Majority of the school children who participated in the study were in their early adolescent ages. This corresponded to the expected age for their classes in the Nigerian educational system. Mean age comparison of children in the study and control groups showed no significant difference and this provides a basis for a non-equivalent quasi experimental group design. The mean age was similar to what was found in a pilot study reported by Olowokere and Okanlawon (2013) in a study conducted in similar settings in Osun State. The study also shows that majority of the children were Christian. This corresponded with findings in the similar setting (Ogunfowokan, 2012) and the general assumption that the southwestern part of Nigeria is dominated by Christians.

The proportion of female pupils found in this study was comparable with past studies where female pupils were more than their male counterparts in a school-based study (Gance-Claveland, 2000; Solomon and Laufer, 2005; and Olowokere and Okanlawon, 2013). It was however in contrast to what was reported by Okanlawon and Asuzu (2012) in a school-based study in Oyo State where male pupils dominated the study. The percentage of double orphans found in the study was lower than what was reported by Miller, *et al.* (2011a) who found that majority of their respondents were double orphans.

Most of the key parents of the children in this study were petty traders and artisans. This supported the findings of Opara, Ikpeme and Ekanem (2010) that the public schools are mostly attended by the children of people of low class while the private schools are presumably patronised by the children of the elite, medium or high

socio-economic group in society. The study was also in support of Ogunfowokan's findings among similar population in the same setting in 2012 and further confirmed the report of the Osun State Government (2010) that majority of public school children parents were petty traders. Higher percentage of children in this study were from poor household as found by Tetera and Missaye (2014) among OVC in which majority (81.7%) of them were from poor household. This further confirms Adegun (2013) finding that parent of children in public schools are low income earners. This finding also supported Bhuveneshwari (2005) that the school system in the public school caters for the educational needs of the poorest of the poor in the city.

The prevalence of separation of orphans and vulnerable children from their siblings found in this study was lower than what had been reported in previous studies in countries like Zambia and Congo-Brazzaville where about 63% and 56% of orphaned children were separated from their siblings (USAID/SCOPE-OVC/FHI, 2002).

5.1.2. Public Health Nurses' and Teachers' Knowledge and Involvement in Providing Psychosocial Support for Orphans and Vulnerable Children

Nursing is developing a vital role in provision of appropriate health care intervention to vulnerable populations (Johnson, 2001). For nurses to work more effectively among the school-age vulnerable children, teachers' involvement becomes highly important. These two professionals are highly pivotal in meeting the health care needs of this population within the school health framework. With the importance placed on psychosocial support for vulnerable population by the National Plan of Action for orphans and vulnerable children in Nigeria (2006), having necessary knowledge of psychosocial support by these professionals does become necessary.

However, low level of knowledge about psychosocial support of vulnerable school children was observed among teachers and nurses who participated in this study before intervention. This level of knowledge supported the submission of Fisher, Frazer, Hasson and Orkin (2010) and Brezner (2013) that there is a general lack of knowledge about care and support of vulnerable population among nurses and teachers respectively.

The nurses and teachers in this study lack knowledge of common psychosocial interventions reported in literatures that could be used to address psychosocial distress

among vulnerable children. However, 50% or more of these professionals affirmed spiritual support as a form of psychosocial intervention. Even though spiritual support has not been widely reported as a form of psychosocial intervention to address psychosocial distress among orphans and vulnerable children, the use of it by a sizeable proportion of nurses and teachers confirmed the strong belief of people in the southwestern part of Nigeria in God as the solution to all problems. Thus, the effect of spiritual support on psychosocial outcomes is worth exploring as previous study have linked spirituality to effective coping and found it to be negatively related to perceived stress, psychological distress and emotional focused coping (Tuck, McCain and Elswick, 2001).

The number of nurses who received training on the care of vulnerable children agreed with Fishers' and colleagues submission that a general lack of knowledge about the care of vulnerable population evident among nurses referred to the lack of formal training in nursing education coupled with limited experience in actually caring for vulnerable population. (Fisher, Frazer Hasson and Orkin, 2010). Similar trend was also found by Wilson, *et al.,* (2008) and Pryjmachuc, *et al*., (2012) who reported that few community-based nurses had received specific training in child and adolescents' mental health.

Empirical studies exploring teachers' knowledge and involvement in the care and support of OVC were scarce. This further downplayed their involvement in meeting the needs of vulnerable school children. The low proportion of teachers who had been specifically trained in psychosocial support may influence their ability to support vulnerable children as submitted by McGrath and Noble (2010) who stated that teachers expressed doubts about their ability to meet the challenge of supporting vulnerable children. Thus, improving their knowledge is highly important to build their skills and confidence to support these children. Professional knowledge of the processes contributing to resilience functioning can enable them to capitalise on school periods as unique opportunities for promoting adaptation during significant adversity or trauma as submitted by Toth and Cicchetti (1997) and Luther and Cicchetti (2008).

This study also showed that some nurses had been involved in the care and support of vulnerable school children in the past. This was in line with the submission of

Mead, Bowen and Crask (1997) that nurses are already involved in emotional health care with variety of groups.

This study has shown that psychosocial interventions provided by nurses in collaboration with teachers can significantly improve children's resilience and the selected psychosocial indices. This supported Hall and Elliman (2003) and Department of Health and DfES (2004) submissions that health promotion programme implemented in schools primarily through the work of school nurses working in conjunction with teachers and other professionals had been found to be important as it provides the gateway of identifying school children who are experiencing health difficulties for support. This collective approach by nurses and teachers has been documented to be necessary to ensure that children who are in need are identify early and offered appropriate services and support they need to promote their well-being (Appleton, 2007).

Although, nurses in this study saw the care of orphans and vulnerable children as professional obligation and value their involvement in mental health of young people recognising it as an important area of their practice as earlier reported by Pryjmachuk, *et al*. (2012), this did not translate to their involvement in supporting these children. The findings from the study showed that nurses and teachers' involvement in the support of vulnerable children was low. Considering the impact of their involvement in this study on children's resilience and psychosocial health outcomes, it is expedient that they are continually mobilized and trained to respond adequately to meet psychosocial needs and other health care needs of school children. Thus, the study therefore supported the submission of Kiwanuka (2013) that nurses should use professional nursing skills and expertise to advance the health and well-being of the children in their care.

5.1.3. Protective Factors as Predictor of Resilience

This study explored fourteen protective factors and its influence on resilience among the school children. An exploration of the total protective factors assessed in this study shows that each of the factors is associated with resilience. Thus, the study supported factors earlier reported in literatures to be linked with resilience. These factors include child's intelligence level (Garmezy and Masten, 1991); ability to access social support

(Grotberg, 1995); sense of humour (Wooten, 1996); faith in a higher power. (Masten, 1994; Gordon and Song, 1994; Grotberg, 2003 and Raghallaigh, 2011); a good relationship between the parent(s) or guardian and child (Lengua, *et al*., 2000 and Sandler, *et al.* 2003), the availability of adequate and competent adults who serve as consistent role models and social status (Lawford and Eiser, 2001; Masten, 2001; Coutu, 2002 and Adejuwon and Balogun, 2004), a positive emotional climate and the availability of supports and resources within the family and broader community context (Hjemdal, Vogel and Solem, *et al*., 2011). This study also supported previous reports that found a link between child's level of temperament and resilience (Eisenberg, *et al*., 2003; Buckner, Mezzacappa and Beardslee, 2003; Croom and Proctor, 2005 and Connor and Zhang, 2006)

The positive correlation found between the level of protection possessed by the children and resilience confirmed Baylis (2002) submission that protective processes encompass a breadth of experiences and mechanisms that enable positive adaptation despite adversity. This result was in line with Werner's submission (2000) that as long as the balance between stressful events and protective factors is favourable, successful adaptation is possible even for young children who live in high risk conditions. She however stated that when stressful life events outweigh the protective factors, even the most resilient child can develop problems.

Even though, all the protective factors were associated with resilience, a logistic regression analysis shows that two of these factors can predict resilience. These include having a good rapport with parents and the presence of a good adult role model. This finding corroborated the submission of Hjemdal, Vogel and Solem, *et al*. (2011) that an availability of supports and resources within the family and broader community context can serve a protective function. A supportive environment can also help to develop personal qualities that enable children to cope with adversity. These resources often take the form of social relationships, as opposed to facilities that need to be made available. They make children feel important and give them a sense that others are concerned about them.

The study showed that the presence of a good adult role model was a major predictor of high resilience. This result supported past literatures that availability of

adequate and competent adults who serve as consistent role models have been found to contribute to resilience (Lawford and Eiser, 2001; Masten, 2001; Adejuwon and Balogun, 2004 and Schenk, *et al.*, 2010). Thus, the presence of at least one supportive adult can have an enormous impact on a child's resilience as opined by Werner and Smith (1992). By acting as mentors or role models, adults can provide models of reinforcement for problem –solving, motivation and other coping skills (Turton, Straker and Mooza, 1990; McCallin and Fozzard, 1991, and Richman and Bowen, 1997). Positive role models are instrumental in helping children develop strong moral values (Coutu, 2002) and principles to guide them through life and provide structure and form to their dreams and aspirations.

A good rapport between children and parent was also found to be a predictor of moderate resilience in this study. This finding was in line with Boyden and Mann (2005) submissions that quality of bonding and nurture within primary care giving unit is absolutely fundamental to well-being especially in younger children (Boyden and Mann, 2005).

Having knowledge of protective factors for resilience can help nurses and teachers to learn how to reverse vulnerability by strengthening children's protective factors so that they become less vulnerable. The influence of a good role model and having a good rapport with parents on resilience could be enhanced by nurses and teachers by focusing on parents or guardian to strengthen their parenting skills most especially in relation to developing good interpersonal relationship between them and their wards.

5.1.4. Resilience among Orphans and Vulnerable Children

The mean resilience scores found among the children at baseline was higher than what was reported by Tetera and Missaye (2014) in their study among orphans and vulnerable children in Ethiopia. Some of the children who participated in this study demonstrated high resilience score. This supported previous submission by Crowford, Wright and Masten (2001) that not all vulnerable children will display low resilience. However, the proportion (8.5%) of vulnerable children that displayed high resilience in the study

contradicted the report of Masten (2001) that 50-66% of children growing up in circumstances of multiple risks appear to manifest resilience.

Generally, the finding of this study was in line with Tetera and Mulatie (2014) who found that most of the OVC in their study were less resilient. Thus, promoting resilience is therefore critical as this may contribute to the prevention of negative outcomes for youths challenged by significant stressors. The significant negative correlation found between resilience and both anxiety and depression in the resilience group further confirms this and thus the result was in line with previous studies which found that resilience protects against depression, anxiety and other negative emotions (Wagnil, 2010; Hjemdal, *et al.*, 2011; and Hjemdal, *et al.*, 2007).

The finding of this study was in contrast with the submission of Ziaian, Antiss, Antoniou, *et al.*, (2012) who reported that the females demonstrated greater resilience across all studies but was at par with Tetara and Missaye (2014) who found that there was no significant difference in the resilience scores of male and female in their study. This study also found a positive correlation between age and resilience. Meaning that as age increases, resilience also increases. Thus, younger OVC were found to be less resilient than the older ones. Similarly, Luthar (2007) stated that resilience can also change overtime base on the child's developmental stages. The possible explanation could be that the difference was due to physical and mental development in the older ones. This study found a positive correlation between resilience and self-esteem as submitted by Connon and Zhang (2006) and Croom and Proctor (2005). Similar trend was also observed between resilience and social connection. Thus promoting resilience is therefore critical as this may contribute to improved self-esteem and social connection that can help the child to negotiate for resources in the environment to adapt to stressful experiences.

5.1.5. Psychosocial Outcomes and Socio-demographic Characteristics of Orphans and Vulnerable Children

Four psychosocial outcomes were considered in the study which includes anxiety, depression, self-esteem and social connection. The level of anxiety and depression found among the children in this study was in support of Williamson (2000) who identified

anxiety and depression as some of the psychosocial health problems experienced by OVC. The proportion of the children experiencing moderate to high anxiety symptoms in this study was at par with the submission of Atwine, *et al.*, (2005) on the levels of psychological distress found among vulnerable children including the orphans.

Mixed or conflicting results were found in respect of the relationship between children status in relation to being orphan or not and both anxiety and depression. While anxiety was higher among orphans than other vulnerable children at one point of data collection, the reverse was the case at another point. The result of no difference found at pre-intervention for anxiety between orphans and vulnerable children was at variance with most of the comparative studies which indicated that orphans are more at risk and have higher levels of psychosocial distress than vulnerable children. (Atwine, *et al*., 2005; Cluver, *et al*., 2008; Killian and Durrheim, 2008; Makame, *et al*., 2002; and Zhao, *et al*., 2007). The result however supported Cluver & Gadner (2007) submission that there is similarity in anxiety symptoms among orphans and vulnerable children. The result of significant difference found at post-1 in the resilience and peer support group where other vulnerable children have higher anxiety scores than the orphans contradicted the report of Segendo and Nambi (1997) that orphans had greater risk for higher levels of anxiety compared with other vulnerable children.

No difference was found between orphans and vulnerable children in the peer support group and control group in relation to depression pre- and post-interventions. This was in contrast to previous literatures (Manuel, 2002) that found higher depression scores and more psychosocial distress among orphans compared to other vulnerable children (Gilborn, *et al.*, 2006) in rural Mozambique and Bulawayo in Zimbabwe but was in support of Wild, *et al.*, (2002) and Cluver and Gadner (2007) submissions who found similarities in depression symptoms among orphans and vulnerable children. However, the result of higher depression scores found among orphans compared with other vulnerable children in the resilience group at pre-intervention was in line with previous studies that report higher depression scores among orphans than vulnerable children (Manuel, 2002, Segendo and Nambi, 1997). The result found higher depression scores among vulnerable children at post-intervention 1 in the resilience group. This result was at variance with what was found in the group at pre-intervention.

This study did not identify any difference among the three types of orphans in their psychosocial outcomes unlike some studies which indicated little difference in the psychosocial well-being between the three types of orphans (Baaroy and Webb, 2008; Cluver, Fincham, and Seedat, 2009; and Fang, *et al*., 2009). The findings was also at variance with the submissions of others that maternal and double orphans were more vulnerable to psychosocial problems than their paternal orphan counterparts (Baaroy and Webb, 2008; Kang, 2008; and Qun Zhao, 2010) and that they have higher levels of psychosocial distress than their paternal orphan counterparts (Ruiz-Casares, *et al*., 2009; Wood, *et al*., 2006; and Yucelen, 2007). The implication of this for programming is that focus of intervention should not be on the form of orphan that a child is but rather on addressing their psychosocial health needs.

Besides orphan type, the literature indicated that other individual-level factors such as age and gender are also highly correlated with psychosocial health (Li et al., 2008). This study found age to be negatively and significantly correlated to anxiety. Thus this result was at variance with submission that older OVC are especially vulnerable to psychosocial distress (Wood, *et al.*, 2006, Nyamukapa, *et al*., 2008; Cluver, *et al.*, 2009; Onuoha and Munakata, 2010). A mixed result was also observed in this study in relation to the influence of gender on anxiety and depression symptoms among OVC. The result observed in the peer support group was at variance with past studies (Makame, et al, 2002; Nyamukapa, *et al.*, 2008 and Gilborn, *et al.*, 2006) that found increased psychosocial distress in girls as compared to boys. However, the result observed in the control group was consistent with past literatures that found increased psychosocial distress in girls than boys (Wood, *et al.*, 2006; Nyamukapa, *et al*., 2008; Cluver, *et al*., 2009 and Onuoha and Munakata, 2010).

This study was in contrast with Gong, *et al*., (2009) submission who found that orphans separated from siblings had significant higher scores in anxiety, compared with those living with their siblings. The report by Makeme, *et al.,* (2009) that orphans living alone, with grandparents, or with non-relatives have significantly higher levels of internalising problems than do orphans who reside with close kin contradicted the findings of this study where the living structure of the children did not have any influence on their experience of anxiety and depression. The submission of Nyamukapa, *et al*.

(2008), who posited that being unrelated to the caregiver is positively associated with psychosocial distress and residing in a household of a close relative is a protective factor, was also at variance with this study in relation to anxiety and depression. However, this study found living with either or both parents to be important in improving child's social connection. Thus, this study supported Freiesen and Brennan (2005) who posited that parents have the responsibility for creating the immediate environment in which their children grow and develop strategies for mediating their children relationship with the larger community most especially in the later years.

The mixed or conflicting results found in relation to anxiety and depression symptoms in this study was in line with Neuman's assumption (Neuman and Fawcett, 2002) that people's response to stressor depends on the availability of resources within their environment at a given point in time and how well the individual can utilise such resources. Thus, it could be deduced from the findings of this study that resilience or positive psychosocial outcomes was not really based on being orphan or vulnerable children but was more of the general features of the protective resources that are available to the child.

The implication of this for psychosocial programming is that orphans and vulnerable children, girls and boys have tendency to respond equally to stressors depending on the resources at their disposal and how well they are able to use such resources. In planning intervention, targeting orphans alone will likely result in inefficient distribution of support. Therefore, programme intervention should target both groups. The focus of public health professionals should be on assessment of vulnerability. Once vulnerability is established, a child should be exposed to early intervention even before manifestations of any psychosocial problems for primary prevention and where child is already manifesting symptoms of distress, secondary prevention should be provided promptly.

The result of this study showed no significant difference in self-esteem as against Wild, *et al*., (2006) who reported low self-esteem among orphans than other vulnerable children. The study also showed no difference between orphans and vulnerable children in their social connection with significant others.

In general, the result of this study supported the National survey of OVC which documented that all vulnerable children including the orphans are more prone to psychosocial distress (Federal Ministry of Women Affairs and Social Development, 2008). Therefore, the need to implement programmes that support psychosocial health needs of vulnerable children whether orphans or others is once again emphasised.

5.1.6. Effects of Resilience-based Training and Peer-support Activities on Resilience and Psychosocial Health Outcomes of OVC

This study evaluated two psychosocial interventions (peer support and resilience training) and their related effects on resilience and four psychosocial health outcomes (anxiety, depression, self-esteem and social connection) .

Considering the impact of the psychosocial interventions implemented in this study on children's resilience and psychosocial outcome variables, this study confirmed the findings of several authors who indicated that psychosocial support for children affected by traumatic events through community and school-based approaches is highly important for children's psychosocial well-being (Dybdahl, and Pasagic, 2000; Thabet and Vostanis, 2000; Hosin, 2001; Cohen, 2005; Allen, Pfefferbaum, Cuccio, and Jeanna, 2008; Betancourt and Khan, 2008; IFRC, 2009; Ager, *et al*., 2011; DeMause, 2011; Hasanovic, 2011; Fernando and Ferrari, 2011; Jordans, *et al.*, 2011; Punamäki, Quota, and Miller, 2011; and Ellis, *et al*., 2012).

The improved resilience scores recorded post-intervention among the children in the intervention groups supported Karthic-Lakshman and Mythili (2010) results in a study conducted in Indian on the effect of psychosocial intervention among early adolescent girls in Chennai Corporation school where a significant increase was observed in the resilience scores of the girls post-intervention. A similar finding was also noted in a study conducted by Jordan, *et al.,* (2010) on a classroom-based psychosocial intervention in conflict affected Nepal using a randomised control trial. The result shows that a school-based psychosocial intervention demonstrated moderate short term beneficial effects for improving social behavioural and resilience indicators among subgroups of children exposed to armed conflict.

The resilience scores reported at post-intervention also supported a previous study conducted among similar population by Olowokere and Okanlawon (2013) who found that a school-based psychosocial intervention was useful in improving the resilience and coping pattern among vulnerable school children. In comparing the intervention groups, the children in the resilience group had better resilience scores and improved psychosocial outcomes such as self-esteem compare with peer support group. This result was at par with Grant (2006) submission who studied the impact of scouts programming using a resilience framework among girl children of incarcerated parents, and Place, *et al*. (2002) who developed a resilience package for vulnerable children to protect them from becoming disturbed. In addition to this, the higher self-esteem and lower anxiety scores found among the intervention groups in this study was in agreement with Han and Ssewama (2009) findings that participants in the treatment condition reported higher self-esteem than the control group in an intervention programme among orphans and vulnerable children in Uganda.

The display of higher level of resilience in the intervention groups was in line with Newman (2003) who stated that resilience can be learned by almost everyone. The result was also in support of Beasley, Thompson, and Davidson (2003) submissions that people's resilience attributes whether acquired or by instinct could be improved through effective training and development. Similarly, Killian (2007) stated that people are naturally endowed with the ability to cope with adversity but this capacity needs nurturing and support within a facilitative environment to enable resilience to win over vulnerability. Thus, with adequate support through training, the children resilience to cope with challenges can be significantly enhanced as posited by Pienaar, Swanepoel, Rensburg and Heunis (2011) and supported by the current study.

