

**MENTAL HEALTH OF STREET CHILDREN IN SELECTED
RESIDENTIAL CARE IN LUSAKA PROVINCE**

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A Dissertation Submitted to the University of Zambia in Partial Fulfilment of
the Requirements of the Degree of Master of Arts in Child and Adolescent
Psychology

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LUSAKA
2011

I Sarah Banda declare that this dissertation

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Abstract

Previous research has established high mental health problems and needs of children in residential care. However, in Zambia little is known about the mental health of this peculiar group of children. The study prescribed in this paper aimed to explore the mental health problems/disorders in residential care for street children and to examine the service response to their mental health needs. The study utilized a sample of 74 (68 boys and 6 girls) street children in residential care aged 7-17 years. To collect data on children's mental health problems and needs, the Strengths and Difficulties Questionnaire (SDQ) was administered to agency carers and adolescents (if older than 11). Data on mental health service provision was obtained from children's case files and semi structured interviews with residential care managers. Nearly three quarters of street children in residential care were rated as having a mental health problem, as indicated by findings from both the self rated SDQ and the Carers' SDQ. Out of this sample, a considerable number (about one third) had multiple mental health problems which indicated significant levels of impairment. The most frequent mental health problems/disorders were behavioural and emotional problems. The study also found a strong relationship between multiple mental health problems (co-morbidity) and the impact of these problems on the children. Residential care managers reported that there were no referral centres for children with complex mental health problems. The study results also indicated that some residential centres lacked trained personnel to deal with mental health problems among children and adolescents. In addition, all the residential centres had financial challenges to effectively implement programmes. The researcher concluded that street children in residential care are a high risk population to mental health problems. In addition, children with multiple mental health problems are likely to perform poorly in terms of social functioning compared with those with less or without mental health problems. Further, the the mental health services for street children in residential care were not matching to the needs of the children.

I dedicate this piece of work to my two sons Fumbani and Moses. They have been deprived of the mother's love during the time I have been away from home for studies, yet they have always understood and gave me the support.

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Chapter One: Introduction

1.0 Introduction

This chapter gives background information to the current study. The chapter further presents the statement of the research problem, the purpose of the research, research objectives, research hypothesis, the significance of the study operational definition of concepts and the theoretical framework for the study.

1.1 Background

The number of children and adolescents living in Zambian residential care homes stands at approximately 2,500 (Department of Social Welfare Annual Report, 2009). Multiple risk factors such as poverty, broken homes, neglect, sexual and physical abuse, discontinued relationships and genetic factors have an impact on the mental health of children and adolescents in residential and foster care (Richardson & Lelliot, 2003; Rutter, 1985; Newton, 1988). In addition 50-80 percent of children in residential and foster care have experienced at least one traumatic event (Meltzer et al., 2003).

Statistics on the mental health of children in residential care systems play a vital role in guiding welfare policies and programmes concerning service planning and budgeting. The study by the Ministry of Community Development and Social Services (2006) indicated that in as much as it is important to address the physical health needs, programs dealing with the children should also be in a position to address their mental health needs. According to Richardson and Joughin (2000), “promoting mental health and dealing effectively with those with mental health problems is an important task for those concerned with children”. Unresolved mental health problems cause continuing distress in the children who are affected and this may persist into adulthood (Ibid).

Considerable research evidence reveals the existence of mental health problems among young people including street children throughout the world who are in or transitioning from care systems (Richardson & Lelliot, 2003). Prevalence estimates vary greatly, and comparisons between studies are limited owing to different methodologies and how results are presented. However, a rate of 1 out of 5 (20 percent) is usually quoted in most studies which reflects a significant level of prevalence (Specialty Advisory Committee, 2002).

According to Lindsey (2000), the most common mental health problems include anxiety, fears, and depression along with behavioural problems. Such mental health problems manifest in a variety of distressing behaviours and social concerns such as self harm, substance abuse, and aggression (Speciality Advisory Committee, 2002).

1.2 Problem Statement

International prevalence rates for mental health problems/disorders in residential care for children and adolescents are estimated to be between 44 percent and 96 percent, with large studies reporting a prevalence of 60 percent to 70 percent (Schmid, 2008). In addition research evidence shows that a considerable number of this group of children and adolescents have multiple mental health problems/disorders (co-morbidity) and exhibit high levels of mental health needs and poor functioning (Clark et al., 2005).

In Zambia, however, research in the field of child mental health is scarce. Menon et al. (2009) conducted a study which is closer to the present study but the focus was on HIV adolescents in Zambia. Other studies mainly concentrated on mental illness (Mayeya et al., 2004) and the situation analysis of Orphans and Vulnerable Children (OVCs) (Tacon & Lungwangwa, 1991; Lungwangwa & Macwan'gi 1996; Project Concern International (PCI), 2002; Ministry of Sport Youth and Child Development (MSYCD), 2004; Ministry of Community Development and Social Services (MCDSS), 2006).

