ADVERSITIES AND MENTAL HEALTH OF HIV/AIDS INDUCED ORPHANS IN MAFIKENG: THE MODERATING ROLE OF PERCEIVED SOCIAL SUPPORT

PALESA MORUBANE

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Mini-dissertation (article format) submitted in partial fulfilment of the requirements for the degree in Masters of Social Sciences in Clinical Psychology of the North West University

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DEDICATION

This study is dedicated to my family, especially my mother, Motlalepula Morubane,

Whose unfaltering love, encouragement, sacrifices and support over many years has always been a great inspiration

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PREFACE

Article format

For the purpose of this dissertation, as part of the requirements for a professional master's degree, the article format, as described by General Regulation A.7.5.1.b of the North West University, was chosen.

Selected Journal

The targeted journal for submission of the current manuscript is Journal of AIDS Care. For the purpose of examination, Tables are included in the text.

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The letter of consent from the co-authors, in which they grant permission that the manuscript "ADVERSITIES AND MENTAL HEALTH OF HIV/AIDS INDUCED ORPHANS IN MAFIKENG: THE MODERATING ROLE OF PERCEVED SOCIAL SUPPORT", may be submitted for purposes of the thesis, is attached.

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We, the undersigned, hereby give consent that Palesa Morubane may submit the manuscript entitled, "ADVERSITIES AND MENTAL HEALTH OF HIV/AIDS INDUCED ORPHANS IN MAFIKENG: THE MODERATING ROLE OF PERCEVED SOCIAL SUPPORT", for the purpose of a dissertation in partial fulfilment for a master's degree.

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ADVERSITIES AND MENTAL HEALTH OF HIV/AIDS INDUCED ORPHANS IN MAFIKENG: THE MODERATING ROLE OF PERCEVED SOCIAL SUPPORT

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ADVERSITIES AND MENTAL HEALTH OF HIV/AIDS INDUCED ORPHANS IN MAFIKENG: THE MODERATING ROLE OF PERCEVED SOCIAL SUPPORT

Abstract

Aim: The study aimed at exploring the moderating role of perceived social support in the relationship between mental health and adversities of HIV/AIDS- related orphans in Mafikeng.

Method: A cross-sectional research was conducted and three hundred and twenty one participants were purposively selected from two orphanage centres and two secondary schools in Mafikeng (orphans and non- orphans).Orphans were 121 (male= 66, female= 55), and non-orphans were 200 (male= 115, female= 85) between 10 to 20 years of age.Data was collected using Child Abuse Trauma Scale (CAT- Scale), General Health Questionnaire (GHQ28), and Multi-Dimensional Perceived Social Support Scale (MPSS).

Results: The findings of the study indicated that there was a statistically significant negative relationship between child abuse and trauma (r= -.492, p= .01); and perceived social support.Results also indicated that there was a significant positive relationship between child abuse and trauma (r= .423, p= .01); and mental health. As predicted, perceived social support moderated the relationship between adversities and mental health (R^2 = 0.09, DF(1, 320) = 7.697, p< 0.001). Therefore, as perceived social support increases, it lessens the probability of high mental health scores, even when adversitiesis high or low.

Conclusion: Adversities have a significant negative relationship with perceived social support, and adversities also have a significant positive relationship with mental health. Perceived social support moderate the relationship between adversities and mental health.

Introduction and problem statement

According to UNAIDS (2014), there are approximately 35 million people worldwide living with HIV/AIDS. More than two-thirds (70%) of all people living with HIV, 24.7 million, live in sub-Saharan Africa- including 91% of the world's HIV-positive children (UNAIDS Gap Report, 2014). Statistics South Africa (2014), indicates that the total number of persons living with HIV in South Africa increased from an estimated 4,09 million in 2002 to 5,51 million by 2014. UNAIDS fact sheet (2014), revealed that an estimated 1.1 million adults and children died of AIDS, accounting for 73% of the world's AIDS deaths in 2013. It is estimated that 17.8 million children under 18 have been orphaned by AIDS (AIDS Orphan, 2013). In addition, the United Nations Children's Fund (UNICEF, 2013), reported that 15.1 million of these orphaned children live in sub-Saharan Africa, with 63% in South Africa.

The United Nations Children's Fund (UNICEF, 1999) and the Joint United Nations Programme on HIV and AIDS (UNAIDS, 2008), define an orphan as any child below the age of 18, that has lost at least one parent. This loss of parent makes a child who is orphaned more vulnerable, and in need of adult care (Akwara et al., 2010). In consistence with the definition of UNAIDS (2008) and UNECA (2011), HIV/AIDS orphan is defined for the purpose of this study as a child under 20 years of age who has lost one or both parents to HIV/AIDS-related illness.

Nyberg et al. (2012) indicated thatthe impact of losing a parent due to HIV/AIDSmay include a series of stressful life events such as the loss of parental care and protection, decreased access to schooling and health care, food security, increased child labour, increased risk of abuse, exploitation, risk of HIV infection, psychosocial distress, stigma, discrimination, and impoverishment.

Orphanhood can be traumatic for a child, and this can expose a child to countlessadversities. Adversity can be defined as an extremely unfavourable experience or event; a difficulty, danger or state of affliction, which implies a lack of well-being (Gehrling & Memmott, 2008). For children, adversity can be the experience of life events and circumstances which may combine to threaten healthy development (Daniel, 2010). According to Kimani, Mutua, Chesire and Chebet (2012), the death of a parent is often followed by inadequate guidance, emotional support, socialization, educational support, nutrition, material and financial support. For these reasons, HIV/AIDS orphans end up in several destinations like extended families, guardians' homes, orphanages and some turning to the streets (Guo, Li & Sherr, 2012).

As already indicated, adversities faced by HIV/AIDS orphans due to the parents' death, may have negative consequences for their psychosocial well-being (Kaggwa and Hindin, 2010). It can therefore be argued that orphans are susceptible to more mental health challenges than non- orphans. These mental health problems related to HIV/AIDS orphans include psychological symptoms such as posttraumatic stress, anxiety and depression (Nyamukapa et al., 2010; Cluver,Orkin, Gardner, & Boyes, 2012). In support of that, many studies have identified high levels of mental health problems among HIV/ AIDS orphans, and showed that there is an increasing evidence that mental health problem is associated with adversities they are faced with due to parental loss (Doku, 2010; Traube et al., 2010; Cluver, Gardner & Operario, 2009). Furthermore, studies reveal that AIDS-orphaned children have higher depression, anxiety and posttraumatic stress disorder as compared to other orphans and non-orphans, and that HIV/AIDS-related stigma is a risk factor for those outcomes (Boyes & Cluver, 2013; Cluver, Orkin, Gardner & Boyes, 2012). De Witt and Lesling (2010) highlighted that many orphans did not cope as well as could be expected despite their material needs being met and this suggested that psychological problems may be responsible.