This study also supported the work of Cowen and colleagues (1995), in their work on preventive intervention for enhancing resilience among highly stressed urban children conducted in New York which revealed that a significant improvement was found post-intervention with children showing perceived self-efficacy and evidenced a strong tendency ($p<.08$) toward less anxiety. This finding contradicted what was earlier reported by Olowokere and Okanlawon (2013) in a pilot study that evaluated impact of resilience training on anxiety among the children where no significant reduction was

found in the anxiety symptoms post-intervention. The current result further supported the duo submission that the reason for not observing a significant improvement in the anxiety scores of the children might be connected to the lack of power of their study. This study was also in support of Gance-Claveland (2000) submission who reported an enhanced coping and increased resilience in a school-based peer support group intervention.

Peer support in this study was significantly linked with improved psychosocial outcomes with children showing improvement in self-esteem and social connection and fewer symptoms of depression and anxiety. This result supported a study conducted in four OVC programmes in Kenya and Tanzania among 6,127 children ages 8-14 (Brown, *et al*., (2009a). The result was also in line with Miller, *et al*. (2011) findings in Uganda who reported that peer group intervention when led by teachers and complemented by health care significantly decreased anxiety, depression and anger among intervention group. A peer support programme result by Houck, Darnell and Lussmann (2002) also reported decreased stress and distress among depressed adolescents.

Improved social connection found in this study following intervention was in line with the findings of Gance-Claveland (2000) who found improved relationship among school children following a school-based support group intervention. Good social relationship is highly beneficial to the children as studies have linked improved social connection to adjustment to stress and positive outcomes for individual health and well-being (Resnick, Harris, and Blum, 1993; Resnick, Bearman, Blum, Bauman, Harris and Jones, 1997; Berdger-Schmitt and Noll, 2000 and Spellerberg, 2001).

Maintaining connections with family or peers provides a context for social and emotional growth (Newcom and Bagwell, 1995). A child who cannot make friends or easily interact may have problem asking for help when the need arises. This may worsen existing distress and ability to cope. Positive social relationships are widely recognised as facilitating adjustment to stress and adversity (Solomon and Laufer, 2005). However, health care professionals need to caution children on the negative implications of connection to many people which may be counter productive. Studies have proved that children who felt they could turn to various sources of social support exhibited distress than those who did not (Solomon and Laufer, 2005).

The literature reviewed in this session have shown that resilience based and peer support psychosocial intervention have been linked to improved resilience and psychosocial health outcomes. However, it was noted that the children in the resilience group have better resilience and psychosocial outcome improvement when compared with those in the peer support group. The findings have confirmed that resilience training may be an important intervention to alleviate psychosocial symptoms and improve psychosocial well-being of vulnerable children in the school

This study was in support of the position of the Federal Government of Nigeria as documented in the National Plan of Action for the care of orphans and vulnerable children which recommended that there should be capacity building in psychosocial support interventions by training all actors responsible for responding to the needs of orphans and vulnerable children at all levels. (National Plan of Action, 2006). The impact of the psychosocial training for nurses and teachers who in turn train their students was evident in the improvement of the resilience scores and psychosocial outcomes of children in the various intervention groups.

5.2. Limitations of the study

Difficulty in obtaining adequate number of public health nurses to participate in the study constituted a challenge due to fewer numbers of them at the primary health care level. Thus this may affect the generalisation of the result relating to nurses' knowledge and involvement in psychosocial support of OVC. Also, the findings of this study can only be explained in relation to public health nurses and not school nurses. This is because public schools in Nigeria do not employ school nurses. The public health nurses are the ones who implement school health programme as part of primary health care services.

Because the scales that were used for measuring resilience and health outcomes were based on self-reported assessment of coping and psychosocial well-being, children might have responded in ways that are socially desirable rather than reveal their actual response to each statement. To minimise the effect of this problem, the instruments used to collect data from the children were translated to local language (Yoruba) to facilitate students' understanding of research variables.

The study is also limited by its geographical restriction to two local government areas in a state in Nigeria. Caution will also be necessitated for inferences to OVC outside the school settings.

5.3. Implications for School Health Nursing

The school is an appropriate place for public health nurses to reach all members of school community to provide children and young people with comprehensive care and support that promote and protect well-being as demonstrated by this study. Comprehensive care services are health services that focus on more than one health problems (Sebastian, 2008). This includes the use of both the formal and informal curriculum in health that could help the nurse to successfully implement interventions that enhance both physical and psychosocial well-being.

The school is the second home of children and they spend more time in the school than other places. Thus making this setting an important one in promoting resilience in young people (Noam and Hermann, 2002). Therefore, it is an ideal place for public health nurse to support children who are vulnerable to promote their well-being, academic success, and lifelong achievement. Public health nursing in schools is posited to have a significant influence on health and education of school-age population (Trim, 2011; MacDougall, 2004, Mitchell, Laforet-Flesser and Camiletti, 2009, Dalgreen and Whitehead, 2006 and Falk-Rafael, Fox and Bewick, 2001).

Public health nurses are well positioned to provide leadership to initiate interventions that can promote health of school children such as the intervention used in this study. This role involves collaboration and partnership with relevant stakeholders such as teachers and parents to address emotional and social problems as a result of stressful life events in children. The findings of this study showed the importance of good rapport between children and parents and identification with a good adult role model in promoting resilience. Even, the parents or guardian can also function as a good role model for their wards. The study therefore emphasise the need for public health nurses in collaboration with other public health professionals and teachers to engage in the training of parents to emphasize the importance of resilience and psychosocial support for children. However, in doing this, Friesen and Brennan (2005) opined that it is

important for nurses and teachers to understand how barrier to good parent-child relationship may operate, so that intervention addresses critical targets of change (Friesen and Brennan, 2005). Nurses at an advanced level have been described to have educational knowledge and competencies to assess assets and needs of population to propose solutions in partnership as demonstrated in this study (Association of Community Health Nursing Education [ACHNE], 2003).

This study has also shown that resilience is a function of available resources (protective factors) within the client environment. Public health nurses can serve as a link between the vulnerable population and community resources. This is one of the roles of public health nurses as submitted by Sebastian (2008). She stated that nurses should know about community agencies that offer health and social services for vulnerable populations and facilitate appropriate referral and follow-up to ensure that the desired outcomes are achieved**.**

Also, Williams (2010) in having explored the viability of school-based support for vulnerable children concluded that vulnerable children have particular needs and require intervention that will enable them to overcome emotional stress, anxiety, fear and hopelessness. It is therefore imperative that a school health programme must include psychosocial support for the children to have optimum development. One of the roles of community health nurses is to assist individual through "difficult life transitions" or stressful events (Gitterman, 2001). For example, this study and other study (Shepard, Williams and Richardson, 2004) have shown the effectiveness of social support provided by nurses in promoting positive social and health outcomes among vulnerable populations (Shepard, Williams and Richardson, 2004).

To do this effectively, a politically motivated advocacy must be a core component of community health nursing to influence health policy relating to school health programme (Sebastian, 2008). For example, nurses and other public health professionals could become engaged with government and schools to tackle vulnerability and the psychosocial consequence among school children. Based on their knowledge of these children, they need to provide information to policy decision makers on how best to address and meet the needs of school children and design innovative comprehensive programmes that can promote optimum physical and psychosocial health of the children.

At the same time, they need to advocate for resources (both human and material) to implement such programmes.

Public health nursing practice is population focused and requires unique knowledge, competences and skills (Kulbok, Thatcher, Park and Meszaros, 2012). It extended beyond sick care to encompass advocacy, health interventions, political and social reforms that can facilitate prompt care to vulnerable children. According to ANA (2003), the focus of public health nursing is to foster primary prevention and health promotion. Therefore, the need for early identification of the children for prompt intervention cannot be overemphasised.

5.4. Contributions to Knowledge

A significant contribution that this study has made is the development of a simple resilience training package using a participatory approach with active involvement of the school children. This training package can be used by all stakeholders working with vulnerable children both the governmental and non-governmental organisations to facilitate coping and positive psychosocial health outcomes among vulnerable children. The training package can also be adapted for use among other vulnerable population to enhance coping with life stressful events that could affect their health negatively.

Also, this study is the first study that will assess vulnerability among vulnerable school children and that initiated a school-based intervention within the school health framework in Nigeria. Through this study, the vulnerability index tool which focuses more on out-of-school children and designed by the Federal Ministry of Women Affairs was revised to suit vulnerability assessment among school children. Subsequent studies in this area among school children may found this tool useful. The findings from the study will contribute to data pool on issues of vulnerability, resilience and psychosocial outcomes among vulnerable children in Nigeria.

The findings on nurses' and teachers' knowledge about psychosocial support of OVC as well as their involvement in their care will also provide a local empirical data for further study in this area. Thus, this study has addressed an information gap of lack of local empirical data related to the study.

This study has been able to evaluate two psychosocial intervention packages which have proven to be useful in enhancing coping and psychosocial outcomes of vulnerable children. This also addressed the knowledge gap that the effectiveness of most psychosocial interventions is based on anecdotal evidences.

In addition to the above, the structure put in place in the local government area within the school health programme could be adopted and used by public health nurses to facilitate psychosocial support as part of comprehensive health care for school children.

5.5. Suggestions for Further Study

Retention of resilience and improved psychosocial health outcomes should be evaluated beyond the six months of this study if possible to evaluate the lasting benefits of these interventions. This will provide guidance on the need for periodic re-training of study participants.

Further research in the area of promoting resilience among the school children may explore the effectiveness of intervention that focus on enhancing family/parent-child connection due to the strong association found between both parental rapport with children and a good role model adult and resilience.

In addition to the above, further study in this area should explore the effectiveness of the two interventions used in this study in relation to other psychosocial outcomes among vulnerable children.

This study also recommends a multi-centre study to further ascertain the effectiveness of the intervention packages used in this study.

Also other study in this area could look into the influence of spiritual support on resilience and psychosocial outcomes because of the strong belief of people in this part of the world in God as this could be confirmed by the affirmation of a good proportion of the nurses and teachers on spiritual support as a form of psychosocial intervention.

5.6. Recommendations for Improved School Health Programmes for Orphans and Vulnerable Children

Based on the usefulness of the interventions used in this study, the following recommendations are made:

- Training of health care personnel to ensure that skills are constantly improved and updated to help them provide more comprehensive health care and support including psychosocial care to meet the needs of school children should be implemented by concern authorities periodically.
- Inclusion in nursing and teachers curriculum at all levels of education an aspect that addresses support of vulnerable populations. This recommendation became necessary because only few of the nurses and teachers reported to have received training on care of vulnerable populations.
- There is also need to empower public health nurses to become local leaders in children's health in their communities by mobilising teachers and other relevant stakeholders such as counsellors that will assist in establishing a comprehensive coordinated school health programme that can take care of the psychosocial health needs of school children.
- Early assessment of school children psychosocial needs by nurses and teachers to identify sources of stress for appropriate primary, secondary and tertiary interventions need to be factored into school health programme.
- Considering the few number of public health nurses who anchors the school health programme at the local government level, there is need for massive employment of more public health nurses to meet the comprehensive health care demands of the increasing school children.
- Public health nurses and other health professionals should invest in empowering teachers who are always with the children to provide some minimum psychosocial support and care. This is highly important, because much was achieved through the use of teachers in this study.
- Since having a good rapport with parents and identification with a good role model were identified as significant predictors of resilience, there is need to

involve parents in the psychosocial support of vulnerable children. This could be done through training of parents on psychosocial support for their children most especially in term of ensuring good relationship and being a good role model to their wards.

- There is also need for the government to review the health care of school children to guide planning and policy formulation that will better ensure a sustainable comprehensive response to the health care needs of vulnerable school children. However, public health nurses need to articulate psychosocial health implications of vulnerability to help health planners and policy makers in their decisions.
- The local government who anchors the school health programme will need to provide a reward system for local championship of school health programme to encourage public health nurses and other stakeholders in providing continuous support to vulnerable school children.

5.7. Summary and Conclusions

This study was designed based on previous evidences that vulnerable children are prone to psychosocial distress which have a lot of implications on those that are in school most especially in relation to their retention and academic performance. Also, the study became necessary based on the evidences that there was no studies of intervention for improving psychosocial well-being of children, and that current practice is based on anecdotal knowledge, descriptive studies and situational analyses and such do not provide a strong evidence base for the effectiveness of interventions in use.

Responding to the psychosocial health needs of the vulnerable population is considered to be a significant health issue which must be addressed through access to public health professionals. However, nurses who are part of the key players in public health sector are been reported to have inadequate knowledge and skill to respond to the needs of vulnerable population. Past evidences however have shown that training of health providers is a known method of improving capacity to handle psychosocial health needs of the children.

The literature review explored the concept of vulnerability and its relevance to school children's psychosocial health. It presented key research evidence as to why

vulnerable school children were viewed as a significant public health concern. The review emphasised the need for public health professionals most especially nurses and teachers to be knowledgeable about psychosocial support for children and the implications this has for their practice. Access to public health professional is found to be crucial in ensuring that vulnerable school children are identified early and offered appropriate services and support that they need to promote their psychosocial health and well-being.

This quasi-experimental study was designed to determine the effects of a nurse-led psychosocial intervention on nurses' and teachers' knowledge of psychosocial support of vulnerable children and the impact this had on the school children's resilience and psychosocial health outcomes (anxiety, depression, self-esteem and social connection). A total of twenty-two (22) public health nurses, thirty-six teachers (36) teachers and seven hundred and fifty (750) OVC selected from public junior secondary schools participated n the study.

Findings from the study indicated that nurses and teachers had poor knowledge of psychosocial support of OVC. Their knowledge was however improved significantly after psychosocial training. Even though the nurses and teachers believed that caring for vulnerable children is a professional responsibility of the duo, this had not translated to practice in term of involvement in their care prior to the study. Children's resilience varies across the study groups and the level of protection possessed by the children was significantly related to improved resilience. Rapport with parents and identification with a good adult role model were significant predictors of moderate and high resilience in the study. Findings also showed significant improvement in the children's resilience and psychosocial health outcomes (reduction in anxiety and depressive symptoms and improvement in self-esteem and social connection).

A mixed result was found between orphans and vulnerable children in the study in relation to their resilience and psychosocial health outcomes. While significant difference was found in one study group, no difference was observed in the other groups or vice versa. Thus, it was concluded that the children's resilience and psychosocial outcomes may not have anything to do with whether a child is an orphan or vulnerable. It may however, have a close link to their access to protective resources within their

environment as reported in the literatures and found in this study. Children in the resilience group were better in resilience and self-esteem and had less anxiety compared with those in the peer support group.

This study concluded that nurse-led school-based resilience training and peer support group activities have the potential of improving coping and psychosocial health outcomes of orphans and vulnerable children. The findings however showed that the resilience based intervention was more effective in improving resilience and some psychosocial outcome variables compared with existing peer support intervention. Therefore, the use of this intervention is recommended for public health nurses to enhance coping ability and promote psychosocial health of school children.

The collaborative model between public health nurses and teachers used in this study was a creative initiative designed to build into public health and educational institutions a sense of formal responsibility for promoting child psychosocial health. There is need for policy makers to support the use of this model by adopting it to enhance psychosocial health of vulnerable children within the school health framework.

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APPENDIX I

QUESTIONAIRE ON NURSES/TEACHERS KNOWLEDGE OF THE PSYCHOSOCIAL HEALTH CARE AND SUPPORT OF VULNERABLE CHILDREN IN OSUN STATE

For official use only	
Nurses'/Teachers' Serial No	
PHC ID/School ID	
Data No	
Intervention Received	
Date of Administration	
Observation No	

Dear Respondents,

I am a postgraduate student of the Department of Nursing, University of Ibadan conducting a study on the above topic. The research work is essential for the completion of my PhD degree in Community Health Nursing from the University of Ibadan. The aim of this study to measure the effectiveness of an intervention package on child's resilience and coping to promote healthful development of vulnerable children in this zone. As a nurse or teacher, you are a major stakeholder in responding to the needs of vulnerable children. Your participation is voluntary and I wish to let you know that your responses will be treated in confidence. Please, kindly read and sign copies of the consent form and information sheet before filling this questionnaire. Ensure that you collect a copy of the information sheet for your record. Please note that your participation is not by compulsion and there is no penalty for not participating. I therefore seek your cooperation and thank you in anticipation of your support.

Olowokere, A.E.

SECTION A: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

1. Age at last birthday (years)_____

2. Sex: 1. Male ☐ 2. Female ☐

3. Years of Work Experience_____

5. Marital Status: 1. Married ☐ 2 Married but separated ☐ 3. Single ☐

6. Religion: 1. Christian ☐ 2. Muslim ☐ 3.None ☐ 4. Others (specify) ☐

7. Professional Cadre: 1. Nursing Officer 1 ☐ 2. Nursing Officer II ☐ 3. Senior Nursing Officer ☐ 4. Principal Nursing Officer ☐ 5. Chief Nursing Officer ☐ 6. Assistant Director of Nursing ☐

8. Highest Educational Attainment: 1. Diploma ☐ 2. BA/BNSc/BSc ☐ 3. MSc/MA ☐ 4. PhD. ☐

9. Professional Qualification: 1. RN ☐ 2. RN&RM ☐ 3. RN, RM & RPHN ☐

4. Others (Specify) ☐

SECTION B: NURSES'/TEACHERS' KNOWLEDGE OF PSYCHOSOCIAL HEALTH SUPPORT OF ORPHANS AND VULNERABLE CHILDREN (OVC)

Please thick as appropriate the correct response in the underlisted questions.

10. Who is an orphan in Nigeria context?
    1. A child between ages 0-18 years who has lost both parents ☐
    2. A child between ages 0-18 years who has lost both or either of the parents ☐
11. The term vulnerable children mean?
    1. Children that are prone to deprivation of basic needs, care and protection ☐
    2. Children who steal ☐
    3. Children who engage in the act of violence ☐
    4. Children who eat often ☐
    5. Children who have no parents ☐
12. Indicate categories of children that are vulnerable in the list below?

S/N	Categories of Vulnerable Children	Yes	Don't know	No
1	Children who have lost one or both parents			
2	Children living with terminally or chronically ill parent(s) or caregiver(s)			
3	Children on the street/child hawkers			
4	Children living with aged or frail grandparent(s)			
5	Children who get married before 18 years			
6	Neglected children			
7	Abandoned children			
8	Children in child headed homes			
9	Children infected with HIV			
10	Child beggars/destitute children (including exploited almagiris)			
11	Internally-displaced or separated children			
12	Child domestic servants			
13	Child sex workers			
14	Children with special challenges or disability, or whose parents have disability.			
15	Trafficked children			
16	Children in conflict with the law			
17	Children of migrant workers e.g. fishermen or women			
18	Children living with teenage unmarried parent(s).			

13. How could vulnerable children in the clinic, schools or community be identified? (You may tick as many responses as possible depending on your view).

1. Clinical assessment ☐ 2. Physical examination ☐

3. Use of vulnerability index ☐ 4. Community & key opinion leaders ☐

14. What tool can be used to select the most vulnerable children for intervention in the school setting?

1. Clinical assessment ☐ 2. Physical Examination ☐

3. Vulnerability index ☐ 4. Community and Key Opinion leaders ☐

15. Tick as appropriate the major problems that orphans and vulnerable children do experience?

1. Abuse ☐ 2. Sexual exploitation ☐ 3. Psychosocial distress ☐

4. Dropping out of school ☐ 5.Antisocial behaviour ☐ 6.Child labour ☐

7. Poor academic performance in school ☐ 8. Poor health ☐

16. Among all these problems, which one do you think is mostly experienced by VC?

1. Abuse ☐ 2. Sexual exploitation ☐ 3. Psychological distress ☐

4. Dropping out of school ☐ 5. Antisocial behavior ☐ 6.Child labour ☐

7. Poor academic performance in school ☐ 8. Poor health ☐

17 What services do you think will be needed by orphans and vulnerable children?

1. Shelter and care ☐ 2. Nutrition support ☐ 3. Protection ☐

4. Health care ☐ 5. Education support ☐ 6.Economic support

7. Psychosocial support ☐

18. Of all the services listed in question 17 above, tick a single service which should always be included in any intervention programme for OVC in Nigeria.

