

# **The Psychological Well-being and Social Support of Street Children in Durban, KwaZulu-Natal**

**Mashudu Tshifaro Netshiombo**

Submitted in partial fulfilment of the requirements for the degree Master of Social Science in  
Clinical Psychology in the Faculty of Humanities, School of Applied Human Sciences,  
University of KwaZulu-Natal.

**Supervisor: Prof. Anna Meyer-Weitz**

**Co-Supervisor: Dr Kwaku Oppong Asante**

**July 2015**

## **DECLARATION**

I hereby declare that this dissertation titled “The Psychological Well-being of Street in Durban, KwaZulu-Natal” is submitted in partial fulfilment of the requirement for qualification of Master of Social Science in Clinical Psychology is entirely my own independent work. This dissertation has not been previously submitted for any degree or examination at any higher education institution. All completed references have been indicated and properly acknowledged for all sources used.

.....  
Mashudu Tshifaro Netshiombo

.....  
Date

## **DEDICATION**

I dedicate this work first to God my creator and within whom all things are possible. I also dedicate this work to my parents, siblings and partner for their continued love, support, encouragement and understanding in the process of completing this dissertation.

## **ACKNOWLEDGEMENTS**

First and foremost, I would like to thank God for having guided and strengthen me through this research. To my humble, supportive and encouraging supervisor, Professor Anna Meyer-Weitz, you have been a great source of support and inspiration to me through the process of this dissertation. I sincerely appreciate your support and encouragement through this process. You have always encourage me in my work, gave me positive and constructive criticism. From the bottom of my heart, no amount of words can express my sincere gratitude, I thank you.

I also would like to extend my gratitude to my co-supervisor Dr Kwaku Oppong Asante. This dissertation would not have been completed if it was not due to the continuous encouragement, support and motivational discussions. Thank you so much, you have been a great source of support and I appreciate that so much.

Lastly, thank you to my parents, siblings, partner, friends (Zama, Sbo and Ernest) for your unending love and support in my life and in the process of completing this dissertation. I love you all and thank you so much for everything.

## ABSTRACT

**Introduction:** Globally, street children are known to have poor psychological health and engage in risky behaviours as a result of the environment in which they find themselves. The current study was conducted to examine the psychological well-being of street children in Durban, KwaZulu-Natal. The main objectives of the study were to examine the prevalence of psychological problems and to examine the associations between health risk behaviours and psychological functioning.

**Method:** The sample used in this study consisted of 149 street children (128 boys and 21 girls) recruited purposively and responded to an interviewer administered questionnaire which measured varied constructs related to psychological health. The Strength and Difficulty Questionnaire was used to assess the psychological functioning of the street children. The Multidimensional Scale Perceived Social Support was used to assess their perceived social support. Pearson product-moment correlation and binary logistic regression models were fitted in the analysis of the data.

**Results:** This study revealed that among the participants, 99.3% reported using substances with over 84.2% reporting suicidal ideation. Substance use include alcohol, cigarettes, and marijuana and used by 74.3%, 43.6 % and 50% respectively. The majority of the participants (85.4%) were sexually active with 52.1% reporting non-condom use. Over 92.5% reported being victims of violence, with about 84.4 % being perpetrators of violence whilst within the domains of the streets. Suicide ideation was found to be associated with conduct problems and being victims of violent behaviour, whilst perpetrating of violent behaviours was positively associated with conduct problems. Prosocial behaviours was positively related to both emotional problems and suicide ideation but negatively associated with conduct problems, hyperactivity and engagement in violent acts against others. A significant

relationship was found between substance use and risky sexual behaviours among the participants. Furthermore, a significant relationship was reported between non-condom use in the last sexual activity and the use of marijuana and between non-condom use in the last sexual activity and the use of other drugs such as glue. Participants who consumed alcohol were three times more likely to have ever engaged in sexual activities whilst under the influence of alcohol. Additionally, street children who used marijuana were four times more likely not to use condoms in their sexual engagements. Furthermore, street children who used marijuana were more likely to engage in sexual activities without condom use.

**Conclusion:** This study contributed to the existing body of knowledge on mental health and health risk behaviours among street children. The findings of this study could be used to develop appropriate interventions that support the mental health of children living on the streets.

## **ACCRONYMS**

AIDS	Acquired Immune Deficiency Syndrome
ANOVA	Analysis of Variation
CBD	Central Business Area
CHETNA	Childhood Enhancement Through Training and Action
Crimstatssa	Crime Statistics South Africa
CSC	Consortium of Street Children
DoH	Department of Health
DSD	Department of Social Development
HIV	Human Immune deficiency Virus
HSRC	Human Science Research Council
MPSS	Multidimensional Scale Perceived Social Support
MRC	Medical Research Council
SAHIL	Against Child Sexual Abuse
SAMHSA	Substance Abuse and Mental Health Service Association
SDQ	Strengths and Difficulty Questionnaire
SPSS	Statistical Package for the Social Sciences
StatsSA	Statistics South Africa
STI	Sexually Transmitted infection
UN	United Nations
UNAIDS	Joint United Nations Program on HIV/AIDS
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WHO	World Health Organization

## TABLE OF CONTENT

CONTENT	PAGE NO.
DECLARATION	i
DEDICATION	ii
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
ACRONYMS	Vi
TABLE OF CONTENT	vii
CHAPTER 1: INTRODUCTION	1
1.1 Background	1
1.2 Rationale of the study	3
1.3 Aims and Objectives of the study	4
1.4 Research questions	5
1.5 Ethical considerations	5
1.6 Outline of the dissertation	5
CHAPTER 2: LITERATURE REVIEW	8
2.1 Introduction	8
2.2 An overview of the phenomenon of street children	8
2.2.1 Prevalence of homelessness	9
2.2.2 Factors contributing to phenomena of street children	9
2.3 Mental health of street children	10
2.3.1 Behavioural Problems	11
2.3.2 Co-morbidity of Psychiatric disorders	12
2.3.3 Suicide ideation and attempts	14
2.4 Substance use among street children	15
2.4.1 Violence and Violent Behaviours	20
2.5 Sexual health risk behaviours among street children	21
2.5.1 Survival Sex	22
2.5.2 Multiple Sexual Partners	23
2.5.3 Non-condom Use	24
2.6 Theoretical framework: Bronfenbrenner's Eco-developmental model	25
2.7 Conclusion	28
CHAPTER 3: RESEARCH METHODOLOGY	29
3.1 Introduction	29
3.2 Research Setting	29
3.3 Research Design	30
3.4 Participants	30
3.5 Research Instruments/Measures	31
3.6 Data collection and procedure	34
3.7 Ethical Considerations	35
3.8 Data Analysis	35
3.9 Conclusion	35
CHAPTER 4: QUANTITATIVE RESULTS	37
4.1 Introduction	37
4.2 Background and characteristics of participants	37
4.3 Psychological functioning of street children	38
4.3.1 Psychological functioning and its relationship with other variables	42
4.3.2 Suicide ideation and attempts	42
4.4 Health Risk Behaviours	43
4.4.1 Substance abuse	43



4.4.2 Violence and Violent related Behaviours	44
4.4.3 Sexual Risk Behaviours	45
4.4.3.1 Relationship between substance use and sexual risk behaviors	45
4.4.3.2 Predictors of ever had sex and condom use	48
CHAPTER 5: DISCUSSION	49
5.1 Introduction	49
5.2 Discussion	49
5.2.1. Demographics characteristics of street children	49
5.3 Psychological functioning of street children	50
5.3.1 Suicide and suicide ideation	51
5.4 Substance Use	52
5.4.1 Violence and violent behaviour	55
5.5 Sexual risk behaviour	57
CHAPTER 6: LIMITATIONS, RECOMMENDATIONS AND CONCLUSION	60
6.1 Introduction	60
6.2 Limitations	60
6.3 Recommendations for Organizations	61
6.4 Recommendations for Future Research	62
Conclusion	62
REFERENCES	64
APPENDICES	
APPENDIX A: Ethical Clearance to Conduct Study	82
APPENDIX B: Consent Form for Individual Participants	83
APPENDIX C: Sample Questionnaire	85
LIST OF TABLES	
Table .1 Descriptive statistics for Psychological functioning used in the study	32
Table .2 Demographic Characteristics of the Participants	38
Table. 3 Relationship between psychological functioning and other variable in the study	41
Table .4 Behaviours related to mental health	42
Table. 5 Health risk behaviours (Substance Use)	44
Table. 6 Health risk behaviours (Sexual Risk Behaviours)	45
Table .7 Relationship between substance use and sexual risk behaviours	47
Table. 8 Logistic regression of the predictors of ever had sex and non-condom use among street children	48
LIST OF FIGURES	
Figure 1: An ecological perspective applied to mental health among street children	26
Figure 2: Frequently reported psychological symptoms of street youth	40

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background**

Socio-political and economic factors such as unstable political transition, conflict, rejection by family has resulted in an increased street children populace globally (Aptekar & Stoecklin, 2014; Beazley, 2013; Panter-Brick, 2002; Osei-Twum & Wasan, 2012). A report by (WHO, 2014) stated that as the global population is increasing, a similar pattern is noted among the increasing number of street children. Literature and statistics within the African context reported an alarming increase of over 10 million street children from approximately 100 million street children (UNICEF, 2012). A great number of these children have little access to education and health facilities (Bordonaro, 2012; Henley, McAlpine, Mueller & Venter, 2010).

Developed and developing countries widely acknowledge and recognise the phenomenon of street children. The phenomenon is often associated with difficulty in definition and classification due to varied contexts in which street children live. Some researchers consider that the concept of street children is a manifestation of various societal and civil agendas (Panter-Brick, 2002). Controversies relating this definition of street children continue to prevail within varied socio-political contexts (Ursin, 2011). Panter-Brick (2002) emphasise that the term “street children” can be problematic due to wide-ranging criticism across socio-political peculiarities. Nevertheless, street children are defined as a fluid and heterogeneous populace that can be problematic to describe and categorise (Mercer, 2009). Additionally, researcher (Conticini, 2008) argues that some researchers continue to view street children as a homogenous population, which may lead to generalisation among this category of youth.

Street children, according to UNICEF (2005) are grouped into three main heterogeneous categories that include; children at risk, children of the streets and children on the streets. In

South Africa, street children are defined according to the (Children's Act no 38 of 2005). They are described as "a street child means a child who (a) because of abuse, neglect, poverty, community upheaval or any other reason, has left his or her home, family or community and lives, begs or works on the streets; or (b) because of inadequate care, begs or works on the streets but returns home after night" (Constitution of the Republic of South Africa, 1996). Street children in South Africa are also described as children living and working on the streets (Department of Social Development, 2014). In South Africa, the increase in street children numbers has raised concern by authorities who have begun to review policies and legislation on street children (Baatjies, 2005; Sevenhuijsen, Bozalek, Gouws & Minnaar-McDonald, 2003). An estimated 250,000 children reside on the streets and a great number are living within the greater towns and cities of South Africa (Consortium of Street Children (CSC), 2014). The increase in the street children population in the country has reached an alarming rates and is a major cause of concern that has been linked to the HIV/AIDS pandemic (Cluver & Gardner, 2006; Ward & Seager, 2010).

The influential factors that draw children to the streets have an impact on their general well-being and place them at further risk due to the adversities of street life (Malindi, 2014). Problems such as alcohol and drug use, abuse, and sexual risk behaviours are common social ills that confront street children (Adebisi, 2014; Bambonye, & Elbert, 2014; Nada & Suliman, 2010). Street children often have little knowledge of the adverse effects of substances (Barnaby, Penn & Erikson, 2010) and are more likely to use substances as a way of coping with life on the street (Embleton, Ayuk, Atwoli, Vreeman & Braitstein, 2012). Street children may also experience mental health problems such as: poor attention and concentration, conduct disorders, and mood and anxiety disorders including depression and Post Traumatic Stress Disorder (PTSD) (Edidi et al., 2012; Hudson & Nandy, 2012). Street life experiences further increase's their risk for mental health problems (Edidin et al. 2012).

Street children may also engage in suicidal thoughts (Aptekar & Stoecklin , 2014; Umthombo Street Children, 2014; Ward & Seager, 2010).

In South Africa socio-economic factors such as poverty, abuse and poor social and economic conditions have an impact on children's development and a greater number of children continue to move and live on the streets. In South Africa, studies focus on health problems, stigma, condom use among adolescents and street children (Eaton, Flisher, & Aarø, 2003; Kalichman & Simbayi, 2003; Thurman, Brown, Richter & Maharaj, 2006). It is crucial to examine the psychological well-being of street children within a context like South Africa.

## **1.2 Rationale for the study**

In South Africa, varied push and pull factors such as social, economic, and political factors have had a waving impact on the causes and the increase of children residing on the streets (Bray, 2003; Ennew, 2003). Studies highlighted the many problems of government systems within a context like South Africa (Schneider, Blaauw, Gilson, Chabikuli & Goudge, 2006). The seemingly lack of concern and protection by authorities and the general public of street children has been linked to the prevailing negative perceptions and stigma associated with street children (Umthombo Street Children, 2014; Ward & Seager, 2010). These children are often considered social problems and are less likely to be safeguarded and cared for whilst living on the streets by authorities (Ogunkan & Adeboyejo, 2014).

Previous studies in South Africa focused on orphan-hood due to HIV/AIDS, HIV/AIDS related knowledge, attitude, behaviours and the backgrounds of street children (Cluver, 2006; Ennew, 2003; Le Roux, 1995). Additionally, the involvement of multiple organizations and authorities in addressing issues of street children has had poor success due to little attention drawn into understanding the association between risky behaviours and mental health issues among this category of youth (Malindi & Theron, 2010; WHO, 2014 ).

One of the greatest needs seem thus appear to be the much neglected psychological needs of street children to form the foundation for appropriate interventions that address the psychological well-being of street children in South Africa. This study employed a quantitative approach as this method, this approach further allows for the categorization of common characteristics such as; risk behaviours and mental health problems experienced by street children. This approach differs from most of the South African studies that were of a qualitative nature (Celik, 2009; Le Roux, 2003). It is hoped that the findings of this study will further broaden existing knowledge on the mental health of street children within a multicultural South African context. Findings from this study could also be used to inform policies and guidelines for interventions targeted at improving the mental health and well-being of street children.

### **1.3 Aim and Objectives of the study**

The aim of this study is to examine the mental health status and psychological well-being of street children and associated risk behaviours they may engage in. The specific objectives of the study are:

- To explore the levels of psychological problems and health risk behaviours among street children.
- To investigate the association between health risk behaviours and the psychological problems of street children.
- To examine the association between substance use and sexual risk behaviours among street children.

## **1.4 Research Questions**

In order to achieve the above-mentioned aim and objectives of this study, the following research questions were asked:

- What are the prevalence of psychological problems and health risk behaviours among street children?
- What is the relationship between psychological problems as measured by SDQ and health risk behaviours among street children?
- What is the relationship between substance use and sexual risk behaviours among street children?

## **1.5 Ethical Considerations**

Ethical clearance for the study was obtained from the Ethics Committee of the University of KwaZulu-Natal. The study was conducted in KwaZulu Natal within the Durban Central region. Ethical approval was also sought from I-Care, a non-profit organization working with street children, who are designated custodians of street children within the Durban region. The study complied with ethical principles (e.g. informed consent, confidentiality of information, and voluntary participation). More detail about the ethical procedures that were followed during data collection will be presented in Chapter 3. See attached Appendix 1 for ethical approval from the above-mentioned institution.

## **1.6 Outline of the dissertation.**

The outline of the dissertation and various aspects in each chapter are presented below:

*Chapter One: Introduction*

In this section, the dissertation presents a brief background of the study with emphasis on the rationale of the study.

### *Chapter Two: Literature Review*

This chapter discusses and presents a review of literature on street children and the theoretical framework that guided the study. It gives an overview on street children globally and with a specific focus on the South African context. It further discusses the mental health and sexual risk behaviours of street children and finally the broad theoretical framework for understanding the various influences that impact street children and their behaviors.

### *Chapter Three: Methodology*

Chapter 3 provides an overview of the research method in relation to the design, sampling and instruments. It further discusses the procedure followed in data collection and the methods of analysing the collected data.

### *Chapter Four: Results*

This section presents the results of the study using a quantitative approach in relation to the research questions. The results of the statistical analysis are presented i.e. the psychometric properties of the measures, the relationships between psychological functioning and other variables and the predictors of sexual risk behaviours among street children.

### *Chapter Five: Discussion*

This section provides a discussion of the study results as described in the previous chapter. The results are discussed in relation to the literature and the theoretical framework used in the study. Firstly, the demographic characteristics of the participants are deliberated upon. Secondly, behaviours related to mental health of street children are discussed. Thirdly, the

relationship between psychological functioning and other variable in the study is deliberated on. Fourthly, the relationships between substance use and sexual risk behaviours are presented. Lastly, the predictors of ever had sex and non-condom use and the mental health outcomes among street children are reported.

#### *Chapter Six: Limitations, Recommendations, and Conclusion*

The first section of this chapter discusses the limitations of the study. Thereafter, the concluding comments and recommendations of the study are presented.



## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter provides a review of literature on the psychological well-being and health behaviours of youth living on the streets referred to as street children. The first section discusses the prevalence and the causes of homelessness. The sections that follow focus on the mental and health risk behaviours of street children. The chapter pays particular attention to mental health issues that are prominent among street children such as depression, hyperactivity, suicidal attempts, conduct and emotional problems. It further discusses the health risk behaviours among street children such as; substance use, violence and sexual risk behaviours.

In conclusion, the theoretical framework of the study namely the Bronfenbrenner's socio-ecological theory is discussed. The model focuses on the ecological levels of the environment and their influence on human behaviour. The model further proposes that in understanding influences of behaviour, it is crucial to take into account the relationships and interactions of the varied levels of the environment

### **2.2 An Overview of the phenomenon of Street Children**

This section presents an overview of street children by reporting on the prevalence of the phenomenon and possible causes of the increasing street children population. It is also essential to note that in describing children that live on the street, various words such as homeless youth and street youth etc. are interchangeably used. Some researchers use terms such as vulnerable children and homeless adolescents when addressing the phenomena of street children, especially in developing countries. This study uses terms such as street youth, vulnerable children and homeless youth interchangeably when referring to street children.

The definition of street children adopted for the purpose of this study is according to the Department of Social Development working definition of street children in South Africa. Street children interviewed in the study were those who resided within the domains of the streets. The age group of children interviewed in this study were those below the ages of 17 years of age.