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It is clear that existing research on mental health of HIV/AIDS orphans highlights that these children need intervention. It is important that alternative strategies that will serve as protective factors for their mental health, are discovered and brought in to assist in preventing or minimising the risks of mental health problems.

Among the variables that are positively associated with children's mental health, perceived social support is gaining increasing attention. There is good evidence that social support plays an important role in mental health. For example, Wang et al., (2012) reported that perceived social support such as future expectations and trusting relationship with caregivers, significantly mediated links between risk factors such as stigma and exposure to adverse situations, and depression. Moreover, a study conducted by Desilva et al., (2012) indicated that perceived social support played a protective role, as it was associated with lower risks of anxiety and depression symptoms, lower oppositional levels, and heightened self-esteem and resilience.

Although the moderating role of social support on adversities is evident in previous studies, much less studies have focused on identifying social support as it moderates the relationship between adversities and mental health among HIV/AIDS-related orphans; and thus the present study aims to close the identified gap.

Aim of the study

The aim of the study was to explore the moderating role of perceived social support in the relationship between adversities and mental health of HIV/AIDS orphans in Mafikeng, North-West Province.

Objectives

- To explore the difference between orphans and non- orphans onadversities, mental health, and perceived social support.
- To explore the moderating role of perceived social support on adversities and mental health of orphans.
- To assess gender differences of orphans on adversities, mental health and perceived social support.

Significance of the study

Conclusions drawn from this moderating study will have practical significance for the orphanage centres, caregivers, community, children and adolescents who are orphaned by HIV/AIDS by increasing awareness of how adversities they face may predispose them to mental health problems, as well as the influence of perceived social support. Thereby, it will assist the orphanages.

The study will also be beneficial to the orphanage centers, caregivers, community, children and adolescents who are HIV/AIDS orphans by giving insight on whether or not perceived social support can act as a moderator between the relationship between adversities and mental health. By doing so, the study will contribute towards the planning of future intervention strategies that focus more on strengthening social support.

Recommendations from this study may assist in the development of policies and strategies to minimize the mental health needs of HIV/AIDS- related orphans. Psychologists will be able to identify and diagnose mental health needs of this vulnerable population when providing psychological services to them.

Theoretically, it will add on to the existing literature on mental health by introducing the role of perceived social support as a moderator of the relationship between adversities and mental health, as many researchers have not yet explored this area. The study will also project various adversities endured by HIV/AIDS- related orphans in Mafikeng and their perception of social support. Limitations of this study will give direction to future researchers by identifying other gaps that still need to be researched.

Methodologically, this study will increase knowledge and the use of moderation approach in the methodology of future studies by demonstrating the relevance and applicability of moderation analysis when studying adversities and mental health. By so doing, researchers will not only focus on the influence of one variable on another, but will also look at variables that are likely to act as moderators between two variables.

Theoretical background

The study was conceptualized within the following theories: Adversity theory, The Biopsychosocial model, Buffer theory, and Gender theory. The theories are explained in detail below.

- Adversity theory

The study adopted the adversity theory by Haidt (2006), to give an explanation of how adversity may play a role in the proneness of mental health problems.The theory postulates that people are able to experience posttraumatic growth rather than post-traumatic stress after they experience significant adversity. Haidt (2006), posits that people can experience post traumatic growth following adversity and that people must endure adversity for growth. Furthermore, the theory postulates that adversity in the twenties and thirties may best position an individual for growth, however, adversity experienced earlier or laterin life,has the likelihood to result in post-traumatic stress (Haidt, 2006).

This study is directly linked to the last statement of the theory which says, when one undergoes major stress early or late in life, then it is likely not to result in growth but post-traumatic stress. Walsh et al. (2014), also agreethat an adverse psychosocial environment in the childhood years significantly increases the risk for later psychopathology.

HIV/AIDS orphans used in this study are younger than twenty years. Thus, according to Haidt (2006), they are more likely to experience post -traumatic stress and other emotional and psychological scarring following adversity. These adversities may be: abuse, poverty, neglect, exploitation, and heading households. Therefore, this theory supports our assumption that, adversities negatively affect the mental health of HIV/AIDS-related orphans.

With this theory, we argue that HIV/AIDS orphans will report higher scores on adversities and therefore score high on the mental health measure, than non-orphans. This would be because orphans experience many challenges, losing a parent being an adversity on its own; as compared to non-orphans and that would increase their likelihood of developing psychological problems later in life.

- The Biopsychosocial model

As the WHO (2012) puts it, many factors come together to affect the well-being of individuals and societies. Health is determined by circumstances and environment people find themselves in. Factors such as our genetic makeup,where we live, surroundings,economic status and educational level, and the relationships we have with friends and family all have significanteffects on health (Marya, 2011). The biopsychosocial model of disease can better explain how these factors affect one's mental health.

The biopsychosocial model of disease is a framework developed by Engle (1980), which states that biological, psychological, and social factors are all involved in the causes of health

and disease. In other words, it is the interaction between one's genetic makeup, behaviour, and sociocultural environment that contribute to both health and disorder.

Many disorders have a biological basis in the form of genetic vulnerability or disposition. For example, some children are most likely to develop a mental disorder such as schizophrenia mainly because there is a history of the disorder in the family. As research also reveals, if one monozygotic twin develops schizophrenia, there is at least a 60% chance the co-twin will also develop the disorder (Churbanov, 2013). The psychological part looks for potential psychological bases for a health problem such as emotional disturbance and distorted thinking (Nursing Theories, 2013). According to Liu (2011), psychosocial factors can cause a biological effect by predisposing an individual to risk factors. An example is that the death of a beloved may not cause liver damage by itself, but a grieving person may be more likely use excessive alcohol as a coping mechanism, and therefore end up with liver damage.

As for the social part of the model, it investigates how various social aspects such as socioeconomic standing, religion, values and principlescan influence health (Upton, 2012). For instance, losing parents may place one at risk of poverty, financial stress and illness. The purpose of this model is simply to make us understand that each one of these factors is not sufficient to bring about health or illness, but the interaction between them is what determines health or illness. In the case of HIV/AIDS orphans, in relation to the theory, we argue that because health and wellness are caused by a complex interaction of biological, psychological, and sociocultural factors therefore, adversities will have an impact on one's mental health.

According to this study, HIV/AIDS- related orphans may find challenges in almost all aspects of their lives. They may be emotionally and psychologically traumatized by the loss of their

parents, end up in poverty, sufferchild abuse and neglect, get exploited and be vulnerable to other illnesses, and all of this may negatively impact the mental health of the orphans.