1. Shelter and care ☐ 2. Nutrition ☐ 3. Protection ☐

4. Health care ☐ 5. Educational support ☐ 6.Economic support ☐

7. Psychosocial support ☐

19. Psychosocial support for children could best be described as:

1. Total help given to children which takes into account their psychological (or unseen aspects) and social life ☐

2. Care that help children to cope with stress or difficult situation. ☐

3. Psychosocial support is about giving ones time and attention to the children. ☐

4. Psychosocial support only focus on the emotional well-being of the children ☐

20. Identify signs of psychosocial distress that may require intervention in children?

	Signs of psychosocial distress in children	Yes	Don't Know	No
1	Aggression			
2	Frequently disobeys teachers or guardian			
3	Isolation from peers			
4	Not having close relationship with people			
5	Engaging in fight with peers			
6	Displaying anger			
7	Sadness			
8	Poor concentration in school work			
9	Poor performance in school work			
10	Worries			
11	Low self-esteem			
12	Poor attention to personal hygiene			

21. List other psychosocial symptoms/signs that are not listed above that may require intervention in children?

_____

_____

22. What are the interventions/ activities that could be used by nurses and teachers to help vulnerable children to be psychosocially healthy.

1. _____ 4. _____
2. _____ 5._____
3._____ 6_____

23. A child is said to be resilient if he or she has the capacity to?

1. Navigate in culturally meaningful way the resources that sustain well-being ☐
2. Cope well in the face of adversity ☐
3. Be psychologically and socially stable despite exposure to stresses ☐

24. Do you think that building resilience will promote psychosocial health of orphans and vulnerable children? 1. No ☐ 2. Don't Know ☐ 3. Yes ☐

25. What are the core characteristics of resilience that nurses/teachers can promote in a child to assist them to cope with life challenges without any psychosocial problems?

1._____ 4. _____

2._____5.._____

3. _____6._____

26. How can nurses/teachers enhance resilience (adaptation) in vulnerable children?

Building Resilience in Children	**Yes**	**Don't know**	**No**
Create an enabling environment for children to ask for help when they need it			
Build hope in the child for the future			
Assist the child to set realistic goals			
Encourage children to put efforts into their school work			
Educate the child to look clean and to be confident			
Assist children to continue with routine of school work despite difficulties			

SECTION C: NURSES'/TEACHERS' INVOLVEMENT IN THE CARE AND SUPPORT OF VULNERABLE CHILDREN

27. Do you think that nurses/teachers have professional obligations to provide psychosocial support to VC? ☐ 1. No ☐ 2. Yes

28. If yes how do you perceive your role as a nurse/teacher in the care and support of these children?

_____

_____

29. Have you been involved in providing support to vulnerable children in the past?
1. No ☐ 2. Yes ☐

30. If yes, what exactly have you been doing/done to support the children?

_____

_____

31. Did you undergo any training for the care and support of vulnerable children in the course of your study in the nursing school/university or on the job?
1. No ☐ 2. Yes ☐

32. If yes, in what course were you taught the care of vulnerable children?

_____

33. If you had on-the-job training, who trained you and where were you trained?

_____

_____

34. Have you been specifically trained in psychosocial support for vulnerable children?

1. No ☐ 2. Yes ☐

35. If yes, where were you trained and who trained you?

_____

_____

APPENDIX 1I

QUESTIONAIRE ON RESILIENCE AND PSYCHOSOCIAL HEALTH OUTCOMES OF ORPHANS AND VULNERABLE CHILDREN IN OSUN STATE

For official use only	
Child's Serial No	
School ID	
Data No	
Type of Intervention Received	
Observation Number	
Date of Administration	

Dear Respondents,

I am a postgraduate student of the Department of Nursing, University of Ibadan conducting a study on the above topic. The research work is essential for the completion of my PhD degree in Community Health Nursing from the University of Ibadan. The aim of this study is to measure the effectiveness of two intervention packages on children's resilience and psychosocial health outcomes. Your participation is voluntary and I wish to let you know that your responses will be treated in confidence. I therefore seek your cooperation and thank you in anticipation of your support.

Olowokere A.E.

SECTION A: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

1. Age at last birthday (years):_____

2. Sex: 1. Male ☐ 2. Female ☐

3. Years of Entrance into School ☐

4. Years already spent in School ☐

5. Current Grade: 1. JSS 1 ☐ 2. JSS 2 ☐ 3. JSS3 ☐

6. Religion: 1. Christian ☐ 2. Muslim ☐ 3.None ☐ 4. Others (specify) ☐

7. Family structure

1. living with parents ☐
2. Raised by mother alone ☐
3. Raised by father alone ☐
4. Living with relatives/guardians ☐
5. Child is living with chronically ill parent ☐
6. Others (State) ☐

8. Are you currently living with your sibling? 2. Yes ☐ 1. No ☐

9. Average academic performance in the last session (to be completed by the teacher)

1. Excellent (70 and above) ☐ 3.Fair (50-59) ☐

☐ ☐

2. Good (60-69) 4. Poor (<50)

10. Educational level of key Parent/Guardian:

1. No formal education ☐ 2. Primary education ☐

3. Secondary education ☐ 4. Tertiary education ☐

11. Occupation of key parents/guardian

1. Junior worker (civil servant) ☐ 2. Senior worker (Civil servant) ☐

3. Petty trader ☐ 3. Unemployed ☐ 4. Retired ☐ 5. Others (specify) ☐

12. Mark the causes of child's vulnerability status as appropriate (mark as many that are applicable to the child

1. Maternal orphan ☐ 2. Paternal orphan ☐ 3. Double orphan ☐

4. Child is HIV Positive ☐ 5. Child is a labourer ☐ 6. Child with disability ☐

7. Child living in a poor family ☐ 8 Child is living alone with grandparents ☐

9. Child Living in child-headed house ☐ 10. Others (specify). ☐

SECTION B: PROTECTIVE FACTORS AS POSSESSED BY RESPONDENTS

Listed below are number of questions about the factors that could influence a child's coping capability. The question is structure in a way to allow the children to show the degree to which they possess these factors. Let the children know that there are no rights or wrong answers.

13. Identify protective factors possessed by the child?

S/N	**Protective factors**	**Not at all**	**A little**	**Some what**	**Quite a bit**	**A lot**
1	I have good intellectual skills					
2	I know that my life has meaning and there is a reason why I am living(self esteem)					
3	I have good role model around me who I aspire to be identified with					
4	My parent (s)/guardian(s)watch me closely					
5	My parent (s)/ guardian knows a lot about me					
6	My family is sound economically and can meet my basic needs					
7	Spiritual beliefs are source of strength to me					
8	I feel supported by my friends					
9	I receive necessary support from my immediate family during difficult times					
10	My friend stand by me during difficult times					
11	I am treated fairly in my communities					
12	I have a good rapport with my parent (s)/guardian					
13	I have easy and appealing temperament					

14	I always find something to laugh about in my life (humour)					

SECTION C: RESPONDENT'S RESILENCE

14. Listed below are a number of questions about the child. These questions are designed to better understand how the child copes with daily life challenges. For each question, assist the child to tick the option that best describes him/her. There are no rights or wrong answers. Read each statement carefully and tick the one word that best describe how. Tick one answer for each statement.

Statement on Resilience	**Not at all**	**A little**	**Some what**	**Quite a bit**	**A lot**
1. I cooperate with people around me					
2. Getting an education is important to me					
3. I know how to behave in different social situations					
4. I try to finish what I start even if I am faced with difficult situation					
5. I am proud of my ethnic background					
6. People think that I am fun to be with					
7. I talk to my family/caregiver(s) about how I feel					
8. I am able to solve problems without harming myself or others(for example by using drugs and /or being violent)					
9. I know where to go in my community to get help					
10. I feel belong at my school					
11. I can confidently ask for help when I need one					
12. I am hopeful about my future					
13.I do set goals for myself and work towards achieving it					
14.I I do believe in my capability to do whatever I want to do					
15. I love to look clean and confident					
16. I don't entertain fear when I have opportunity to talk with my teachers , parents/guardian about how I feel					
17. I love to put a lot of effort into my school work even when I am going through difficult moment					
18.I love to make myself happy even though the situation around me is contrary					
19.I enjoy playing with my peers irrespective of their family background or economic status					
20. I make use of any opportunity available to me to show others that I am becoming adults and can act responsibly					
21. I am aware of my own strengths					
22. I participate freely in organised religious activities					

23.I think it is important to be involved in community development activities in my community					
24. I feel safe when I am with my family/caregiver(s)					
25.I make use of opportunities that afford me to develop skills that will be useful later in life (like job skills and skills to care for others					
26.I enjoy my family's /caregiver's cultural and family traditions					
27. I enjoy my community traditions					
28. I am proud to be a Nigerian					

SECTION D: SYMPTOMS OF PSYCHOSOCIAL DISTRESS AMONG RESPONDENTS

15. This aspect has a list of statements to identify symptoms of anxiety, depression, low self-esteem and poor social connectedness among the children. Read each statement carefully and ticks the one word that best describe how you feel. For anxiety and depression scale , 0- Did not apply to me at all , 1 -Applied to me to some degree, or some of the time, 2 - Applied to me to a considerable degree, or a good part of time , 3 - Applied to me very much, or most of the time. For self esteem and social connectedness scale, 0- Strongly disagree, 1- Disagree, 2- Agree and 3- Strongly Agree.

15.5	**Anxiety scale**	**Did not apply to me at all**	**Applied to me some of the time**	**Applied to me a good part of time**	**Applied to me most of the time**
1	I found myself getting upset easily with my friends and people				
2	I worry about what people think about me				
3	I experience breathing difficulty even without any physical exertion				
4	I do have a feeling of shakiness and often feel afraid when there is no reason for this				
5	I often found it difficult to relax				
6	I worry that I will do badly at my school work				
7	I worry about being away from my parents				
8	I feel scared if I had to sleep on my own				
9	I feel worried that something bad will happen to me				

10	When I have problem, my heart really beat fast				
11	I have trouble going to school in the morning because I feel afraid				
12	I do find myself in situations that made me so anxious				
13	I feel that I have nothing to look forward to				
14	I find myself getting upset rather easily				
15	I feel that I was using a lot of nervous energy				
16	I find myself getting impatient when I encounter with any delay				
17	I perspired noticeably in the absence physical exertion				
18	I felt scared without any good reason				
15.2	**Depression scale**	**Did not apply to me at all**	**Applied to me some of the time**	**Applied to me a good part of time**	**Applied to me most of the time**
1	I couldn't seem to experience any positive feeling at all in my life				
2	I just couldn't seem to get going with my colleagues and guidance/parents				
3	I feel sad and depress				
4	I feel that I had lost interest in just about everything				
5	I feel I wasn't worth much as a person				
6	I feel that life is not worthwhile				
7	I could see nothing in the future to be hopeful about				
8	I feel that life is meaningless				
9	I feel down and unhappy				
10	I feel too tried to do my school work & other assignment				
11	I feel like crying				
12	I have not been able to feel happy even when people/friends tried to help me				
13	I feel I am not as good as other kids				
14	I find it difficult to sleep as I should do				
15	I do feel like dying				

15.3	**Self-esteem Scale**	**Strongly disagree**	**Disagree**	**Agree**	**Strongly Agree**
1	On the whole I am satisfied with myself				
2	At times I think I am no good at all				
3	I feel I have a number of good qualities				
4	I am able to do things as well as most other people				
5	I feel I do not have much to be proud of				
6	I certainly feel useless at times				
7	I feel that I am a person of worth at least on an equal plane with others				
8	I wish I could have more respect for myself				
9	All in all I am inclined to feel that I am a failure				
10	I take a positive attitude towards myself				
15.4	**Social Connectedness Scale**	**Strongly disagree**	**Disagree**	**Agree**	**Strongly Agree**
1	I enjoy doing things with my friends and other people				
2	I get along well with people (peers, guardians & others at home or school				
3	I get angry these days that I get into fights				
4	I get into trouble than usual				
5	I can make up with friends after fight				
6	If something bad happens to me , I can easily ask my guidance/anybody concern for help				
7	There are people who love and care about me				
8	I am able to make friends easily				

APPENDIX III

ÀGBÉYÈWÒ LÓRÍ IPÒ ÌYIGBÌ NÍPA TI ỌKÀN ATI IBASEPO LAWUJO TI ÀWỌN ỌMỌ ÒRUKÀN ÀTI ÀWỌN ỌMỌ TIOKUDIEKAATO FUN NÍ ÌPÍNLẸ̀ ỌSUN

Fún ìlò ọ́fíìsì nìkan	
Nọ́mbà Àtẹ̀lé Ọmọ	
Ìdánimọ̀ Ilé-ìwé	
Nọ́mbà Àkójọ ètò f'áyẹ̀wò	
Ọjọ́ tí a gbàá idahun Olukopa kalẹ̀	

Ẹ̀yin Olùkópaà mi Ọ̀wọ́n,

Ọmọ ilé-ẹ̀kọ́ àgbà tị̀ ekọ́sẹ́ ìṣègùn Nọ́ọ̀sì, Ilé ẹ̀kọ́ gíga Yunifásítì ti Ìbàdàn ni mo jẹ́. Mo sì ńṣe ìwádìí lórí àkòrí ọ̀rọ̀ tí ó dá lórí **Ipò Ìyigbì Nípa Ti Ọkàn Àti Ìlera Àwọn Ọmọ Òrukàn Àti Àwọn Ọmọ Tí Kò Ní Ìtọ́jú Tó Ní Ìpínlẹ̀ Ọṣun (The Effectiveness of a Nurse-Led Psychosocial Intervention on Resilience and Health Outcomes among orphans and vulnerable children in Osun State)**. Iṣẹ́ yìí ṣe kókó fún mi láti lè gba oyè ẹ̀kọ́ ìmọ̀-ìjìnlẹ̀ dókíta (PhD)̀ ní Ètò Ìlera Àwùjo (Community Health Nursing). A kò kán nípá fún un yín láti kópa nínú ètò yí, ṣùgbọ́n mo fún un yín ní ìdánilójú wípé gbogbo èsì tí ẹ bá fi ṣọwọ́ sí wa kò ní lu jáde bí ó ti wulẹ̀ kí ó rí. Nítorínáà, mo ńfẹ́ ìfọwọ́sowọ́pọ̀ yín, mo sì mọ̀ dájú wípé ẹ kò ní já mi kulẹ̀. Ẹ ṣé púpọ̀.

Olówóòkéré A.E.

IPELE KỈNNÍ: AWON ABUDA IDANIMO AWON OLUKOPA

1. Ọjọ́ orí rẹ lati ìgbà ayẹyẹ ọjọ́ ìbí tí o ṣe kẹ́hìn (ọdún):_____

2. Akọ tàbí Abo: 1. Ọkùnrin ☐ 2. Obìnrin ☐

3. Ọdún tí o wọ ilé-ìwé ☐

4. Iye ọdún tí o ti lò ní ilé-ìwé ☐

5. Ipele Ẹ̀kọ́ọ̀ rẹ: 1. JSS 1 ☐ 2. JSS 2 ☐ 3. ☐

6. Ẹ̀sìn rẹ: 1. Ìgbàgbọ́ ☐ 2. Mùsùlùmí ☐ 3.Kòsí ☐ 4. Ẹ̀sìn mìíràn (sọ wọ́n) ☐

7. Ètò Ìdíléè rẹ

1. Ò ńgbé pẹ̀lúu àwọn òbîì rẹ mejeji ☐ 2. Ò ńgbé pẹ̀lúu àwọn alágbàtóò ☐

3. Ìyá nìkan ni ó tó ẹ dàgbà ☐ 4. Bàbá nìkan ni ó tó ẹ dàgbà ☐

5. Ò ńgbé pẹ̀lúu àwọn òbí rẹ tí ó ńṣ'àìsàn ☐ 6. Àwọn mìíràn (sọ wọ́n) ☐

8. Ǹjẹ́ ò ńgbé pọ̀ pẹ̀lúu àwọn ẹ̀gbọ́n àti àbúrò rẹ? 2. Bẹ́ẹ̀ni ☐ 1. Bẹ́ẹ̀kọ́ ☐

9. Ìṣe dédé sí omo nínú ẹ̀kọ́ọ sáà tí ó kọjá (*àwọn olùkọ́ ni eléyìí wà fún*)

1. Ó dára gidi gan (70 lọ sókè) ☐
2. Ó dára (60-69) ☐
3. Ó dára díẹ̀ (50-59) ☐
4. Kò dára (<50) ☐

10. Iwe melo ni òbí tàbí alágbàtọ́ ti on ntoju omo naa ka (Eyi wa fun eni ti o se pataki julo fun itoju omo naa ninu awon obi tabi alagbato re)

1. Ko ka we rara ☐ 2. Ilé-Ìwé Alákọ̀ọ́bẹ̀rẹ̀ ☐ 3. Ilé-Ẹ̀kọ́ Girama ☐

4. Ilé- Ẹ̀kọ́ Gíga ☐

11. Iṣẹ́ wo ni òbí tàbí alágbàtọ́ omo naa nse (Eyi naa wa fun eni ti o se pataki julo fun itoju omo naa ninu awon obi tabi alagbato re)

1. Òṣìṣẹ́ kékeré (Iṣẹ́ Ìjọba) ☐ 2. Osise Agba (Ise Ijoba) ☐ 3. ǹtajà/Oníwóróbo ☐

4. Ó ńwá iṣẹ́ ☐ 5. Ó ti fẹ̀hìntì ☐ 6. Awon ise miiran (Ko won sile)

12. Ṣe ìtọ́ka tí ó yẹ sí àwọn okùnfá ipò àìní ìtọ́jú tó àwọn ọmọ (tọ́ka sí èyí tí ó ba omo naa mu . O le toka si ju ohun kan lo.

1. Ọmọ Aláìníyàá ☐ 2. Ọmọ aláìní bàbá àti ìyá ☐ 3. Ọmọ aláìní bàbá ☐

4. Ọmọ ńgbé ní ilé àwọn ọmọ aláìniyàá 4. Ọmọ ní kòkòrò àrùn HIV ☐

5. Ọmọ ńṣe iṣẹ́ àgbàṣe ☐ 6.ọ jẹ́ aláàbọ̀-ara ☐

7. Ọmọ tálákà ☐ 8. Omo naa ngbe pelu awon obi- obi ☐

9. Omo naa ngbe nibi ti Omo ti n dari ile ti o si npese fun awon aburo re ☐

10. Ohun mìíràn (sọ wọ́n) ☐

IPELE KẸ́TA: ÀWỌN ÈRÒJÀ ÌDÁÀBÒBÒ FÚN ÀWỌN OLÙKÓPA

Awon atojo isale yii ni ibeere nipa awon eroja idaboobo to o nje iranwo fun awon omo lati dojuko awon ipenija ti won ndojuko. Beere lowo awon omo lati se afihan awon eroja ti won ni.

13. Ṣe ìtọ́ọ̀ka àwọn èròjà ìdáàbòbò ti ọmọ nàá ní.

S/N	ÈRÒJÀ ÌDÁÀBÒBÒ	Rara	Ni wonba	O dabi	O po die	O po gaa ni
1	Mo ní ìmọ́ ìjìnlẹ̀ eko tí ó yè kooro					
2	Mo mọ̀ wípé ayé mi ní ìtumọ̀ àti wípé ó nídìí tí mo fi wà láyé (ìgbàgbọ nínú ara ẹni)					
3	Mo ni awon eniyan ti o je wokose rere nitosi ti mo n fe lati se afarawe won					
4	Àwọn òbí/alágbàtọ́ mi ńbójú tó mi gidigidi					
5	Àwọn òbí/alágbàtọ́ mi mọ̀ mí délé-délé					
6	Àwọn ẹbí mi ní owó àti ohun gbogbo tí wọ́n lè fi tó mi					
7	Igbagbo ninu olorun ni o je orison agbara mi					
8	Mo ni atileyin awon ore mi					
9	Mo n ri atileyin to ye gba latodo awon ebi mi ni akoko ti nnkan ba le koko					
10	Awon ore mi maa n duro ti mi nigba ti nnkan ba le fun mi					
11	Awujo mi maa n fun awon omode bii temi ni itoju, aponle ati owo					
12	Mo ní ìbáṣepọ̀ tí ó dánmọ́rán pẹ̀lú àwọn òbí tàbí àwọn alágbàtọ́ mi					
13	Mo ni iwa ti ko nira tabi to fanimora					
14	Mo je eni ti o ma nri ohun kan to o le mu inu mi dun ninu ipokipo ti mo ba wa					

IPELE KẸ́RIN: ÌYIGBÌ TABI IFAYARAN ÀWỌN OLÙKÓPA

14. Àwọn ìbéèrè àtẹ̀lé wọ̀nyí dá lórí ìwọ tìkaláraà rẹ, àwọn ẹbí rẹ, àwùjọ̀ rẹ àti ìbáṣepọ̀ rẹ pẹ̀lú àwọn ènìyàn. A ṣe ètò wọ̀nyí l'ọ́nà tí yíò mú kí a lè mọ̀ bí o ṣe ńgbé ìgbe ayée rẹ àti ipa tí àwọn ènìyàn wọ̀nyí ńkó nínú àwọn akitiyan àti ìlàkàkà rẹ. Fa ìlà si abe idahun ti o ba o mu daa daa.. Kò sí bóyá o gbàá tàbí o ṣì ìbéèrè náà (ìdáhùn náà yẹ tàbí kò yẹ).