### *2.2.1 Prevalence of homelessness*

Street children population estimates are difficult to obtain due to the fluid nature of this category of youth. However, UNICEF estimates that the population of street children run into tens of millions globally (UNICEF, 2012). In Sub Saharan Africa, the epidemic of HIV/AIDS has led to a generation of vulnerable children, about 11 million vulnerable children under the age of 15 (UNICEF, 2012). It is estimated that about 10,000 – 12,000 homeless children (Save the Children, 2014) can be found in South Africa, out of which about 500 are living on the streets of Durban (Umthombo Street Children, 2014).

### *2.2.2 Factors contributing to the phenomena of street children*

The reasons why children are drawn to reside within the domains of the streets is complex and multifaceted. Veeran (2004) links the phenomenon of street children to socio-economic and political structures that prevails worldwide. Previous research suggests that the reasons for children to reside on the streets included but not limited to; low purchasing power, overcrowding, abuse, neglect and family disintegration (Consortium of Children, 2014). Poverty, as a social factor in South Africa cannot be viewed in isolation when comprehending the causes of street children in the country (Kok et al., 2010). Barnaby, Penn and Erickson (2010) affirm that being homeless increase the risk for being in conflict with the law, using substances and engaging in illegal activities.

In South Africa, the origins of street children have been criticised (Kok et al., 2010). Kok, et al., (2010) question whether it could be due to poor housing and infrastructure or a combination of multiple factors. Health, social and economic factors have been reported to be possible causes for street children population in South Africa (Department of Social Development, 2014). The history of South Africa characterized by great inequalities and fragmented legislation and policy on the protection, nurturance and development of children, especially those on the streets could also be a contributing factor (Kok et al., 2010).

Factors such as fragile support, parental poor health and child neglect have been reported as common causes for the increase in the number of street children (Olley, 2006). Gender is another factor that has been reported to play a role in the cause of homeless youth (Olufemi, 2000). When examining the causes that contribute to the phenomenon of street children, considerations regarding the analysis of childhood adversity, urban poverty, and social segregation should be taken into account (Panter-Brick, 2004). Regardless of the reasons why children reside on the streets, a large proportion of street children find themselves without family support (UNICEF, 2004). The increased number of homeless individuals particularly in South Africa, has not being adequately addressed (Kok et al., 2010). Available literature to date on street children continue to focus on the drivers of street populace, rather than the impact of living on the street children's general well-being. Little is known about the extent of the psychological impact of homelessness on children living on the streets.

### **2.3 Mental Health of Street Children**

Street children are vulnerable and known to experience general and mental health problems. This section discusses the mental health of street children, with particular focus on their behavioural problems and substance use behaviours.

### 2.3.1 Behavioural Problems

Behavioural problems reviewed include hyperactivity, conduct and emotional problems, co-morbidity of psychiatric disorders and suicidal behaviors among street children.

#### *Hyperactivity, conduct and peer problems*

Street children's behavioural patterns often show signs of mental health problems. These problems may also influence their psychological well-being. According to Schmutte and Ryff (1997) the definition of psychological well-being encompass an range of attributes such as desirable psychological state and mental functioning that can be influenced by predisposing factors. When examining behavioural problems among homeless youth, Barnaby et al., (2010) reported that street youth experience feelings of loneliness, hopelessness, fear, shame, doubt, despair, trauma and stress. According to Wentzel (2014) prosocial behaviours are behaviours that involve assisting and supporting others in distress which often forms the hallmark of social competence during the stages of adolescent. Homeless youth are exposed and vulnerable to trauma, which may lead to victimisation by other street peers and criminals (The National Child Traumatic Stress Network, 2014). High stress levels among street children due to the difficulties of their everyday lives and the need for survival have been reported whilst they are residing within the streets (van Rooyen & Hartell, 2006). A study on behavioural problems among street children found that over eighty one percent (81%) of participants reported using substances in order to deal with emotional pain (Barnaby et al., 2010). A report by UNICEF noted that children's responses to stress differ and many may struggle to express their feelings and as a result may internalise these feelings (UNICEF, 2004).

Studies in Africa examined behavioural problems among street children. Studies in Ghana reported a close link between street life situations and the lack of parental control to defiant

behaviours (Special Attention Project, 2011). In Southern Africa, homeless youth present with deviant behaviours, which was also associated with psychopathological symptoms (Mufune, 2000). Low self-esteem was found to play an influential role on behavioural problems amongst street children, in particular to the risky behaviour they may engage in (van Rooyen & Hartell, 2006). Poor mental health was also found to be an indication of coping behaviour among street children, in particular females (Kirst, Eriskson & Strive, 2009).

Hypervigilance, impulsivity and difficulty in making decisions because of trauma are prevalent among homeless youth (The National Child Traumatic Stress Network, 2014). A study in Ghana found that street children presented with learning problems that also co-occur with symptoms of hyperactivity and inattention (Special Attention Project, 2011). A UN report found that the adverse environments in which street children reside might also result in impulsivity and risky behaviours (UN, 2014).

The general perception of street children is often negative also linked to the type of activities they often engage in (Ogunkan & Adebeyejo, 2014). Street children are also faced with social stigma that is often related to physical and mental health status as well as the use of substances (Barnaby et al., 2010).

### *2.3.2 Co-morbidity of Psychiatric Disorders*

Homeless youth are category of groups at high risk for psychiatric disorders such as depression (Whitbeck, Hoyt & Bao, 2000). Common mental health disorders diagnosed in street children include depression, anxiety, bi- polar and schizophrenia (Barnaby et al., 2010). A study by Taib and Ahmad (2014) reported high prevalence rate of co-morbid psychiatric conditions among street children. The same authors revealed that over half of participants in their study had co-morbid conditions such as depression and anxiety (Taib & Ahmad, 2014).

Findings from a study by Whitbeck et al., (2000) on psychiatric disorders among street children found that about a fourth of participants had elevated scores on the depression scales. A positive correlation between the experience of violence and aggression and its reciprocal impact on adolescent depression was reported (Latzman & Swisher, 2005). Children residing on the streets appear to experience multiple risks for depressive episodes symptoms, conduct problems and substance use (Whitbeck et al., 2000). In contrast, Taib and Ahmad (2014) argued that there was no evidence of psychotic disorders among the homeless participants in their study. Co-morbid substance use and pre-existing mental and other psychiatry disorders have made the assessment of street youth mental health problematic (Edidin et al., 2012).

Mental health problems are reported to be common among street children (Dawson & Jackson, 2013). Psychiatric disorders are commonly diagnosed mental health problems among street children and the prevalence of such problems is alarmingly high. In a study conducted in Chicago, over eighty two percent (82%) of street youth met criteria for a psychiatric diagnosis (Quimby et al., 2012). Approximately sixty one percent (61%) of street youth had a mood, anxiety or psychiatric disorders and over eighty four percent (84%) of participants met the criteria for substance related disorders (Quimby et al., 2012). A study conducted in Canada on mental health problems among street children also found that twenty four percent (24%) of participants experienced concurrent mental health and substance use problems (Kirst, Frederick & Erickson, 2011).

In a psychological study on psychiatric disorders among street children, Taib and Ahmad (2014) found a high prevalence of psychiatric conditions among homeless youth with over fifty seven percent (57%) of participants who were street youth met criteria for anxiety disorders, in particularly linked to Post Traumatic Stress Disorder (PTSD). Similarly, the researcher in the same study found that over twenty nine percent (29%) had childhood

disorders such as ADHD and childhood depression (Taib & Ahmad, 2014). In a study on depressive symptoms, substance abuse and conduct problems among homeless adolescents, being a victim of street life, was found to be good predictor of depression, substance abuse, or conduct problems (Whitbeck et al., 2000). Depression and PTSD were found to be mental health consequences of trauma (The National Child Traumatic Stress Network, 2007).

### *2.3.3 Suicide Ideation and Attempts*

Suicide attempts and suicide ideation among street children are been reported to be prevalent. Yoder, Whitbeck and Hoyt (2008) suggest a view of suicidality as a psychological progression that begins with thoughts of death and continues to suicidal ideation then move to suicidal attempts, which may lead to completed suicide. This view was also earlier supported by Desai, Liu-Mares, Dausey and Rosenheck (2003) who viewed suicidality on a continuum that begins from suicidal thoughts, attempts, and completed suicide. Conclusions drawn by Desai et al. (2003) suggested that homeless persons with a mental illness are at greater risk for suicidal behaviours than the general populace. Merscham, Van Leeuwen and McGuire, (2008) found a significant relationship between history of trauma and suicide ideation. In a study on suicidal ideation and suicide attempts in homeless mentally ill persons, Desai et al (2003) found that the prevalence of suicide and suicidal ideation among homeless individuals was relatively high, with about thirty five percent (35%) of participants reported suicidal thought and ideation.

Studies conducted in United States of America (USA) and Canada on suicide among street children reported that self-esteem played a key protective role in predicting feelings of hopelessness and helplessness amongst street children (Kidd & Shahar, 2008). A study in Sudan reported factors such as adverse street life conditions, family disintegration, economic factors and abuse to have impacted the psychological functioning of street children (Ali,

2011). A study in New York, highlighted factors such as family violence, abuse and associating with peers with suicidal behaviours to impact on suicide behaviours of street youth (Kidd, 2006). A study in the USA also reported that, homeless youth who engage in survival sex were at high-risk for suicide (Walls, Potter & Leeuwen, 2009). Desai et al. (2003), further affirm a significant relation between the use of substances and risk for suicide.

## **2.4 Substance use among street children**

The use of substances among street children has been widely documented to be highly prevalent. The WHO (2014, pg 1) defines substance abuse as "persistent or sporadic drug use inconsistent with or unrelated to acceptable medical practice". Street children, especially adolescents, are populations that are at-risk groups for using and abusing substances (Merscham, Van Leeuwen, & McGuire, 2008). A strong correlation between the use of substances and mental health issues among street children was found to be prevalent (Kropiwnicki, 2012). The use of substance among street children is prevalent in developed and developing countries. The use of illicit drugs is relatively high among the youth population in South Africa (Morejele et al 2013). In a study by Childhood Enhancement through Training and Action (CHETNA (2014) about seven hundred and thirty five (735) of street children were addicted to more than one type of substance. Furthermore, homeless youth were at great risk for substance use and poly substance (Bousman et al., 2005). Dhawan 2009 found the onset of substance use among street children to occur from an early age. A study by Barnaby et al., (2010) found the onset of substance use among street children to be from the age of 12 years. Due to the difficult and unstable environments of street children, they are more vulnerable to the use of substances (UN, 2014). Factors linked to the onset of substance use include availability and access of substances, the nature of drug use, background, social networks and individual motivation (Barnaby et al. 2010).



Substance use has been attributed to factors such as urbanisation, infrastructure, social and economic disparities (Against Child Sexual Abuse) SAHIL, 2014). According to Bousman et al. (2005), easier access to specific drugs leads to higher risk of addiction on the particular substance. The use of substances among street children, which included cheap drugs, was widely due to easy access and affordability (Naik et al., 2011). Glue was found to be easily accessible and affordable drug, it's the legal status of glue makes it a desirable drug of choice among street children (Embleton et al., 2013). The devastating effects of substance use among street children produce adverse effects on their brain function, which ranges from cognitive impairment to dementia (Dhawan & George, 2009). Physical and mental effects such as increased attentiveness, concentration, vigour, elevated mood and suppressed appetite are associated with the use of substance among street youth (SAHIL, 2014). Street children were reported to seek substance from places such as informal markets or shops and drug distributors (CHETNA, 2014).

The use of substances has also been linked with multiple risk factors, which occur at different levels of the environment (Morejele, Parry, Brook & Kekwletswe, 2012). The harsh realities of street life further renders some youth to be vulnerable to the misuse of substances that may further impair their cognitive function (van Blerk, 2012). Substance use among street children further places them vulnerable to problems with attention and possible brain damage in the long term (van Rooyen & Hartell, 2006). The use of substance among street children is further associated with mental health problems. Studies by Substance Abuse and Mental Health Service Association (SAMHSA) in the USA (2014) stated that there is a correlation between mental illness and substance abuse, with twenty six point one percent (26.1%) of homeless youth meeting the criteria for diagnosis psychiatric disorder, whilst thirty four point seven percent (34.7%) had problems with long-term substance use problems. The pilot study by SAMHSA (2014) further revealed that above eighty percent (80%) of participants had

lifetime drug or alcohol problems and over sixty percent (60%) had chronic mental health problems. A study conducted in the USA found a causal relationship between substance use and delinquent behaviours among homeless youth (Paradise & MariCauce, 2003). Furthermore, SAMHSA (2014) postulates that homeless youth are at great risk for serious mental illness, traumatic stress and substance use. In addressing substance use problems among street children Merscham, Van Leeuwen and McGuire (2008) highlighted the need for researchers to take into account the preference of drugs and their implications on the development of psychiatric disorders.

Street children use particular substances within particular contexts. The types of substance frequently used among homeless youth include; alcohol, tobacco and cannabis (Bousman et al., 2005). According to a study by Embleton et al. (2013), on substance use among street children, over seventy percent (70%) of homeless youth use substances such as glue as a mechanism of coping. A study conducted in Colorado on abuse indicators among homeless youth, supports this affirmation. The study showed that a vast majority of the participants were diagnosed with mental illness that was linked with the substance of choice (Merscham, Van Leeuwen, & McGuire, (2009). Cannabis among street youth in Chicago is the frequently used substance (Quimby et al, 2012). When examining substance use among street children in Colorado, van Leeuwen et al. (2004) found that over seventy five percent (75%) participants, who were on the streets, used cannabis.

Multiple factors influence the use of substance among street children. Barnaby et al. (2010) , identified some factors that contribute to substance related problems and risks, they included; behaviour and individual choices, the environment in which people reside and the laws and policies for control drug use. Lack of parental control was found to be a predictor of substance use among homeless youth (Bousma et al., 2005). A study in Colorado on substance use among homeless youth found a significant correlation between living

conditions and substance use among homeless youth (van Leeuwen et al., 2004). Peer and environmental factors influence homeless youth's use of substances (Bousman et al., 2005). The duration of living on the street was found to play a crucial role on the likelihood of using substances – the longer they have been on the street the more likely it is that they will use substances (Van Leeuwen et al., 2004). The mobile nature of street children raises challenges for accessing and engaging these children in substance use treatment programs (Triphathi & Ambekar, 2009). One of the major challenges faced by authorities in controlling the use of substances among street children is the lawful status of substances used by this category of youth (Triphathi & Amabekar, 2009). Examining the social contexts of substance dependence or abuse among street children may provide deeper understanding of the relationship between individual factors and the use of substances (Cottrell-Boyce, 2010). In South Africa, factors such as communal, school and academic environment, household environment, peer and individual factors play an influential role on children seeking refuge on the streets (Morejele et al., 2013) and thus influence the likelihood of substance use.

Although street children are reported to use substances, a variety of factors have been linked to their continuous use of substances. Barriers that were found to influence street children quitting substances include dependence, peer pressure, social networks, coping and survival strategies necessary in street life (Embleton et al., 2013). Nonetheless, positive factors have been identified to facilitate street children from quitting alcohol, included; the desire to quit and positive peer influence (Embleton et al., 2013). The use of varied substances among street children is also associated with adverse risks (Dhawan & George, 2009). The harmful effects of substance include compulsion, decreased need for sleep, anxiety and mixed emotions, which further influence the decision to use or quit substances (SAHIL, 2014). In contrast, the use of substances may aid and make it possible sleep during noisy and overcrowded areas. About ninety five percent (95%) of participants in a study on drug use

among street children reported attempting to quit drug use (Embleton et al., 2013). Similarly, in another study (CHETNA, 2014) about eighty seven percent (87%) of street youth disclosed the desire to quit but lacked the consciousness on how to do so. A study by CHETNA (2014) found that over sixty five percent (65%) of participants lacked knowledge of the use of substance and the consequence thereof.

The use of substances involves exposure to hazardous drugs that may increase risk to other problems (Barnaby et al., 2010). In South Africa, the Department of Health (DoH, 2014) developed a national policy of addressing substance use. However, the national Drug Master Plan, (DoH, 2014) fails to address substance use among the vulnerable members of society, especially street children. Section 10 to 12, subsection (12) of the Constitution of South Africa (No 108 of 1996) stipulates that citizens have the right to have their dignity respected and protected, the right to life, freedom, and security. The South African Drug Master Plan addresses substance use problems, but fails to consider the particular contexts in which street children live due to the fact that the plan place primary emphasis on raising awareness through media, school, and public health settings (DoH, 2014). A study in South Africa has pointed out the casual relationship between the use of substance and associated health risks (Parry, Rehm & Morejele, 2010).

In South Africa the commonly used substance among street children is alcohol, tobacco and cannabis (Morejele et al., 2012). Some of the risk factors for the use of substance and related interpersonal violence included; pressure, personality, behavioural problems, aggression and mental health problems (WHO, 2006). Similarly, the use of substances has a profound impact on brain function, which may result in impairment in individuals' thought processes that may lead to engaging in high-risk behaviour (van Rooyen & Hartell, 2006). The Department of Health (DoH) and the United Nations (UN) Office on Drugs and Crime, developed a prevention initiative known as "Ke Moja", which aims to raise awareness on drugs in South

Africa among children and youth (DoH, 2014). Although it is critical for collaborative efforts to address substance use among children and youth, it is crucial that harm reduction efforts and interventions are monitored and regulated with easy access and treatment for all (Morejele et al., 2013). Furthermore, South Africa's structural factors such as poverty and unemployment have had devastating consequences linked to reasons for street children and their subsequent substance abuse (Morejele et al., 2013).

#### *2.4.1 Violence and Violent Behaviours*

Street children are at risk of exposure to violence, engagement in violent behaviours on the streets or being the victims of violence. Violence according to the WHO (2014) involves intended force or power directed at an individual, group or community which can result in physical injuries, death or psychological injury. In this study, violence includes all forms and exposure within the street which street children may endure. In a report by (WHO, 2006) the types of drugs and substances used by street children are associated with the nature of violence they encounter. Homeless youth, prior to homelessness, are reported to experience high rates of trauma and abuse (Huemer et al., 2012). Street youth, who previously had concurrent mental health and substance use problems, were more likely to experience abuse and be victimised (Kirst et al., 2011). The risk of victimisation correlates with mental health problems in street children (Maciel et al., 2013). Street children with a history of trauma were likely to present with suicidal ideation (Merscham et al., 2008).