- Buffering hypothesis theory

The buffer theory proposes that social support moderates the power of psychosocial adversity to cause incidences of illness (Alloway, 1987). Social support, according to the buffering hypothesis, acts as a resource with the ability to ease or prevent a stress reaction by making threatened individuals feel more capable of dealing with the stressor in their lives (Cohen & McKay, 1984).

Lack of social support and lower perceived ability of social support have been associatedwith symptoms of depression among HIV/AIDS orphans (Uchino, Bowen, Carlisie, & Birmingham,2012; Zhao et al., 2011). In addition, social support has proved to be a moderator of mental health symptoms among HIV/AIDS related orphans (Puffer et al., 2012).

According to Cohen and Wills (1985), social support provided by families, friends and significant others can protect an individual from those stressful events which are potentially capable of causing a disease.Orphans may be lacking in social support due to ill parents and death of loved ones.Theymay also have negative perceptions of themselves and others and that may lead to lower perceptions of social support (Cluver, Fincham & Seedat, 2009). Cohen and Wills (1985), further posited that support is needed from people within the social environment when there are elevatedstress levels to assist with coping. It could be support from an intimate friend, school-friend, teacher or a family member.

According to Tomich and Helgeson (2002), something as simple as social relationships can elevate the mood, make one feel like they belong, and be a source of companionship to share events of our lives with, which in turn can lead to animproved quality of life. In addition, Cohen & Wills (1985),hypothesized that lack of positive social relationships leads to poor

psychological well-being such as depression and anxiety. In turn, anxiety and depression may impact physical health, either in a direct effect orthrough physiological processes that influence susceptibility to disease. This theory is used to support the assumption that HIV/AIDS-orphans are most likely to face adverse situations, following their parents' death, which may impact their mental health, but if they have suitable perceived social support, their stress effect willbe moderated,as compared to those who may not have any social support.

- Gender Schema theory

The study uses gender schema theory to explain the gender variable.The gender schema theory by Bem (1981) stipulates that males and females learn to process new information in their environment based on masculinity or feminism.Once children have developed this schema, society also expects them to behave in ways consistent with traditional gender roles. Children internalise these messages and grow up with the notion that, what males can do females cannot do; or what is applicable and suitable for the other sex does not apply on the other counterpart. They also believe that masculinity is more highly valued than feminism. For example, gender disparities have been reported regarding the spread of HIV. Women reported that men refused to use condoms and they respected and accepted their decision as they are superior to them, and that puts them in a powerless position of being unable to protect themselves from the disease (Joubert-Wallis & Fourie, 2009).Therefore, the theory indicates that the impact of orphanhood may differ by gender due to the socialization of a child. Thus we hypothesize that females are more vulnerable to poor mental health than males.

Literature Review

Adversities faced by HIV/AIDS orphans

A wide range of adversities, including physical, emotional and sexual abuse, are known to be predictors of many forms of mental ill health (Read & Bentall, 2012). According to Pacione et al., (2012), adversity can take various forms for orphans, such as vulnerability, family dysfunction and environmental stressors. All of these may threaten children's development and impact their mental health. Becoming orphaned, child- headed households and child labour, all expose children to possibly harmful environmental stress (Nyamukapa, Gregson, Wambe & Mushore, 2010). The death of a parent to AIDS can often leave children vulnerable to illness, abuse, neglect, and mistreatment. In addition, it also exposes them to economic burden, stigma, and withdrawal from school (Cluver & Orkin, 2009).

After parents' death, these children are now faced with new responsibilities and work. Tom and Mudhovozi (2014), highlighted that responsibilities and work, both within and outside of the household, increaseintensely when parents die. Due to these new responsibilities, some children are forced into dangerous labour, exploitation, abuse and neglect while others migrate to threatening environments, such as street dwellings and urban centres (Nyberg et al., 2012). Furthermore, orphaned children are often forced into abusive situations and exploitative employment in an attempt to negotiate their survival (Cluver, Gardner & Operario, 2008). Many children are forced into sex work, thereby exposing themselves to significant physical and psychological risks (Cluver, Orkins, Boyes, Gardner & Francizka, 2011).

According to Motene (2009), children can suffer child abuse and neglect, long before they are orphaned as a result of the ill parent. Eventually, when their parents die, they are then

supposed to adapt to a new life, with little and at times no social support, and may suffer exploitation and abuse.

- Child abuse

Several factors leading to poor psychological functioning of HIV/AIDS orphans include abuse (Lata & Verma, 2013).According to Meinck et al., (2015), there is evidence from Africa that indicates high rates of child abuse, with rates being ashigh as 64% for physical abuse. Other studies also confirm that orphaned children report experiences of physical abuse.For example, disclosures of physical abuse among HIV/AIDS-orphans were indicated in several studies (Harms et al., 2010; Seloilwe & Thupayagale-Tshweneagae, 2009; Thurman & Kidman, 2011; Ballet, Sirven, Bhukuth & Rousseau, 2011). Cluver et al., (2011) and Meinck, Cluver, Boyes & Ndhlovu, (2013), investigated severe physical abuse of vulnerable children in areas with high HIV incidence in South Africa. Their findings revealed that physical abuse was6% among AIDS-orphaned children, which was evidence of high levels of child abuse in families affected byAIDS. In contrast, in a systematic review and meta- analysis (Nichols et al., 2014) it was revealed that orphans were 4% less likely to experience physical abuse compared to non-orphans.

Emotional abuse was indicated in a study conducted by Morantz et al., (2013). The findings revealed that 27% of orphaned children experienced emotional abuse which included being humiliated, threatened by caregivers,bullying and rejection by the biological children of the caregiver, and exposure to domestic violence. Orphans reported being threatened and made to feel like a burden (Harms et al., 2010). Furthermore, it is revealed that this abuse was often directed towards the loss of their parents.

For sexual abuse, some studies (Meinck et al., 2015; Nyamukapa et al., 2008, 2010; Pascoe et al., 2010), revealed that orphans are vulnerable to sexual abuse. They reported experiences

ofsexual abuse by family members, as well as being forced into prostitution by caregivers or because of poverty (Cluver& Gardner, 2007; Mmari, 2011; Mojola, 2011; Seloilwe & Thupayagale-Tshweneagae, 2009).

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- Maltreatment

Orphans are most often cared for by their relatives and may have been subjected to child maltreatment by family members (Morantz and Heymann, 2010; Cluver & Gardner, 2007).The findings indicated intra-household discrimination being the main maltreatment among orphans,including being treated less well than other children by the caregivers' biological children. This involved being deprived of resources such as food, clothing and schooling or being made to engage in excess chores or paid work. In addition, some studies also reported severe material deprivation of HIVAIDS orphans, such as hunger, tattered clothing and inadequate conditions (Funkquist, Eriksson & Muula, 2007). Furthermore, research also indicate experiences of explicit neglect (Cluver & Gardner, 2007;Nyamukapa et al., 2010), with reports including being left alone at home or locked in a shack.