Kókó Ọ̀rọ̀ lórí Ìyigbì tabi ifayaran	**Rara**	**Die**	**O dabi**	**O po die**	**O po gan-an**
1. Mo ní ìbáṣepọ̀ pẹ̀lú àwọn ènìyàn ní àyíkáà mi					
2. Ìmọ̀ ẹ̀kọ́ jẹ mí lógún gidigidi					
3. Mo mọ̀ bí a ti ńhu ìwà ní àárín àwùjọ					
4. Mo ma ǹsakitiyan láti yanjú ohun tí mo bá bẹ̀rẹ̀					
5. Àwọn ènìyàn fẹ́ràn láti máa wà pẹ̀lúù mi					
6. Mo máa ńsọ nípa àwọn ẹ̀hónú mi fún àwọn òbí/alágbàtọ́ mi nigba ku gba ti inu mi ko ba dun					
7. Nkò ti'jú ìlú abínibí mi					
8. eniyan ro pe mo je eni to se wa pelu					
9. Mo le ba ebi/Alagbato mi so ro ni pa awon ero okan mi					
8. Mo lè wá ojúùtú si àwọn ìṣòro mi láì ṣe ara mi tàbí àwọn ẹlòmíràn ní jàǹbá (àpẹẹrẹ nípa lílo àwọn ògùn olóró tàbí ṣiṣe jàgídí-jàgan)					
9. Mo mọ ibi tí mo lè lọ l'áwùjọ tí mo bá nílò ìrànwọ́					
10. Inu mi ma n dun nigba ti mo ba wa ni ile iwe mi nitori mo mọ̀ wípé mo je eni itewogba laarin awon ore					
11. Mo le bere fun iranwo pelu igboya nigba ti mo ba ni lo re					
12. Mo ni ireti nipa ojo ola mi					
13. Mo naa n ni afojusun mo si maa n lakaka lati je ko wa si imuse					
14. Mo ni igbagbo ninu ara mi lati se ohun ti mo ba fe se					
15. Mo ni feesi inigboya at wiwa ni imo toto					
16. N o kii ni iberubojo nigba ti mo ba ni anfani lati ba oluko, obi/alagbato soro nip aero mi					
17. Mo ma n fe lati sapa mi ninu ise ile iwe bi o tile je pe mo n la akoko lile koja					
18. Mo maa n fe lati danu ara mi dun bi o tile je pe ohun ti o yimika selodi					
19. Mo man n gbadun ere sise pelu awon egbe mi lai fi ti ipo ebi tabi oro aje won se					
20. Mo ní àǹfààní láti fi han àwọn ènìyàn wípé mo ti ńdàgbà àti wípé omolúwàbí ni mo jẹ́					
21. Mo mọ agbáraà mi àti ohun tí mo lè ṣe					
22. Mo máa ńkópa nínú ètò iṣẹ́ ìsìn si olorun mi bi o ti					

wu mi					
23. Mo rò wípé ó dára láti jùmọ̀ gbé àwùjọ̀ọ̀ mi ga					
24. Mo ní ìdánilójú ààbò nígbà tí mo bá wà pẹ̀lú àwọn ẹbí/alágbàtọ́ọ̀ mi					
25. Mo ní ore-ọ̀fẹ́ láti k'ọ́ṣẹ́ tí yíò wúlò fún mi l'ọ́jọ́ ọ̀la (gẹ́gẹ́bí iṣẹ́ ọwọ́ àti iṣẹ́ ìrànwọ́ fún àwọn elòmíràn)					
27. Mo máa ńgbádùn àwọn àṣà ìbílẹ̀ àwọn ẹbí/alágbàtọ́ọ̀ mi					
28. Inúù mi dùn wípé ọmọ Nàìjíríà ni mí					

IPELE KARÙN ÚN: ÀWỌN ÀMÌ OGBE OKAN ATI IBASEPO AWON OLÙKÓPA PELU AWON ENIYAN LAWUJO

15. Ipele yìí dá lórí àwọn àṣàyàn ọ̀rọ̀ láti ṣe ìdámọ̀ àwọn àmì àìbalẹ̀-ọkàn (àníyàn),ìrẹ̀wẹ̀sì, àìnígbàgbọ́ tó nínú ara ẹni àti àìlè-bá-ẹgbẹ́-pé ní àárín àwọn ọmọde. Ka ìkọ̀kan àwọn ọ̀rọ̀ wònyí dáradára kí o sì tọ́ka sí èyí tí ó bá ọ mu jùlọ níbẹ̀.
Fún ìwón àìbalẹ̀-ọkàn (àníyàn),ìrẹ̀wẹ̀sì àti àìlè-bá-ẹgbẹ́-pé:

0 – Kò bá mi mu rárá;
1 – O ba mi mu die
2 – o ba mi mu pupo die
3 – Ó bá mi lára mu gidigidi

15.1.	**Ìwọ̀n Àìbalẹ̀-ọkàn (Àníyàn)**	**Ko ba mi mu rara**	**O ba mi mu die**	**O ba mi mu pupo die**	**O ba mi lara mu gidi gidi**
1	Mo máa ńsá bàá bá àwọn ọ̀rẹ́ àti àwọn ènìyàn jà lọ́pọ̀ ìgbà				
2	Mo maa nronu nipa ohun ti awon eniyan ba so nipa mi				
3	Mo sa ba ma nmi gulegule bio ti le je wipe nko se ise agbara				
4	Ẹ̀rù ma ńbà mí, mo sì ma ńgbọ̀n bí ó tilẹ̀ jẹ wípé kò sí ìdí kan fún èyí				
5	O ma n jẹ́ ìṣòro fún mi láti f'ọkànbalẹ̀				
6	Mò ma ńronú wípé nkò ní ṣe dáradára nínú ẹ̀kọ́ọ̀ mi				
7	Mò ma ńronú wípé àwọn òbíì mi				

	kò sí lọ́dọ̀ mi				
8	Ẹ̀rù ma ńbà mí gidi gan tí ó bá ṣe èmi nìkan ni mo dá sùn sí yàrá				
9	Mò maa ńronú lopolopo igba wípé ǹkan burúkú lè ṣẹlẹ̀ sí mi				
10	Tí mo bá ní ìṣòro, ọkàn mi máa ńlù pùpùpù fún àìbalẹ̀.				
11	Nkò kìí fẹ́ lọ sí ilé-ìwé ní òwúrò nítorí ẹ̀rù máa ńbà mí				
12	Mo máa ńṣe àníyàn gidigidi ní ipòkípò tí mo bá wà				
13	Mo ma n ro wipe ko si ohun ti o dara nipa ojo ola mi				
14	Inú ma ńtètè bí mi				
15	Mo mọ̀ wípé àìbalẹ̀-ọkàn ńdà mí láàmú				
16	Nkò ní sùúrù tó nígbà-kígbà tí mo bá ní ìdádúró fun ohun ka				
17	Mo máa ńla òógùn gan bí ó tilè jẹ́ wípé nkò ṣe iṣẹ́ agbára				
18	Ẹ̀rù ma ńbà mí ní àìní ìdí kan pato				
15.2	**Iwon Irewesi**	**Ko ba mi mu rara**	**O ba mi mu die**	**O ba mi mu pupo die**	**O ba mi lara mu gidi gidi**
1	Nkò rí ohun kan tí ó jẹ́ ìwúrí fún mi rí ni ayika mi				
2	Ǹkan kò lọ déédé ní àárín èmi àti àwọn ọ̀rẹ́ àti àwọn òbí/alágbàtọ́ọ mi				
3	Mo ma ńṣe’rẹ̀wẹ̀sì, inúù mi sì ma ńbàjẹ́ ni opolopo igba				
4	Ohun gbogbo tilẹ̀ ti sú mi pátápátá				
5	Ó dàbí ẹni wípé nkò tilẹ̀ wúlò rárá				
6	Mo woye wipe aye yi ti sú mi				
7	Ó dàbí ẹni wípé kò sí ohun tí ó dára kan ní ọjọ́ ọ̀la mi				
8	Mò ma ńronú wípé asán l’ayé				
9	Inúù mi kìí dùn ni opolopo igba				
10	Mo ma ńrojú láti ṣe iṣẹ́ tí a yàn fún mi láti ilè ìwé wá				

11	Ó ma n dàbí ẹni wípé kí nmáa sọkún ni opolopo igba				
12	Ọpọ̀ ìgbà ni inúù mi kìí dùn bí ó tilẹ̀ jẹ́ wípé àwọn ènìyàn fẹ́ láti ràn mí lọ́wọ́				
13	Mo sakiyesi wipe nkò dára tó àwọn ọmọ mìíràn				
14	Ó jẹ́ ìṣòro fún mi láti sùn déédé bí ó ti yẹ				
15	Ó maa ndàbí ẹni wípé ki n ti le ku ni opolopo igba				
15.3	**Ìwọ̀n Ìgbàgbọ́ Nínú Ara Ẹni**	**Nko fara mon-on rara**	**Nko fara mon-on**	**Mo fara mn-on**	**Mo fara mon gan- ni**
1	Ju gbogbo rẹ̀ lọ, mo fẹ́ràn araa mi				
2	Mo sakiyesi pe nkò dára tó ní'gbà míràn				
3	Mo ní àwọn ohun àmúyẹ tí ó dára				
4	Mo lè ṣe gbogbo ǹkan tí àwọn elòmíràn lè ṣe dáradára				
5	Ó dàbí ẹni wípé nkò ní ohun tí ènìyàn lè fi yangàn				
6	Dájúdájú, mo ma ńrò wípé nkò wúlò rárá				
7	Mo rò wípé mo ṣ'ọ̀wọ́n lọ́pọ̀lọpọ̀ bí àwọn elòmíràn				
8	Ó wù mí kí nlè bu ọlá fún araà mi ju báyìí lọ				
9	Ju gbogbo rẹ̀ lọ, mo mọ̀ wípé mo le ma se daradara ninu awon igbese mi(fun apeere idawon ati awon ise ti ayan fun mi ni ile iwe tabi ni ile)				
10	Mo ma sa ba ro Ire sí araà mi				
15.4	**Ìwọ̀n Ìbá-Ẹgbẹ́-Pé abi ajosepo pelu awon eniyan**	**Nko fara mon-on rara**	**Nko fara mon-on**	**Mo fara mn-on**	**Mo fara mon gan- ni**
1	Mo gbàdún láti máa bá àwọn ọ̀rẹ́ àti àwọn ènìyàn ṣe ǹkan pọ̀				
2	Kò ṣòro fún mi láti darapọ̀ mọ́ àwọn ènìyàn (ọ̀rẹ́, alágbàtọ́, ojúlùmọ̀ n'ílé				

	tàbí n’ílé ìwé)				
3	Mo ṣe àkíyèsí wípé inú tètè ma ńbí mi, mo sì tún ma ńjà				
4	Mo ma ńtètè dá’ràn ju bí ó ti yẹ lọ				
5	Kò ṣòro fún mi láti parí ìjà pẹ̀lú àwọn ọ̀rẹ́ẹ̀ mi				
6	Tí mo bá ní ìṣòro tàbí tí ǹkan ibi bá ṣẹlẹ̀ sí mi, mo lè bèrè ìrànwọ́ láti ọ̀dọ̀ àwọn alágbàtọ́ mi tàbí àwọn ẹlòmíràn				
7	Mo ní àwọn tí wọ́n fẹ́ràn mi àti àwọn tí ọ̀rọ̀ mi jẹ l’ógún				
8	Mo lè yan àwọn ẹni tí mo fẹ́ ní ọ̀rẹ́				

APPENDIX IV

ORIGINAL RESILIENCE SCALE

To what extent do the statements below DESCRIBE YOU? Circle one answer for each statement.

Statement on Resilience	**Not at all**	**A little**	**Some what**	**Quite a bit**	**A lot**
1.I have people I look up to	1	2	3	4	5
2. I cooperate with people around me	1	2	3	4	5
3. Getting an education is important to me	1	2	3	4	5
4. I know how to behave in different social situations	1	2	3	4	5
5. My parent(s)/caregiver(s) watch me closely	1	2	3	4	5
6. My parent(s)/caregiver(s) know a lot about me	1	2	3	4	5
7. if I am hungry , there is enough to eat	1	2	3	4	5
8. I try to finish what I start	1	2	3	4	5
9. Spiritual beliefs are a source of strength for me	1	2	3	4	5
10. I am proud of my ethnic background	1	2	3	4	5
11. People think that I am fun to be with	1	2	3	4	5
12. I talk to my family/caregiver(s) about how I feel	1	2	3	4	5
13. I am able to solve problems without harming myself or others(for example by using drugs and /or being violent)	1	2	3	4	5
14. I feel supported by my friends	1	2	3	4	5
15. I know where to go in my community to get help	1	2	3	4	5
16. I feel belong at my school	1	2	3	4	5
17. My family stands by me during difficult times	1	2	3	4	5
18. My friends stand by me during difficult times	1	2	3	4	5
19. I am treated fairly in my community	1	2	3	4	5
20. I have opportunities to show others that I am becoming an adult and can act responsibly	1	2	3	4	5
21. I am aware of my own strengths	1	2	3	4	5
22. I participate in organised religious activities	1	2	3	4	5
23. I think it is important to help out in my community	1	2	3	4	5
24. I feel safe when I am with my family/caregiver(s)	1	2	3	4	5
25. I have opportunities to develop skills that will be useful later in life (like job skills and skills to care for others)	1	2	3	4	5
27. I enjoy my family's/caregiver's cultural and family traditions	1	2	3	4	5
28. I am proud to be (Nationality:_____)?	1	2	3	4	5

Resilience Researchd Centre. 2009. The Child and Youth Resilience Measure-28. Halifax, NS: Resilience Research Centre, Dalhousie University. Receved by mail with user manual , June 2011.

APPENDIX V

FOCUS GROUP INTERVIEW GUIDE FOR PILOT STUDY

INTERVIEW GUIDE FOR UNDERSTANDING THE PHENOMENON OF RESILIENCE & PSYCHOSOCIAL HEALTH AS PERCEIVED BY ORPHANS AND VULNERABLE CHILDREN

The questions listed below were developed to explore your understanding of the phenomenon of resilience and psychosocial health prior to intervention. Your responses will further assist in the improvement of the questionnaires and intervention package for a programme that will be developed to promote resilience and psychosocial health outcomes among children. Your participation is confidential and voluntary. Please feel free to ask for clarity on any questions raised. Your sincere responses will go a long way to assist future children.

Thank you.

1. What is your view about who a vulnerable child is?
2. What would a child need to grow up well in this environment?
3. How do you describe people who grow up well in this environment despite many problems they face?
4. What do you do when you face difficulties in life?
5. Can you share with me a story about another child who grew up well in this community despite facing many challenges?
6. Can you share a story about how you have managed to overcome challenges you face personally, in your family or outside your home in your community?
7. What kinds of things are mostly challenging to you to grow up well in this environment?
8. What does it mean to be resilient?
9. What does being healthy mean to you?
10. What does it mean to you to be psychologically healthy?
11. What does it mean to you to be socially healthy?
12. Could you provide information on some of the psychosocial problems you have experienced or currently experiencing?
13. What does others children you know do to keep healthy psychologically and socially?

APPENDIX VI

ÌTỌNI ÌFỌRỌ WÁNI LENUWO LÁTI LÈ NÍ ÒYE ÌFAYARAN NIGBA TI A BA DO JU KO ISORO ÀTI ÌLERA ÌRÒNÚ-OKAN PELU IBAGBE PO PELU AWON ENIYAN TABI ELEGBE WON LÀWÙJỌ TÍ ÀWỌN ỌMỌ ALÁÌLÓBÌÍ ÀTI ÀWỌN ỌMỌ TÓKÙDÍ E KÁÀTÓ FÚN

Àwon ìbéèrè tí a tò sísàle yìí ni a gbékale láti wádìí ìfayaran, ilera okan ati ibagbepo wa pelu awon elegbe wa tabi eniyan lawujo. Àwon ìdáhùn re yóó ṣe ìrànlowo síwájú síi láti lè túbo gbèrú síi nínú ètò ìtojú awom omo alailobi and awon omo to ku die kaa to fun ni ile-iwe. Ikopa yin yoo je asiri ati pe kii se kanpa. Jowo beere fun alaye lori awon ibeere to ba ruju. Awon idahun atinuwa wa yoo se iranwo fun awon omo miiran lojo iwaju.
E se pupo.

1. Kí ni èrò tì e ni nípa ohun tí omo -tókùdíe káàtó-fún je ki e si so iru awon omo bee ?
2. Kí ni omode nílò láti le dagba daadaa ni awujo yi?
3. Báwo ni o ṣe lè sàpéjúwe àwon ènìyàn to se aseyori ni awujo bi o ti le je pe won nla opo isoro koja?
4. Kí ni awon ohun ti o ma nse nigba ti o ban la isoro koja?
5. Ǹje o lè so ìtàn nípa omo mìíràn tí o sàseyo rí ní àwùjo re pelú opo ìpèníjà tí ó dojú ko?
6. Ǹje o lè so ìtàn bí o ṣe borí ìpèníjà tí ó dojú ko nínú ebí re tàbí ní àárin àwùjo ri ?
7. Kí ni àwon n ohun tí ó je ìpèníjà fún yin lati dagba daadaa tabi se aseyori ni awujo yìí?
8. Kí ni ó túmo sí kí èèyàn ní ifayaran nigba ti o ba n dojuko isoro ti ko fi ni se ara re ni jamba yala nipa ilera okan tabi ibasepo re pelu awon eniyan?
9. Kí ni nini ilera pipe tumo si fun o?
10. Kí ni wiwa ni ilera pipe nipa ironu okan tumo sí?
11. Kí ni wiwa ni ilera pipe nipa ibagbepo pelu awon eniyan ni awujo tumo sí?
12. Ǹje o lè fi tówa létí àwon ìsòro ìrònú-idaamu okan tí o ti làkojá tàbí tí ò ń làkojá lowolowo báyìí?
13. Kí ni àwon omo mìíràn tí o mo ń ṣe láti wà lálaàfíà nípa èrò-inú okan and ibagbepo laalafia pelu awon eniyan làwùojo ?

APPENDIX VII

OVC VULNERABILITY INDEX

For official use only	
Child's Serial No	
School ID	
Data No	
Date of Administration	

The OVC vulnerability index defines the level of exposure to stressor known as vulnerability. It can be used to identify those OVC most in need of help based on objectively verifiable criteria. This instrument should be used to identify OVC in the school settings that will require support.

VULNERABILITY INDICES

1. Health (4)

0	**1**	**2**	**3**	**4**
Child has no health concern	Child occassionally fall sick	Sick frequently with access to health services	Sick frequently without access to health services	Child is living with chronic health problem (e.g. HIV, SCD) please specify others

2. Education (3)

0	**1**	**2**	**3**
Child has no educational concern	Occasional unexplained absences from school	Frequently unexplained absence from school	Child verbalise intention to stop coming to school

3. Shelter (3)

0	**1**	**2**	**3**
No shelter and care concern	Child lives in overcrowded home	Child lives in dilapidated or poor shelter	No shelter at all (living on the street)

4. **Protection (3)**

0	**1**	**2**	**3**
No protection concern	Child is at risk of abuse	Child is currently experiencing one form of abuse or exploitation (physical, emotional or sexual or neglect)	Child is seriously being abused and require social/ legal protection

5. **Nutrition (4)**

0	**1**	**2**	**3**	**4**
No nutrition concern (eat 3 days meals considered to be adequate by the child)	Child eat 2 meals per day	Child hardly eat I meal/day	Child has nothing to eat most of the days	Household food insecurity

6. Psychosocial (4)

0	**1**	**2**	**3**	**4**
Child never feel worried or sad	Child rarely feel worry and sad	Child often feel worry and sad	child is always anxious and depressed	Child has suicidal ideation

7. **Economic Strengthening (Household) (3)**

0	**1**	**2**	**3**
No economic concern in child's household	Children is a sole source of household income	Child household is living between poverty line with income generating skills	Living below poverty level with no income generating skills.

Source: Adapted from Vulnerability Index Developed by Federal Ministry of Women Affairs, CDD, OVC Unit 2007

APPENDIX VIII

INFORMED CONSENT TO PARTICIPATE IN RESEARCH

Investigator: Olowokere Adekemi Eunice. **Telephone No.:** 0805-050-2125

Protocol No: ERC/2012/09/19 **E-mail:** ayaolowo@yahoo.com

Institution: University of Ibadan. **Department:** Nursing, Faculty of Clinical Science

TITLE OF PROJECT: THE EFFECTS OF NURSE-LED RESILIENCE-BASED TRAINING AND PEER SUPPORT ACTVTIES IN SCHOOLS ON RESLIENCE AND PSYCHOSOCIAL HEALTH OUTCOMES AMONG ORPHANS AND VULNERABLE CHILDREN IN OSUN STATE, NGERIA

INTRODUCTION:

I am Mrs. Kemi Olowokere, a postgraduate student of the Department of Nursing, University of Ibadan. I am inviting you to participate in a research study that is designed to evaluate the effectiveness of a psychosocial intervention training programme on children psychosocial health. Through this study, nurses and teachers capacity on psychosocial support for vulnerable children will be enhanced.