There is a significant positive relationship between interpersonal violence and substance use among street youth (WHO, 2006). In Bangladesh, some of the identified reasons for children residing on the street children were found to be associated with violence and social bonds (Conticini & Hulme, 2007). Over ninety percent (90%) of homeless youth in Duhok has been exposed to traumatic experiences (Taib & Ahmad, 2014). Studies in South Africa examined

assaults among street children and found that thirty four percent (34%) of participants reported assaults with head injuries and over fifty two percent (52%) of assaults reported were because of substance use or motor vehicle accidents (Van Rooyen & Hartell, 2006).

Apart from mental health issues that street children experience and its impact on their psychological functioning, it is imperative to pay attention to health risk behaviours among street children as these also influences their general well-being. The following sections will deliberate the issues pertaining to sexual health risk behaviours among street children.

## **2.5 Sexual Health Risk Behaviours among Street Children**

Life within the domains of the streets sometimes exposes street children to high level of health risks due to the adverse environments that they are embedded in. The most vulnerable group exposed to varied forms of exploitation includes the abuse of street children (Raja, Bano & Ahmed cited in SAHIL, 2003) which impact their health. Risks that confront street children include abuse, sexual risk behaviours with increased susceptibility to sexually transmitted diseases, mental and general health problems (Celik, 2009; UNESCO, 2014). Street children move in groups that are sexually active, with over two thirds of them being sexually active as reported in a study conducted in Canada (Marshall, Kerr, Shoveller & Patterson, 2009). There is a noteworthy correlation between high-risk sexual behaviours and the form of abuse that homeless youth are exposed to (Ferguson, 2009). There are higher rates of physical and sexual violence among street children than the general populace (Barnaby et al., 2010). When examining sexual risk behaviours among street children, sexual abuse was found to be prevalent among street children with over seventy eight percent (78%) reported experiencing sexual abuse and about thirty nine percent (39%) reported victimizing other street peers (SAHIL, 2014). Ferguson (2009) found that sexual abuse was the most emotional stressful experience for homeless youth. Risky sexual behaviours are on the

increase among street children and this vulnerability may result in sexual health illness and diseases (WHO, 2014). In Western Kenya, the majority of children and youth begin to engage in sexual activities with a lack of knowledge of the consequences of their behaviour (Kayembe et al., 2008). In a report by WHO (2003), the age of sexual debut was correlated with high-risk behaviours which included multiple sexual partners and little condom use negotiation.

Within the central business district of Durban, the use of substances, petty theft and risky sexual behaviour are highly prevalent (Umthombo Street Children, 2014). In a study conducted in KwaZulu-Natal it was found that gender plays an influential role in the onset of sexual debut among street children (Manzini, 2001). Young females were found to be at risk for engaging in risky sexual behaviours in exchange for food, clothing or shelter (Manzini, 2001). These behaviours of street children place them at risk for all forms of abuse, injuries, sexually transmitted infections including HIV and poor mental health (Aptekar & Stoecklin, 2014; Swart-Kruger & Richter, 1997; Ward & Seager, 2010). Due to the consequences of homelessness, street children may experience problems that may render them vulnerable to violent behaviour, minor crime, abandonment and commercial sex work (UN, 2014). Engaging in risky sexual behaviours has also been reported to be associated with use of substances among street children (Pagare et al., 2004). Although a few studies have examined sexual risk behaviour among children and adolescents in South Africa, there is little information on the association between the engagement in risky behaviours among street children and their psychological well-being.

### *2.5.1 Survival Sex*

The sexual behaviours street youth adopt as a way of life within the realm of the streets place them at high-risk for STI including HIV infection (Mastro et al., 2012; Tyler, Whitbeck,

Chen & Johnson, 2007). Some of the behaviour street youth engage in may include survival sex and the exchange of sex for substance use (van Leeuwen et al. 2004; Mastro et al., 2012; Nada & Suliman, 2010). Survival sex is sometimes a consequence of trauma and being homeless, which is also associated with health risks problems (The National Child Traumatic Stress Network, 2014). In Ghana, Asante, Meyer-Weitz and Petersen (2014) found that the use of substances among homeless youth make them vulnerable to high-risk sexual /behaviours, which included non-condom use, multiple sexual partners and survival sex. Within the Sub-Saharan region, studies have examined sexual behaviours among homeless youth. In Zimbabwe a positive correlation between risky sexual behaviours and the use of substances among street children was found (WHO, 2014). The way of life of street children makes them vulnerable to injuries and substance use that might include sexual and reproductive health (UN, 2014). Survival behaviour and poor living conditions are associated with mental health problems in middle-income countries (Woan, Lin & Auerswald, 2013).

### *2.5.2 Multiple Sexual Partners*

There is a link between survival sex among street children and health risks - this includes multiple sexual partners and inconsistent condom use. In a study on sexual risk behaviours among street children, about fifty four percent (54%) reported having multiple sexual partners for survival reasons (Nada & Suliman, 2010). The conditions in which street children reside correlate with a high prevalence of multiple sexual partners (Marshall, Kerr, Shoveller & Patterson, 2009). Some of the predictors of multiple sexual partners among street children are associated with living conditions and the use of substances (Solorio et al., 2008; UN, 2014). HIV and STI infections are prevalent among street children due to sexual risk factors such as multiple sexual partners and lack of protection (Nada & Suliman, 2010). Factors that facilitate sexually transmitted diseases among street children include consensual



sexual contact with multiple partners, coerced sex, substance abuse and related risky behaviours (UN, 2014).

### *2.5.3 Non-Condom Use*

Although studies in South Africa have examined sexual risk behaviours among street children, studies date from early 1990's till early 2000's (Swart-Kruger & Richter, 1997; Kruger & Richter, 2003). Not much is available and known on the current sexual behaviours of this category of youth in South Africa. In a study on condom use among homeless youth Nada and Suliman (2010) found that fifty two percent (52%) of participants reported never using condoms. Non-condom use amongst street children is associated with the use of substance (Tucker et al., 2012). In a report by the UN (2014) street children that use substances were more likely to engage in risky sexual behaviours, which may involve the non-use of condoms. A study in South Africa on street youth reported that they engage in sexual relationships which may also involve marketing sexual gratification (Kruger & Richter, 2003). There is further strong link between inconsistent condom use and high-risk of sexual diseases and infections such as STI's or STD'S (Marshall et al., 2009).

The lack of knowledge or concern influenced sexual health preference among street children (Barnaby et al., 2010). In a study on sexuality and sexual risking behaviours among street children, Barnaby et al. (2010) found that safe sex practice among sexual partners influence choice on the use of condoms, the financial gains also predict the use of condoms when engaging in sex work. The use of condoms was associated with the kind of sexual activity (Barnaby et al., 2010). For instance, there is no condom use for oral sex, but rather intercourse. Dawson and Jackson (2013) propose that there is a great need to maintain optimal health of street children to reduce their high-risk to mental and other health problems.

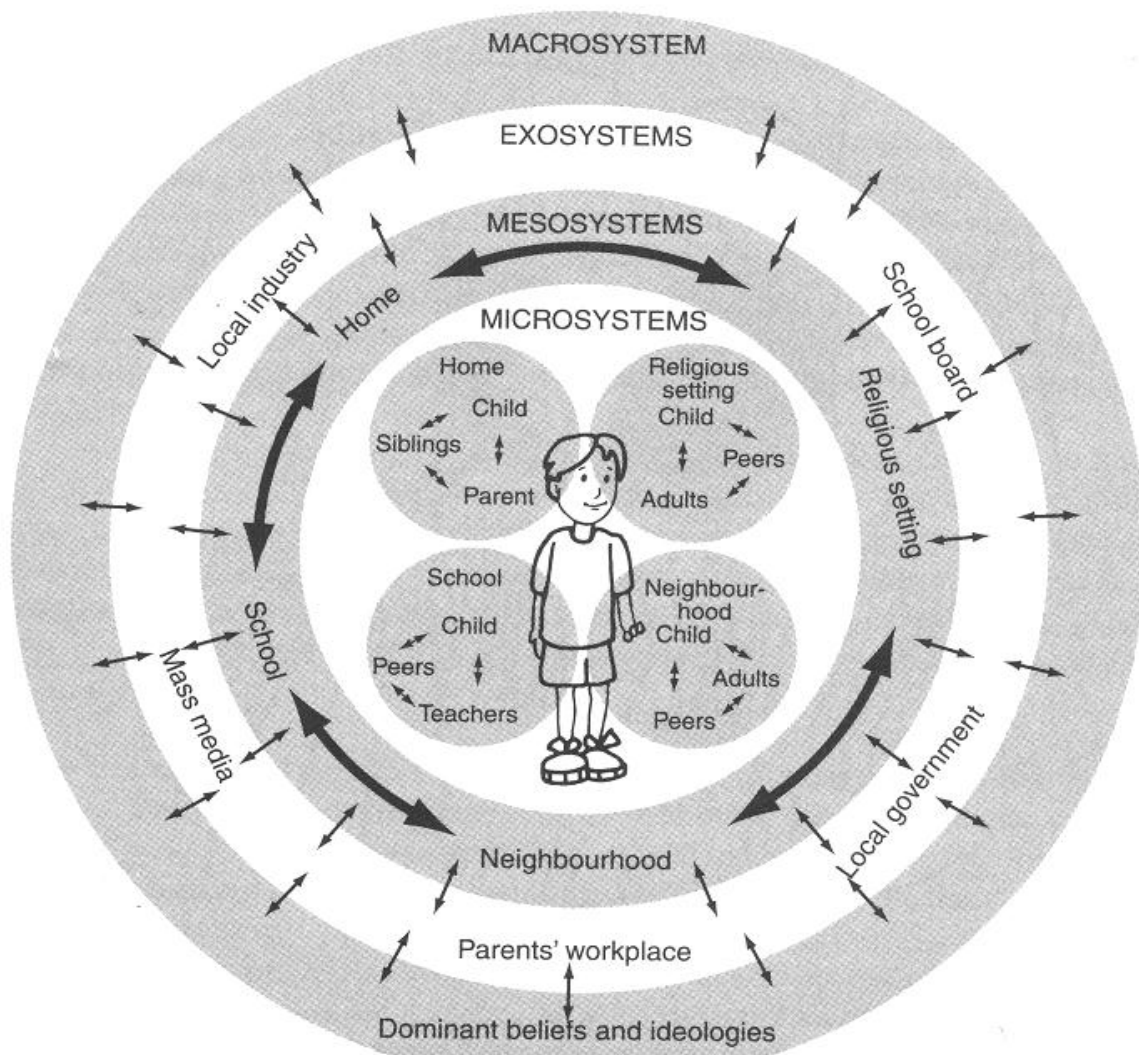
The section above deliberates the issues pertaining to the mental health of street children with associated behaviours and health risks. It is imperative to understand the psychological well-being of children living on the streets taking into consideration the multiple levels of influence on the general psychological well-being. The sections that follow provide in-depth understanding of the theory and model applied for this study in understanding the phenomenon of street children.

## **2.6 Theoretical Framework: Bronfenbrenner's Eco-developmental Model**

This study used the Bronfenbrenner's Eco-developmental Model as a guiding theoretical framework. There is no particular theory that can be used to offer justifications of mental health and its impact on the psychological well-being of street children and hence the model was applied with caution. The Bronfenbrenner's theory has been widely adopted in health studies but its foundation is primarily on human development. The description of human behaviour and development from this model is viewed from biological, interaction and social theories. This model provides multidimensional perspectives in understanding risk and resilience factors and the impact on human behaviour and development (Petersen, Swartz, Bhana & Flischer, 2010).

According to Bronfenbrenner's Eco-developmental Model, human development is viewed as a dynamic and interactional process (Bronfenbrenner, 1979; Bronfenbrenner, 1989). The model rests on the prominence of the interactions between individuals and their environment. Human development is viewed according to Bronfenbrenner as multidimensional with interactions between individuals, societies and socio-economic and political factors. The model suggests ecological layers that influence development. These layers are arranged in symmetrical patterns with structural, social and individual factors that impact on each other. The ecological layers affect inverse impact on each other (Bronfenbrenner, 1979). Different

segments of the environment have an influence on the individual who is entrenched within the innermost layer. The environment is thus divided into macro, meso, exo, and chrono structures of the environment (Berk, 2000). There is five interconnected layers microsystem, mesosystem, exosystem, and macrosystem in which the individual exists within (see Figure 1).



*Figure 1. Understanding multi-level influences on the child (Bronfenbrenner & Ceci, 1994)*

A social web embeds an individual; explanations that endeavour to appreciate them should take into account their environment and its impact on their behaviour and development within

the ecological layers. Those whom they interact with also influence the individual's behaviours and development. Factors that influence children's interactions within the individual level include characteristics that relate to the child and adults (Bronfenbrenner & Ceci, 1994). The characteristics include factors such as age, gender, culture, substance use, and educational level. For children on the streets, these include street peers and also their street youth or child status. The microsystem comprises factors such as peers, family environment, violence, abuse, and interactions with relatives or family members that have great influence on mental health behaviours. The roles of children, peer and family relationships and interactions form their microsystem (Elder et al., 2007).

The exosystem layer includes environments that are further than the child's immediate environment such as their family member's workstation. Although this system is beyond child's direction environment, it has an impact on the child. The community includes structures such as area, religious institutions and workplace in which social relationships are entrenched within (Elder, 2007).

The model used in this study provides appropriate framework for analysing street children from varied layers of the environment and its impact on their lives. It is also crucial to take into account the risk and protective factors that confront children resident on the street. In examining the mental health of street children with a developing context, the study adopted the model to meet its aims and objective. As children reside within the domains of the streets, numerous relationships have direct influence on their development. According to the theory, it is pivotal to pay attention at the varied systems that impact on the child, especially their growth and development. Within the varied layers of the environments the quality and context of child's development is of key focus (Elder et al., 2007).

## **2.7 Conclusion**

This chapter provided an overview about the phenomenon of street children that included the definition, prevalence and causes of this phenomenon. The study comprehensively reviewed literature on the mental health and sexual health risk behaviours among street children. In addition, research finding on these issues were discussed, this was followed by explanations and motivation for the theoretical model. The Bronfenbrenner's socio-ecological was used to examine the influence of the different layers of the environment on behaviour.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter provides the research methodology used in the study. The research setting is first described followed by the research design, sampling, research instrument, the process of data collection and analysis.

### **3.2 Research Setting**

South Africa has a populace of about 52.98 million people (Statistics South Africa (STATSA), 2014). The country has 11 official languages along with distinguished ethnic and cultural groups with their unique traditional practices. The province of KwaZulu-Natal has the second largest populace of the country with 10.5 million people, about 19.8% of the country's population (STATSA, 2014). About 29.2% of the population is aged younger than 15 years and approximately 7.8% (4.15 million) is 60 years or older (STATSA, 2014). Of those younger than 15 years, approximately 22% (3.42 million) live in KwaZulu-Natal (STATSA, 2014). This study was located in Durban, a city on the east coast in the province of KwaZulu-Natal. The Durban metro is predominantly black African (74%) with coloured in the minority at 3% (STATSA, 2014). The dominant home language is IsiZulu spoken by around 62% of the population, followed by English at 26%, (STATSA, 2014).

The research study sought the assistance of an organisation that renders community outreach services to children living on the streets of Durban and work towards the re-integration of children back into their homes.

### **3.3 Research Design**

The methodological approach used in any research study is often unique due to the specific aims and objectives the study sought to achieve. As suggested by Terre-Blanche and Durrheim (1999), the research design is a planned background for achievement that serves as a tie between research questions and the implementation of research. The researcher may have a preferred methodological approach that can significantly influence methods in which data is collected, analysed, and interpreted. Although each methodology varies, be it, quantitative or qualitative, it is critical to assess the strengths and weakness of each design (Terre-Blanche & Durrheim, 1999).

In reaching the objectives of this research study on the psychological well-being and social support of street children, the study used a purely quantitative approach in line with the aims and objectives of the study. The specific design used was a cross-sectional design, whereby the study collected data at a specific point in time (DiClemente & Salazar, 2006). A cross-sectional design typically comprises of data used to identify patterns of association in the groups as a whole or sharing characteristics or attributes (Somekh & Lewin, 2005). A cross-sectional design was deemed appropriate for this study, as participants had different backgrounds and reasons for residing on the streets, but they are all currently residing on the streets and confronted with similar challenges on the physical, psychological, social, and general well-being.

### **3.4 Participants**

The research participants in the study were street children living on the streets of Durban Central, KwaZulu-Natal. The study used a non-probability convenience sampling technique due to easier access the street children population within the Durban Central area. Neuman

and Neuman (2006) broadly defines sampling as a procedure that comprises choices about which people, settings, circumstances, and social processes to note.

The non-probability convenience sampling of street children within Central Durban, KwaZulu-Natal allowed the researcher to choose participants who are available from the population at a point in time (Haer & Becher, 2012). This sampling method was useful as it was the most convenient way of collecting data from the participants and the fact that the estimated number street children during data collection was unknown. This sampling type method was also justified because participants are interviewed based on their availability and accessibility (Adler & Clark, 2014). A total of 149 street children were interviewed within the Durban Central Area. The sample size of 149 was viewed to be adequate due to the difficulty in accessing this transient population.

### **3.5 Research Instruments/Measures**

Data collection was done in the form of an interviewer-administered questionnaire as the literacy levels of homeless youth may vary greatly, making it difficult for them to complete it themselves. Three research assistants and principal researcher were primarily responsible for the data collection process and procedure. The questionnaire consisted of socio-demographic questions, and other measures that assessed psychological functioning of youth, and health risk behaviours. The details of these measures are below.

*Biographical Information:* Questions included were: gender, age, highest level of education, number of years living on the street, reasons for homelessness, available support structures, and other support services and province of origin.

*The Strengths and Difficulties Questionnaire:* The Strengths and Difficulties Questionnaire (SDQ) developed by Goodman (2001) was used to assess the **psychological functioning** of



the street children. The SDQ consists of a 25-items with five sub-scales namely emotional symptoms, conduct problems, hyperactivity, peer relationship problems, and prosocial behaviours, rated on a 3-point Likert scale (Not True, Somewhat True, and Certainly True) with the score range of 0-40. These scores can often be classified as normal, borderline and abnormal. Scores falling within score range of 0-13 is categorised as normal, 14-16 as borderline and 17-40 as abnormal. The SDQ has been used in South Africa (Cluver, Gardner & Operario, 2007) and has been validated in the South African context by previous researchers which reported high Cronbach's alpha coefficients (Mueller, Alie, Jonas, Brown & Sherr, 2011). Inter-item correlations were conducted and some items in the SDQ were deleted to improve the Cronbach alphas for the various indices. In this regard, four items (2, 10, 21, and 25) were used to compute hyperactivity, three items (12, 18, 22) for conduct problems, three items (8, 16, 24) for emotional problems. All five items measuring pro-social behaviour were retained. In computing the total difficulty per child, only the sub-scales of hyperactivity, conduct, and emotional problems were used. Table 1 presents the full descriptive characteristics of these measures (See Chapter 4).