Mental health of orphans

The death of parents introduces major changes in the life of a childincluding disrupted family functioning, moving in with relatives, child-heading households,socioeconomic status, and poverty.All these changes easily affect the psychological well-being of a child. According to Guterman, Cameron & Hahon (in Doku, 2012), parental deaths are traumatic for anyone, but it becomes worse for children as it is relatedto negative physical and psychosocial problems. For HIV/AIDS orphans, the impact could be even worse because HIV/AIDS is a highly stigmatized phenomenon (Gilbert& Walker, 2010; Cluver & Gardner, 2007). The literature indicate that possible factors such as abuse, family malfunctioning, stigma and discrimination pose psychological problems on HIV/AIDS orphans (Lata & Verma, 2013; & Lin et al.,

2010). Further, childhood abuse and maltreatment are linked to poor mental health (Read & Bentall, 2012). As already indicated above, abuse among orphans is reported high and acts as a risk factor for the likelihood of mental health problems later in life.

A systematic review of empirical studies on HIV/AIDS and orphans found that orphaned children often have negative psychological and physical outcomes (Chi et al., 2013). In addition,elevated levels of psychological distress in orphans, including anxiety, depressive symptoms, anger, loneliness, low self- esteem, social withdrawal, hopelessness, suicidality, post-traumatic stress symptoms and sleep problems(Lin et al., 2010;Cluver et al., 2007; Ruiz-Casares, Thombs, & Rousseau, 2009; Zhaoet al., 2009; Cluver & Gardner, 2007)were reported. Recent studies also revealed high levels of anxiety, post-traumatic stress and depression among HIV/AIDS orphans (Kumar et al., 2014; Chi et al., 2014; Sharer, Cluver & Shields, 2015; Kuo et al., 2013). Furthermore, Yendork and Somhlaba (2015) revealed that orphans reported high anxiety symptoms compared to non-orphans but there were no differences between orphaned children and non-orphans on symptoms of depression. On the other hand, Desilva et al., (2012) and Govender et al., (2014),found anxiety and depression to be low for both AIDS orphans and non- orphans.

In another study conducted by Cluver and Gardner (2006), HIV/AIDS orphans were more likely to have marked concentration difficulties and to report frequent somatic symptoms.In addition, Zhao et al., (2010) and Atwine et al., (2005) indicated that HIV/AIDS orphans scored high for feelings of loneliness, hopelessness and suicidal ideation. Furthermore, Desilva (2012) also revealed that orphans were more likely to report being very ill compared to non-orphans.

Gender

There is a disparity in the levels of suffering that orphans face according to their gender. Nabunya and Ssewamala (2014) report that within the household, both boys and girls experienceincreased responsibilities. They both reported having to do more household chores, however, orphaned girls were more likely to report taking care of small children than boys.Evans (2007) also indicated that both girls and boys experience decreased school participation following parents' death.

Francis-Chizororo (2010), revealed that girls are more disadvantaged because they are usually the first in the household to drop out of school, care for younger siblings and take on many adult tasks.In the case of childhood abuse,Zapata et al., (2013) reported that physical and sexual abuse is more prevalent in girl orphans compared to boy orphans.

Some studies on mental health and gender differences were inconsistent. For example, Desilva et al., (2012) and Thurman and Kidman (2014), found girls to report more anxiety, depression and behavioural symptoms as compared to boys; while Kaggwa and Hindin, (2010) and He and Ji (2007), reported heightened depression and hopelessness among boys but not girls.However, some studies did not find any gender difference (Nyamukapa et al., 2010; Onuoha & Munakata, 2010; Li et al., 2009). Furthermore, Nyamukapa et al., (2008), concluded that HIV/AIDS orphanhood is negatively associated with children's psychological wellbeing regardless of gender.

Perceived social support

Social support acts as a buffer against stressful life events, that is, if an individual has a perception that they arecared for, esteemed, loved, valued and belong to jointly equal relationships (Cohen & Wills, 1985). Cobb (1976), also suggests that social support indirectly strengthensa sense of well-being by lessening the effects of stress and enhancing coping skills.In support of that, there are several studies conducted in South Africa that indicate that social support can help individuals cope better with different challenges. For example: Casale, (2012); and Ndlovu, Jon & Carvalhal, (2010), revealed that social support helps families manage with socioeconomic and emotional challenges related to HIV/AIDS. Other studies highlighted higher levels of social support to be linked with low death rates, and enhanced quality of life among the bereaved (Holt- Lunstad, Smith& Layton, 2010; Ke, Liu & Li, 2010).

Integration in a social network helps one to manoeuvre through traumatic experiences and therefore reducing the chances of poor well-being. Caregivers, siblings and special people in AIDS orphans' lives can be effective sources of social support for them, which may help to promote psychological well-being (Okawa et al., 2010). This is supported by the study conducted byCluver, Fincham & Seedat, (2009), which revealed that perceived social support has been linked with less symptoms of post-traumatic stress among AIDS orphans.Adamson and Roby, (2011) also reported thatperceived social support is positively linked with the mental health of AIDS orphans.

The literature indicates that there is availability of social support for orphans. For example, Hong et al. (2010) examined the relationship between perceived social support and psychosocial wellbeing among HIV/AIDS orphans. The results suggested that vulnerable children had the lowest level of perceived social support compared to HIV/AIDS orphans and

non-orphans. This could be because most orphans are cared for by their grandparents, and it is revealed that extended families serve as an important source of care and support for them (Avabratha, Kodavanji & Vaid, 2011). However, the grandparents are said to be in their mid-60s in age which may raise concern about their ability to physically and financially care for young fostered children (Beegle, et al. 2010). Therefore, it is essential that orphans receive adequate social support as it is reported by Orban et al., (2010) that orphans also view social support as the most helpful coping strategies.

Hypotheses

1. There will be a significant difference betweenorphans and non- orphans on adversities, mental health and perceived social support.
2. Perceived social support will moderate the relationship between adversities and mental health of orphans.
3. Female orphans will report high adversities and therefore, report high on mental health than male orphans.

Methodology

Study Design

This study was based on a cross sectional design within a quantitative research approach. This method is a study design in which data are collected for all the variables of interest using one sample at one time (Adler & Clark, 2015). According to Aparasu and Bentley (2015), this study design is often used descriptively to capture information about a population, but may also be used to examine associations between an independent and dependent variable. The independent variable in this study is adversities (child abuse and trauma) and dependent variable is mental health. The moderating variable is perceived social support.

Sampling

Purposive sampling was used to select both groups, the reason being that, it is the only viable sampling technique in obtaining information from a very specific group of people such as orphaned adolescents. It is a limited number of individuals who possess the trait of interest, such as age and gender (orphans/non- orphans).