PURPOSE: To determine the effects of resilience-based training and peer support activities on resilience and psychosocial health outcomes of orphans and vulnerable children (OVC).

PROCEDURES: If you decide to participate in this study and you are qualified based on the criteria for participation in the study, you will be asked to complete a questionnaire before, during and after the study. The study is in three phases. First, the nurses will be trained on psychosocial health needs of vulnerable children (VC). They will in turn train the teacher using the same manual used with the nurses. Thereafter, the teacher will train the children using any of the psychosocial intervention packages developed by the researchers. Participants in this study (nurses, teachers and the children) will be evaluated on the impact of the training programme on their knowledge of health care needs of vulnerable children, resilience and the selected psychosocial outcomes.

BENEFITS: This study will assist nurses and teachers to learn how to help disadvantaged children to improve their capability to cope with life challenges and reduce the susceptibility to negative psychosocial health outcomes. As children, you have the opportunity by participating in this programme to enhance your capacity to develop resilience skills. It is expected that the training will enhance your psychological and social wellbeing.

COSTS OF PARTICIPATION: There is no financial cost to you for participating in this study but you will need to make time available to respond to the questionnaire and to participate in the training programme. For the nurses, you will need to volunteer three days for a training of trainers (TOT) training and another three days to train the teachers from the selected schools. Teachers participating in training programme would have to volunteer a full three days for training and 1-2 hours of their time afterward to interact with the children once a week for a period of six weeks. Nurses and Teachers will be required to fill the questionnaire at three different points in time which will take a period of 30 minutes.

For the **children,** participation means that you are going to be having interaction with your teachers for a period of 1-2 hours on a weekly basis. You are also going to be filling questionnaires at three different times. The filling of the questionnaire will take approximately one hour of your time each time you fill it.

POSSIBLE RISKS/DISCOMFORT: There are no physical risks associated with responding to the questionnaires, or answering questions. You will not be required to answer any questions that you find embarrassing.

COMPENSATION: There will be no compensation for participating in the study but you will access to incentives such as some writing materials.

CONFIDENTIALITY: All information gathered in this study will be kept confidential. When findings of this study are reported to the Department of Nursing University of Ibadan, or in scientific journals or meetings, you will not be identified. All records and any other study material will be stored in the locked cabinets and accessed by only authorised persons.

RESPONDENTS' RIGHTS: As a participant in this study you have a right to decline participation in the study at any point in time. In this instance, your completed questionnaire shall be retrieved and destroyed. Respondents who decline or withdraw from the study shall suffer no disadvantages whatsoever for such action. Respondents who have further questions about the study or their rights are welcome to contact:

Olowokere, A.E.
Department of Nursing Science,
Obafemi Awolowo University, Ile-Ife
Tel: 08050-502125
E-mail: ayaolowo@yahoo.com

CONFLICT OF INTERESTS: This study is purely for academic purpose and there is no conflict of interests.

FOR YOUR RECORDS: You will be given a copy of this form to keep.

CONSENT: Please read the sentence below and think about your choice. After reading the sentence, circle Yes or No. No matter what you decide to do, it will not affect you in any way. You take special note of the following:

- You will not receive any direct benefit as a result of your participation in this study.
- Participation in the study is voluntary.
- You can change your mind at any time during the study
- Photograph may be taken in the course of the training. The photograph is specifically for documentation purpose as a confirmation that the study was conducted. For any other reason other than what is stated above, further consent will be taken before photograph is used for publication
- You will not be paid for responding to the questionnaire

(***If the participants cannot read, the interviewer shall interpret the entire document to the respondent in the presence of a witness).***

Subject's Agreement:

I have read the information provided above, or it has been read to me.

I have had the opportunity to ask questions about it and any questions I have asked have been answered to my satisfaction. I consent voluntarily to participate in this study.

Yes ☐ **No** ☐

Signature/Thumb print of Research Respondent. Date:

Signature/Thumb print of Research Respondent Guardian/Parent Date

Signature and thumb print of witness Date
(For children only)

Signature/thumb print of Person Obtaining Consent. Date

APPENDIX IX

SUBJECT INFORMATION SHEET

Principal Investigation: Olowokere Adekemi Eunice Telephone No:-08050502125

E-mail: ayaolowo@yahoo.com

Institution: University of Ibadan, Ibadan

Department: Nursing

Title of Study: The Effects of Nurse-led Resilience-based Training and Peer Support Activities in Schools on Resilience and Psychosocial Health Outcomes of Orphans and Vulnerable Children in Osun State

Co – Investigators: None

- **SOME GENERAL THINGS TO KNOW ABOUT THE STUDY**: It is a nursing research for academic purpose and to receive a PhD degree in community health nursing in the University of Ibadan.

- **PURPOSE OF THE STUDY**: To determine the effects of resilience-based training and peer support activities on resilience and psychosocial health outcomes of orphans and vulnerable children (OVC)

- **PROCEDURES:**

  The interventions to be utilised in this study will be implemented in three phases:

  - **Phase 1**: The nurses will be trained for 3 days on the psychosocial health support of orphans and vulnerable children after an initial data would have been collected on their knowledge of e psychosocial support
  - **Phase 2**: The nurses in turn will train teachers using the same module after baseline of their knowledge had also been collected.
  - **Phase 3:** The teachers after their training will work in their respective schools with the school visiting nurses to identify vulnerable children using the vulnerability index. VC selected will be trained by the teachers using the intervention packages for the study.
    - Children in some of the schools will receive Resilience training only. The resilience training module was developed from literature review and educational materials on resiliency. The manual focus on improving children knowledge and skills in the core resilience characteristics which includes self-reliance, being oneself (existential aloneness), maintaining balance and harmony with self

(equanimity), having a sense of purpose and perseverance. The package will make use of autobiography of both local and international legends who had successful outcomes despite the risk that they faced in childhood. Local songs that promote resilience, lecture, discussions, brainstorming, craftwork and assignments will be used to teach resilience. The lecture package consists of six sessions with one lecture delivered per week. Each core characteristics of resilience will be taken on a weekly basis for a period of two hours using participatory approach which focuses on active involvement of the children during the training programme.

- The children in the some schools will be put into a peer support Group. The support group will encourage sharing of feelings, ideas and information on coping techniques in different situation. Basic life skills support will be taught during the support group meetings using a standardardised module that covered skills such as self-awareness, interpersonal, communication, critical thinking, decision making, coping, problem solving, coping with feelings, empathy and creative thinking. The session will be facilitated by the teachers once a week.

- **PARTICIPATION**: Involvement of all respondents in this study is voluntary and refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled. You may discontinue participation at any time.

- **BENEFITS**: The result of the study will help community health nurses and teachers working with the children to efficiently respond to the psychosocial needs of vulnerable children in the schools. And for children, the possible benefit to participate in this study is having access to health promoting activities most especially in the area of psychosocial health. The other possible benefit is the knowledge that you are contributing to a study that may help children like yourself in the future.

- **COSTS OF PARTICIPATION**: Participating in the study puts no financial cost on the participant. However, it will cost the participants their time which will be used to respond to the questionnaires and participate in the interview process. Participants will also need to devote their time to be actively involved in the training programmes.

- **RISKS**: There is no risk or exposure to any form of risks whatsoever to the participant for taking part in the study.

- **COMPENSATION**: There will be no monetary compensation for participating in the study.

- **CONFIDENTIALITY**: Every attempt will be made to see that your study results are kept confidential. A copy of the records from this study will be stored in the researcher office in the Department of Nursing Science for at least 10 years after the end of the research. Your conversations with the researcher may be tape recorded during the interview but all reasonable efforts will be made to protect the confidentiality of your information. The results of this study may be published and or presented at meetings without naming you as a subject. Although your rights and privacy will be maintained, the Supervisor of the researcher, Obafemi Awolowo University Teaching Hospital Institutional Review Board and Department of Nursing, University of Ibadan will have access to the study records.

- **RESPONDENTS' RIGHTS**: The participants have the right to withdraw from participating even after they have given consent.

- **CONFLICT OF INTERESTS**: None

- For the records: You will be given a copy of this form to keep

APPENDIX X

SCHEMA OF INTERVENTION PROGRAMME

EXPERIMENTAL GROUP FOR NURSES AND TEACHERS

INTERVENTION NAME: Psychosocial Support Training for Nurses and Teachers

DURATION: Three days

OUTCOME: Nurses and teachers have improved knowledge to provide psychosocial support to OVC.

Day	Activities	Approach/material
1	**Introduction**(20 mins) Pre-intervention Assessment (60 mins) Objectives of Training **Module 1:** Understanding the concept of psychosocial support (30 mins) Questions and clarification (10mins) **Module 2**: Identifying children who needs support in the school setting (90 mins) Questions and clarification (10 mins)	Brainstorming, discussion. Flipchart stand & paper, laptop, projector.
2	**Module 3:** Dealing with difficult behaviour (90 mins) Questions and Clarification (10 mins) **Module 4:** Psychosocial Interventions for OVC (60 mins) Questions and clarifications (10mins)	Role play, group work and presentation. Laptop, projector, Flip chart stand and paper
3	**Module 5:**Understanding the concept of resilience in children (60 mins) Questions and clarifications (10 mins) **Module 6:** Caring for the care givers (60 mins) Questions and clarifications (10 mins)	Group work, brainstorming Presentation and autobiography of the legends. Laptop, projector, Flipchart stand and paper

INTERVENTION GROUP 1 (OVC)

INTERVENTION NAME: Resilience training

DURATION: 6 weeks

OUTCOME: Enhanced positive coping skills and psychosocial health outcomes of vulnerable children

Week	Activity	Duration	Approach /material
1	**Introduction of participants**, collection of baseline information, developing ground rules and relaxation exercise	60 mins	Discussion and Brainstorming. Cardboard, Flipchart paper, A4 paper and Mat
2	**Activity 1: Training on perseverance** Relaxation exercise Questions and clarification	120 mins	Brainstorming, group work, autobiography of legend, Mat, Flipchart stand and papers, markers
3	**Activity 2: Training on meaningful life** Relaxation exercise Questions and clarification	120 mins	Group work, brainstorming, Flipchart paper, handout on health tips
4	**Activity 3: Training on equanimity** Relaxation exercise Questions and clarification	120 mins	Group work and brainstorming. Flipchart paper
5	Activity 4: **Training existential aloneness** Relaxation exercise Questions and clarification	120 mins	Group work and brainstorming. Flipchart paper, marker, A4 paper,
6	**Activity 5: Training on self-reliance** Relaxation exercise Questions and clarification	120 mins	Group work and brainstorming. Flipchart paper, marker, A4 paper,

INTERVENTION GROUP 2 (OVC)

INTERVENTION NAME: Peer Support Life Skills Training

DURATION: 6 weeks

OUTCOME: Enhanced coping skills and healthy psychosocial health outcomes in orphans and vulnerable children

Week	Activity	Duration	Approach /material	Life skills learned
1	**Module 1: Getting started** Introduction of participants, collection of baseline information, developing ground rules and relaxation exercise	60 mins	Discussion, cardboard, Flip chart paper, A4 paper and mat	Self-awareness, interpersonal relationships and communication
2	**Module 2: Getting to know each other** • Facilitate group interaction & sharing of experiences • Relaxation exercise • Questions and clarification	120 mins	Brainstorming, group work, role play, Mat, Flipchart stand and papers, markers.	Self-awareness, interpersonal relationships and communication, critical thinking, decision making and coping
3	**Module 3: Communication** • Facilitate group interaction & sharing of experiences • Relaxation exercise • Questions and clarification	120 mins	Group work, brainstorming, role play, Flipchart paper, handout on health tips	Self-awareness, communication, critical thinking, decision making
4	**Module 4: Relationships** • Facilitate group interaction & sharing of Experiences	120 mins	Group work, brainstorming Flipchart paper, role play	Self-awareness, communication, critical thinking, and problem solving, coping

	• Relaxation exercise • Questions and clarification			with feelings, empathy and creative thinking
5	**Module 5: Decision making** • Facilitate group interaction & sharing of experiences • Relaxation exercise	120 mins	Group work, brainstorming and Role play. Flip chart paper, marker, A4 paper,	Self-awareness, communication, critical thinking, and problem solving, coping with feelings, empathy and creative thinking
6	**Module 6: Coping with emotions** • Facilitate group interaction & sharing of experiences • Relaxation exercise	120 mins	Group work, brainstorming and Role play. Flip chart paper, marker, A4 paper	Coping with emotions and stress, problem solving, empathy, and coping

APPENDIX XI

PSYCHOSOCIAL TRAINING PACKAGE FOR NURSES AND TEACHERS

The training package for nurses and teachers was adapted from training manuals already in use for community volunteers. The researcher therefore acknowledges the use of materials consulted for the development of this material which are listed on the last page of the manual.

LEARNING OBJECTIVES

By the end of this training, learners will be able to:

1. Define psychosocial support
2. Identify children who need psychosocial support
3. Explain difficult behaviour in children
4. Identify psychosocial intervention tools
5. Define resilience
6. List protective factors that contribute to resilience
7. State core resilience characteristics
8. Discuss support needed by caregivers of OVC

MODULE 1: UNDERSTANDING THE CONCEPT OF PSYCHOSOCIAL SUPPORT

Life is often described as a journey from birth to death. In the journey of life, a person may encounter certain opportunities or challenges; and children are not exempted. More often than not, these children can solve most of the problems on their own, but sometimes they become overwhelmed by facing too many at the same time. In addition, many children have lost their parents and are left alone to face life's challenges, hence they often need psychosocial support from other people most especially nurses

What is psychosocial support?

Psycho refers to the unseen emotional and spiritual process that takes place within an individual mind.

Social refers to the relationship between an individual and those who live around him/her

Support: It is to keep something from falling, sinking, or slipping, to help it bear a weight and to help somebody maintain circumstances, to prevent from collapsing under pressure or the weight or situation.

Psychosocial support (PSS) is thus the total help given to an individual which takes into account the psychological (or unseen aspects) of a person and his or her social life. It gives the child skills to cope with stress or difficult situation. Psychosocial support does not have to be an expensive project. It is about giving one's time and attention to the children.

When a child loss a parent or is vulnerable due to any cause, the child will not thrive well unless he or she receives support to help him/her to be emotionally healthy. When children are emotionally healthy they have energy to play and learn. They trust enough to form good relationships with others. A child's emotional health may affect his or her physical health and nutrition, and the ability to learn. All of these things have a large impact on a child's future.

Module 2: IDENTIFYING CHILDREN WHO NEED SUPPORT

How could nurses and teachers identify children who need support?

Nurses who are the primary care givers at the lowest level of health and teachers need to identify which children are most vulnerable and would benefit most from psychosocial support. Children who are most vulnerable may be identified either because they have very difficult lives or because of particular problematic behaviours. Children with difficult lives include:

1) Children who have lost one or both parents
2) Children in a child-headed household
3) Children who have been abused
4) Children with disabilities
5) Children who talk about suicide
6) Children living on the street

Problematic behaviors may indicate that these children need support. There are many behaviors that may indicate that a child is not doing well. Some of these include excessive crying, being aggressive, withdrawing, being very fearful, not sleeping well, using drugs or alcohol, sexual promiscuity, suicidal ideation, extreme sadness, low self esteem, and poor relationship with peers.

However, there is need to explain that a child may be orphans and not vulnerable. This is why the Federal Ministry of Women Affairs designed a vulnerability index form for identification of children that are vulnerable in the community. When nurses notice that a child belongs to any of the categories above or display any of the symptoms of problematic behaviour, the child should be properly assessed for vulnerability using the OVC vulnerability index.

MODULE 3: DEALING WITH SOME SELECTED PSYCHOSOCIAL PROBLEMS IN VULNERABLE CHILDREN

Sometimes we are not aware of exactly what problems children have face, but we can tell by their actions and behaviour that they have more problems than they can manage. When children have experienced loss or great stress, they may "act out" in ways that seem unusual and are troublesome to their siblings or caretakers. We may observe behaviours such as:

- Inactive, withdrawn behaviour
- Aggressive/disobedient behaviour
- Substance abuse, risk taking, and risky sexual behaviour
- Depression
- Anxiety
- Low self-esteem
- Poor social connectedness

When children are having a difficult time, or showing problematic behaviours, they may not have enough energy to play and learn—which is children's "work"—or enough trust to have good relationships with other people.

These behaviours may:

- Have an impact on physical and nutritional health
- Shape children's relationships with the people they depend on
- Shape children's ability to learn and thus affect their futures

This section focuses on a few specific problematic behaviours.

A. Inactive/withdrawn behaviour

- You should be concerned if the child is so inactive or withdrawn socially that s/he:
- Does not look at or greet a familiar visitor
- Does not speak at all during a visit, or speaks very little and softly
- Just sits, and does not play
- Does not appear to watch or listen to others
- Sits far away from other people
- Does not move at all during a visit or moves rarely or only on command.

A caregiver may also notice and tell you that she is worried because the child is very quiet. Most children are a bit shy when they first meet new people, so you should only make a judgement about this kind of behaviour once you have visited several times. How can you help? That will depend partly on the cause.

Some causes are of withdrawn behaviour are:

1) The child is malnourished or sick.

In this case you may need to help the family find resources to feed the child, or refer them to the local health worker.

2) The child is neglected. Children need to interact with other people to develop in a healthy way. Children can become too inactive or withdrawn when they: -

- Are left alone most of the day
- Have no one to talk to; the caregiver rarely speaks to the child
- Have no one to play with
- Have no things to play with

You can counsel caregivers about the importance of not leaving children alone, talking to children, and providing some homemade toys.

3) The child is abused. Children can become too inactive or withdrawn if caregivers:

- Beat them frequently or harshly
- Speak with them very harshly or not at all
- Demand that they be quiet all the time

You can help by discussing other ways of correcting children's behavior with caregivers, such as being gentle but clear about their expectations, explaining their rules, or praising better or good behaviour.

4) The child is suffering from grief and worry. Children who have recently lost a parent, have a very sick parent, or have moved and lost contact with their homes and their brothers and sisters, may be very withdrawn from grief or worry. You can help by encouraging caregivers to provide positive activities in children's lives as much as possible:

- Sending them to school regularly
- Encouraging them to play with other children
- Expressing affection towards them
- Helping them make friends within the new family
- Discuss illness and death honestly with children, even young children; these things are less frightening and confusing when they can be talked about

B. Disobedient/aggressive behaviour

You should worry if a child is so disobedient or aggressive that s/he:

- Frequently fights with other children
- Frequently ignores caregiver requests
- Frequently disobeys caregiver
- Uses bad language on others
- Is described by the caregiver as bad, disobedient, or too aggressive

Most children are aggressive or disobedient from time-to-time. Some children may be so excited by a visitor that they act up at first. You may make a better judgement about this

kind of behaviour once you have visited several times. How can you help? Many of the same things that contribute to children being very inactive and withdrawn also contribute to children being very aggressive or disobedient. Some of the causes of disobedient behaviour include:

1) **Neglect:** If children are left alone most of the day without protection and with no one to talk to and nothing to do, they can become aggressive and disobedient. They may be acting this way to seek attention.

You can problem-solve with caregivers on how to:

- Provide some supervision or company during the day
- Stop other children from teasing them or starting fights
- Express interest and concern even to a "difficult" child
- Build a better relationship through teaching simple things
- Provide some homemade toys

2**) Abuse**: If children are spoken to only harshly or are disciplined with frequent or harsh beatings, they can become aggressive and disobedient.

You can problem-solve with caregivers on how to:

- Teach children proper behaviour without beatings
- Offer praise of positive behaviours
- Share stories or songs even with "difficult" children

3) **Grief and anger**: Children who have recently lost a parent, have a very sick parent, have moved and lost contact with their homes and their brothers and sisters, may be very aggressive or disobedient out of grief or anger. You can help by encouraging caregivers to provide positive activities in children's lives as much as possible by:

- Sending them to school and encouraging them to play with other children
- Expressing affection towards them
- Helping them make friends within the new family
- Discussing illness and death honestly with children, even young children; these topics are less frightening and confusing when they can be talked about

C. Substance abuse: Orphaned and vulnerable children are at higher risk of using drugs due to low self - esteem and trying to escape feelings of extreme sadness. Drug use may

also be linked to poor sexual decision making in adolescents. Some signs of substance abuse in young people include:

- Excessive fatigue
- Changes in appetite
- Weight loss
- Restlessness
- Poor concentration
- Rapid mood swings (from very happy to very sad)
- Loss of interest in school
- Refusal to do usual household tasks
- Violent or aggressive behaviour

Some substances that may be abused include alcohol, dagga, tobacco, mandrax, and cocaine.