*The Multidimensional Scale Perceived Social Support* (Zimet, Powell, Farley, Werkman, Berkoff, 1990) was used to assess the **social support** of the street children. The 12 item scale measures perceived social support along three dimensions that are family, friends, and significant others in the form of a self-administered questionnaire. Scale ratings are based on a 5-point Likert type ranging from 1 (Strongly Disagree) to 5 (Strongly agree). The MSPSS has been administered within a South African context to various samples with a reported Cronbach alpha coefficient of 0.94 for the full scale (Rothon et al, 2011). Acceptable reliability coefficients have been reported in South African samples ranging from 0.86 to 0.97 for all the three dimensions, (Kuo, Fitzgerald, Operario & Casale, 2012). This study found a Cronbach alpha of 0.92 for the full scale.

**Table 1****Descriptive statistics for psychological functioning used in the study**

Measures	N	Items	Scale Range	Mean	SD	Skewness	Kurtosis	$\alpha$	Mean Inter-item Correlation*
<b>Multidimensional Scale Perceived Social Support</b>	146	12	12 – 56	38.27	8.96	-0.49	-0.56	0.917	0.482
<b>Total Strength and Difficulty</b>	137	10	6–16	11.50	8.37	-0.13	-0.40	0.489	-----
Emotional problems	149	3	0 – 6	3.30	1.52	-0.53	-0.52	0.480	0.236
Conduct problems	149	3	0 – 6	2.82	1.45	-0.45	-0.28	0.439	0.207
Hyperactivity	144	4	1– 8	5.01	1.47	-0.62	-0.22	0.500	0.200
Pro-social behaviour	148	5	0 – 10	5.64	2.40	-0.15	-0.52	0.680	0.295
Suicide Ideation	144	4	0 – 4	179	1.26	0.72	-0.76	0.670	0.315

\*Scales with items less than 10 should consider the mean inter-item correlation as suggested by (Briggs & Cheek, 1986).

## **Health Risk Behaviours**

Street children's health risk behaviours were assessed in four main areas namely substance abuse, sexual risk behaviours, suicidal ideation and attempts and violent behaviours. The details of these measures are explained below:

***Substance Abuse:*** There were four questions adapted from the South African Risk Behaviour Survey (Reddy et al., 2009). These were used to ascertain **substance use and abuse**. Information was drawn from these questions from the participants, particularly on their involvement in the use or abuse of substances. The varied items were computed and summarised using the total score as an index.

***Sexual Risk Behaviours:*** In measuring the **sexual activity and behaviours** of the participants, the study asked four questions adapted from the South African Risk Behaviour Survey (Reddy et al., 2009). The focus of these questions was primary on their sexual practices and the use of condoms. For instance, "Have you had sex?", "Did you use a condom?" and "Do you have more than two sexual partners?" The overall measures of sexual risk behaviours were analysed individually.

***Suicidal Ideation:*** Participant's **suicidal ideation and attempts** were assessed and adapted from the South African Risk Behaviour Survey (Reddy et al., 2009). There were four questions asked over a period of a month on the regularity of suicide-related considerations. For example, the questions were as "Have you ever considered attempting suicide?", "Do you sometimes feel hopeless?" and "Have you made plan to commit suicide?" The Cronbach alpha was 0.67 for this study.

***Violent Related Behaviours:*** Violent-related behaviours among street children were assessed using a constructed violence index scale. These questions were also adapted from the South

African Risk Behaviour Survey (Reddy et al., 2009). The questions assessed the various behaviours related to street children **violent and violent-related behaviours**. These questions were scored as either Yes or No. There were specific behaviours that the questions aimed to measure, which included assault, coerced sex, fighting, violence related, and aggressive behaviours. The reliability Cronbach alpha for this study was 0.67 on the measure of violence.

### **3.6 Data Collection and Procedure**

Permission to undertake the study was sought from I-Care, an NGO that provides multifaceted interventions for children on the streets in Durban, and the University of KwaZulu-Natal Humanities and Social Science Ethics Review Committee. The NGO acted as gatekeepers because these youth have vested their well-being, rights and welfare in their care (Blanche, Blanche, Durrheim & Painter, 2006). Once access was granted, one of the officials from the organisation contacted the researcher to facilitate the data collection process. With this primary relationship established, the data collection process was more effective and efficient with less confusion from all participants involved. Each participant on the street was informed about the focus of the study, after which they were asked if they would be willing to participate. Voluntary participation was emphasised and participants were informed that they could freely withdraw from the study at any time. Verbal consent was obtained from those who agreed to participate in the study. Those who participated were interviewed to complete the questionnaires pertaining to the biographical data sheet, the SDQ, MSPSS and health risk behaviours measures. The questionnaire was read to participants in either English or IsiZulu. The administration of the questionnaire lasted on average 40 minutes and data collection period lasted for a period of four weeks. The language's in which data was collected was primarily in English and IsiZulu. The participants that were available within the organization and within the streets during the early hours of the morning were selected and interviewed.

### **3.7 Ethical Considerations**

This study was approved by the Humanities and Social Science Ethics Review Committee of the University of KwaZulu-Natal. In addition, the I-Care street children organisation was approached for consent as they serve as the legal guardians of children living on the streets. All participants were informed about the purpose of the study and the duration. Participants were informed that participation was voluntary and they may allowed to discontinue with participation in the study if they so wish. Confidentiality of participants was protected by ensuring that no personal or identifiable information was mentioned in the research findings or any part of the research study. An informed consent form was read to each participant in the language that they understood. Participants were encouraged to ask questions concerning the study if they had any objections.

### **3.8 Data Analysis**

Data was analysed with the help of SPSS (version 21). Descriptive statistics were used to analyse and describe the nature of the data collected, as well as to determine the levels of psychological functioning and health risk behaviours. Pearson's product-moment correlation coefficients were used to explore possible relationships between psychological functioning and the other variables in the study. Chi-square tests were used to explore the associations between substance use and sexual risk behaviours among street youth. Binary logistic regressions, was used to explore predictors of ever had sex and non-condom use among street children. The low Cronbach's reliability coefficient of the key variables as well as the non-significant correlations, did not allow the researcher to conduct regression analysis.

### **3.9 Conclusion**

This chapter provided comprehensive description of the methods used in this study. The research study provided great opportunities and challenges for the collection of data. The data

collection and analysis processes were elaborated upon in this chapter. The research setting, design, sampling method, measures, used for the study was clearly set out. Chapter 4 will present the results obtained from the analysed data.

## **CHAPTER 4: RESULTS**

### **4.1 Introduction**

This chapter presents the quantitative results. The first section describes the general characteristic of the study sample. This is followed by the results pertaining to the participant's suicidal ideation, substance abuse and sexual risk behaviours. The third section examines the relationships between psychological functioning and other related factors. Finally, a multivariate logistical regression is presented that assessed the predictions of the various sexual risk behaviours.

### **4.2 Background and Characteristics of Participants**

Table 1 presents the demographic characteristics of the sample. The total sample in this study consisted of 128 boys (85.9%) and 21 girls (14.1%). Over 71.1% of the sample were 16 years and younger. A large number of the participants identified themselves as Christians (84.7%). Over two thirds (70.1%) were living on the streets for periods ranging between less than a year and two years. The major reasons for leaving home were family poverty (24.3%), dysfunctional home, and/or divorce (21%). Over 83.1% were not in contact with their family members and about 16.9% were in contact with either their mother; father, brother, sister, aunt, or uncle. The majority (90.6%) of the participants had elementary education (i.e. grade1-9), whilst an equally large number (90.6%) of the children were from KwaZulu-Natal province.

**Table 2**  
**Demographic Characteristics of the Participants**

<b>Characteristics</b>	<b>Number</b>	<b>Percentage</b>
<b><i>Gender</i></b>		
Girls	21	14.1
Boys	128	85.9
<b><i>Religion</i></b>		
Christian	122	84.7
Muslim	7	4.9
Hinduism	10	6.9
Other	5	3.5
<b><i>Number of years on streets</i></b>		
Less than 1 year	51	35.4
1-2 years	50	34.7
3 and above	43	29.9
<b><i>Age</i></b>		
14 years and younger	35	23.5
15 years	30	20.1
16 years	41	27.5
17 years and above	43	28.9
<b><i>Reasons for leaving home</i></b>		
Family poverty	36	24.3
Dysfunctional	31	21.0
Maltreatment;(Sexual abuse)	34	23.0
Maltreatment;(Physical abuse)	14	9.4
Other Reasons	33	22.3
<b><i>Contact with family members</i></b>		
Yes	25	16.9
No	123	83.1
<b><i>Educational level</i></b>		
No education	3	2.0
Grade 1-6	90	60.4
Grade 7-9	45	30.2
Grade 10-12	11	7.4
<b><i>Province</i></b>		
Limpopo	6	4.0
KwaZulu-Natal	135	90.6
Eastern Cape	8	5.4

### **4.3 Psychological functioning of Street Children**

In table 1, the descriptive statistics for this study are outlined. Information on the number, items, scale range, mean, standard deviation, skewness, kurtosis and meant inter-item correlations are provided for the Strength and Difficulty Questionnaire (SDQ) and Multidimensional Perceived Social Support (MPSS) scale. The score of the two measures are



distributed normally according to Table 1. The scores on SDQ and MPSS indicate negative skewed values were score are clustered at the high end of the distribution. The normality of data was assessed by examining the extreme score in the distribution. In determining the reliability of measures, the mean inter-item was computed due to low scale scores. The Strengths and Difficulty Questionnaire scales scores were reported to be low among the participants.

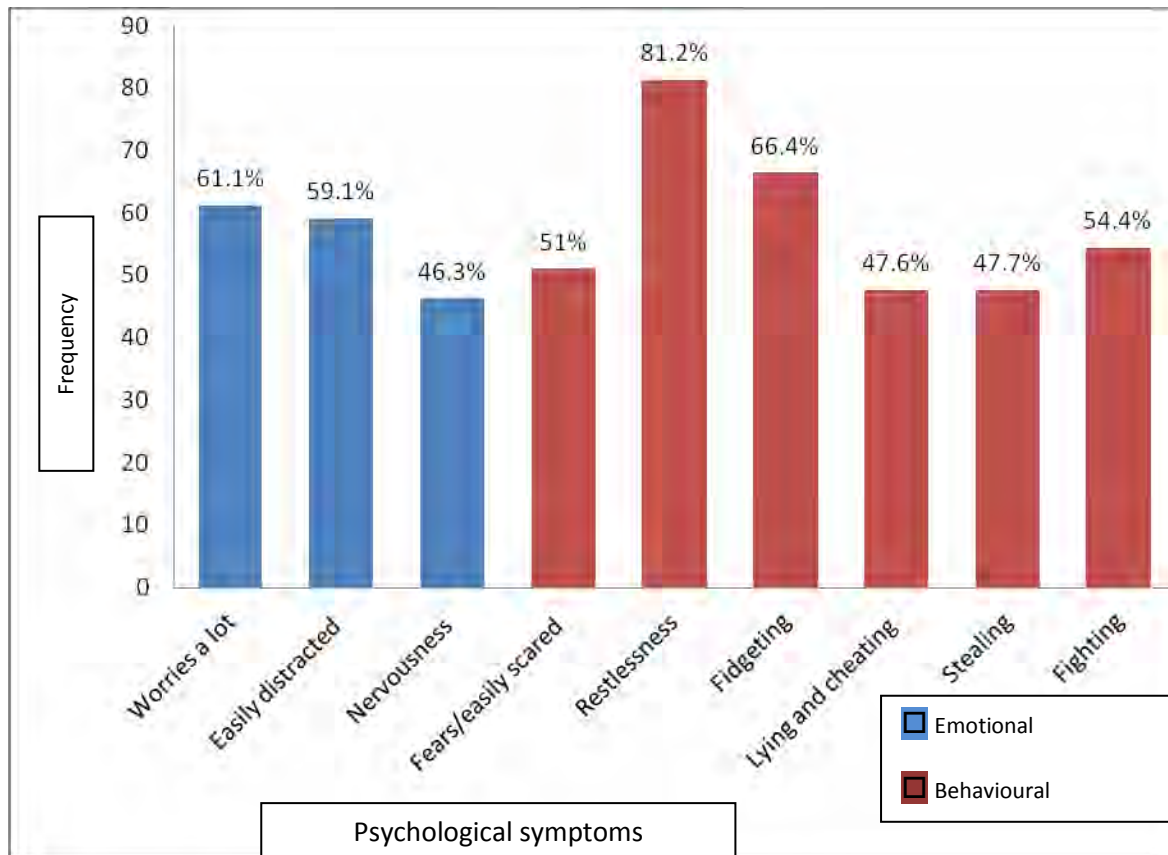
**Table 1**

**Descriptive statistics for psychological functioning used in the study**

Measures	N	Items	Scale Range	Mean	SD	Skewness	Kurtosis	A	Mean Inter-item Correlation*
<b>Multidimensional Scale Perceived Social Support</b>	146	12	12 – 56	38.27	8.96	-0.49	-0.56	0.917	0.482
<b>Total Strength and Difficulty</b>	137	10	6–16	11.50	8.37	-0.13	-0.40	0.489	-----
Emotional problems	149	3	0 – 6	3.30	1.52	-0.53	-0.52	0.480	0.236
Conduct problems	149	3	0 – 6	2.82	1.45	-0.45	-0.28	0.439	0.207
Hyperactivity	144	4	1– 8	5.01	1.47	-0.62	-0.22	0.500	0.200
Pro-social behaviour	148	5	0 – 10	5.64	2.40	-0.15	-0.52	0.680	0.295
Suicide Ideation	147	4	0 – 4	1.79	1.26	0.72	-0.76	0.670	0.315

\*Scales with items less than 10 should consider the mean inter-item correlation as suggested by (Briggs & Cheek, 1986).

The mean inter-item correlation was used in this study due to low scale scores. According to (Briggs & Cheek, 1986: Pallant, 2010) the mean inter-item correlation can be used when score scales are less than 10. Poor attention and concentration by the participants could have resulted in low scales score in the Strengths and Difficulty Questionnaire. Furthermore, participants were observed to be hyperactive with poor concentration and attention.



**Figure 2: Frequently reported psychological symptoms of street youth**

The most frequently reported emotional and behavioural problems reported by street children as measured by the SDQ are presented in Figure 2. The result shows that worrying (61.1%), distraction (59.1%), fears (51.0%) and restlessness (81.2%) were the most common anxiety symptoms reported by the participants. The most behavioural problems reported by the participants include fidgeting (66.4%) and fighting (54.4%).

Table 3

## Relationship between psychological functioning and other variables in the study

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. <b>Difficulty Index</b>	1											
2. Emotional problems	.655***	1										
3. Conduct problems	.496***	.052	1									
4. Hyperactivity	.528***	.162	.060	1								
5. Prosocial Behaviour	.111	.296***	-.272**	-.226**	1							
6. <b>Total Social Support</b>	.098	.026	-.011	-.014	.202*	1						
7. SS-Friends	.106	.005	.045	.063	.868***	-.053	1					
8. SS-Family	.099	.064	-.035	-.089	.945***	.729***	-.028	1				
9. SS-Significant Others	.062	.001	-.040	-.015	.903***	.618***	.842***	-.211*	1			
10. <b>Suicide</b>	.108	.097	.178*	-.023	-.020	-.044	.006	-.015	-.085	1		
11. <b>Violence-Victim</b>	.047	.090	.135	.033	.075	.165*	.053	.062	.089	.119	1	
12. <b>Violence-Perpetrator</b>	.084	-.005	.222**	.043	.050	.065	.301***	-.007	.066	.079	.256**	1
13. <b>Substance use</b>	-.047	.008	.067	-.035	-.021	-.011	.035	.165	-.070	-.049	.064	.176*

\*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$

#### 4.3.1 Psychological Functioning and its Relationship with Other Variables

Table 3 presents the association between the psychological functioning (including its domains) and other variables in the study. The results showed that there is a positive correlation between suicide ideation and conduct problems ( $r = 0.178, p < 0.05$ ) and victims of violent behaviours ( $r = 0.165, p < 0.05$ ). It was also observed that perpetrators of violent behaviours were more likely to report having conduct problems ( $r = 0.222, p < 0.01$ ). A positive and a significant relationship was found between those who engage in violent behaviours and being the victims of such behaviours ( $r = 0.301, p < 0.001$ ), an indication that street children who had been victims of violent behaviours were also perpetuating the same violent behaviours.

#### 4.3.2 Suicidal Ideation and Attempts

In Table 4, over 84.2% of participants reported feeling hopeless and about 42.2% had suicidal ideation. A large percentage (70.1%) of the participants stated that they had no plans to commit suicide, whereas (29.1%) had made plans to commit suicide. Nearly 24.5% reported suicidal ideation with more than one plan to commit suicide. Over 75.5% of the participants reported no suicidal ideation.

**Table 4**  
**Behaviours Related to Mental Health**

Behaviours related to mental health	Yes		No	
	N	%	N	%
<i><b>Suicidal Ideation</b></i>				
Do you sometimes feel hopeless	122	82.4	26	17.6
Have you ever considered attempting suicide	62	42.2	85	57.8
Have you made a plan to commit suicide	44	29.9	103	70.1
Have you made one or two suicide attempts	36	24.5	111	75.5

#### **4.4 Health Risk Behaviours**

Behaviours related to mental health of street children such as substance abuse, violent behaviours and sexual risk behaviours are presented in Table 5, 6, 7, 8 below.

##### *4.4.1 Substance Abuse*

About 99.3% of participants used substance such as cigarettes. Over half (66.2%) of the participants attempted to quit smoking and yet about 33.8% did not attempt to quit the use of substances such as cigarettes. Over 85.1% of the participants had consumed alcoholic beverages whilst on the streets. Only 14.9% had not used alcoholic beverages on the streets. The majority (74.3%) of the participants reported consuming an alcoholic beverage within a month's period. Just about 93.2% of participants reported using illegal substances such as cannabis. About 43.6% of participants reported onset of cigarette use at the age of 14 years and older, whilst 33.3% were between the ages of 12-13 years. A small number (23.1%) reported first onset of cigarette use at age 11 years and younger. Over 50% of the participants who were between ages of 14 years and older reported using cannabis, commonly known to participants as "weed/marijuana". About 36.2% reported their first use of cannabis between the ages of 12-13 years.