From the register list at orphanage centres and schools, where the participants were drawn, the sample size was purposefully selected by age, sex and those who have parents or not, to ensure the representation of these important demographic variables. Those who had lost parents due to other reasons besides HIV/AIDS were excluded. The age cutoff was based on the ability to answer questionnaires as it was 4th grade English. The representation of both sexes was insured as the study wanted to check for gender differences.

Participants

A total sample of 321 participants (Orphans = 121 and Non-orphans = 200) were selected to participate in the study. The participants were 'HIV/AIDS- related orphans' from the two

orphanage centres in Mafikeng; and non– orphans were leaners from two Secondary schools, located in Mafikeng, in the North West Province, South Africa.

The demographic representations of the participants are as follows: orphans were (N=121) while Non- orphans (200). Non-orphans had more males: 115 (57.5%) and females: 85 (42.5%), as compared to orphans who had males 66 (54.5%) and females 55 (45.5%). Participants, according to age, orphans' mean age is 14.1 (SD= 2.09) with the Range = 10 – 20 years while non- orphans' mean age is 15.2 (SD= 1.75) with the Range = 10 -18 years. The majority of the orphans come from the rural areas (81%), while non-orphans also have a majority number (91.5%) staying in rural areas. Orphans have at least a grade eight level of education (66.9%) as well as non- orphan (51.5%). All the orphans did not have biological fathers and very few (2.5%) have biological mothers, while non-orphans who have biological fathers are 55.5% with a majority 85.0% having biological mothers.

Orphans reported that they at least have brothers (63.6%) and sisters (62.0%). Very few of them reported to have a paternal grandfather (14%), paternal grandmother (28.1%), maternal grandfather (23.1%) or maternal grandmother (38.8%). They at least have uncles (40.5%) and aunts (43.0%). Non- orphans reported that they at least have brothers (64.5%) and sisters (63.5%). Very few of them reported to have a paternal grandfather (15%), paternal grandmother (20.5%), maternal grandfather (20.0%) or maternal grandmother (14.5%). They at least have uncles (34.0%) and aunts (28.0%). Orphans who have the highest number of people staying in a household are (38.8%) while non- orphans are (40.5%).

Instruments and psychometric properties

The instruments that were used to measure variables of interest were the Child Abuse Trauma Scale (CAT- Scale), General Health Questionnaire (GHQ28), and Multi-Dimensional Perceived Social Support Scale (MPSS). The description of each instrument follows next.

- The Childhood Abuse and Trauma Scale (CAT-scale)

This questionnaire was developed by Sanders and Becker-Lausen (1995). The scale consists of thirty-eight items to assess various forms of childhood physical, sexual, emotional, and maltreatment abuse. The frequency of each experience is rated on a 5- point Likert scale, ranging from 0= "never" to 4= "always". The measure contains three subscales: Negative Home Environment/Neglect (NEG), Sexual Abuse (SA) and Punishment (PUN).

A total score can be derived by summing item frequency scores and dividing by the total scores range from 0- 4, with higher scores reflecting greater childhood trauma (Schember, 2007). The Cronbach's alpha for the scale was found to be .90 and test-retest reliability was .89 (Sanders & Becker-Lausen, 1995).The reliabilityof this scale was tested for the present study and the Cronbach's alpha was .88.

- General Health Questionnaire (GHQ-28)

The General Health Questionnaire (GHQ-28) by Goldberg and Allison (1995), was used to assess mental health. It is a 28 items scale which consists of four subscales (somatic complaints, anxiety and insomnia, social dysfunction and depression), using a 4 point likert scoring format (strongly disagree = to strongly agree = 4). It is used to assess psychological well-being in the general population and within community. Any individual that scores between 0-42 is regarded as having good mental health while the ones that score between 43-84 are considered as having poor mental health.The reliabilityof this scale was tested for the present study and the Cronbach's alpha was .79.

- Multidimensional scale of perceived social support (MPSS)

The Multidimensional scale of perceived social support(MSPSS) by Zimet, Dahlem, Zimet, and Farley (1988) is used to measure social support. It consists of 12 items that provide assessment of three sources of support: family (FA), friends (FR), and significant other (SO). The items directly addressing social support are divided into factor groups relating to the source of the support (i.e., Family, Friends, or significant others), each of these group consists of four items.Cronbach's coefficient alphafor the whole scale was found to be 0.94. The reliabilityof this scale was tested for the present study and the Cronbach's alpha was .75.

Procedure

The schools and orphanage centres were contacted telephonically to request a meeting with the managers. Appointment dates were set for a personal meeting to explain what the study was about and how they could be of assistance. Consent was obtained from the school authorities and orphanage manager, dates and time of data collection were communicated to all concerned. On the dates of collection, learners and orphans who were selected from the information list by the researcher together with the School Heads and Centre Managers, according to the requirements (age, gender and if they are orphans/non- orphans) of the study were invited to participate in the study. As far as the orphans are concerned, before they were invited for participation in the study, the manager of the centres screened the questionnaire to avoid harmful questions and no such questions were found.

Data collection took six (6) days because collection was done at two centres and children came on different days depending on their age group. Each centre filled questionnaires for three (3) days. Administration of the questionnaires took place from 09h00-13h30, under the supervision of 2 guardians from both centers, four research students who were assisting with data collection and the researcher.

At the schools, data collection took place from 8h30-11h00. Administration of the questionnaires took place during regular classes under the supervision of the researcher, two research assistants, and two teachers appointed by the school principal to assist. Data collection took eight (8) days and each school filled questionnaires for four (4) days.

Ethical considerations

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Ethical approval was granted by the North-West University Ethics Committee (NWU-00028- 14- A9), and the permission to collect data was obtained from the orphanage center's manager and the Department of Education.

Consent was obtained from the center manager, on behalf of the orphans. As far as the non-orphans (learners) are concerned; before they could take part in the study they were given consent forms to take home to parents. On the dates of collection, questions were thoroughly explained by the researcher. The participants were assured that the information they provide would be treated with confidentiality and that they may not disclose their identity anywhere in the questionnaires. Participants were informed that they may withdraw from the study anytime if they want to and they will not be penalized in any way.

Furthermore, there was a debriefing session arranged for participants who may have been emotionally provoked by the completion of the questionnaires in order to deal with any emotional reactions that could arise, as a means of protecting participants from harm. After completion of questionnaires, all participants were thanked for their cooperation and participation.

Data analysis

In this study, data was analyzed using Statistical Package of Social Sciences Software (SPSS) version 9.5. An independent sample t-test was used to test hypothesis 1, while hypothesis 2 was tested using a moderated hierarchical multiple regression analyses and correlation analysis. Hypothesis 3 also used independent sample t-test.

Results

This study was intended to investigate the relationship between adversities and mental health and the moderating role of perceived social support among HIV/AIDS-related orphans in Mafikeng. An independent t-test (Table 2) was conducted to test hypothesis one and the results are presented below.