What can be done to help children who may be abusing drugs?

- Identify early signs through observation
- Educate children about dangers of substance abuse
- Discuss increased risk of unsafe sex associated with drug use
- Refer youth to programmes available for counselling and rehabilitation from addiction

D. Depression

A child suffering from severe depression feels sad all the time and cries a lot. The child may refuse to eat and may lose a lot of weight. S/he may feel tired all day long and want to stay in bed all day, but finds it difficult to sleep at night. A depressed child withdraws from activities, may talk a lot about wanting to die, and sometimes has thoughts about killing him or herself. The child may say over and over again that he or she wants to be where the deceased parent is. The child may show self-destructive and aggressive behaviour like cutting him or herself, pulling out his or her own hair, deliberately causing hurt to his or her own body, and destroying objects that were formerly precious to him or her.

If you know of a child who is experiencing these severe problems, speak to the child and explain that you have noticed that s/he is going through a difficult time. Mention to the child that you want to help him or her by talking to their caregiver and suggesting that the child be referred to a specially trained counsellor or a social worker. It is important that you do not criticise the child's behaviour. If the child feels that you are being critical, your help may be refused.

Some ways to help:

- Give the child plenty of opportunity to talk out his/her feelings and fears during the day with an understanding and caring adult
- Reassure the child that s/he is loved and will be cared for and that his sadness will get better with time
- Encourage lots of physical activity as this will help to relax the child, work out some of his/her feelings, and tire him/her out to sleep better.

E. Anxiety

Anxiety is a common experience to all of us on an almost daily basis. Feeling anxious is normal and can range from very low levels to such high levels that social, personal and academic performance is affected. Anxiety can arise from real or imagine circumstances. Anxiety disorders are one of the most common mental health conditions in children. The central characteristic of anxiety is worry which is excessive concern about situations with uncertain outcomes. Excessive worry is unproductive because it may interfere with the ability to take action to solve a problem. A child having anxiety problem may have the following problems: concentration difficulties, overreaction to minor events, memory problems, worry, irritability, perfectionism, thinking rigidity, hyper vigilant, fear of losing control, fear of failure, difficulties with problem solving and academic performance, shyness, withdrawals, frequently asking questions, frequently need for reassurance of teacher, rapid speech, excessive talking, restlessness, fidgeting, habit behaviour such as hair pulling or twirling, impulsiveness, trembling or shaking, increased heart rate, excessive perspiration, shortness of breath,, dizziness, chest pain or discomfort flushing of the skin, nausea, vomiting, diarrhea, muscle tension and sleep problems,

refusal or reluctance to attend school, avoidance of academic and peer activities, self criticism and low self-esteem.

How can we help children having anxiety symptoms in school?

There are many ways that school teachers can help a child with generalised anxiety disorder succeed in the classroom. Meeting between parents and school teachers, guidance counsellors or nurses will allow for collaboration to develop helpful school structure for the child. The following strategies may be used in the school:

- Establish check in on arrival to facilitate transition into school
- Accommodate late arrival due to difficulty with transitions
- Because transitions may be particularly difficult for these children, allow extra time for moving to another activity or location. When a child with anxiety refuses to follow directions, for example, the reason may be symptoms of anxiety rather than intentional oppositionality
- If the child is avoiding school, determine the cause of the child's reluctance and address it, initiate a plan for him or her to return to school as quickly as possible. It may help ease anxiety if the child attends for a shorter school day temporarily
- Identify a "safe" place where the child may to go reduce anxiety during stressful periods. Develop guidelines for appropriate use of the safe place will help both the student and staff
- Develop relaxation techniques to help reduce anxiety at school. Employing the techniques developed at home can be useful
- Provide alternative activities to distract the child from physical symptoms. Calming activities may be helpful
- Encourage small group interaction to develop increased areas of competency
- Provide assistance with peer interactions
- Encourage the child to help develop interventions - enlisting the child in the task will lead to more successful strategies and will foster the child's ability to problem solve
- Reward a child's effort – every good effort deserves to be praised

F. Low self-esteem

Self-esteem is the way individuals think and feel about themselves and how well they do things that are important to them. In children, self esteem is shaped by what they think and feel about themselves. Their self esteem is highest when they see themselves as approximating their ideal self, the person they would like to be. Children who have high self-esteem have an easier time handling conflicts, resisting negative pressures and making friends. They laugh and smile more and have a generally optimistic view of the world and their life. Children with low self-esteem have a difficult time dealing with problems, are overly self critical, can become passive, withdrawn and depressed. They may hesitate to try new things, may speak negatively about themselves, are easily frustrated and often see temporary problems as permanent conditions. They are pessimistic about themselves and their life. Some common signs of low self-esteem in children and teens are as follows:

- Feeling they must always please other people
- General feelings of not liking themselves
- Feelings of unhappiness most of the time
- Feeling that their problems are not normal and that they are to blame
- Needing constant validation or approval
- Not making friends easily or having no friends
- Needing to prove that they are better than others

How do we build child esteem in school?

- Be a role model for high self-esteem. If you have a positive attitude, chances are that the school children will have too.
- Have realistic expectations. Unreasonable goals will set up a child for feelings of failure

- Respect every child. Their accomplishments should be praised even if they are not in your area of interest or if their level of academic success for instance is generally lower than what you expect it to be
- Praise a child's efforts, even if you are ultimately unsuccessful.. Making a great effort should be rewarded
- Be careful when correcting a child's behaviour. Constructive criticism is much more useful than pinning a child with a label like " lazy" or "stupid.

G. Poor Social Connectedness

Social connectedness refers to the relationships that the child has with others. It is integral to well-being. Relationship gives a child support, happiness, contentment and a sense that they belong and have a role to play in society. Social connectedness is fostered when relationships are positive and when a child has the skills and opportunities to make friends and to interact constructively with others. Symptoms of poor social connectedness may include:

- Not feeling comfortable in the presence of others
- Not having a sense of brotherhood or sisterhood
- Not fitting well to different situations
- Not having close relationship with people
- Feeling disconnected from the world around a person
- Not seeing people as friendly and approachable
- Not being able to relate with peers
- Not having a sense of togetherness with peers
- Feeling lonely
- Not relating well with people
- Not participating with anyone or any group

How do we help children having relationship problem?

- Counsel child on the importance of relating with peers and significant others
- Discuss the fears of relating with people
- Counsel appropriately

- Encourage child to interact with peers on regular basis
- Reinforce positive changes in child

H. Suicide

When a child makes a statement about suicide, never ridicule him or her or ignore his/her feelings, and never refuse to talk about it. If they are saying it, they are thinking it and thoughts of suicide must be taken seriously. The child is trying to say, "I need to talk, I need help."

Attempting Suicide

Children who have experienced the pain of losing someone they love are much more at risk of attempting suicide, especially teenagers who think that no one else understands their feelings. They often feel VERY alone with no one to talk to.

Teenage boys are particularly at risk, as they tend to keep their emotions and bad feelings locked up inside. Therefore, if a boy makes a suicide threat, it needs to be taken VERY SERIOUSLY! As girls tend to talk about suicide more openly, intervention is often possible before a child acts on these emotions. But in any situation where a girl or boy is talking about suicide: GET HELP IMMEDIATELY!

Ask for help/support from grandparents, elders, uncles, village headmen, social welfare officers, counsellors, health workers, the church/mosque, peers, and other supportive members of the community.

MODULE 4: PSYCHOSOCIAL INTERVENTIONS FOR OVC

What are some of the ways or tools we can use to provide psychosocial support to children?

There are different types of psychosocial interventions that are commonly used by care providers. These include counselling, support group, memory box, play therapy, kids club and resilience games.

4.1. Counselling?

It is a process of helping people to learn how to solve their problems and also achieve improved mental well-being. In this process, the counsellor (caregiver) tries to establish a

safe, non-judgemental, non-threatening and unconditionally accepting relationship with the child, family and community members. It involves a process that takes place in stages to reach a desired goal.

Counselling is not:

- Advice giving
- Telling the client or individual what he or she should do about the presenting problem
- Judging who is wrong or right
- An opportunity for the counsellor to deal with his or her own issues
- It is not arguing or trying to convince the client what decisions she or he should take
- To make the counsellor happy

A lot of children go through a difficult childhood characterised by parental illness and death, poverty, and other heartbreaking social and emotional ills. Child focused and community based counselling processes have become increasingly important for helping children to acquire coping skills. Individual counseling processes are particularly important for children whose psychological and social functioning may be severely compromised. While generally a small percentage of the overall population, this group requires intensive psychological attention because they are unable to manage on their own.

4.2. Support Groups

A support group is a group of people who meet to resolve or cope with a common problem, condition or issue. It can be initiated and facilitated by a professional, a trained facilitator or group members themselves. Many support groups are started by people who are living with a condition and are looking for support or want to share information and coping skills with other people living with the same condition.

Children's groups are facilitated by adults who have been trained and can help children understand themselves, their situations; and express their emotions. When running a support group, one has to consider the following:

- Duration - is it on-going or limited to a number of session
- Just like counselling, the facilitator and the group need to make decisions about the frequency of group meetings, the duration of each meeting and the duration of the whole group process
- Membership - is it open to anyone or do the members have be in a particular situation or have experienced something in particular
- Depending on the problem or the issue that brings the group together, the group together with the facilitator need to think about the objectives of the group process

Some advantages of working with children in groups:

- Children feel less isolated
- They can spend time with peers
- Children realise that they are not the only one in a problematic situation
- Develop social skills and friendships in a safe place
- The group will benefit from the guidance and mentorship from the counsellor/facilitator
- A sense of belonging and social connectedness is developed
- Groups offer children empathy and they also learn to be empathetic

4.3. Memory Box

When someone loses a parent as a child, their memory of those parents may fade over time and they eventually may not remember very much about their parentis at all, which can result in them feeling very alone and isolated. A memory box helps as a reminder of our parents, of important events and information.

A 'memory box' is a box, bag, album or any other container where the child and family can collect photos, mementos, or personal items reminding them of their parents and important information and documents. It is important for the 'box' to be in possession of the child (available to them whenever they want to look through it) and portable so that they can take it with them if they are moved to another home/carer. The memory box serves many purposes:

- It is a project that the child, parent and family can work on together to help them deal with the emotions of the situation
- It is a communication tool that can be used as a journal for facts and memories for children, providing children with a picture of their parents, their hobbies, likes e.t.c

4.4. Play Therapy

It is a form of psychotherapy for children that uses play situations for diagnosis or treatment.

It is usually studied professionally by psychologists and social workers but lay counsellors and teachers/other people who work with children can learn how to use play techniques/skills to communicate with children. A lay counsellor would not use play skills to diagnose or treat a child but to communicate with the child - helping the child express themselves, helping the child resolve emotions and letting the child know that they are not alone and that someone cares. Play therapy can be conducted with an individual child and with a group of children.

The play therapy group would be structured in terms of time, goals, programme per session and participants; and it may be referred to as structured group therapy.

Play Therapy is:

- A means of establishing meaningful contact with the child
  A medium of observation
- A source of data
- A means of facilitating the child's exploration of self as well in relation to others, in particular significant others
- A device that promotes interpretative communication.

Play therapy is NOT for:

- Recreation, it is for the child to work on his or her problems
- Education - neither cognitively, socially, morally, etc.
- Therapist to be a playmate: rather therapist is a participant observer.

Who Can Run a Play Therapy Group?

- A professionally trained person like a social worker or a psychologist
- A teacher, lay counsellor or person who works with children and has received training on how to use play techniques/skills

Basic Functions of the Therapist: Characteristics of the Therapist:

- Participants observer
- Attempt to understand
- Attempt to communicate the meaning of child's play
- Thorough grounding in child development and experience in observation of normal and deviant children
- Knowledge of underlying theory
- Access to an experienced supervisor
- Sufficient maturity to empathise and not sympathise
- Able to regress into play without losing ability to observe and interpret.
- Able to endure affective pressure without loss of control
- Able to deal with provocation or seduction without being provoked or seduced
- Sufficient resolution of own childhood conflicts - should have dealt with own issues

After the children have gone home, the teachers sit together and discuss what they have observed about the children in their groups and difficulties they experienced. They then brainstorm possible solutions to the challenges that came up. If certain children were absent or identified as having special needs, the volunteers make plans to conduct home visits or arrange referrals.

4.5. Kids Clubs

.Kids Clubs should build support between the children and deal with basic life skills and emotions, and difficulties that are common to the group. It allows the following:

- For children to just 'be children' and to have fun
- Providing a safe place for children to be and express themselves

- To provide continuum of care
- A platform for youth leadership (can evolve through different levels of responsibility)
- Make children feel accepted within the community (social integration and sense of belonging), especially children who are facing difficult circumstances like HIV/AIDS
- Facilitate child growth/development
    - Understanding their emotions
    - Building resilience and coping skills
    - Building life skills
    - Allow children the opportunity to explore their talents and build self-knowledge and self-confidence
- Mechanism to 'check' on children, register needs and access additional emotional and physical support.
- Cultivating a culture of care of care (amongst children and families, in a community)

Who can run a Kids Club?

Anyone who cares about children and their well-being can run a Kids Club. It is advisable and advantages that this person receive training on how to run a Kids Club and basic skills for counselling children.

What makes a good kids club facilitator

- Understanding of importance of community ownership and mobilisation
- Understanding of children's needs, rights, safety, participation
- Someone who give consistently to the Kids Club
- Someone who is committed
- Skills (with a focus on facilitation skills)
- A facilitator does not need to have all the skills but needs to access those skills within the community

MODULE 5: BUILDING RESILIENCE IN CHILDREN

A. UNDERSTANDING THE CONCEPT OF RESILIENCE IN CHILDREN

Resilience is a person's ability to cope with difficulties and stresses of life and to emerge from them stronger than before, having learned something from the experience. It also refers to a person's ability to return to his former situation after having experienced a lengthy period of deprivation or stress. Resilience is not an inborn trait. Like the body's immune system, it is affected by our mood and the amount of help we receive from others.

B. RECOGNISING RESILIENCE IN CHILDREN

How could nurses and teachers recognise resilience in children?

Children have much strength that helps them cope with challenges and difficulties.

It is useful to identify the characteristics of a resilient child, which may include:

- Ability to ask for help
- Being positive, with hopes for the future
- Being able to set goals
- Puts effort into work
- Plays well with other children
- Looks clean, takes pride in appearance, is confident
- Takes responsibility and cares for siblings and family members
- Can deal with challenges and frustrations appropriately
- Continues with routines of life (school) despite difficulties

C. PROTECTIVE FACTORS FOR RESILIENCE DEVELOPMENT IN CHILDREN

What might help a child to develop resilience?

A close and secure relationship with a caregiver	A resilient child usually has a positive relationship with his caregiver. He feels safe and secure and enjoys his relationship with his caregiver.
A close relationship with the	A resilient child is usually close to other family

remaining family members	members if he loses his parent or primary caregiver. He feels close to his/her family and knows his place.
Education	A resilient child continues his/her education even after difficult situations or loss.
Close links to his or her community	A resilient child usually has strong links to his/her community. He/she is involved with neighbours and community activities and knows where he/she fits in.
A wide range of emotions	A resilient child is usually comfortable with a wide range of emotions. Resilient children are able to understand their own emotions and can express them in words and actions (e.g. able to say “I am angry” or “What you are doing irritates me”).
A good personal memory	A resilient child can usually recall positive relationships, moments of kindness, role models (for example teachers, parents) as well personal achievements of the past.
A sense of belonging	Resilient children know where they belong. They are grounded at home, in the community, in an organisation, and have a sense of their own culture. They are able to look for and find emotional support from other people, and are self-confident and also confident of the support of peers and caregivers. This support may change from time to time; it may not be provided by the same person over an extended period of time but may change.
Interest in others	A resilient child feels the need to help others. S/he has the feeling for the needs of others and is able to help.
A value and belief system	Resilient children know what is right and what is wrong. They have a sense of justice, and strong

	spiritual belief system that may include faith in any kind of transcendent being (one God, several Gods, the power of ancestors etc.). Some children will develop some sort of political or cultural ideology. Or may identify with certain cultural, political or religious leaders.

D. RESILIENCE CORE CHARACTERISTICS

What are the core characteristics of resilience?

Resilience core is made up of five essential characteristics which include

- Meaningful life (purpose)
- Perseverance
- Self-reliance
- Equanimity
- Coming home to yourself (existential aloneness)

Meaningful Life (Purpose)

Having a sense of one's own meaning or purpose in life is probably the most important characteristic of resilience, because it provides the foundation for the other four characteristics. Life without purpose is futile and aimless. It can be difficult to get up in the morning if there is no good reason to do so. Purpose provides the driving force in life. When we experience inevitable difficulties, our purpose pulls us forward. One may discover his/her purpose for life by asking questions such as:

1. What do I do that others value?
2. In what ways am I needed every day, and by whom?
3. What in my life has the most meaning?

Perseverance

The determination to keep going despite difficulties, discouragement, and disappointment is perseverance. Repeated failure or rejection (and the discouragement that follows) can

be formidable roadblocks in life which can prevent us from moving forward and attaining our goals. Resilient individuals are good at overcoming roadblocks. They tend to finish what they begin. Because of this, you can depend on them. If they say they are going to do something, they do it.

Resilience is the ability to bounce back when knocked down, and this takes perseverance. It is always tempting to give up, or take the easy path. It takes courage and emotional stamina to fight the good fight, and resilient people clearly demonstrate this ability. Establishing and adhering to a routine is one way to strengthen perseverance. Setting realistic goals and attaining them builds perseverance.

In order to understand one's level of perseverance, it is good to ask questions like:

- Do I finish what I begin?
- How often am I defeated before I even try?
- Do others say I give up too quickly?
- Am I able to stay focused on my goals, or am I easily distracted?

Equanimity

Some people dwell on disappointments, are weighed down with regrets, or tend to turn everything bad that happens in their life into a catastrophe. They have a skewed and 'out of balance' view of life. Equanimity means balance and harmony. Resilient people learn to avoid extreme responses and 'sit loose in the saddle.'

Resilient people understand that 'it is an ill wind that blows no good.' Life is neither all good nor all bad. People who respond with resilience recognise this and are open to many possibilities. This is one of the reasons resilient people are described as optimistic, because even when the situation looks doubtful, they are probably on the lookout for opportunities. To examine one's equanimity, the following questions may be asked:

- Do I see the glass as half-full or half-empty?
- Do I look back on my life with so many regrets that I find it difficult to move on
- Do I tend to create catastrophes from even the small things that happen in my life?
- Would my family and close friends describe me as an optimist or a pessimist?

Self-reliance

Self-reliance is a belief in oneself, with a clear understanding of one's capabilities and limitations. It comes from experience and the 'practice, practice, practice' that leads to confidence in your abilities. Throughout one's lifetime, we encounter challenges that we meet successfully. At other times, we fail. Self-reliant individuals have learned from these experiences and have developed many problem-solving skills. Furthermore, they use, adapt, strengthen, and refine these skills throughout life. This increases their self-reliance.

In order to understand one's own self-reliance, the following questions may be asked:

- Am I aware of all the things that I do well?
- Do others who know me well describe me as a capable person?
- Can I usually think through a problem and work out a good solution?
- Can I do what needs to be done in an emergency, or do I fall apart?

Coming Home to Yourself (Existential Aloneness)

While we all live in the world with other people, resilient individuals learn to live with themselves. They become their own best friends. This is what 'coming home to yourself' means. We must face alone much of what we face in life; if we are content with ourselves, this is easier. Coming home is a journey that begins with getting to know oneself well. Being existentially alone does not deny the importance of shared experiences, nor does it demean significant and close relationships with others. It does mean that you must accept yourself as you are, warts and all. Existential aloneness could be tested by asking questions such as:

- Am I willing to take a course of action that I know to be right, but which is unpopular with my peers?
- As I look back at my life, what sets me apart from everyone else?
- Am I comfortable with whom I have become?

E. Building Resilience in Children

Resilience can be cultured in children or destroyed**.** Adults can crush or impede resilience in children by not recognising or giving credit to their ability to understand, participate

and contribute. They give messages such as “You are still too small”, “You wouldn’t understand”, “You would not be able to deal with it”, “This is adult business not for children”, etc. Children need to become resilient – and they cannot do it alone. They need adults who know how to promote resilience.

How can nurses and teachers build resilience in children?