A small number (13.8%) of the participants reported onset of use of cannabis was at 11 years and younger. Approximately 46.5% of the participants reported their first use of alcohol at the age of 14 years and older. Over 31% reported onset of alcohol use between ages 11-12 years. Only 22.5% of the participants reported initial age of drinking alcohol at age 11 years and younger.

**Table 5**  
**Health Risk Behaviours (Substance Use)**

Health Risk Behaviours	Yes		No	
	N	%	N	%
<b>Substance Use/Abuse</b>				
Have you ever smoked cigarette?	148	99.3	1	.7
Have you ever drunk an alcoholic beverage?	126	85.1	22	14.9
Have you used alcohol in last one month?	110	74.3	38	25.5
Have you ever used “weed” (marijuana)	137	93.2	10	6.8
<b>Tobacco</b>				
<i>Age of first smoking cigarette</i>				
11 years or younger	34	23.1		
12-13 years	49	33.3		
14 years and above	64	43.6		
Have you ever tried to quit smoking?	98	66.2	50	33.8
<b>Marijuana</b>				
<i>Age of first smoking marijuana</i>				
11 years or younger	19	13.8		
12-13 years	50	36.2		
14 years and above	69	50.0		
<b>Alcohol</b>				
<i>Age of first drinking alcohol</i>				
11 years or younger	29	22.5		
12-13 years	40	31.0		
14 years and above	60	46.5		
<b>Violent Behaviours</b>				
Have you ever been bullied?	136	92.5	11	7.5
Have you ever bullied someone?	124	8.4	23	15.6
Have you beaten someone?	128	87.1	19	12.9
Have you ever been injured in a fight?	143	96.6	5	3.4

#### *4.4.2 Violence and Violent related behaviours*

About 92.5% of the participants experience bullying whilst on the streets. Nearly 84.4% of the participants reported bullying other peers on the streets. Over 87.1% of the participants reported physically assault. Almost all (96.6%) of the participants reported being physically assaulted during fights with peers.

**Table 6**  
**Health Risk Behaviours (Sexual Risk Behaviours)**

Health Risk Behaviours	Yes		No	
	N	%	N	%
<b>Sexual Risk Behaviours</b>				
Have you had sex in the last one month?	127	85.8	21	14.2
Did you use a condom in your last sexual activity?	69	47.9	75	52.1
Do you have more than two (2) sexual partners?	61	41.8	85	58.2
Have you had sex with someone in exchange for food, money)	19	12.9	128	87.1
<b>Age of sexual debut</b>				
11 years or younger	24	17.3		
12-13 years	72	51.8		
14 years and above	43	30.9		
<b>Coerced sex</b>				
Have you ever been forced to have sex with someone?	32	21.6	116	78.4
Have you forced someone to have sex before?	38	25.7	110	74.3
Do you know someone who had been raped?	92	62.2	56	37.8

#### *4.4.3. Sexual Risk Behaviours*

In table 6, over 85.4% of participants reported being sexually active, while 14.2% reported not to be sexually active. Just over half (52.1%) did not use condoms whilst engaging in sexual activities. About 47.9% reported condom use when engaging in sexual behaviours. Over 87.1% reported not engaging in any sexual behaviour in exchange for money, clothing, or food. Just under half (47.3%) have been forced or forced themselves to have sexual relations with other peers. Over half (62.2%) of participants reported knowledge of knowing someone that had been raped, whilst (37.8%) mentioned that they did not know anyone who had been raped on the streets. Over 51% of the participants reported sexual debut at age 12-13 years, whilst 30.9% were 14 years and older. A small number of participants (17.3%) reported their sexual debut at age 11 years and younger.

##### *4.4.3 .1 Relationship between substance use and sexual risk behaviours*

Table 7 presents the results of the Chi-square tests, showing the relationship between the various categorical variables measuring substance use and sexual risk behaviours. The results

showed the presence of clustering effect of health risk behaviours among the street children such that those who have had sex were more likely to have used alcohol ( $\chi^2 = 6.60$ ;  $p = 0.010$ ) and used marijuana ( $\chi^2 = 5.79$ ;  $p = < 0.05$ ). Furthermore, a significant positive relationship was reported between non-condom use in the last sexual activity and the use of marijuana ( $\chi^2 = 6.97$ ;  $p = 0.008$ ) on one hand, and between non-condom use in the last sexual activity variable and the use of other drugs, such as glue ( $\chi^2 = 6.35$ ;  $p < 0.01$ ) on the other hand. The results did not find any relationship between having multiple sexual partners and any of the indices of substance use. Again, no significant association was found between survival sex (i.e. sex in exchange for food, money, and clothes or even where to sleep) and any of the indices of substance use.



**Table 7**  
**Relationship between substance use and sexual risk behaviour**

	Ever had sex		Chi-square $\chi^2$	Multiple sex partners		Chi-square $\chi^2$	Non condom use		Chi-square $\chi^2$	Survival sex		Chi-square $\chi^2$
	Yes (%)	No (%)		Yes (%)	No (%)		Yes (%)	No (%)		Yes (%)	No (%)	
<i>Smoked cigarette</i>												
No	0	100	0.16	98.7	1.3	0.93	98.8	1.2	0.73	99.2	0.8	0.15
Yes	99.2	0.8		99.5	0.5		100	0		100	0	
<i>Drunk alcohol</i>												
No	66.7	33.3	6.60*	84.0	16.0	0.63	81.2	18.8	3.26	85.9	14.1	0.64
Yes	88.2	11.8		85.5	14.5		91.8	8.2		78.9	21.1	
<i>Use marijuana</i>												
No	81.0	19.0	5.79*	95.9	4.1	0.23	89.3	10.7	6.97**	93.7	6.3	0.03
Yes	95.2	4.8		94.2	5.8		100	0		94.7	5.3	
<i>Used wonga</i>												
No	37.5	62.5	0.60	50.4	49.3	1.47	49.4	50.6	0.67	46.9	53.1	0.20
Yes	47.5	52.5		40.0	60.0		42.0	58.0		41.2	58.8	
<i>Glue use</i>												
No	63.2	36.8	0.80	68.1	31.9	1.02	53.8	46.2	6.35*	63.9	36.1	0.05
Yes	63.0	37.0		59.7	40.3		75.0	25.0		61.1	38.9	

Note: \*  $p < .05$ ; \*\*  $p < .01$ .

#### 4.4.3.2 Predictors of Ever had sex and non-condom use

The results in Table 8 depict the binary logistic regression of the predictors of ever had sex and non-condom use. Participants who consumed alcohol were three times (OR = 3.77; 95% CI = 1.30–10.73,  $p = 0.014$ ) more likely to have ever engaged in sexual activities whilst under the influence of alcohol. Additionally, street children who used cannabis were four times (OR = 4.71, 95% CI = 1.20-18.40,  $p = 0.026$ ) more likely not to have used condoms during sexual activities. Furthermore, street children who used cannabis (OR=2.46; 95% CI=1.15-5.29,  $p= 0.021$ ) were more likely to engage in sexual activities without condom use.

**Table 8**  
**Logistic regression analysis of the predictors of ever had sex and non-condom use among street children**

Variables	Coefficients ( $\beta$ )	SE	Odds Ratio (OR)	95% CI	$p$ -value
<b>Ever had sex</b>					
Drunk alcohol	1.32	0.54	3.733	1.30–10.73	0.014*
Use marijuana	1.17	0.74	3.21	0.75–13.74	0.116
<b>Non condom use</b>					
Use marijuana	1.55	0.67	4.71	1.20 – 18.40	0.026*
Glue use	0.90	0.39	2.46	1.15 – 5.29	0.021*

Note: \* $p < .05$

## **CHAPTER 5: DISCUSSION**

### **5.1 Introduction**

In this chapter the results presented in the previous chapter will be discussed with consideration of previous study findings in conjunction with the theoretical framework of Bronfenbrenner's Ecological Model. The objective of this study was to explore the psychological functioning using the Strengths and Difficulty Questionnaire with subscales measuring emotional levels, hyperactivity and conduct problems among street children in Durban. Secondly, the study examined the association between the sexual risk behaviours and psychological functioning of street children. Lastly, the study examined the predictors of psychological functioning well-being and health risk behaviours.

### **5.2 Discussion**

#### **5.2.1 Demographic characteristics of street children**

Over (85.9%) of participants were males with only (14.1 %) of females. Findings from this study are similar to a study conducted in Rwanda which reported that a great majority of street children are males with a few number of females (Veale & Donà, 2003). About (70.1%) of the participants reported living on the streets for periods ranging between less than a year and two years. The common reasons for leaving home were found to be due family poverty, dysfunctional home, abuse and other reasons. According to Veale and Donà (2003) poverty in the lives of street children in Rwanda was found to be some of the reason children leave their homes. A great number (83.1%) had no contact with their family members and with only (16.9%) were in contact with either their mother; father, brother, sister, aunt or uncle. In a study conducted in Pakistan on social conditions of street children, it was found that over 93.5 % have contact with their family (Ali et al., 2004). The vast difference with street children contact in South Africa and Pakistan could be due family

structures in which they are raised. According to Ali et al. (2004) street children in Pakistan come from large families who often migrate to the city in search of employment opportunities. The majority (90.6%) of the participants had elementary education (i.e. grade 1-9), whilst an equally large number (90.6%) of the children were from KwaZulu-Natal province.

### **5.3 Psychological Functioning of Street Children**

Overall, the majority street children exhibited severe psychological problems. Among the participants emotional problems, conduct problems and hyperactivity were respectively prevalent. These results on the total support and difficulty index are consistent with studies in developing countries, which found high levels of conduct problems, emotional problems and hyperactivity among homeless youth (The National Child Traumatic Stress Network, 2014; Barnaby et al, 2010; Van Rooyen & Hartell, 2006). The study found a negative relationship between conduct problems, hyperactivity and being perpetrators of violence amongst street. Previous studies reported inverse relationship between those that engage in pro-social behaviours and psychological functioning (Barnaby et al., 2010; Van Rooyen & Hartell, 2006). Participants may have trouble with sustaining concentration and attention over periods; they are often on the go, having difficulty completing tasks or activities. These findings further support Bronfenbrenner's socio-ecological model where environmental factors such as the adversity of street life and peer relationships play a pivotal role on behaviors among street children. The findings of these results are consistent with previous studies that report inattention and hyperactivity ((The National Child Traumatic Stress Network, 2014; Special Attention Project, 2014: UN, 2014). Prosocial behaviours were positively correlated to emotional problems and suicide ideation experienced by street children. These results suggest that the psychological functioning of street children was related to their prosocial behaviours. For instance, street children showed concern for others'

well-being. Findings from this study showed that as the levels of prosocial behaviour among street children increased, their emotional problems and suicide ideation also increased. These results could be due to the burden of care of others by those children who had high levels of prosocial behaviour (Eisenberg, 2007; Malti, Gummerum, Keller & Buchmann, 2009; Menesini & Camodeca, 2008).

### *5.3.1 Suicide and Suicide Ideation*

In this study on street children in Durban, it is evident that they experience mental health problems. According to Bronfenbrenner's socio ecological model, children at this Microsystems level develop and form close relationships with those within their immediate environment (Bronfenbrenner, 1979). The overall prevalence of suicide ideation was 84.2%, which was higher than a study in Uganda on suicide among the homeless individuals, which found the prevalence of suicide ideation to be 31%, with 20% reporting suicide attempts and 23% reported suicidal attempt plans (Swahn, Palmier, Kasirye, & Yao, 2012). The high prevalence of suicide ideation in this study could be due to underlying factors such as violence, poor coping mechanism, substance use and psychiatric conditions that street children may be confronted with. Street children experience of suicidal thoughts and ideation differ from the general population due the adversities they are confronted with within the domains of the streets. The issues of suicide are not only unique to South Africa, but also prevalent in developed countries. According to Rew, Taylor-Seehafer, Thomas and Yockey (2001) homeless youth that had difficulty adapting to street life were more likely to experience feelings of hopelessness and helplessness with life threatening behaviours.

The engagement in violent behaviours and being victims of violence may have its own psychological dynamics that may render homeless youth more hopeless and helpless which may result in suicide ideation (Stein, Milburn, Zane & Rotheram-Borus, 2009; Votta &

Manion, 2004). This study also found that suicide ideation corresponded to engagement and being victims of violent behaviours. Participants who are perpetrators of violence are more likely than others to have suicidal ideation. Findings from this study are consistent with previous literature on the relationship between perpetrators of violence and suicide ideation (Belfer, 2008; Feitel et al., 1992; Molnar et al., 1998; Yoder, Whitbeck & Hoyt, 2008). Emotional difficulties among children are often observed in their behaviour, which may result in suicide ideation or attempts (Farrell, 2003; Kerfoot et al., 2007; Kidd, 2004). Due to high prevalence rate of violence, street children may resort to suicide as a means of escape from the harsh realities of street life.

Factors linked to suicide include a family history of suicide, mental illness, substance use, social support and stressful life events (Desai et al., 2003). These factors highlight that homeless children, especially within a developing context like South Africa, are at high-risk for suicide and mental health problems compared with other developed countries due to history of violence, migration labour, oppressive legislature, culture and patriarchy. In addressing suicide among street children, it is important to understand the determinants of suicide behaviour to intervene timely to prevent them from engaging in suicide or attempting suicide.

#### **5.4 Substance Use**

The study found in table 3 that the use of substance is very common with over 99.3% of participants reporting using substances. About 74.3% reported consuming alcohol, with just over 93.2% reported using illegal substance such as cannabis, which is commonly known to participants as “Weed or Marijuana”. In South Africa, the use of substances, especially alcohol has become of national concern as it accounts for a great number of deaths annually, be it through violence or motor vehicle accidents (Setlalentoa et al., 2010). These findings on

substance use among the streets are consistent with previous studies in developing and developed countries, which indicates high prevalence of substance use among street youth (Merscham et al., 2008; Morejele et al., 2013; WHO, 2014). The use of substances among street children in South Africa attributes to violence, health and economic problems (Morejele et al., 2012). Substance use has serious consequences for individual's health and general well-being. The use of substance among street children may impair their cognitive functioning, which may result in difficulty in making decisions, poor insight and judgment (van Blerk, 2012; van Rooyen & Hartell, 2006) as can be seen in their engagement in risky sexual behaviours.

The results from the study found a significant relationship between the use of substances and risky sexual behaviours. The engagement in sexual risk behaviours are consistent with previous studies that affirm the role of substances in the sexual risk behaviours of street children (Bousman et al., 2005; Kropiwnicki, 2012; Mastro et al., 2012; Whitbeck et al., 2000). Studies in Africa also affirm the correlation between substance use and risky sexual behaviours among street children (Kayembe et al., 2009; Kudrati et al., 2008; Mandalazi et al., 2013; Nada & Suliman, 2010; Oppong et al., 2014). Studies in high-income countries have reported consistent finding with correlations between substance use and engagement in risky sexual behaviours among street children (Embleton et al., 2013; Kropiwnicki, 2012; Pagare et al., 2003). The use of substances has an impact brain function which can lead to impaired judgment and difficulty with decision-making (Durand et al., 2013; Oscar-Berman & Marinković, 2007). The use of substance such as alcohol is a predictor of engagement in sexual activities and the non-use of condoms in this study. Therefore participants who used alcohol were more likely to engage in risky sexual behaviour when under the influence of alcohol. Alcohol is a stimulant that provides for some individuals, a sense or feeling of euphoria (Peele & Brodsky, 2000). The use of this stimulant could boost confidence in the

participants and offer them a sense of power over others (Rice et al., 2005). It is possible that the use of substances among the participants helps them cope with emotional pain and difficulties that they confront on the street.

The average age for the onset of substance use was 14 years and older for a majority of the participants in this study. Developmentally participants are going through stages of change of adolescent to young adults, which accompany physical, emotional and psychological change (Coon & Mitterer, 2007). Participants could use substances to build and maintain interpersonal relationships with other peers; feel accepted by other street peer groups. The use of substance among street children was found to be associated with peer pressure (Sharma & Joshi, 2014). As a result of using substances participants could engage in behaviour deemed to be risky, especially towards their general health. Street children who used substances such as marijuana and glue were less likely to use condoms in their sexual behaviour. As participant used substances, they may have felt accepted by other peers and engage in risky behaviours (Hudson et al., 2010; Martino et al., 2011). The use of substance could provide a sense of safety and protection by conforming to the peer group behaviours and rules (Sharma & Joshi, 2014). The use of substance could also provide a structure of family and connectedness with other peers. Participants' use of substance could provide temporary be used to suppress appetite. Previous studies reported that the adverse effect of using substance such as cannabis influences the individuals' cognitive functioning and hence the likelihood of making poor and uninformed decisions (Romer, 2010; Tomalski & Johnson, 2010; van Blerk, 2012; Van Rooyen & Hartell, 2006). Findings from the study on substance abuse further affirm Brofenbrenner socio ecological model and the multiple influences of the micro, meso and level of the environment which play a crucial role on substance use and risk behaviours related to the use of substances. There is a great need for mental health professionals to



develop interventions that keep street children engaged and to channel their energies positively.

#### *5.4.1 Violence and Violent Behaviors*

This study reported a high prevalence of violence and violent behaviours. About 92.5% of participants reported experiencing bullying, whilst 84.4% reported bullying others whilst living on the streets. High rates of violence have also been document in developing countries were about 90% of participants reported to have both been subjected and exposed to violence (Taib & Ahmad, 2014). The high prevalence of violence among street children highlights the extent of problems street children face in street life. The high rate of violence could be a representation of unconscious psychological material, expressed through violent behaviours (Herrenkohl et al., 2000; Swartz et al., 2014). Factors such as bullying, self-harm and violent behaviour relates to violence among children (Arseneault, Bowes & Shakoor, 2010; Vanderbilt, & Augustyn, 2010). According to Vanderbilt and Augustyn (2010), children who experience bullying are at risk for emotional problems. Measures for violent behaviours in this study included; abuse, beating or coercion into violent behaviours. Previous studies reported consistent findings on violence among street children with bullying being the most prevalent forms of violence street children experience (Huemer et al., 2012; Van Rooyen & Hartell, 2006; WHO, 2006).