Hypothesis 1: There will be a significant difference between orphans and non-orphans onadversities, mental health, and perceived social support.

TABLE 1: Comparison of adversities, mental health and perceived social support between orphans and non- orphans

Variables	Orphans (N=121)		Non-Orphans (N=200)				
	X-bar	SD	X-bar	SD	t	df	p
Child Abuse and Trauma	30.0	20.5	30.5	20.2	.194	319	ns
Mental Health	58.8	11.2	56.7	12.2	-1.54	319	ns
Perceived Social Support	66.0	11.1	64.8	11.3	-.952	319	ns

The results did not reveal a significant statistical difference on adversities (t = 194; df =319; p = n.s), mental health (t = -1.54; df =319; p = n.s), and perceived social support (t = -.952; df =319; p = n.s) between HIV/AIDS orphans and non-orphans. However, looking into the descriptive statistics, HIV/AIDS orphans scored lower on adversities ($\overline{X}$ = 30.0, SD = 20.05), than non- orphans who scored higher on adversities ($\overline{X}$ = 30.5, SD= 20.2). On mental health, HIV/AIDS orphans scored higher ($\overline{X}$ = 58.8, SD = 11.2), than non-orphans who scored lower on mental health ($\overline{X}$ = 56.7, SD= 12.2). HIV/AIDS orphans scored higher on

perceived social support ($\overline{X}$ = 66.0, SD = 11.1), than non- orphans who scored lower on perceived social support ($\overline{X}$ = 64.8, SD= 11.3).The study hypothesis was thus rejected.

Hypothesis 2: Perceived social support will moderate the relationship between adversities and mental health of orphans.

A correlational analysis was used for the prediction of values which will be appointed in hierarchical multiple moderated regression analysis. See Table 2A

TABLE 2A: Inter-correlation between study variables (n= 321)

Variables	1 (PSS)	2 (MH)	3 (CAT)	4 (SEX)	M	SD
PSS	-	-.136	-.492**	.164	66.0	11.1
1. MH		-	.423**	.131	58.8	11.2
2. CAT			-	.116	30.0	20.5
3. Sex				-	1.6	2.1

KEY:

PSS= Perceived Social Support; MH= Mental Health; CAT= Child Abuse and Trauma.

The results in Table 3A above revealed that mental health (r= -.136) showed a non-significant relationship with perceived social support. This means, being a high or low scorer on mental health does not decrease perceived social support. Additionally, the results showed that there was a significantnegative relationship between child abuse and trauma (r= -.492, p= .01),and perceived social support. This means, as child abuse and trauma increase, perceived social

support decreases. However, sex (r= .164), showed a non-significant relationship with perceived social support. This means being male or female does not decrease or increase perceived social support.

The results also indicated that there was a significant positive relationship between child abuse and trauma (r= .423, p= .01); and mental health. This means as child abuse increases, mental health also increases. Additionally,sex (r= .131) showed no significant relationship with mental health, meaning being male or female does not decrease or increase mental health. Furthermore, the results indicated that sex (r= .116) showed no significant relationship with child abuse and trauma. This means,being male or female does not decrease or increase child abuse and trauma.

Hypothesis two expected perceived social support to moderate the relationship between adversities and mental healthand hence, a correlational analysis was firstly conducted (Table 2A), then a hierarchical multiple regression was carried out to test these hypotheses. The variables were entered step wise and the results generated three models. The results are presented below (Table 2B).

TABLE 2B: Moderated Hierarchical Multiple Regression

Models	R	R^2	Adj	$R^2\Delta$	R^2F	ΔF	B	Std. Err	Beta	t
Model 1	.446	.199	.178	.178	8.26**	9.66**				
Adversities							.255	.052	.47	4.92**
Model 2	.431	.185	.172	.185	13.43**	9.43**				
Social Support							.096	.096	.10	.99**
Model 3.468	.219	.191	.009	7.697**	2.737**					
Adversities x Social Support							-.005	.004	-.56	-1.38*

In the first step, mental health was regressed on adversities. In the second step, mental health was regressed on perceived social support. The last step was the product of adversities and perceived social support (i.e., the interaction term) was entered. The standardized regression coefficient for the interaction term was statistically significant, $\beta = -0.56$, $p< 0.05$. The change in R^2 was also statistically significant, $R^2 = 0.09$, $DF(1, 320) = 7.697$, $p< 0.001$, indicating that, after controlling for adversities and perceived social support, the interaction term explained about 1% of unique variance in mental health. This means that perceived social support significantly moderated the relationship between adversities and mental health of HIV/AIDS- related orphans. Thus, hypothesis 2 was accepted.

Hypothesis 3: Female orphans will report high adversities and therefore, report higher on mental health than male orphans.

TABLE 3: Gender differences on adversities (child abuse and trauma) and mental health of orphans.

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Variables	Male Orphans (N=66)		Female Orphans (N=55)				
	X-bar	SD	X-bar	SD	t	df	p
Child Abuse and Trauma	27.8	19.2	32.6	21.8	-1.275	119	ns
Mental Health	57.5	9.2	60.4	13.1	-1.445	119	ns

The results did not reveal a significant statistical difference between male and female HIV/AIDS orphans on adversities (t = -1.275; df = 119; p = n.s), and mental health(t = -1.445; df = 119; p = n.s). However, looking into the descriptive statistics, HIV/AIDS female orphans scored higher on adversities ($\overline{X}$ = 32.6, SD = 21.8), than HIV/AIDS male orphans who scored lower on adversities ($\overline{X}$ = 27.8, SD= 19.2). On mental health, HIV/AIDS female orphans scored higher on mental health ($\overline{X}$ = 60.4, SD= 13.1), than HIV/AIDS male orphans who scored lower on mental health ($\overline{X}$ = 57.5, SD = 9.2). Hypothesis 3 was thus rejected.

Discussion of results

Hypothesis one: Differences between orphans and non- orphanson adversities, mental health, and perceived social support

The study did not find any difference between orphans and non-orphans on adversities, mental health and perceived social support as hypothesized. Even though the current research results did not reach an acceptable level of statistical significance, the descriptive statistics indicated that orphans reported low on adversities, but they reported high levels of poor mental health and perceived social support compared to non-orphans.Orphans reported low level of adversities compared to non- orphans. This finding is in line with previous research (Nichols et al., 2014), which revealed that orphans were 4% less likely to experience physical abuse comparedto non- orphans.

Orphans also reported high mental health compared to non-orphans. This is in line with Chi et al., (2013), who revealed that orphans have high levels of poor mental health compared to non- orphans. The findingsindicated that orphaned children often have negative psychological and physical outcomes.As in the current study, HIV/AIDS orphans reported high levels of mental health compared to non- orphans. But because HIV/AIDS orphans reported low on adversities, it was expected that they would report low levels of poor mental health as it is commonly known that less adversities suggests low risk for poor mental health. The reason that might best explain why orphans reported high levels of poor mental health could be because they are vulnerable in nature and as such are susceptible to poor mental health.