- Believe that children have strengths and can learn to identify these strengths and use them to manage stress
- Remember to interact with children according to their developmental stages so that we do not set them up for failure by giving responsibilities that are beyond their developmental stage
- Respect, appreciate, encourage and praise the child
- Ensure confidentiality and be clear to children about any issues you are obliged to report
- Remember that children can be very sensitive to certain issues
- Realise they may have different views from their guardians and from you
- Listen to what they are saying
- Encourage children to talk in groups and “one and one” and join them during these discussions
- Find an environment in which the children are comfortable
- Use/allow children to share personal examples or stories of peers
- Keep an open mind because some of their solutions might sound trivial to an adult but may work very well for children
- Set an example when there are problems. Learn and model behaviour that shows good stress management

How can Nurses or Teachers destroy resilience in children?

- Only see child’s weaknesses and negative circumstances
- Belittle and disrespect them
- Share their story with other people
- Share your opinions rather than listening

- Solve their problems yourself
- Close-mindedness

MODULE 6: CARE OF THE CAREGIVERS

In order for children to flourish, it is important that their immediate caregivers receive support as well. Often caregivers are overwhelmed by caring for children, particularly if the caregivers are older and have many grandchildren to care for. Although they are doing their best, caregivers may suffer from "burn out" or being exhausted by trying to meet the varied needs of many children when they have limited resources. Nurses and Teachers who work with vulnerable children will inevitably be caring for the caregivers as well.

Some signs of "burnout" in a caregiver include:

- Caregiver does not make an effort to ensure that children are going to school
- Caregiver is frequently very angry and harsh with the children
- Caregiver seems to pay no attention to the children

Some ways that a volunteer can help to "care for the caregiver" include:

- Visiting and talking with the caregiver
- Being a good listener and perhaps helping with problem solving
- Involving caregivers in community activities
- Making sure caregivers are aware of any local support and help services that are available to them
- Organising caregiver support groups. Caregiver support groups provide help from peers through discussions of problems and solutions for children's issues, and usually become a source of practical

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APPENDIX XII
RESILIENCE TRAINING MANUAL FOR ORPHANS AND VULNERABLE CHILDREN

INTRODUCTION

This intervention package is designed to enhance resilience skills among Orphans and Vulnerable Children (OVC) in the study setting. The package is structured in a way to improve knowledge of resilience and skills in core characteristics of resilience – Equanimity, Meaning, Perseverance, Self-reliance and Existential Aloneness. The package makes use of autobiography of legends, songs that promote resilience, lecture, discussions and brainstorming. The training manual was developed by the researcher using materials and literatures on core resilience activities by Wagnild (2009).

Procedure for intervention

The facilitators (nurses/teacher) introduce themselves to the children and the children also introduce themselves to the trainer through an icebreaker.

Ask each student to take a sheet of paper. Draw a picture of him/her; put his/her names, strength as individual and weaknesses. Student in pairs should exchange what they have and should make presentation to the larger group. Student should paste this on the wall for revision at the end of the presentations.

After the presentations, the lead trainer should provide an overview of the intervention schedules. Ground rules should be determined by the student and pasted on the wall to guide the conduct of the training.

Energiser: Relaxation therapy should be done in between the training sessions.

Learning Objectives

By the end of this training, learners will be able to:

1. Define perseverance and relate it to life experiences
2. Appreciate what it mean to have a sense of purpose
3. Explain what balance and harmony mean
4. Describe the uniqueness of "self" in facing life challenges
5. Know the importance of self-reliance in dealing with life challenges

TRAINING ACTIVITIES

ACTIVITY 1. TRAINING ON PERSEVERANCE

Step 1: Trainer should ask what perseverance means (brainstorming).

Step 2: Trainer to write the different definitions provided on the flipchart board

Step3: Present the definition of perseverance as follows:

"Perseverance is being purposeful and steadfast. It is sticking to something, staying committed, no matter how long it takes or what obstacles appear to stop you… When you are committed to a task, pace yourself, and be persistent, doing it step-by-step."

Step 4: Divide students into 4 groups

Step 5: Each group should have autobiography of the different legends

Step 5: Provide the following questions for discussion in the group

- What are the personal virtues in the legend's life that assist him to achieve his goal?
- What are the external factors or resources that assist him/her to achieve his/her goal?

Step 7: Ask each group to write their responses on the flip chart.

Step 8: Ask student to go back to their sit and reflect on these questions individually

1. What "personal goal" do I plan to achieve this year?
2. Am I able to stay focused on my goals or am I easily distracted?
3. How will I set my goals so I can persevere and do things step by step?
4. What other virtues will help me to persevere when things get tough?
5. Do people say I give up too quickly?

Step 9: Ask the children to summarise their answer to each question on a sit of paper

Step 10: Sample the answers to the questions from few students and ask them to submit their responses to the trainer at the end of the session.

Trainer should round up by the word of Marie Curie that, "Life is not easy for anyone. But we must have perseverance and above all confidence in ourselves. We must believe that we are gifted for something and that this thing must be attained". All people on earth could be what they want to be if they are committed to the course that can take them to

their desired goal. We understand that many of us here have challenges that may want to affect our achievement of future goal because of our situation but we have been able to review the autobiographies of some people that even have it tougher than what we are going through now and was able to attain their desired goal. For example, you want to be a lawyer like Afe Babalola, you can make up your mind to be so by studying hard and avoiding things that will distract you from this goal.

Trainers should review the personal questions by telling the students that it is good to stay focus on one's goal so that one can achieve it and that it is not too good for people to say to us that we gave up too quickly. People who give up too quickly may have difficulty achieving their goals in life.

Repeated failure or rejection (and the discouragement that follows) can be formidable roadblocks in life. They can prevent us from moving forward and attaining our goals. Resilient individuals are good at overcoming roadblocks. They tend to finish what they begin. Because of this, you can depend on them. If they say they are going to do something, they do it.

Resilience is the ability to bounce back when knocked down, and this takes perseverance. It is always tempting to give up, or take the easy path. It takes courage and emotional stamina to fight the good fight, and resilient people clearly demonstrate this ability. Establishing and adhering to a routine is one way to strengthen perseverance. Setting realistic goals and attaining them builds perseverance.

ACTIVITY 2: TRAINING ON MEANINGFUL LIFE (PURPOSE)

Step 1: Ask the children about what it means to have a sense of purpose (Meaningful Life) – Brainstorming.

Step 2: Write this on the flip chart paper

Step 3: Ask the children why it is good to have a sense of purpose? Also write this on the flip chart paper

Step 4: Summarise by saying that:

Having a sense of one's own meaning or purpose in life is the most important characteristic of resilience. Life without purpose is futile and aimless. It will be difficult for the children to become great in life or attain their dream if there is no purpose that drives their course in life.

Step 5: Ask the children to go into their previous group and identify ways of developing a Meaningful life

Step 6: Ask each group to write on the flip chart and make presentation to the larger group.

Step 7: The trainer should summarise the session as follows:

Purpose provides the driving force in life. When we experience inevitable difficulties, such as our different status of not having parents or coming from a very poor home, our purpose pulls us forward. Nobody can be somebody in life without a sense of purpose or meaning for life. If you do not see anything good about life, you will not strive to be a better person in the future. The trainer should then discuss the underlisted tips on good habits that is needed to be successful in life. Practising these habits can assist children to get ahead in life.

1. Get on a good schedule.

We need structure and routine in our lives. Our bodies expect it. They perform best when we operate on a regular schedule. We especially need to eat and sleep about the same time each day. This routine stays with a person their whole life and helps them to develop good work habits. Find a schedule that works for you and stick to it!

2. Eat a healthy diet.

Our brains need the right food to perform at their peak. Don't go to school on an empty stomach. Students need to train themselves early to eat an adequate and healthy diet. Even though you are from a poor home, sometimes you are given stipends for school meal, instead of eating junks you can use the money to buy meal in the school that will help you better than taking junks. We tend to carry the habits we learn when we are young forward with us for most of our lives. Learning to eat right now can avoid many health issues down the road.

3. Learn to exercise.

We need physical activity to stay healthy. The benefits of regular exercise are well documented. We need to find exercise routines that are fun and match our individual tastes. Developing a good exercise routine is a habit that will increase both the quantity and quality of your life.

4. Practice gratitude.

It is so easy to get in the bad habit of envying what others have. The grass often seems greener on the other side of the fence. It is vitally important to learn gratitude. Practice thinking about the things you have to be thankful about.

5. Develop good study habits.

Studying effectively is a skill. People that live lives to the fullest are lifelong learners. They never stop trying new things. One needs to study and gather new knowledge in an effective and efficient manner. Learning how to study and acquire the knowledge to succeed doesn't just occur naturally. It needs to be taught. Take a study skills course or ask others for tips on improving your study habits.

6. Never give up!

I remember being told in school that, "Winners never quit and quitters never win." I think this is a Vince Lombardi quote and it is certainly true. It takes perseverance in life to enjoy any kind of success. I also remember hearing, "When the going gets tough, the tough get going." These sayings come back to me time and again when I feel like giving up. Perseverance is a habit. It is one that can be developed just like any other.

7. Manage money wisely.

Why don't they teach a good personal finance class in school? Students need to learn to earn, save, budget, track, and wisely spend money to be successful in life. Good money habits can never start too early. There are a lot of good resources out there to help.

8. Respect the environment.

It seems to be hip to be "green", but being a good steward of our environment is really not that new. Wise parents have been teaching these principles to their children for ages. We only have this one world and we depend on it for our survival. Every person needs to

do their part to protect what we have. Develop habits now that will help you to be a good environmental citizen for a lifetime!

9. Strive for excellence!

Why do a job if you aren't going to do it right? We need to develop the habit of giving every task our best effort. Excellence should be the standard we strive for in all we do. We can't start letting ourselves do the least possible to get by. If we do, then we are going to receive less than the best results from our work. Teaching excellence now will ensure habits for success will carry forward.

10. Live the Golden Rule.

"Do unto others…" is a guideline we should all follow. Think of the conflict and tragedy that could have been avoided if people simply applied the Golden Rule in all their relationships. If we make this a habit, then we will find a lot more success in life. Respecting people of all races and beliefs is a hallmark of living life to the fullest.

11. Practice good hygiene.

You really can dress for success! Habits like brushing your teeth twice a day and washing your hands regularly not only contribute to health, but also lead to routines that give one a sharper appearance. First impressions are powerful and are mostly derived from the way a person looks. Like it or not this is true. Start today to ensure you do what it takes to leave a lasting good impression.

12. Always tell the truth!

The truth often comes out whether we want it to or not. Lying generally just complicates the situation and makes us look bad. Look at the scandals many of our politicians fall into because they fail to admit the truth. It is much better to just develop the habit of telling the truth even when it is difficult. This will save you a lot of heartache and misery in life.

13. Ask for what you want.

Develop the habit of asking for what you want. How else are you going to get it? It is really that simple. Often, when I ask, I am amazed at how quickly I get exactly what I wanted. Just give this one a try. As children ask your parents or significant others for

what you want. This is truly a behavior you want to come naturally. It will build confidence and self-esteem that will serve you forever!

14. Be a regular reader.

Being a good reader is a skill that often separates the good students from those that struggle. Becoming a good reader takes practice. The more you read, the better you get. Reading has numerous benefits. It builds one's vocabulary, expands the imagination, and rekindles creativity. Make reading a routine!

15. Be punctual.

Arriving on time is important to one's success. People always notice when you are late. It is an indicator of whether you mean what you say and can be trusted. Create the habit of being punctual now and you won't have to worry.

16. Respect authority.

Failure to respect those in authority positions can lead to all kinds of problems in life. It doesn't matter whether it is parent, guardian, teacher, or older adult around you. People in authority have a job to do and often worked hard to get into the position they are in. They deserve to be treated with proper manners and reverence. Learning to say, "Yes ma'am" and "Yes sir" will get you noticed in a positive way.

17. Tend to your spiritual needs.

We cannot ignore our spiritual needs and truly live a full and rewarding life. We must recognise that there is a higher power and pursue our faith regularly. We may not exercise our beliefs in exactly the same way, but I encourage you to find what works for you and explore it to its depths. A solid spiritual life will serve you well.

Good habits developed now will last a lifetime! These are good habits you want to set in concrete now. The quicker you make these habits that you live by, the better life you will experience.

Trainer should print this list and give to the children. During each meeting (Club-children should be reminded of these habits.

Source:http://mysuperchargedlife.com/blog/back-to-school-17-good-habits-for-a-successful-life/

ACTIVITY 3. TRAINING ON BALANCE AND HARMONY (EQUANIMITY)

Step 1: Ask the children to go back into group

Step 2: Children are to review the autobiography of the legends again

Step 3: Ask children to identify areas where the legends faced difficult situations and identify how they perceive it to move forward

Step 4: Children should write this on a flip chart in their different group.

Step 5: Children should exchange what they have with the other group

Step 6: The trainer should then use one of the legends autobiography to summarise the session using the note below

Explain to children that life is full of both good and bad for everyone. When people fail or experience difficult situation, they should explore it to bring out the best in them. It is not good enough to capitalise on one's failure and refuse to move forward. Resilient children will accept that life is neither all good nor all bad. This is one of the reasons why resilient children are described as optimistic because even when the situation looks doubtful, they are probably on the look out for opportunities. Children should not allow disappointments and failure to weigh them down. ***Equanimity means balance and harmony***. In the face of difficult situations, you must learn to maintain balance and harmony with everyone.

Step 5: Ask children to reflect on the questions below to assess themselves if they possess equanimity.

1. Do I look back on my life with so many regrets that I find it difficult to move on?
2. Do I tend to create catastrophes from even the small things that happen in my life
3. Would my family and close friends describe me as an optimist or a pessimist?

ACTIVITY 4: TRAINING ON BEING ONESELF (EXISTENTIAL ALONENESS)

Step 1: Give the children a sheet of paper and a pencil

Step 2: Ask the children to draw a nice picture of themselves with focus on their strengths and weaknesses as a person (Tell the children that the picture must reflect their strengths and weaknesses)

Step 3: Ask the children to list out these strengths and weaknesses at the back of the sheet

Step 4: Ask the children in pair to share their picture with each other. (The other partner should look at the picture and guess the strength and weakness of the other by merely looking at the picture)

Step 5: Ask the partner to say it to the other and then compare what they have said with what is written at the back of the sheet

Step 6: Ask the children to return the picture back to the owner

Step 7: Ask each of them to look at what they have drawn and written and see if they are happy about whom they think they are (Tell the children that they need to be sincere with themselves) - children should write happy/unhappy on their sheets

Step 8: Ask them if they think there are things they need to change or do that they have not done that can make them to be the real person that they really desire to be.

Step 9: Ask them to share their pictures and write up with their friends and explore the differences between what they are and their friends

Step 10: Ask the children the under listed questions to test their existential aloneness and tell them to write the answers on a piece of paper:

- Am I willing to take a course of action that I know to be right, but which is unpopular with my peers?
- As I look back at my life, what sets me apart from everyone else?
- Am I comfortable with whom I have become?

Step 11: Ask few of the children to share what they have written with the larger group

Step 12: In a larger group, ask the children to tell you the lessons they have learnt from this exercise

The trainer should round up by saying that each person is unique on his/her own and have unique characteristics for different assignments for the future. The courage to be oneself is known as existential aloneness. While we all live in the world with other people,

resilient individuals learn to live with themselves. They become their own best friends. This is what 'coming home to yourself' means. We must face alone much of what we face in life; if we are content with ourselves, this is easier. Coming home is a journey that begins with getting to know oneself well. Being existentially alone does not deny the importance of shared experiences, nor does it demean significant and close relationships with others. It does mean that you must accept yourself as you are.

Most of people are ordinary people going about ordinary lives, but each person is unique. We have much to contribute to the world around us. Many people fail to recognise this about themselves and are filled with despair. A resilient individual will recognise his or her own worth.

Resilient people will also realise that they are in a class of their own and do not feel a pressure to conform. They are able to 'go it alone' if necessary.

ACTIVITY 5: TRAINING ON SELF-RELIANCE

Step 1: The facilitator should try to make a fan using a cardboard/A4 paper while the children are watching.

Step 2: The facilitator should repeat this exercise until all the children have watched the demonstration

Step 3: Ask the children to take a sheet of paper and practice it on their own without looking at anyone

Step 4: Ask children to aspire to do it better than their trainer and also to be creative about it

Step 5: Provide all the necessary materials that the children can use for this exercise (clip, paper tape, cello tape, safety pin, ribbon etc)

Step 6: Leave the children for about 10 minutes to do this

Step 7: Ask the children to display what they have on their table

Step 8: Ask the children that have difficulties at start up to raise up their hands and tell the larger group how they were able to overcome the difficulties and still able to do it.

Step 9: To test the children’s self-reliance, ask the following question and tell them to write the answer on a sheet of paper

- Am I aware of all the things that I do well?

- Do others who know me well describe me as a capable person?
- Can I usually think through a problem and work out a good solution?
- Can I do what needs to be done in an emergency, or do I fall apart?

Step 10: Ask the children to tell you the lessons that they learnt from the exercise and write this on the flip chart paper

Summarise the session by saying that self-reliance is a belief in oneself, with a clear understanding of one's capabilities and limitations. It comes from experience and the 'practice, practice, practice' that leads to confidence in your abilities. Throughout one's lifetime, we encounter challenges that we meet successfully. At other times, we fail. Self-reliant individuals have learned from these experiences and have developed many problem-solving skills. Furthermore, they use, adapt, strengthen, and refine these skills throughout life. This increases their self-reliance.

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APPENDIX XIII

SUMMARY OF TRAINING MANUAL ON

LIFE SKILLS EDUCATION FOR VULNERABLE SCHOOL CHILDREN

This Manual was adapted from Life Skills Education tool kit for OVC developed by Family Health International India in collaboration with the National AIDS Control Organization. The first six modules of the manual were relevant to this study because it focused on the core life skills. The manual is available online at www.fhi360.org/NR/rdonlyres/edfce6xfgy3q. Activities selected from each of the module to teach life skills are as stated in the table on pages 267-271.

The life skills training is based on the construct that if children and young people are provided with the opportunity to learn skills in a supportive environment, they can confidently manage their lives in a positive manner while serving as valuable resources to their friends, family and society at large.

Objectives of Life Skills Training

By the end of the training, participants would be able to:

- Take positive health choices
- Make informed decisions
- Practice healthy behaviour that promote coping with stress and emotions
- Recognise and avoid situations and behavioUr that are likely to pose health risks.
- Facilitate relationship that can assist them to cope well with stressful events
- Express and manage their feelings
-

What are Life Skills?

Life skills refer to a large group of psychosocial and interpersonal skills that promotes mental well-being and that leads to a healthy and productive life. Health is defined as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Life skill has been defined by World health Organization (WHO,

1993) as the abilities for adaptive and positive behaviour that enable individual to deal effectively with the demands and challenges of everyday life.

The core set of life skills for the promotion of well-being of children and adolescents are problem solving, decision making including goal setting, critical thinking, creative thinking including value clarification, communication skills, interpersonal skills including assertiveness, self-awareness, empathy, coping with stress and coping with emotions. A life-skills educational programme is often tailored to address varied needs of different population of children depending on the risk that they are exposed to. For vulnerable children such as orphans and vulnerable children, life skills are essential to reduce risk and cope with threatening and difficult situations. These children need to learn how to cope with various emotions accompanied with loss, poverty or family separations. The training manual consists of six modules as shown in the table below.