These findings on violent behaviours among street children is also consistent with a previous study in a developed country, which affirms that street youth who engage in violent behaviours also demonstrated other delinquent behaviours (Barnaby et al., 2010). Although conduct problems among street children may result in poor psychological functioning, resilience could assist to strength in street children whilst on the streets. Resilience factors include factors that assist and support street children's external and internal resources (Grabbe, Nguy & Higgins, 2012; Monn et al., 2013 Thompson et al., 2010). Findings on

behaviours related to violence also affirm Bronfenbrenner's view of behavioural influences at a micro and meso level of the environment.

Findings from this study found that there was a correspondence between victims and perpetrators of violence and violent behaviours. Street children may result to violent behaviours as a means of coping with the street life anxieties. The study further found that perpetrators of violence were victims of violent behaviours, perpetuating the cycle of abuse. A previous study conducted in Australia affirmed that homeless youth engage in violent behaviours for survival (Heerde, Hemphill & Scholes-Balog, 2014). The behaviours displayed among street children may be a result of contained feelings and emotions. Studies in middle-income countries suggest that violence among street children is on the increase (Ferguson, 2012; Zdun, 2008). Strategies to combat these behaviours should be addressed with immediate effect as they have adverse psychological consequences on street children (van Rooyen & Hartell, 2006). This study found that there is an association between victims of violent behaviour and perpetrators of violence and psychological functioning of street children. Victims and perpetrators of violence may experience constant fear and anxiety about violence and this could lead them to frequently thinking and planning mechanisms of survival in the streets.

In South Africa, where they find themselves, has a high rate of violence that further makes them vulnerable to experiencing varied forms of violence. Violent behaviours among street children could be a result of coping strategies and self-esteem among this category of youth. The adversity of street life may compel street children to adopt mechanisms of adapting, which result in aggressive behaviours towards other peers (Skinner, Edge, Altman & Sherwood, 2003). Street children may behave violently towards other peers in order to feel accepted and respected (Chun & Springer, 2005; Conticini, 2007). These findings on violence among street children are consistent with previous studies in higher income countries that

found that street children exposed to violence or violent behaviours were more likely to experience psychological problems (Huemer, Edsall, Karnik & Steiner, 2012; Kirst, Frederick & Erickson, 2011). According to Maciel et al. (2013), street children who experience violence or violent behaviour are vulnerable to experiencing psychological symptoms. In this study, it was found that being a perpetrators and victim of violence related behaviours were associated with overall psychological functioning. Findings on violent behaviour are consistent with previous studies that reveal that street children are vulnerable to varied forms of abuse and violence, which can also occur in a sexual nature (Maciel et al., 2013; Taib & Ahmad, 2014). Studies in South Africa also affirm that violence among street children is on an increase especially through assault (van Rooyen & Hartell, 2006). Given the history of the country in which the study was conducted, it is with no doubt that the aftermath of violence continues to prevail in society to date, especially among vulnerable groups such as street children. Findings on violence among street children highlight the need to develop anti-violence campaigns, which could assist in the reduction of lack of life skills and difficulty dealing with conflict by street children.

### **5.5 Sexual Risk Behaviours**

Sexual risk behaviour among participants is prevalent in this study with 85.4% of participants reporting being sexually active as reported in table 3. Over 52% of participants reported non-condom use when they engage in sexual activities. The findings in this study on sexual risk behaviour among street children are consistent with previous studies in developing countries, which reported high sexual behaviours among street children with adverse health consequences (Barnaby et al., 2010; Marshall et al., 2009). Risky sexual behaviours among street children have been associated with survival sex, non-condom use and multiple sexual partners (Marshall et al., 2009; Nada & Suliman, 2010; Tyler et al., 2007). This study did not find any relationship between multiple sexual partners and substance use or survival sex.

These results could be due to an interviewer-administered questionnaire, participant may have given socially desirable responses. The general public perception of street children and sexuality could have potentially influence these findings. According to Ogunkan & Adeboyejo (2014) the general perception of street children has an influence on their behaviour. Other previous studies (Nada & Suliman, 2010; van Leeuwen et al., 2004) found a positive correlation between multiple sexual partners and survival sex; these studies employed mixed method designs. Studies in developing contexts like South Africa could use mixed method designs when examining the risky sexual behaviours among street children. High-risk sexual behaviours are associated with risk for contracting infections and diseases such as HIV, STI or STD's (Tyler et al., 2007). In developing countries like South Africa, street children are reported to be at risk for sexual risk behaviours (Kruger & Richter, 2003; Swart-Kruger & Richter, 1997). The results from this study found no relationship between sexual activity and nature of sexual activity such as survival sex or multiple sexual partners. This might be due to the cultural views on sexuality which may influence children expected and accepted behaviours when engaging in sexual behaviours (Francis, 2010; Gunkel, 2012; Morrell, Jewkes & Lindegger, 2012). Participants have may have given socially desirable responses about their sexual partners. Participants' perception and views on survival sex or multiple sexual partners may have influenced their responses on sexual behaviour in this study. Nonetheless, about 47.3% reported forced sex and over 62.2% reported knowing a victim of sexual abuse. Findings on sexual risk behaviours among street children further affirmed Bronfenbrenner's ecological view of the numerous influences on individual behaviour. Street children's sexual behaviours are influenced by multiple factors such as the need for shelter, survival, conformity to street life and culture, with little protection from adults and authorities. Sexual abuse among the participants is prevalent. This may be due to several reasons. Firstly, this category of youth may consider forced sexual and violent

behaviours as normal. Secondly, South Africa is a country with high rates of domestic and sexual abuse, which may be a reflection of a national problem that extends to the vulnerable groups such as street children. Lastly, a lack of adequate housing or shelter further places participants at risk due to limited and scarce resources. In addressing sexual risk behaviours among street children it is crucial to develop policies and programs that are holistic in nature which would encompass violence, substance use and the consequences on individuals psychological functioning among street children.

## **CHAPTER 6: LIMITATIONS, RECOMMENDATIONS, AND CONCLUSION**

### **6.1 Introduction**

This section discusses the conclusions from the findings of the current study and discusses the limitations of the study. Recommendations stemming from the study findings are presented and future research areas are highlighted.

### **6.2 Limitations**

The present study had its limitations as with most research studies. The cross-sectional design of the study in which data was collect at a fixed point in time does not allow for the assessment of casual relationships among the variables. Although the study drew significant relationships among the variables, the study could not determine inferences about the causal relationship findings. In determining the causality, the study recommends that future longitudinal research studies could be valuable to better understand causal relationships.

The small conveniently selected sample of 149 participants, could have limited the generalizability of the study findings. Nevertheless, the sample size was within a context in which there is an increase in migration of street children in and out of Durban central business area, obtaining a number of 149 was still sufficient to give an overview of several of the psychological problems street children experience. The participants seemed to have provided some socially desirable responses especially on the SDQ scale, which could have prompted them to indicate their engagement in prosocial behaviours.

The poor attention and concentration span from the participants noted when responding to questions, especially towards the end of the questionnaire might have impacted the quality of the data negatively.

### **6.3 Recommendations for Organisations**

Findings from this study indicate high prevalence of emotional problems, hyperactivity and conduct problems among street children. Custodians of street children and mental health care service providers could develop policy that addresses the drivers of poor mental health among street children in South Africa. Agencies or centres working with street children could develop short and long-term programmes that offer therapeutic services to strengthen and foster children's resilience on the streets and address their mental health concerns. The study found that violent behaviours and substance use among street children are prevalent among street children highlighting the need for organisations offering services to street children to develop awareness programs that holistically target and address violence and substance use among street children. Addressing violence among this category of youth could assist in decreasing psychological problems from being a victim or perpetrator of violence.

This study further found that the use of substance plays a role in risky sexual behaviours i.e. un-protective sex among street children. Interventions programmes should be specifically addressed to street children to increase their awareness of the consequences of substance use and un-protective sex. The importance to provide health services and increase access to condoms is important to protect their health. In addition, programmes are needed to keep youth on the street actively involved in various activities. For example, using sports to channel their energies positively and involve youth in programs that equip them better to deal with their challenges on the streets.

Organisations that provide programs and services for street children should be encouraged to keep records and data on street children and observe their behaviours to identify psychosocial needs and link them with the necessary service providers. It is also pivotal for agencies working with street children to identify prosocial behaviours and their impact on street

children's general psychological well-being. Furthermore, it is crucial that interventions targeted at street children take account of the multiple influences at different levels of the environment on human behaviour. Future interventions should attempt to address the negative influences on street children's behaviours.

#### **6.4 Recommendations for Future Research**

The study further recommends that future research take into consideration the specified limitations discussed above to control these measures. This can be done by controlling time, conducting research in early hours of the morning when participants are orientated in all spheres. In doing so, this may result in more honest responses, which could further strengthen the reliability of the results. Despite the limitations of the study, future research could examine relationships between psychological functioning and resilience.

Future researchers could examine the determinants of poor mental health among street children in South Africa. Future studies should examine factors that promote and strengthen resilience of street children which is likely to further improve their general well-being within the street context.

The study measured the psychological symptoms of street children, but not the prevalence of specific disorders. Future studies could explore the prevalence of specific disorders in a developing context like South Africa.

#### **6.5 Conclusion**

A majority of participants in this study presented with moderate to severe psychological problems. The study concluded that emotional problems, hyperactivity and prosocial behaviours were prevalent among street children in South Africa. A great number of participants reported suicide ideation, engagement in violent e behaviours and substance use



problems. There is a great need for mental health services and professionals to engage street children whilst within the domains of the street within an African context. Policies and programs for street children should consider the mental health and substance use problems that this category of youth experience. Future research need to examine specific psychological problems that street children within an African context experience. The chapter concluded by discussions of the study limits, recommendation for organisations and future research.

## REFERENCES

- Adebiyi, A. (2014). (17-21 August 2014). Psycho-social skills intervention for substance use amongst street children. In *The 20th IEA World Congress of Epidemiology*. Alaska, USA: Anchorage, USA.
- Adler, E., & Clark, R. (2014). *An invitation to social research: How it's done*, Australia: Cengage Learning.
- Ali, M., Shahab, S., Ushijima, H., & de Muynck, A. (2004). Street children in Pakistan: a situational analysis of social conditions and nutritional status. *Social Science and Medicine*, 59(8), 1707-1717.
- Ali, W. A. (2011). Factors affecting homelessness among street children in Khartoum State. *Journal of Business*, 2(2), 98-106.
- Aptekar, L. (1994). Street children in the developing world: A review of their condition. *Cross-Cultural Research*, 28(3), 195-224.
- Aptekar, L., & Stoecklin, D. (2014). *Street children and homeless youth: A cross-cultural perspective*. Netherlands: Springer.
- Aptekar, L., & Stoecklin, D. (2014). Children in Street Situations: Street Children and Homeless Youth. In L. Aptekar, and D Stoecklin *Street Children and Homeless Youth: A Cross-Cultural Perspective* (pp. 5-61), Netherlands: Springer.
- Arseneault, L., Bowes, L., & Shakoor, S. (2010). Bullying victimization in youths and mental health problems: 'Much ado about nothing'?. *Psychological Medicine*, 40(05), 717-729.
- Asante, K. O., Meyer-Weitz, A., & Petersen, I. (2014). Substance use and risky sexual behaviours among street connected children and youth in Accra, Ghana. *Substance Abuse Treatment, Prevention, and Policy*, 9(45), 2-9.

- Baatjies, R. (2005). United cities and local governments of Africa: crystallisation of local government in Africa. *Local Government Bulletin*, 7(3), 15-16.
- Barnaby, L., Penn, R., & Erickson, P. G. (2010). *Drugs, homelessness & health: Homeless youth speak out about harm reduction*. Ontario. Canada: Canadian Harm Reduction Center.
- Beazley, H. (2013). The sexual lives of street children in Yogyakarta Indonesia. *Review of Indonesian and Malaysian Affairs*, 37(1), 17-44.
- Belfer, M. L. (2008). Child and adolescent mental disorders: the magnitude of the problem across the globe. *Journal of Child Psychology and Psychiatry*, 49(3), 226-236.
- Berk, L. E. (2000). *Child Development* (5th Ed.), Boston: Allyn and Bacon.
- Blanche, M. J. T., Blanche, M. T., Durrheim, K., & Painter, D. (Eds.). (2006). *Research in practice: Applied methods for the social sciences*, South Africa: Juta.
- Bordonaro, L. I. (2012). Agency does not mean freedom. Cape Verdean street children and the politics of children's agency. *Children's Geographies*, 10(4), 413-426
- Bousman, C. A., Blumberg, E. J., Shillington, A. M., Hovell, M. F., Ji, M., Lehman, S., & Clapp, J. (2005). Predictors of substance use among homeless youth in San Diego. *Addictive Behaviours*, 30(6), 1100-1110.
- Bray, R. (2003). Predicting the social consequences of orphanhood in South Africa. *African Journal of AIDS Research*, 2(1), 39-55.
- Bronfenbrenner, U. (1979b). *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, Massachusetts: Harvard University Press.
- Bronfenbrenner, U. (1989). Ecological Systems Theories of Child Development: Revised formulation and current issues. Greenwich, JAI press.
- Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nurture Reconceptualized in Developmental Perspective: A Bio-ecological Model. *Psychological Review*, 101(4), 568-586.

- Celik, S. S. (2009). Verbal, physical and sexual abuse among children working on the street. *Australian Journal of Advanced Nursing*, 26(4), 14-22.
- CHETNA. (2014, September 15). Rehabilitating Street and Working Children Abusing Substances report. Retrieved from <http://www.chetna-india.org>
- Chun, J., & Springer, D. W. (2005). Stress and coping strategies in runaway youths: An application of concept mapping. *Brief Treatment and Crisis Intervention*, 5(1), 57-74.
- Cluver, L., & Gardner, F. (2006). The psychological well-being of children orphaned by AIDS in Cape Town, South Africa. *Annals of General Psychiatry*, 5 (1), 1-9.
- Cluver, L., Gardner, F., & Operario, D. (2007). Psychological distress amongst AIDS-orphaned children in urban South Africa. *Journal of Child Psychology and Psychiatry*, 48(8), 755-763.
- Conticini, A. (2007). *Children on the Streets of Dhaka and their Coping Strategies Livelihoods at the Margins: Surviving the City*, California: Left Coast Press.
- Conticini, A., & Hulme, D. (2007). Escaping Violence, Seeking Freedom: Why children in Bangladesh migrate to the street. *Development and Change*, 38(2), 201-227.
- Conticini, A. (2008). Surfing in the air: A grounded theory of the dynamics of street life and its policy implications. *Journal of International Development*, 20(4), 413-436.
- Consortium for Street Children. (2014, August 10). Consortium of Street children, Annual Report of 2009. Retrieved from Global Giving website: <https://www.globalgiving.org>.
- Coon, D., Mitterer, O, J. (2007). *Introduction to Psychology, Gateways to Mind and Behaviours (11<sup>th</sup> Ed)*, New York: Thomson Wadworth.
- Cottrell-Boyce, J. (2010). The role of solvents in the lives of Kenyan street children: An ethnographic perspective. *African Journal of Drug and Alcohol Studies*, 9(2).93-102.
- Crosby, R. A., DiClemente, R. J., & Salazar, L. F. (Eds.). (2011). *Research methods in health promotion*, United States of America :John Wiley & Sons.

- Dhwan, A. (2009). *Assessment of Pattern, Profile and Correlates of Substance use among children in India*, New Deli, India.
- Dawson, A., & Jackson, D. (2013). The primary health care service experiences and needs of homeless youth: A narrative synthesis of current evidence. *Contemporary Nurse*, 44(1), 62-75.
- Desai, R. A., Liu-Mares, W., Dausey, D. J., & Rosenheck, R. A. (2003). Suicidal ideation and suicide attempts in a sample of homeless people with mental illness. *The Journal of Nervous and Mental Disease*, 191(6), 365-371.
- Durand, V., Hennessey, J., Wells, D. S., Crothers, L. M., Kolbert, J. B., Lipinski, J., & Hughes, T. L. (2013). Bullying and substance use in children and adolescents. *Journal of Addiction Research and Therapy*, 4(4), 2-6.
- Eaton, L., Flisher, A. J., & Aarø, L. E. (2003). Unsafe sexual behaviour in South African youth. *Social Science and Medicine*, 56(1), 149-165.
- Edidin, J. P., Ganim, Z., Hunter, S. J., & Karnik, N. S. (2012). The mental and physical health of homeless youth: a literature review. *Child Psychiatry and Human Development*, 43(3), 354-375.
- Eisenberg, N. (2007, January). Empathy-related responding and prosocial behaviour. In *Novartis Foundation Symposium*, 27(8), 71-80.
- Elder, J. P., Lytle, L., Sallis, J. F., Young, D. R., Steckler, A., Simons-Morton, D., Stone, E., et al. (2007). A description of the social-ecological framework used in the trial of activity for adolescent girls. *Health Education Research*, 22(2), 155–165.
- Embleton, L., Ayuku, D., Atwoli, L., Vreeman, R., & Braitstein, P. (2012). Knowledge, attitudes, and substance use practices among street children in Western Kenya. *Substance Use and Misuse*, 47(11), 1234–1247.

- Ennew, J. (2003). Difficult circumstances: some reflections on 'street children' in Africa. *Children Youth and Environments*, 13(1), 128-146.
- Farrell, P. (Ed.). (2003). Children with emotional and behavioural difficulties: Strategies for assessment and intervention. London, UK: Routledge.
- Feitel, B., Margetson, N., Chamas, J., & Lipman, C. (1992). Psychosocial background and behavioural and emotional disorders of homeless and runaway youth. *Psychiatric Services*, 43(2), 155-159.
- Ferguson, K. M. (2009). Exploring family environment characteristics and multiple abuse experiences among homeless youth. *Journal of Interpersonal Violence*, 24(11), 1875-1891.
- Ferguson, K. M. (2012). The world population of street children encom. *Handbook of International Social Work: Human Rights, Development, and the Global Profession*, New York, NY: Oxford University Press.
- Francis, D. A. (2010). Sexuality education in South Africa: Three essential questions. *International Journal of Educational Development*, 30(3), 314-319.
- Goodman, R. (2001). Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(11), 1337-1345.
- Grabbe, L., Nguy, S. T., & Higgins, M. K. (2012). Spirituality development for homeless youth: A mindfulness meditation feasibility pilot. *Journal of Child and Family Studies*, 21(6), 925-937.
- Gunkel, H. (2012). The cultural politics of female sexuality in South Africa. South Africa, RSA: Routledge.