Moreover, HIV/AIDS orphans reported high on perceived social support. This finding is in line with the work of Hong et al., (2010), who reported that orphans scored higher perceived social support than orphans. In the current study, the results could be clarified by the fact that

more orphans reported that they live with their brothers, sisters, uncles and aunts. This is consistent with the work of Avabratha, Kodavanji and Vaid(2011), which revealed that extended families serve as an important source of care and support for AIDS orphans.

Hypothesis two: The moderating role of perceived social support in the relationship between adversities and mental health problems.

The second hypothesis which stated that perceived social support will moderate the relationship between adversities and mental health of HIV/AIDS related orphaned adolescents was accepted. This means that perceived social support buffers the relationship between adversities and mental health of HIV/AIDS- related orphans. The findings of this study are similar to those of Casale (2011), and Ndlovu, Jon and Carvalhal (2010), which revealed that social support helps families cope with financial and emotional challenges related to HIV/AIDS and other stressors. This finding is also consistent with the work of Adamson and Roby (2011), which indicated that perceived social support is positively associated with the psychological well-being of AIDS orphans.

Cobb (1976) suggested that social support indirectly strengthens a sense of well-being by lessening the effects of stress and enhancing coping skills.The link between social support and mental healthis well establishedin existing research. For example, Cluver, Fincham and Seedat (2009), reported that perceived social support was associated with fewer symptoms of post-traumatic stress disorder among AIDS-orphaned children and adolescents.Lack of social support and lower perceived social support have been linked to symptoms of depression. Desilva et al., (2012), indicated that perceived social support was a protective factor, as it was associated with lower odds of anxiety and depression symptoms, oppositional behaviour, and greater self-esteem and resilience.

Even though orphans reported high on perceived social support, they still reported poormental health as compared to non-orphans. This could be related to the work of Cluver et al., (2009), suggesting that orphans may have distorted thoughts of themselves and others, which of itself may lead to reduced perceptions of social support and high mental health. Differential-susceptibility theory (Zuckerman, 1999) can also account for these findings.The theory argues that some individualsare more susceptible than others to adverse effects of negative experiences due to their biological makeup, while others are simply not impacted by adversities.Therefore, the reason orphans may have reported higher on poor mental health despite reporting high on perceived social support could be because they are biologically susceptible to poor psychological well- being.

Hypothesis three: gender differences on mental health problem, and adversities between male and female orphans

The third hypothesis stated that female orphans will report a high level of adversities and mental health compared to male orphans. The findings suggest that HIV/AIDS orphans, despite their gender, are on equally comparable levels of mental health, and adversities (i.e., trauma and child abuse). This may be because they have both lost their parents and are exposed to the same situation. As highlighted in the work of Nabunya and Ssewamala (2014), in the household, both boys and girls experience increased responsibilities. Contrarily, Francis-Chizororo (2010), argues that girls are more disadvantaged because they are usually the first in the household to drop out of school, care for younger siblings and take on many adult tasks.

Although the findings were not in the predicted direction, nevertheless, there were some differences on the measures. Child abuse was reported high among female adolescents as compared to male adolescents. This is in line with thefindings from a study conducted by

Okello et al., (2014), which showed that, female HIV/AIDS orphans reported high levels of adversities and poor mental health when compared to male orphans. Zapata et al., (2013), also reported that physical and sexual abuse are more prevalent in girl orphans compared to boy orphans.This supports the findings which indicated that female orphans reported high levels of adversities compared to male orphans. Moreover, the study revealed that female HIV/AIDS orphans reported high levels of poor mental health compared to male orphans.This finding is consistent with the work of Okawa, Yasuoka, Ishikawa, Poudel, Ragi and Jimba (2011) who reported that female orphans reported high levels of perceived social support compared to boy orphans. In the current study, the results could be clarified by the fact that more participants reported that they have more grandmothers and aunts than grandfathers and uncles. It is thus presumed that a girl child could easily relate to grandmothers and aunts and therefore receive more support compared to a boy child.

Conclusion

It can be concluded that perceived social support operated as a moderating factor in the relationship between adversities and mental health of orphaned adolescents. However, in the context of Mafikeng,there is no difference in the above mentioned variables; neither does gender play a role. This means that both males and females suffer the same level of mental health effects, following adverse situations. And that non-orphans and orphans are not doing differently according to adversities and mental health status.

Implication of findings

The findings of this study indicate that there is no significant difference between orphans and non-orphans on adversities, mental health and social support. The findings also indicate that there are no gender differences among HIV/AIDS orphans on adversities and mental health. Furthermore, the results indicated that perceived social support moderated the relationship between adversities and mental health. Therefore, professionals involved in working with HIV/AIDS orphans need to use this information when treating them, so as to develop relevant strategies that generate social support for them. The results suggest that interventions aimed at helping HIV/AIDS orphans and other children, need to consider that adversities are experienced by all children and that poor mental would be the result. The interventions also need not be gender specific. Such interventions should include strengthening social support, minimising adversities and mental health problems.

Limitations

This study had its own limitations:

- The length of the questionnaire, which might have influenced the high scores or low scores on the measures as the participants seemed tired.
- The study focused on orphanage centres in the Mafikeng area and therefore, the study cannot be generalized to other regions.
- Participants were predominantly male and this affected the generalizability of the study's results to the general population regarding gender.
- The data used was collected from orphans only and they could have over reported or under reported on the measures. The study would have benefited from additional data from the caregivers. Future research could ensure that data be collected from both orphans and their caregivers.
- Another limitation was that some of the orphans were not present at the orphanage centres during the days of data collection, therefore some questionnaires were unanswered, reducing the desired population size.

Recommendations

Following the findings discussed above, the following recommendations are made:

- Results have indicated the importance for perceived social support, thus suggesting that not only should AIDS orphans be provided with tools for survival, but for orphans and other children as well, to help them pass through the early developmental stages more easily.

- Psychologists, social workers, teachers and other professionals who work closely with AIDS orphans and other vulnerable populations, should strengthen social support to minimize the risks of these children developing mental health problems in adulthood.

- Future research may focus on this similar topic following the transition of these orphaned adolescents to their young adulthood phase, exploring more on their resilience, with data collected from both orphans and theircaregivers. In that case, it will be helpful to track how they turn out as adults and if the effects of social support were evident.

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Appendices

Appendix 1: Demographic attributes

1. **Sex:** Male

   Female

2. **Age:**
3. **Place of birth**: Urban

   Rural
4. **Race:** Black

   White

   Colored/Mixed race

   Indian/Asian
5. **Level of School**
6. **Who are the people who live in your household for the better part of the year?**

Please mark all the individuals who live in your household for the better part of the year.