TRAINING MODULE OVERVIEW FOR THE PEER SUPPORT GROUP

MODULE	OBJECTIVES	SESSION	ACTIVITIES	LIFE SKILLS LEARNED/OUTCOME
1. Getting Started	• Make rules for the group • Identify and clarify expectations about the training	Session 1.1. Rules and Expectations	• Making ground rules • Our expectations	Self- awareness, critical thinking and communication
	• Develop a sense of trust so that personal growth takes place • Understand how some statements can hurt others • Learn how to speak positively and support one another	Session 1.2. Trust and Support	• Only positive thoughts allowed	Empathy, communication and critical thinking

2. Getting to Know Each Other	• Identify child's own strength: what the child is good at and what positive qualities he/she have • Get feedback from their friends in the group about their positive qualities • Say why they are happy to be a boy or a girl • Learn to protect themselves from any negative remarks about themselves • Decide what quality or skill they would like to strengthen	2.1. I Am Special, My Abilities, My Skills	• I love myself	Self-awareness, critical thinking and communication
	• Identify and share some of their values • Understand that many intangible things have more value than material and tangible things • Examine the relationship between values and behaviour	2.2. My Beliefs and Values	• I want, I need	Self-awareness, critical thinking, communication and decision making
	• Discuss the ups and downs in their lives • Identify their hopes for the future	2.3. My Life	• My river of life	

3. Communication	• Learn to listen attentively • Understand that children communicate both verbally and non-verbally • Learn that verbal and non-verbal behaviour need to convey the same message	3.1. We Speak with our Bodies	• Act and meet • choosing whom to talk to	Self-awareness, communication, critical thinking, interpersonal skills
	• Learn how behaviours that are aggressive or passive can make a child vulnerable • Learn assertive skills that reduce vulnerability • Learn that assertiveness is essential to communicate in a way that explains what you want to say in a clear manner without being aggressive or passive	3.2. Effective Communication	• Passive, Aggressive or Assertive • " I and You: Using "I fell" statement	Critical thinking, communication, decision making, interpersonal skills
4. Relationship	• Understand that the relationships of love include parents, brothers and sisters' friends and peers. • Learn that love can be expressed in many ways by caring and helping • Understand the difference between a good and a bad friend • Learn that abuse can be emotional, social and physical	3.1. Network of Relationship	Relationship Maps My Best Friend Hotline My family and Me I belong to a community	Self -awareness, communication, critical thinking and solving problems

	• Understand that give and take in any relationship is important			
	• Understand that different perceptions of the same situation may lead to conflict • Have better self awareness regarding individual responses to conflict situation • Communicate and manage strong emotions that contribute to managing conflict • Learn positive conflict resolution methods • Learn that creative ways of solving conflict lead to win-win situation	3.3. Conflict and Negotiation	Different perspectives: This and That Responses to conflict	Critical thinking, coping with feelings, self awareness, empathy, problem-solving and creative thinking.
5. Decision Making	• Identify why problems occur and what steps can be taken to solve them • Learn to choose the most appropriate situation by analysing possible consequences	5.1. Solving Problems	What Should I do? Problems and Solutions	Critical thinking, creative thinking, problem-solving and decision-making

	• Understand how children unknowing convince themselves not to change • Understand that children are the only ones who can take control of their lives and be responsible for them.	5.2. We can change Behaviour	Open Door, Closed Door	Self-awareness, critical thinking, and decision making
6. Coping with Emotions	• Identify and express feelings • Understand that feelings can be expressed both verbally and non-verbally • Understand that it is normal for feelings to change and they can change in intensity • Learn that young people share many emotions	6.1. Understanding feelings	Pass the feeling Rainbow and Clouds Mix and match feelings	Coping with stress, coping with emotions, critical thinking, problem-solving, interpersonal skills

APPENDIX XIV

SUMMARY OF FOCUS GROUP DISCUSSION FINDINGS

Orphans and vulnerable children were selected from three schools in Ife North Local Government area for a focus group discussion. A total of fifty-four (54) OVC participated in the discussion.

Purpose of Interview: To enhance instrument fidelity and understanding of the phenomenon to be studied on a larger scale which include resilience and psychosocial health.

Demographic characteristics of participants

	Male		Female		Total (%)
	N	%	N	%	
School A	4	21.1	15	78.9	19 (35.2)
School B	7	36.8	12	63.2	19 (35.2)
School C	7	43.8	9	56.3	16 (29.6)
Total	18	33.3	36	66.7	54 (100.0%)

Children conceptualisation of who a vulnerable child is:

During discussion with the different groups, seven items were mentioned by the children as stated below:

Definition of Vulnerable Child	**School A**	**School B**	**School C**
Children who has no parents	+	+	+
Children who have no helpers	+	+	+
Children who have parents but whose parents cannot meet their basic needs	+	+	+
Children who lack basic things like books , money for feeding,	+	-	+

Children who has a father but has no mother	+	-	-
A child who lack parental care and upbringing and protection	+	+	+
Children who engage in bad behaviour	+	-	-

+ = mentioned in the group; - = not mentioned in the group

One of the respondents explained why a child who has no mother but a father is still a vulnerable child.

"Mother is more caring than the father. Many fathers are not responsible. For example I have a father but I would rather say it is better for me not to have him so that people can be of help to me. My father is not a loving person and this makes me sad all the time. He does not care about what we eat, wear or how we go to school. But he will always get money to drink Ogogoro"

What do the Children need to grow well in this environment

What children need to grow well	**School A**	**School B**	**School C**
We need our parents to guide us	+	+	+
Good food	+	+	+
Continuous counselling from elders to learn how to behave well	+	+	+
Support from each other	+	+	+
Information on where to get help when we have problems	-	+	-
God	+	+	+
Prompt care when we are sick	+	+	+
Someone to confide in	+	+	+
Our parent need money to take good care of us	+	+	+

+ = mentioned in the group; - = not mentioned in the group

How do you describe someone who grew up well in this environment despite many problems:

One of the children stated and I quote:

"*The person could be described as someone who can endure difficulties. The person is not weighed down by many problems but he tries to move ahead. An example is our current governor who was not discouraged in life coming from a very poor background but he was able to rise to one of the highest position in the state. This is why he bought us school uniform because he has been through the situation before*"

Another participant stated that this kind of person is referred to in the local language as "omo to ni Ifayaran". I mean a child who can endure. I must tell you ma, it is very difficult most especially with me. Many times I feel so sad and depressed when I cannot get what others have simply because I am from a poor home. But I am still trying hard to stay in school. That is perseverance.

What do you do when you face difficulties?

Majorly, participants in the discussion will do the following when they are faced with difficulties

"*I am a positive thinker and I believe that the problem will soon pass"*

"I discuss with people around me"

"I cried a lot and my grandmother too will be crying, thereafter we will both pray to God to help us"

" I keep to myself and watch things the way they are"

" I pray "

One of the children shared a story of a boy who grew up well in the community despite facing many challenges

"XX (name withheld) use to stay with his grandmother. He used to be one of the students in this school. His both parents have died and the grandmother had been very ill not being able to stay out of bed. He was the one caring for the grandmother through the manual labour he usually engaged in after school. But many times I am surprise that despite this trouble, he is still one of the happiest people and best students in the class. I tried to ask him what was responsible; he told me that he trusted God, prays always,

hope in the future and at the same time study very well to pass his exam. He however said that his grandmother has been a great source of encouragement to him and that she made him to feel that he can be somebody great in life.

What are the things most challenging to growing up well in this environment

Challenges to growing up well	**School A**	**School B**	**School C**
Lack of responsible father	+	+	+
No emotional support from anyone including teachers	+	+	+
The community is not supportive for the care of poor children	+	+	-
Hunger	+	+	+
Lack of encouragement during difficult times e.g. hunger	+	+	-
Maltreatment from step-mother	+	+	+

+ = mentioned in the group; - = not mentioned in the group

One of the children further explained and stated that:

"*Most challenging issue for me now is my irresponsible father. How would people assist me when my father is still alive? It is better for him not to be alive so that the doors of help can be opened to me. Ask many of my teachers, I usually come to school with empty stomach. Some of them who knew what I am facing do buy me food sometimes. How do I concentrate or learn in this situation when I am not always happy and go hungry almost every time"*

Children were asked on what does it mean to be resilience, main responses from the discuss are"

- *To persevere*
- *To be hardworking*
- *To remain emotionally stable in the midst of problem*

- *People who are resilient always look at the positive side of their experiences and turn it to strength.*
- *To be confident all the time*
- *A resilience person is not timid.*
- *A resilient person will confidently ask for help when he /she needs it*
- *Being resilient mean being hopeful even when things are going on the contrary*
- *It is the ability to think positively and to be able to live independent life*
- *A resilient child will focus on her education even when things seem not to be working well.*

One of the children shared a story about how she was able to overcome challenges

"I am YY (name withheld) and I must say that I did not grow up to know any of my parents. I am currently a househelp in one of the houses in this community. My mistress is not treating me well. She always call me names and that make me sad almost all the time. When I could no longer bear it, I confided in one of my teachers. She counsels me that what I am going through will only make me stronger at the end. Each time I am sad, I always tell her and she counsels me well. She even taught me to love her despite her behaviour so that I can have my education. What I am trying to say is that it is good to have someone you can run to and you know the person will always be there for you".

Being healthy to the children mean the following

- *Being strong physically to carry out what I always do on a daily basis*
- *Being happy all the time*
- *Ability to sleep well*
- *Not falling sick often*
- *Relating well with relatives and friends*

According to the children, to be psychologically healthy mean

- *Having a good thought in one's mind.*
- *Thinking right about oneself*
- *Having good feelings about oneself*
- *Having positive feelings about one's achievement*
- *It involves ability to make oneself happy at all times*
- *Keeping away from worries*
- *Not having suicidal tendencies*

The underlisted were mentioned by the children as a sign of being socially healthy mean :

- *Ability to relate well with people who include friends, neighbours and parents.*
- *It also entails being cheerful and respectful.*
- *A child who relate well can be easily helped by the people.*

Psychosocial problems being experience by some of the children are as stated below:

"Sometimes the thought of harming myself and others comes to my mind often most especially when my stepmother beat me and refuses to give me food"

"I always feel depressed sometimes when I cannot get what I want e.g. books, cloth, food. In fact, I have left school on a particular day because I don't understand what my teacher was talking about. I was so sad and lost interest in everything"

"Currently I am scared that Boko Haram will come one day to kill everyone"

"*Sometimes I feel so lonely and distur*bed for reason that I cannot even explain"

What do others do to keep healthy psychologically and socially?

"Most of my friends go to one place (I don't want to mention the name because they told me not tell anyone). They told me that they use to give them food, and clothing materials. Also, they meet monthly for support group. But is rather unfortunate that my father warned me not to go there."

"*Faith in the Almighty God is what is sustaining many of us"*

"Some of us beg our friends and teachers for assistance"

APPENDIX XV: OTHER TRAINING MATERIALS

1. AUTOBIOGRAPHIES OF LEGENDS USED FOR RESILIENCE TRAINING

ABRAHAM LINCOLN

On February 12, 1809 the 16th President of the United States was born in a log cabin in Hardin County, Kentucky. It is unlikely that his uneducated farming father, Thomas Lincoln, or his mother Nancy Hanks Lincoln had any idea that their first-born son (he had an older sister, Sarah) would eventually be considered by many historians as the greatest US president ever. Abraham's birth may have been largely uneventful but as with all of us his environment and family began to shape his life.

Although Thomas Lincoln, Abraham's father was largely uneducated, he was a respected member of the Kentucky community and had purchased his own land. Thomas was a religious Baptist and was outspoken in his beliefs against slavery. While this humanistic anti-slavery attitude influenced Abraham from birth, he did not share in his father's religious beliefs. It is believed that a combination of Thomas's refusal to support slavery *and an increasing amount of debt led to the family* leaving Abraham's birthplace in 1816 (Abraham was 7 years old) to what is now known as Spencer County in Indiana.

Before Abraham Lincoln's 10th birthday he had lost 2 family members. Two years later Abraham's mother Nancy died from 'milk sickness'. He had also had a younger brother who died in infancy. Abraham Lincoln soon had a new stepmother, Sarah Bush Johnston. Apparently the young Abraham (Abe) was fond of her as she was of him. *Abraham Lincoln's education consisted of little more than a total of 18 months throughout his early life, and was mostly from itinerant teachers. This did not stop young Abraham Lincoln thirsting for knowledge though. He was an avid reader and borrowed books from neighbors at every opportunity*.

In 1830 the family moved again and Abraham was in Illinois helping his father build a new log cabin, clearing land and planting crops. By the end of a year that saw his family all ill, the young Abraham was ready to launch out into the world alone. It is said that witnessing a slave auction on a trip to New Orleans may have had a great impact on his

life. *Abraham Lincoln's life was at times filled with grief and sadness but it was also filled with greatnes*s. Abraham from childhood was aware of his world and of values such as honesty and fairness.

Even though Abraham was raised by his step-mother, he was not discouraged about life. He failed several times in his lifetime. Even when he grew up, he failed in several attempts to become a leader in the USA, but he did not lose hope and he later became one of the best presidents of the United State of America. He therefore defined success as moving from failure to failure without losing hope until you achieve your goals.

CHIEF AFE BABALOLA

Afe Babalola had a rustic beginning as he grew up on the far. Afe's date of birth was a matter of conjectures. The author had this to say on the uncertainty of the exact date of his birth: My parents could not tell me the exact date when I was born. This was because both parents could neither read nor write. However my mother told me that the daughter of a distant relation who was a lay reader in a new church about a mile from our house was about a year older. She was born sometime in 1930. It is therefore reasonable to suggest that I was born late in 1930 or about 1931. For reasons of the distance from the home to the farm, which was put at about eight miles, Afe said "... we often had to stay at the farm for about 3 months at a time. We usually came home to participate in annual festivals like Ogun or Egungun".

Afe was indeed proud of his humble beginning. Hear him, "Life on the farm was to me the best and most pleasant thing in life." An idea of the young Afe can be captured from his description of his childhood years: As a boy I did not wear clothes on the farm. My father never wore shoes or slippers throughout his life. It was not unusual... It was therefore not surprising that throughout my life on the farm and until I completed my education in the prestigious Emmanuel School, Ado-Ekiti, after Standard VI Certificate, I had no shoes or slippers. It was when I started to work as a pupil teacher that my mother bought me my first shoes. It was a pair of white canvass shoes, which I wore only on

Sundays to church. I was about I6 years of age then".

Afe and parents slept on banana leaves and were usually bitten by insects. Jiga, which live under it and lice, were, never far from the family. But the rugged life on the farm notwithstanding, "It was a matter of regret when my father decided to withdraw me from the farm to attend school". "Life on the farm was very simple. Water was taken from small pools on the rocky hills or from springs from the valleys. We made fire by knocking the blunt edge of a cutlass on a stone". As a toddler, Afe loved hunting and he got involved in numerous hunting expeditions, some of which almost proved fatal. One experience, which was recorded in greater detail, was this: "*I mistakenly applied my sharp cutlass which unfortunately cut the left hand of my brother. The deep cut almost, went through the hand... My father quickly went to his Cocoa farm, collected some leaves, squeezed them together and sprinkled the extracted liquid on the wound, lied it with another leave. After about two months, the wound was completely healed".*

It would not be an exaggeration to say that Afe's father was conversant with native medical knowledge. But an account of one hunting episode, which almost claimed his life.. On this particular day, Afe had all encounter with a tiger that had been trapped but not yet dead. He was frightened and had to run to the hut invite his father's attention who used tradition medicine to kill the tiger. His father then informed him that he had just narrowly escaped being attacked and killed by a tiger.

The young Afe was stubborn as a schoolboy. He himself admitted that “I have several scars over my body which bears testimony to the wounds I received from teachers' canes”. His stubbornness notwithstanding, Afe was an exceptionally brilliant chap. Though, Afe may not be the best in his class but was certainly one of the best. He completed his primary school in 1945 at the age of 14 and had the privilege of proceeding to class III in Christ School because of his exceptional performance. *But rivalry between Afe's mother and a co-wife inherited by his father through widowhood inheritance prevented him from going to Christ School. The woman had insisted that the amount,*

which Afe required for his school fees, must be given to her son as well.

Afe was an extremely sensitive person especially when it comes to feelings of relative deprivation. The feeling and realization that his life ambition was being frustrated saw him into voting with his legs and departed Ado-Ekiti to Ibadan. Thus he said "The main reason while I left Ado-Ekiti was that my colleagues at the elementary school who were then in class II or III in Christ School used to visit me on Saturdays in our teachers' lodge. They would eat my food and discuss with pride the new subjects being taught them in school. Little did they know that after their departure, I would be downcast. This was one major reason why I decided to leave Ekiti".

Treading the Legal Path, Afe read at home for his LL. D. Examination or the University of London and had admission to read law in London.. Afe had all along aspired to be a great lawyer and his role model was Olu Ayoola "who had the largest number of lawyers in the country that time." Moreover, his name and achievement inspired me. I hoped and dreamt of being a great lawyer like him."

Afe's humble beginning and gentle rise to the top should make those who always plan big in life to be cautious. Apart from hard work however, truthfulness, commitment and sincerity were the hallmarks of Afe's legal practice. Afe confessed, from his experiences, that those from humble background often do better whereas those from rich homes were usually lazy.

MOTHER THERESA

Mother Teresa was the youngest child of Nikola and Drane Bojaxhiu and was originally named 'Agnes Gonxha Bojaxhiu Ans'. Agnes received her first communion at the age of five. From her childhood, she attended prayers and devoted herself in the worship of the Almighty. When Agnes was eight years old, her father died, because of which, the family faced financial crisis. Drane Bojaxhiu, then, assumed the dual role - of being a mother

and a father - and helped her children develop a good character. Under the influence and guidance of her mother and a priest, Agnes decided to carry out missionary work.

Agnes decided to become a Catholic nun, in order to do missionary work and spread the message of love and compassion in the world. In 1928, she became a Catholic nun and changed her name from Agnes Gonxha Bojaxhiu to Teresa. Later on, she joined the Irish order 'The Sisters of Loretto'. In order to carry out missionary work in India, she was sent to Calcutta on 6th January 1929, where she was appointed as a teacher at St. Mary's High School. Sister Teresa became Mother Teresa on 24th May 1937, when she made final Profession of Vows to become the 'Spouse of Jesus for Eternity'. She continued to work as a teacher. In 1944, she was made the Principal of the school.

Mother Teresa taught at St. Mary's High School from 1931 to 1948. The condition of poor people outside the convent made such a deep impact on her that she decided to serve the destitute. In 1948, she was granted permission from her superiors to leave the convent school and take on the task of serving the poor slum dwellers in Calcutta. Although she had no funds, it was her determination that kept her going. With strong faith on the Divine Providence, she started an open-air school for slum children. Soon, she was joined by volunteer helpers. Financial assistance started pouring in. This made it possible for Mother Teresa to extend the scope of her social service.

Mother Teresa made use of the donations and thousands of missionaries who had joined her, for the establishment of several centers for poor and needy people across the world. In 1980, she started Homes for people with no one to look after them, people suffering from various incurable diseases, prostitutes, drug addicts and orphans. One of her most significant works was the establishment of center for AIDS patients in 1985, wherein thousands of patients were provided shelter. The Missionaries of Charity was officially recognised as an International Association, on March 29, 1969. By the beginning of 1990s, the number of co-workers had increased manifold and there were about a million of them, working in about 40 countries across the world.

Mother Teresa's service to humanity received worldwide recognition. She stood as the icon of peace, love and compassion. Her determination to serve the poor and needy fetched her about 124 prestigious awards, including 'Padmashree Award' (in 1962 from the President of India), 'John F. Kennedy International Award (1971), 'Bharat Ratna' ,

'Order of Merit' from Queen Elizabeth, 'Nobel Peace Prize' (1979), The Pope John XXIII Peace Prize', 'Medal of Freedom' (the highest US Civilian award) and many more.

2. ICEBREAKER USED FOR BOTH RESILIENCE AND LIFESKILLS TRAINING: RELAXATION EXERCISE

A typical relaxation exercise for kids was used. The steps involved include:

- **Warm-up.** Ask the children to remove their shoes. They may lie down or sit cross-legged on the floor or on a chair. A special object — such as a yoga mat or pillow, clothing, or stuffed animal used only for yoga — may be used to signal that this is a time for relaxation. The trainer should encourage the children to be quiet in their mind, perhaps by closing their eyes imagining a problem disappearing.
- **Breathing.** Children should be encouraged to focus on breathing in and out slowly and deeply through the nose. In one technique, children might imagine filling up their stomach with air like a balloon and then slowly releasing the air.
- **Postures.** Gentle movements, including stretching, will help children prepare to do postures that involve standing, sitting, twisting, balancing and bending. Trainers may provide pictures of plants, animals or objects to imitate. During each pose, children may be reminded to breathe through their nose, to avoid forcing a position, and to stop if they experience pain.
- **Relaxation.** After completing a series of poses, children may lie down on the floor on their back and close their eyes. The trainer may repeat a sound or phrase to encourage the children to concentrate on their breathing. Children may also be encouraged to visualize experiences, such as lying on a cloud or floating through the sky.
- **Reawakening.** As the class ends, children will begin stretching or wiggling their body and slowly rise from the floor.

Special safety guidelines for children during the exercise

The trainer should take steps to help children avoid injury. For example.

- **Find a safe place to practice.** Insist on level ground and a comfortable room temperature. Children should use a clean mat to prevent slipping.
- **Practice on an empty stomach.** Certain poses may cause children to vomit if they practice the exercise soon after eating. Generally, don't allow children to practice the relaxation exercise until two to four hours after a large meal or one to two hours after a light meal or snack.
- **Don't overdo it.** Remind children to keep their movements slow and to avoid forcing a pose or doing inverted poses, which involve extending the legs above the heart or head. Inverted poses put pressure on the head, neck or shoulders.
- **Consider the children's medical conditions.** If a child has migraines or any condition affected by extra pressure to the head or neck, he or she may need to avoid shoulder stands. The child may also need to take care doing certain breathing techniques or poses if he or she has asthma, bronchitis or a hernia. Don't allow children to do the exercise if he or she is sick.