- Haer, R., & Becher, I. (2012). A methodological note on quantitative field research in conflict zones: get your hands dirty. *International Journal of Social Research Methodology*, 15(1), 1-13.
- Heerde, J. A., Hemphill, S. A., & Scholes-Balog, K. E. (2014). 'Fighting' for survival: A systematic review of physically violent behaviour perpetrated and experienced by homeless young people. *Aggression and Violent Behaviour*, 19(1), 50-66.
- Henley, R., McAlpine, K., Mueller, M., & Vetter, S. (2010). Does school attendance reduce the risk of youth homelessness in Tanzania? *International Journal of Mental Health Systems*, 4(1), 1-8.
- Herrenkohl, T. I., Maguin, E., Hill, K. G., Hawkins, J. D., Abbott, R. D., & Catalano, R. F. (2000). Developmental risk factors for youth violence. *Journal of Adolescent Health*, 26(3), 176-186.
- Hudson, A. L., & Nandy, K. (2012). Comparisons of substance abuse, high-risk sexual behaviour and depressive symptoms among homeless youth with and without a history of foster care placement. *Contemporary Nurse*, 42(2), 178-186.
- Hudson, A. L., Nyamathi, A., Greengold, B., Slagle, A., Koniak-Griffin, D., Khalilifard, F., & Getzoff, D. (2010). Health-seeking challenges among homeless youth. *Nursing Research*, 59(3), 212.
- Huemer, J., Edsall, S., Karnik, N. S., & Steiner, H. (2012). *Childhood trauma in clinical child psychiatry, Third Edition*. United Kingdom, UK: John Wiley & Sons
- Kalichman, S. C., & Simbayi, L. C. (2003). HIV testing attitudes, AIDS stigma, and voluntary HIV counselling and testing in a black township in Cape Town, South Africa. *Sexually Transmitted Infections*, 79(6), 442-447.
- Kayembe, P. K., Mapatano, M. A., Fatuma, A. B., Nyandwe, J. K., Mayala, G. M., Kokolomami, J. I., & Kibungu, J. P. (2009). Knowledge of HIV, sexual behaviour and

- correlates of risky sex among street children in Kinshasa, Democratic Republic of Congo. *East African Journal of Public Health*, 5(3), 186–192.
- Kerfoot, M., Koshyl, V., Roganov, O., Mikhailichenko, K., Gorbova, I., & Pottage, D. (2007). The health and well-being of neglected, abused and exploited children: The Kyiv Street Children Project. *Child Abuse and Neglect*, 31(1), 27-37.
- Kidd, S. A. (2004). “The Walls Were Closing in, and We Were Trapped” A Qualitative Analysis of Street Youth Suicide. *Youth and Society*, 36(1), 30-55.
- Kidd, S. A. (2006). Factors precipitating suicidality among homeless youth: A quantitative follow-up. *Youth and Society*, 37(4), 393-422.
- Kidd, S., & Shahar, G. (2008). Resilience in homeless youth: the key role of self-esteem. *American Journal of Orthopsychiatry*, 78 (2), 163-172.
- Kirst, M., Frederick, T., & Erickson, P. G. (2011). Concurrent mental health and substance use problems among street-involved youth. *International Journal of Mental Health and Addiction*, 9(5), 543-553.
- Kok, P., Cross, C., & Roux, N. (2010). Towards a demographic profile of the street homeless in South Africa. *Development Southern Africa*, 27(1), 21-37.
- Kruger, J. M., & Richter, L. M. (2003). South African Street Children at Risk for AIDS? *Children, Youth and Environments*, 13(1), 1-14.
- Kropiwnicki, Z. O. D. S. (2012). The Politics of Child Prostitution in South Africa. *Journal of Contemporary African Studies*, 30(2), 235-265.
- Kudrati, M., Plummer, M. L., & Yousif, N. D. E. H. (2008). Children of the : A study of the daily lives of street children in Khartoum, Sudan, with intervention recommendations. *Child Abuse and Neglect*, 32(4), 439-448.



- Kuo, C., Fitzgerald, J., Operario, D., & Casale, M. (2012). Social support disparities for caregivers of AIDS-orphaned children in South Africa. *Journal of Community Psychology*, 40(6), 631-644.
- Latzman, R. D., & Swisher, R. R. (2005). The interactive relationship among adolescent violence street violence, and depression. *Journal of Community Psychology*, 33(3), 355-371.
- Le Roux, J. (1995). Street children in South Africa: findings from interviews on the background of street children in Pretoria, South Africa. *Adolescence*, 31(122), 423-431.
- Maciel, M. R., Mello, A. F., Fossaluza, V., Nobrega, L. P., Cividanes, G. C., Mari, J. J., & Mello, M. F. (2013). Children working on the streets in Brazil: predictors of mental health problems. *European Child and Adolescent Psychiatry*, 22(3), 165-175.
- Malindi, M. J., & Theron, L. C. (2010). The hidden resilience of street youth. *South African Journal of Psychology*, 40(3), 318-326.
- Malindi, M. J. (2014). Exploring the roots of resilience among female street-involved children in South Africa. *Journal of Psychology*, 5(1), 35-45.
- Malti, T., Gummerum, M., Keller, M., & Buchmann, M. (2009). Children's moral motivation, sympathy, and prosocial behavior. *Child Development*, 80(2), 442-460.
- Mandalazi, P., Banda, C., & Umar, E. (2013). Street children's vulnerability to HIV and sexually transmitted infections in Malawian cities. *Malawi Medical Journal*, 25(1), 1-4.
- Manzini, N. (2001). Sexual initiation and childbearing among adolescent girls in KwaZulu-Natal, South Africa. *Reproductive Health Matters*, 9(17), 44-52.
- Marshall, B. D., Kerr, T., Shoveller, J. A., Patterson, T. L., Buxton, J. A., & Wood, E. (2009). Homelessness and unstable housing associated with an increased risk of HIV and STI transmission among street-involved youth. *Health and Place*, 15(3), 783-790.

- Mastro, T. D., Cunningham, J., Medrano, T., & van Dam, J. (2012). Youth and HIV: The intersection of homelessness, orphaned status, injection drug use and sexual risk. *AIDS*, 26(1), 111-113.
- Martino, S. C., Tucker, J. S., Ryan, G., Wenzel, S. L., Golinelli, D., & Munjas, B. (2011). Increased substance use and risky sexual behavior among migratory homeless youth: Exploring the role of social network composition. *Journal of Youth and Adolescence*, 40(12), 1634-1648.
- Menesini, E., & Camodeca, M. (2008). Shame and guilt as behaviour regulators: Relationship with bullying, victimization and prosocial behaviour. *British Journal of Developmental Psychology*, 26(2), 183-196.
- Mercer, T. (2009). Family voices: An ethnographic study of family characteristics and caregiver perspectives on street children in Eldoret, Kenya. Thesis presented to Yale University.
- Merscham, C., Van Leeuwen, J. M., & McGuire, M. (2008). Mental health and substance abuse indicators among homeless youth in Denver, Colorado. *Child Welfare*, 88(2), 93-110.
- Molnar, B. E., Shade, S. B., Kral, A. H., Booth, R. E., & Watters, J. K. (1998). Suicidal behavior and sexual/physical abuse among street youth. *Child Abuse and Neglect*, 22(3), 213-222.
- Monn, A., Casey, E., Wenzel, A., Sapienza, J., Kimball, A., Mack III, B & Michaels, C. (2013). Risk and resilience in homeless children. *Children's Mental Health Review*, 1-16
- Morojele, N. K., Nkosi, S., Kekwaletswe, C. T., Saban, A., & Parry, C. D. (2013). Review of Research on Alcohol and HIV in Sub-Saharan Africa. *Policy Brief, Alcohol and Drug Abuse Research Unit, South African Medical Research Council, February*.

- Morojele NK, Parry C, Brook J, Kekwaletswe C.(2012). Alcohol and drug use. (Chapter 14). In Crime, Violence and Injury in South Africa: 21st century solutions for child safety. A.van Niekerk, S. Suffla & M. Seedat (Eds.). Tygerberg: MRC-University of South Africa Safety & Peace Promotion Research Unit.
- Morrell R, Jewkes R, Lindegger G. (2012). Hegemonic Masculinity/Masculinities in South Africa: Culture, Power, and Gender Politics. *Men and Masculinities*, 15(1), 11-30.
- Mufune, P. (2000). Street youth in Southern Africa. *International Social Science Journal*, 52(164), 233-243.
- Mueller, J., Alie, C., Jonas, B., Brown, E., & Sherr, L. (2011). A quasi-experimental evaluation of a community-based art therapy intervention exploring the psychosocial health of children affected by HIV in South Africa. *Tropical Medicine and International Health*, 16(1), 57-66.
- Nada, K.H., & Suliman, E.D.A. (2010). Violence, abuse, alcohol and drug use, and sexual behaviors in street children of greater Cairo and Alexandria, Egypt. *AIDS*, 24:39–44.
- Naik, P. R., Gokhe, S. S. B., Shinde, R. R., & Nirgude, A. S. (2011). Street children of Mumbai: Demographic profile and substance abuse. *Biomedical Research*, 22(4), 495-498.
- Neuman, W. L., & Neuman, W. L. (2006). *Social research methods: Qualitative and quantitative approaches*, Boston: Allyn and Bacon.
- Ogunkan, D. V., & Adeboyejo, A. T. (2014). Public perception of street children in Ibadan, Nigeria. *IFE Psychologia: An International Journal*, 22(1), 39-49.
- Olley, B. O. (2006). Social and health behaviors in youth of the streets of Ibadan, Nigeria. *Child Abuse & Neglect*, 30(3), 271-282.
- Olufemi, O. (2000). Feminisation of poverty among the street homeless women in South Africa. *Development Southern Africa*, 17(2), 221-234.

- Oscar-Berman, M., & Marinković, K. (2007). Alcohol: Effects on neurobehavioral functions and the brain. *Neuropsychology Review*, 17(3), 239-257.
- Osei-Twum, J, A & KM Wasan. (2012). Neglected Populations: Safeguarding the Health of Street- Involved Children in Ghana. *Journal of Pharmaceutical Science*, 101(10), 19-22.
- Pagare, D., Meena, G. S., Singh, M. M., & Saha, R. (2004). Risk factors of substance use among street children from Delhi. *Indian Pediatrics*, 41(3), 221-226.
- Pallant, J. (2010). *SPSS, Survival Manual, fourth edition*. McGraw-Hill : New York.
- Panter-Brick, C. (2002). Street children, human rights, and public health: A critique and future directions. *Annual Review of Anthropology*, 31, 147-171.
- Panter-brick, C. (2004). Homelessness, poverty, and risks to health: beyond at risk categorizations of street children 1. *Children's Geographies*, 2(1), 83-94.
- Paradise, M. J., & MariCauce, A. (2003). Substance use and delinquency during adolescence: A prospective look at an at-risk sample. *Substance Use and Misuse*, 38(3-6), 701-723.
- Parry, C. D. H., Rehm, J., & Morojele, N. K. (2010). Is there a causal relationship between alcohol and HIV? Implications for policy, practice and future research. *African Journal of Drug and Alcohol Studies*, 9(2), 81-91.
- Peele, S., & Brodsky, A. (2000). Exploring psychological benefits associated with moderate alcohol use: a necessary corrective to assessments of drinking outcomes? *Drug and Alcohol Dependence*, 60(3), 221-247.
- Petersen, I., Swartz, L., Bhana, A., & Flisher, A. J. (2010). Mental health promotion initiatives for children and youth in contexts of poverty: the case of South Africa. *Health Promotion International*, 25, 331-341

- Quimby, E. G., Edidin, J. P., Ganim, Z., Gustafson, E., Hunter, S. J., & Karnik, N. S. (2012). Psychiatric Disorders and Substance Use in Homeless Youth: A Preliminary Comparison of San Francisco and Chicago. *Behavioral Sciences*, 2(3), 186-194.
- Reddy, S. P., Resnicow, K., James, S., Kambaran, N., Omardien, R., & Mbewu, A. D. (2009). Underweight, overweight and obesity among South African adolescents: results of the 2002 National Youth Risk Behaviour Survey. *Public Health Nutrition*, 12(02), 203-207.
- Rew, L., Taylor-Seehafer, M., Thomas, N. Y., & Yockey, R. D. (2001). Correlates of resilience in homeless adolescents. *Journal of Nursing Scholarship*, 33(1), 33-40.
- Rice, E., Milburn, N. G., Rotheram-Borus, M. J., Mallett, S., & Rosenthal, D. (2005). The effects of peer group network properties on drug use among homeless youth. *American Behavioural Scientist*, 48(8), 1102-1123.
- Romer, D. (2010). Adolescent risk taking, impulsivity, and brain development: Implications for prevention. *Developmental Psychobiology*, 52(3), 263-276.
- Rothon, C., Head, J., Klineberg, E., & Stansfeld, S. (2011). Can social support protect bullied adolescents from adverse outcomes? A prospective study on the effects of bullying on the educational achievement and mental health of adolescents at secondary schools in East London. *Journal of Adolescence*, 34(3), 579-588.
- Sahil (2014, August 14). Drug Abuse and Its Relationship to Sexual Abuse of Street Children. Retrieved from <http://sahil.org/drug-abuse-and-csa-in-street-children/>.
- SAMHSA. (2014, August 10). National Survey on Drug Use and Health: Summary of National retrieved from <http://www.samhsa.gov>.
- Save the Children. (2014, September 24). Annual Report 2005. Retrieved from <http://www.savethechildren.org>.

- Schmutte, P. S., & Ryff, C. D. (1997). Personality and well-being: reexamining methods and meanings. *Journal of Personality and Social Psychology*, 73(3), 549.
- Schneider, H., Blaauw, D., Gilson, L., Chabikuli, N., & Goudge, J. (2006). Health systems and access to antiretroviral drugs for HIV in Southern Africa: service delivery and human resources challenges. *Reproductive Health Matters*, 14(27), 12-23.
- Setlalentoa, B. M. P., Pisa, P. T., Thekisho, G. N., Ryke, E. H., & Loots, D. T. (2010). The social aspects of alcohol misuse/abuse in South Africa: review article. *South African Journal of Clinical Nutrition*: 2, (23), 11-15.
- Sevenhuijsen, S., Bozalek, V., Gouws, A., & Minnaar-McDonald, M. (2003). South African social welfare policy: an analysis using the ethic of care. *Critical Social Policy*, 23(3), 299-321.
- Sharma, N., & Joshi, S. (2014). Preventing-substance abuse among street children in India. *Health Science Journal*, 7 (2), 137-140
- Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin*, 129(2), 216.
- Somekh, B., & Lewin, C. (Eds.). (2005). *Research methods in the social sciences*. London :Sage.
- Solorio, M. R., Rosenthal, D., Milburn, N. G., Weiss, R. E., Batterham, P. J., Gandara, M., & Rotheram-Borus, M. J. (2008). Predictors of sexual risk behaviors among newly homeless youth: A longitudinal study. *Journal of Adolescent Health*, 42(4), 401-409.
- Special Attention Project. (2014, November 12). Retrieved from <http://www.sapghana.com>.
- Statistics South Africa (2014, December 12). Statistics South Africa. Retrieved from <http://www.statssa.gov.za>.

- Stein, J. A., Milburn, N. G., Zane, J. I., & Rotheram-Borus, M. J. (2009). Paternal and maternal influences on problem behaviors among homeless and runaway youth. *American Journal of Orthopsychiatry*, 79(1), 39-50.
- Swahn, M. H., Palmier, J. B., Kasirye, R., & Yao, H. (2012). Correlates of suicide ideation and attempt among youth living in the slums of Kampala. *International Journal of Environmental Research and Public Health*, 9(2), 596-609.
- Swart-Kruger, J., & Richter, L. M. (1997). AIDS-related knowledge, attitudes and behaviour among South African street youth: reflections on power, sexuality and the autonomous self. *Social Science and Medicine*, 45(6), 957-966.
- Swartz, M. S., Swanson, J. W., Hiday, V. A., Borum, R., Wagner, H. R., & Burns, B. J. (2014). Violence and severe mental illness: the effects of substance abuse and non-adherence to medication. *The American Journal of Psychiatry*, 155 (2), 226-231.
- Taib, N. I., & Ahmad, A. (2014). Psychiatric morbidity among street children in Duhok. *Clinical Medicine Insights Paediatrics*, 8, 11-16.
- Terre Blanche, M., & Durrheim, K. (1999). Histories of the present: Social science research in context., Research in practice. *Applied methods for the social sciences*, 2, 1-17.
- The Department of Health. (2014, September 23). National Drug Master Plan 2012 – 2016. Retrieved from <http://www.capetown.gov.za>.
- The Department of Social Development. (2014, September 23). The National Drug Master Plan, KeMoja Campaign. Retrieved from <http://www.socdev.gpg.gov.za>.
- The National Child Traumatic Stress Network. (2014, August 13). Complex Trauma: Facts for service providers working with homeless youth and adults. Retrieved from <http://www.nctsn.org>
- The National Child Traumatic Stress Network. (2014, October 2014). Culture and Trauma Brief: Trauma among homeless youth. Retrieved from <http://www.nctsn.org>

- The United Nations Children's Fund (UNICEF) (2012). The state of the world's children, Children in an Urban World. UNICEF: New York.
- Thompson, S. J., Bender, K., Windsor, L., Cook, M. S., & Williams, T. (2010). Homeless youth: Characteristics, contributing factors, and service options. *Journal of Human Behavior in the Social Environment*, 20(2), 193-217.
- Thurman, T. R., Brown, L., Richter, L., Maharaj, P., & Magnani, R. (2006). Sexual risk behavior among South African adolescents: is orphan status a factor? *AIDS and Behavior*, 10(6), 627-635.
- Tomalski, P., & Johnson, M. H. (2010). The effects of early adversity on the adult and developing brain. *Current Opinion in Psychiatry*, 23(3), 233-238.
- Tripathi, B, M & Ambekar, A. (2009). *Drug use among street children*. National Drug Dependence Treatment Center: India.
- Tucker, J. S., Hu, J., Golinelli, D., Kennedy, D. P., Green Jr, H. D., & Wenzel, S. L. (2012). Social network and individual correlates of sexual risk behavior among homeless young men who have sex with men. *Journal of Adolescent Health*, 51(4), 386-392.
- Tyler, K. A., Whitbeck, L. B., Chen, X., & Johnson, K. (2007). Sexual health of homeless youth: Prevalence and correlates of sexually transmissible infections. *Sexual Health*, 4(1), 57-61.
- Umthombo street children. (2014). Umthombo Street children retrieved from <http://www.umthombo.org>
- UN. (2014, September 20). Report of the United Nations High Commissioner for Human Rights on the protection and promotion of the rights of children working and/or living on the street. Retrieved from <http://www.ohchr.org>.
- UNESCO. (2014, August 19). A report on street children. Retrieved from <http://www.unesco.org>



- UNICEF (2004). *The framework for the protection, care and support of orphans and vulnerable children living in a world with HIV and AIDS*. New York: UNICEF.
- UNICEF, (Ed.). (2005). *The state of the world's children 2006: excluded and invisible*. UNICEF: Switzerland .
- UNICEF, (2012). *The State of the World's Children 2012: Children in an urban world*. UNICEF: New York.
- Ursin, M. (2011). 'Wherever I lay my head is home'—young people's experience of home in the Brazilian street environment. *Children's Geographies*, 9(2), 221-234.
- Vanderbilt, D., & Augustyn, M. (2010). The effects of bullying. *Paediatrics and Child Health*, 20(7), 315-320.
- van Blerk, L. (2012). Berg-en-See street boys: merging street and family relations in Cape Town, South Africa. *Children's Geographies*, 10(3), 321-336.
- van Leeuwen, J. M., Hopfer, C., Hooks, S., White, R., Petersen, J., & Pirkopf, J. (2004). A snapshot of substance abuse among homeless and runaway youth in Denver, Colorado. *Journal of Community Health*, 29(3), 217-229.
- van Rooyen, L., & Hartell, C. G. (2006). Health of the street child: the relation between life-style, immunity and HIV/AIDS-a synergy of research. *South African journal of Education*, 22(3), 188-192.
- Veale, A., & Donà, G. (2003). Street children and political violence: a socio-demographic analysis of street children in Rwanda. *Child Abuse and Neglect*, 27(3), 253-269.
- Veeran, V. (2004). Working with street children: A child centered approach. *Child Care in Practice*, 10(4), 359-366.
- Votta, E., & Manion, I. (2004). Suicide, high-risk behaviors, and coping style in homeless adolescent males' adjustment. *Journal of Adolescent Health*, 34(3), 237-243.