Biological father

Biological Mother

Step-father

Step-mother

Brothers

Sisters

Paternal grandfather

Maternal grandfather

Paternal grandmother

Maternal grandmother

Uncles

Aunts

Lodgers

Other (specify)

7. **In what type of place do you stay?**
8. **How many people stay in the household?**

Appendix 2: Childhood Traumatic Events Scale

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

Write "1" if it was**Not at all**
Write "4" if it was**Neutral**
Write "7" if it was **Extreme**

1. Did you experience a death of a very close friend or family member? _____
If yes, how old were you? _____
If yes, how traumatic was this? _____
If yes, how much did you confide in others about this traumatic experience at the time?
_____

2. Prior to the age of 17, was there a major upheaval between your parents (such as divorce, separation)?_____
If yes, how old were you?_____
If yes, how traumatic was this?_____
If yes, how much did you confide in others? _____

3. Prior to the age of 17, did you have a traumatic sexual experience (raped, molested, etc.)?_____
If yes, how old were you?_____
If yes, how traumatic was this? _____
If yes, how much did you confide in others? _____

4. Prior to the age of 17, were you the victim of violence (child abuse, mugged or assaulted, any other thing, other than sexual)?_____
If yes, how old were you?_____
If yes, how traumatic was this? _____
If yes, how much did you confide in others? _____

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

If yes, how traumatic was this? _____

If yes, how much did you confide in others? _____

6. Prior to the age of 17, did you experience any other major upheaval that you think may have shaped your life or personality significantly?_____

If yes, how old were you?_____

If yes, what was the event? _____

_____

If yes, how traumatic was this? _____

If yes, how much did you confide in others? _____

Appendix 3: General Health Questionnaire (GHQ28)

We would like to know if you have had any medical complaints and how your health has been in general, over the last few weeks. Please answer ALL the questions by writing the answer which best applies to you in the open space. Remember that we want to know about **PRESENT** and **RECENT** complaints, not those that you have had in the past.

It is important that you try to answer **ALL** the questions.

1. Better than usual

2. Same as usual

3. Worse than usual

4. Much worse than usual

1. Have you been feeling well and in good health? _____
2. Have you been feeling in need of a good energizer? _____
3. Have you been feeling run down and out of sorts? _____
4. Have you been feeling that you are ill? _____
5. Have you been getting pains in your head? _____
6. Have you been getting a feeling of tightness or pressure in the head? _____
7. Have you been having hot or cold spells? _____
8. Have you lost much sleep over worry? _____
9. Have you been having difficulty staying asleep once you are in bed? _____
10. Have you been feeling constantly under strain? _____
11. Have you been feeling edgy and short-tempered? _____
12. Have you been getting scared and panicky for no good reason? _____
13. Have you been finding everything getting on top of you? _____
14. Have you been feeling nervous and strung-up all the time? _____

15. Have you been managing to keep yourself busy and occupied? _____

16. Have you been taking longer to finish things you do? _____

17. Have you been feeling that overall, you were doing things well? _____

18. Have you been satisfied with the way you carry out a task? _____

19. Have you been feeling that you are playing a useful part/role in things? _____

20. Have you been feeling capable of making decisions about things? _____

21. Have you been able to enjoy your normal day-to-day activities? _____

22. Have you been thinking of yourself as a worthless person? _____

23. Have you been feeling that life is entirely hopeless? _____

24. Have you been feeling that life is not worth living? _____

25. Have you thought of the possibility that you might make away with yourself? _____

26. Have you been finding that at times you could not do anything because your nerves were so bad? _____

27. Have you been finding yourself wishing you were dead and away from it all? _____

28. Have you been finding that the idea of taking your own life kept coming into your mind? _____

Appendix 4: Multidimensional Scale of Perceived Social Support

We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you Very Strongly Disagree

Circle the "2" if you Strongly Disagree

Circle the "3" if you Mildly Disagree

Circle the "4" if you are Neutral

Circle the "5" if you Mildly Agree

Circle the "6" if you Strongly Agree

Circle the "7" if you Very Strongly Agree

1.There is a special person who is around when I am in need.	1 2 3 4 5 6 7
2. There is a special person with whom I can share joys and sorrows.	1 2 3 4 5 6 7
3.My family really tries to help me.	1 2 3 4 5 6 7
4.I get the emotional help & support I need from my family.	1 2 3 4 5 6 7
5. I have a special person who is a real source of comfort to me.	1 2 3 4 5 6 7
6. My friends really try to help me.	1 2 3 4 5 6 7
7. I can count on my friends when things go wrong.	1 2 3 4 5 6 7
8. I can talk about my problems with my family.	1 2 3 4 5 6 7
9. I have friends with whom I can share my joys and sorrows.	1 2 3 4 5 6 7
10. There is a special person in my life who cares about my feelings.	1 2 3 4 5 6 7
11. My family is willing to help me make decisions.	1 2 3 4 5 6 7
12. I can talk about my problems with my friends.	1 2 3 4 5 6 7

ADVERSITIES AND MENTAL HEALTH OF HIV/AIDS INDUCED ORPHANS IN MAFIKENG: THE MODERATING ROLE OF PERCEIVED SOCIAL SUPPORT

PALESA MORUBANE (18047130)

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Mini-dissertation (article format) submitted in partial fulfilment of the requirements for the degree in Masters of Social Sciences in Clinical Psychology of the North West University

(Mafikeng Campus)

Supervisor: Prof E. S.Idemudia

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DEDICATION

This study is dedicated to my family, especially my mother, Motlalepula Morubane,

Whose unfaltering love, encouragement, sacrifices and support over many years has always been a great inspiration

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PREFACE

Article format

For the purpose of this dissertation, as part of the requirements for a professional master's degree, the article format, as described by General Regulation A.7.5.1.b of the North West University, was chosen.

Selected Journal

The targeted journal for submission of the current manuscript is Journal of AIDS Care. For the purpose of examination, Tables are included in the text.

Letter of consent

The letter of consent from the co-authors, in which they grant permission that the manuscript "ADVERSITIES AND MENTAL HEALTH OF HIV/AIDS INDUCED ORPHANS IN MAFIKENG: THE MODERATING ROLE OF PERCEVED SOCIAL SUPPORT", may be submitted for purposes of the thesis, is attached.

Page numbering

In this thesis, page numbering is from the first page to the last. For submission to the above mentioned journal, the manuscript is numbered according to the requirements of the South African Journal of Psychology. Hence, all pages are numbered consecutively. Thus, the numbering starts on the title page of the manuscript.

Referencing

In this dissertation, referencing is done according to the instructions of the South African Journal of Psychology