- Walls, N. E., Potter, C., & Van Leeuwen, J. (2009). Where risks and protective factors operate differently: Homeless sexual minority youth and suicide attempts. *Child and Adolescent Social Work Journal*, 26(3), 235-257.
- Ward, C. L., & Seager, J. R. (2010). South African street children: A survey and recommendations for services. *Development Southern Africa*, 27(1), 85-100.
- Wentzel, K. R. (2014). *Prosocial development: A multidimensional approach*. New York: Oxford University Press.
- Whitbeck, L. B., Hoyt, D. R., & Bao, W. N. (2000). Depressive symptoms and co-occurring depressive symptoms, substance abuse, and conduct problems among runaway and homeless adolescents. *Child Development*, 71(3), 721-732.
- World Health Organisation. (2014, August 15). The world health report 2002 – Reducing Risks, Promoting Healthy Life. Retrieved from World Health Organization website <http://www.who.org>.
- World Health Organisation. (2003). Strategic directions for improving the health of children and adolescents. Geneva: World Health Organization.
- World Health Organization (2006). The health of the people- The African regional health report. Switzerland: World Health Organization.
- World Health Organization (April 2014). Global Status Report on Violence 2014. Retrieved from [http://www.who.int/violence\\_injury\\_prevention/violence/status\\_report/2014/en/](http://www.who.int/violence_injury_prevention/violence/status_report/2014/en/).
- Woan, J., Lin, J., & Auerswald, C. (2013). The health status of street children and youth in low-and middle-income countries: a systematic review of the literature. *Journal of Adolescent Health*, 53(3), 314-321.

- Yoder, K. A., Whitbeck, L. B., & Hoyt, D. R. (2008). Dimensionality of thoughts of death and suicide: Evidence from a study of homeless adolescents. *Social Indicators Research*, 86(1), 83-100.
- Zdun, S. (2008). Violence in street culture: Cross-cultural comparison of youth groups and criminal gangs. *New Directions for Youth Development*, 2008(119), 39-54.
- Zimet, G. D., Powel, S. S., Farley, G. K., Werkman, S., Berkoff, K. A. (1990). Psychometric characteristics of Multidimensional Scale Perceived Social Support. *Journal of Personality Assessments*, 55 (3 &4), 610-617.

## APPENDIX A: ETHICAL CLEARANCE TO CONDUCT THE STUDY



07 July 2014

Ms Mashudu Tshifaro Netshiombo (207502912)  
School of Applied Human Sciences – Psychology  
Howard College Campus

Protocol reference number: HSS/0634/014M (Linked to HSS/0958/012)  
Project title: Psychological well-being and social support among street children in Durban, KwaZulu-Natal, South Africa

Dear Ms Netshiombo,

### Full Approval – No Risk / Exempt Application

In response to your application dated 20 November 2013, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

**PLEASE NOTE:** Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours Faithfully

Dr Shonuka Singh (Chair)

/ms

Cc Supervisor: Professor Anna Meyer-Weitz  
Cc Academic Leader Research: Professor D McCracken  
Cc School Administrator: Ms Austin Luthuli

Humanities & Social Sciences Research Ethics Committee

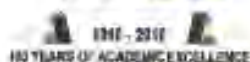
Dr Shonuka Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag 94101, Durban 4001

Telephone: +27 (0) 31 260 9587/85504597 Facsimile: +27 (0) 31 260 4039 Email: [ethics@ukzn.ac.za](mailto:ethics@ukzn.ac.za) / [humanities@ukzn.ac.za](mailto:humanities@ukzn.ac.za) / [socialsciences@ukzn.ac.za](mailto:socialsciences@ukzn.ac.za)

Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)



Fourth Edition: Edgewood, Howard College, Medical School, Pietermaritzburg, Westville

## APPENDIX B CONSENT FORM FOR INDIVIDUAL PARTICIPANTS

**Discipline of Psychology  
School of Applied Human Sciences  
College of Humanities  
University of KwaZulu-Natal**

Dear Child

My name is Mashudu Tshifaro Netshiombo, a clinical psychology Master's student at the University of KwaZulu-Natal, Durban, South Africa conducting a study as part of my final research thesis. The purpose of the research is to examine the psychological well-being and social support of street children in Durban, KwaZulu-Natal. Therefore my research sample consists of children living on the streets of Durban, KwaZulu-Natal. Insights gained from the study could lead to the development of appropriate interventions for working with street children and the timing of such strategies.

This study will require you to answer a few questions about yourself e.g. your age, level of education etc. and two short questionnaires. Complete anonymity of all participants will be ensured. The questionnaire will be kept for five (5) years in accordance with the University regulations and thereafter it will be disposed of by means of shredding. Participation is voluntary and you are completely free to withdraw from this study at any stage for any reason.

Your participation will be highly appreciated and it will not take more than 25 minutes to complete. Please feel free to contact either me or my supervisor for any further clarification regarding this study.

If you have any questions about your rights as a participant please contact Phumelele Ximba in the research office at the University of KwaZulu-Natal on 031-2603587 or email: [ximbap@ukzn.ac.za](mailto:ximbap@ukzn.ac.za).

Yours sincerely,

**Researcher: Mashudu Tshifaro Netshiombo**

Tel: +27 (0) 745 148069

E-mail: [mashudu.netshiombo@gmail.com](mailto:mashudu.netshiombo@gmail.com)

**Supervisor Prof. Anna Meyer-Weitz**

Tel: +27 (0) 312607618

e-mail: [meyerweitza@ukzn.ac.za](mailto:meyerweitza@ukzn.ac.za)

**Co-Supervisor Dr. Kwaku Oppong Asante**

Tel: +27 (0) 733925332

E-mail: [kwappong@gmail.com](mailto:kwappong@gmail.com)

## **PARTICIPANT'S DECLARATION**

I ..... (Full names of participant)  
hereby confirm that I understand the contents of this document and the nature of the research project as discussed with me based on the previous page of this document, and I give consent to participate in the study. I also grant permission for the survey to be administered and to be used for research purposes only. I fully understand that all the information that I provide will be kept confidential and anonymous.

I understand that my participation is voluntary and that I am at liberty to withdraw from the study at any time, should I so wish.

---

Signature of participant

---

Signature of researcher

---

Date

---

Date

## APPENDIX C: SAMPLE QUESTIONNAIRES

### SECTION 1: DEMOGRAPHIC CHARACTERISTICS OF

1. Gender

Male	1
Female	2

2. What is your religion?

Christian	1
Muslim	2
Hinduism	4
Other	3

3. How old are you? (In years)

4. How many years have you been living on the street

Less than 1 year	1
1– 2 years	2
3– 5 years	3
5 years or more	4

5. What is the main reason why you left home [please tick (√) only one]

Family poverty	1
Dysfunctional problems	2
Maltreatment : Sexually abused	3
Maltreatment: Physical abused	4
Divorce	5
Other Reason:	6

Are you in contact with any family member?

1. Yes

☐

2.

☐

If YES, Who is this person?

Mother	1
Father	2
Brother	3
Sister	4
Uncle/Aunt	5
Grand parents	6

Can you ask this person for help if you need it?

1. Yes

☐

2. No

☐

8. What is your highest level of education [Please Tick (√) one]

Grade 1-6	1
Grade 7-9	2
Grade 10-12	3

9. From which Province do you come from?

Free State	1	Western Cape	6
Limpopo	2	Gauteng	7
KwaZulu-Natal	3	Mpumalanga	8
Northern Cape	4	North West	9
Eastern Cape	5		

## SECTION 2: MSPSS

### Instructions:

Please rate the extent to which you agree/disagree with the following statements by circling the appropriate number on the 1 to 5 point scale provided.

	Strongly Disagree	Disagree	Uncertain	Agree	Strong Agree
There is a special person who is around when I am in need	1	2	3	4	5
There is a special person with whom I can share my joys and sorrows	1	2	3	4	5
My street family really tries to help me	1	2	3	4	5
I get the emotional help and support I need from my family	1	2	3	4	5
I have a special person who is a real source of comfort to me	1	2	3	4	5
My friends really try to help me	1	2	3	4	5
I can count on my friends when things go wrong	1	2	3	4	5
I can talk about my problems with my street family	1	2	3	4	5
I have friends with whom I can share my joys and sorrows	1	2	3	4	5
There is a special person in my life who cares about my feelings	1	2	3	4	5
My street family is willing to help me make decisions	1	2	3	4	5
I can talk about my problems with my friends	1	2	3	4	5



### SECTION 3: SDQ

**Instructions:**

Please answer the following statements by circling the appropriate number on the 0 to 2 point scale on how things have been for you over the past six months. It would help us if you answer all items as best as you can even if you are not absolutely certain or the items seem daft.

	Not True	Somewhat True	Certainly True
I try to be nice to other people. I care about their feelings	0	1	2
I feel uneasy a lot, I cannot stay still for long	0	1	2
I get a lot of headaches, stomach-aches or sickness	0	1	2
I usually share with others (food, games, pens etc.)	0	1	2
I get very angry and often lose my temper	0	1	2
I am usually on my own. I generally play alone or keep to myself	0	1	2
I usually do as I am told	0	1	2
I worry a lot	0	1	2
I am helpful if someone is hurt, upset or feeling ill	0	1	2
I am constantly fidgeting or squirming	0	1	2
I have one good friend or more	0	1	2
I fight a lot. I can make other people do what I want	0	1	2
I am often unhappy, down-hearted or tearful	0	1	2
Other people my age generally like me	0	1	2
I am easily disturbed, I find it difficult to concentrate	0	1	2
I am nervous in new situations. I easily lose confidence	0	1	2
I am kind to younger children	0	1	2
I am often accused of lying or cheating	0	1	2
Other children or young people pick on me or bully me	0	1	2
I often volunteer to help others (friends, the blind , older people)	0	1	2
I think before I do things	0	1	2
I take things that are not mine from friends, and other people.	0	1	2
If I am doing something, I can keep my mind on it	0	1	2
I have many fears, I am easily scared	0	1	2
I finish the work I'm doing. My attention is good	0	1	2

## SECTION 4: CD-RISC

### Instructions:

Please rate the extent to which you felt over the past one month with the following statements by circling the appropriate number on the 0 to 4 point scale provided.

	Not true at all	Rarely true	Sometimes true	Often true	True all of the time
I am able to adapt to change	0	1	2	3	4
I have close and secure relationships	0	1	2	3	4
Sometimes fate or God can help	0	1	2	3	4
I can deal with whatever comes	0	1	2	3	4
Past success gives me confidence for new challenges	0	1	2	3	4
I see the humorous side of things	0	1	2	3	4
Coping with stress strengthens me	0	1	2	3	4
I tend to easily overcome difficulties times or illness	0	1	2	3	4
I think things happen for a reason	0	1	2	3	4
I give my best effort no matter what	0	1	2	3	4
I can achieve my goals/ambitions	0	1	2	3	4
When things look hopeless, I don't give up	0	1	2	3	4
I know where to turn for help	0	1	2	3	4
When I am under pressure, I focus and think clearly	0	1	2	3	4
I prefer to take the lead in problem solving	0	1	2	3	4
I am not easily discouraged by failure	0	1	2	3	4
I think of myself as strong person	0	1	2	3	4
I make unpopular or difficult decisions	0	1	2	3	4
I can handle uncomfortable feelings	0	1	2	3	4
I have to act on my intuition	0	1	2	3	4
I have a strong sense of purpose	0	1	2	3	4
I feel I am in control of my life	0	1	2	3	4
I like challenges	0	1	2	3	4
I work towards achieving my goals	0	1	2	3	4
I take pride in my achievements	0	1	2	3	4

## SECTION 5: SSS SCALE

### **Instructions:**

Please rate the extent to which you agree/disagree with the following statements by circling the appropriate number on the 1 to 4 point scale provided.

	Strongly Disagree	Disagree	Agree	Strong Agree
I have been hurt by how people have reacted to me for living on the street.	1	2	3	4
I feel that I am not as good as others because I am homeless.	1	2	3	4
I feel guilty and ashamed because I am homeless	1	2	3	4
People seem afraid of me because I am homeless	1	2	3	4
Some people act as though it is my fault that I am living on the street.	1	2	3	4
People who live on the street are treated like outcasts	1	2	3	4
Knowing that you are homeless, people look for things wrong about you	1	2	3	4
I have been insulted by strangers because I live on the street.	1	2	3	4
Most people think that people living on the street are disgusting	1	2	3	4
People who live on the street cannot get jobs because they don't have home	1	2	3	4
I struggle with the views of others about people who live on the street	1	2	3	4
Homeless people are harassed by the police because they are homeless	1	2	3	4

## SECTION 6: RC SCALE

### **Instructions:**

Please think about how you understand and deal with major problems in your life. To what extent is each of the statements involved in the way you cope?

	Not at all	Somewhat	Quite a bit	A great deal
I think about how my life is part of a large spiritual force	1	2	3	4
I work with God as partners to get through hard times	1	2	3	4
I look to God for strengthen, support and guidance in times of crisis	1	2	3	4
I try to find lesson from God in crisis	1	2	3	4
I confess my sins and ask for God's forgiveness.	1	2	3	4
To what extent is your religion involved in dealing with stressful situations.	1	2	3	4

## SECTION 7: BEHAVIOURS RELATED TO MENTAL HEALTH

**Instruction:** Please answer the following questions as frankly as you can, as there is neither right nor wrong answers

### **Suicidal Ideation**

1	Do you sometimes feel hopeless?	Yes	1	No	0
2	Have you ever considered attempting suicide?	Yes	1	No	0
3	Have you made a plan to commit suicide?	Yes	1	No	0
4	Have you made one or two suicide attempts?	Yes	1	No	0

### **Smoking**

5	Have you ever smoked cigarette?	Yes	1	No	0
6	Have you tried to quit smoking?	Yes	1	No	0

7. How often do you use cigarette?

Never	1
Sometimes	2
Everyday	3

8. How did you react when you friends told you to follow them to smoke?

Walk way	1
Refusing to smoke when offered	2
Refusing and persuading them to stop	3
Refusing and persuading them to stop	4
Joining them and smoke	5

9. How old were you when you start smoking cigarette? (In years)

10	Where did it happen?	Home	1	On the street	2
----	----------------------	------	---	---------------	---

### Alcohol Use

11	Have you ever drunk an alcoholic beverage?	Yes	1	No	2
12	Have you used alcohol in the last one month?	Yes	1	No	2

13. How often do you drink alcohol in a month?

Never	1
Sometimes	2
Everyday	3

14. Age of first drinking

### Illegal drugs

15	Have you ever used “wee” (marijuana)	Yes	1	No	2
----	--------------------------------------	-----	---	----	---

16. How often do you smoke “weed” (marijuana) in a month?

Never	1
Sometimes	2
Everyday	3

17. At what age did you start smoking ‘weed’

18	Where did you learn it?	Home	1	On the street	2
----	-------------------------	------	---	---------------	---

19. How do you normally get access to the “weed”?

From friends	1
Buy it	2
From other people	3

20. How easy is it to get “weed”?

Easy to get	1
Difficult to get	2

20. Have you used the following drugs? (*Never* = 0, *Sometimes* = 1 and *Always* =2)

Glue	1	
Hoonga	2	
Cracks	3	

### Sexual Behaviours

20	Have you had sex in the last one month?	Yes	1	No	0
21	Did you use a condom?	Yes	1	No	0
22	Do you have more than two (2) sexual partners?	Yes	1	No	0
23	Have you had sex with someone in exchange for food, money, and clothes or even where to sleep?	Yes	1	No	0

24	How old were you when you first had sex? (In years)	
----	---	--

25	Where did it happen?	Home	1	On the street	2
----	----------------------	------	---	---------------	---

## SECTION 8: BEHAVIOURS RELATED TO INJURY AND TRAUMA

**Instruction:** Please answer the following questions as frankly as you can, as there is neither right nor wrong answers.

### Assault

1	Have you ever been bullied?	Yes	1	No	0
2	Have you ever bullied someone?	Yes	1	No	0
3	Have you beaten someone?	Yes	1	No	0

	Never	Sometimes	Always
How often have you been beaten up?	1	2	3

How often have you been robbed?	1	2	3
How often have you been beaten assaulted with a weapon?	1	2	3
How often have you been threatened with a weapon?	1	2	3

### Coerced Sex

6	Have you ever been forced to have sex with someone?	Yes	1	No	0
7	Have you forced someone to have sex before?	Yes	1	No	0
8	Do you know someone who had been raped?	Yes	1	No	0

### Fighting

How many times have you been involved in fighting in the past 3 months?

Never	1
Sometimes	2
Always	3

20	Have you ever been injured in a fight?	Yes	1	No	0
----	--	-----	---	----	---

*Thank you for your participation*