MCDSS (2006) indicated that there is lack of information on the outcomes of child welfare programs, in particular those dealing directly with street children. Existing literature also reveals that there is an imbalance between the mental health needs of this high risk population and the service options made available to them (Schmid, 2008).

From the forgoing it can be stated that children in residential care are vulnerable to mental health problems. It is important therefore, to know the mental health status and the impact of mental health on children in residential care and to examine the mental health services provided to these children in order to safeguard their welfare.

1.3 The purpose of the study

The purpose of the study was to explore the mental health problems/disorders of street children in residential care and to examine the service response to their mental health needs.

1.4 Specific Objectives

The research sought;

- (i) to investigate the prevalence of mental health problems/disorders for street children in residential care;
- (ii) to investigate the impact of mental health problems on the street children;
- (iii) to examine the relationship between multiple mental health problems (co-morbidity) and the impact of these problems on the street children; and
- (iv) to examine mental health service provision to street children in residential care.

1.5 Research hypothesis

The study tested the hypothesis that “the impact of mental health problems will be more on street children with multiple mental health problems (co-morbidity) in comparison to those with a single or no problem”.

1.6 Research questions

The following research questions were asked;

- (i) What is the prevalence rate of mental health problems for street children in residential care?
- (ii) Do mental health problems pose a significant impact on street children in residential care
- (iii) What services/programmes are available in residential care for street children?

1.7 Significance of the study

There has been little or no research done specifically on street children’s mental health in residential care. According to Volpi (2002), street children are usually the survivors of traumatic experiences in the family and in the street itself, and they need to reconcile themselves with their life history in order to find meaning and healing. Such reconciliation therefore, requires that their social and psychological wellbeing is taken into consideration.

The present study is therefore important because despite the wealth of information on street children, more empirical knowledge is needed in order to underpin interventions regarding mental health needs and services in residential care which identifies starting points, processes and outcomes for these children. The study may also contribute to information generation in the domain of children’s mental health. It will be one way of building up a greater knowledge and evidence base of problems, interventions and what works with this highly vulnerable group of young people.

1.8 Definition of Terms

1.8.1 Street Children in Residential Care

In this paper, the term street children in residential care refers to children who spent almost their entire livelihood on the streets or public places and are aged 7 -17 years old or below the age of 18 years (MCDSS, 2006), who have been removed from the streets and placed in residential care.

1.8.2 Residential Care

Residential care refers to care provided in any non-family –based group setting (Phillips, 2007).

1.8.3 Looked After Children

The term 'looked after children' refers to children who are below 18 years and have been provided with care and accommodation by children's services (Richardson & Lelliot, 2003). Often this will be with foster carers, but some looked after children might stay in a children's home or with another adult known to the parents.

1.8.4 Mental Health

Mental health refers to successful performance of mental function which results in productive activities, fulfilling relationships with other people, and the ability to change and to cope with changing circumstances (Surgeon General's Report, 1999). Mental health includes; the ability to develop psychologically, emotionally, intellectually and sustain mutually satisfying personal relationships; the ability to become aware of others and to empathize with them; and the ability to use psychological distress as a developmental process so that it does not hinder or impair further development (NHS Advisory Service, 1995). It is however, noteworthy to mention that mental health encompasses both positive and negative aspects of well-being and healthy functioning (Surgeons General Report, 1999).

1.8.5 Mental Health Services

Mental health services are those services that aim to provide assessment and brief psychosocial interventions as well as diversion to longer-term services whilst providing support and advice for staff working with children and adolescents (Arcelus et al., 1999).

1.8.6 Mental Health Problem

In this paper, the term mental health problem is used in a broader sense, as described by Hagel (2003), indicating a level of symptoms of mental ill health that have led to impairment in one's day-to-day life. This term does not necessarily mean that young people are clearly diagnosable as having a major mental illness, but it does assume that they are affected enough by the poor status of their mental health to cause those problems (Ibid).

1.8.7 Mental Health Disorder

Where necessary the author used the term mental disorder as it is used in the *International Classification of Mental and Behavioural Disorders – version 10 (ICD – 10)*, to imply the existence of a clinically recognisable set of symptoms or behaviour associated in most cases with distress and with interference with personal functions.

1.8.8 Mental Illness

The researcher used the term mental illness to refer to a mental disorder that has a relatively distinct onset, for example a depressive illness (Thompson, 2007).

1.8.9 Common Disorders

A number of disorders are relatively common in children and adolescents, and the researcher includes the definitions as given in the DSM-IV Diagnostic Manual, as follows:

i) Emotional disorders

These are characterised by marked symptoms of depression, anxiety or other emotional upsets, but do not meet the diagnostic criteria for the individual disorders.

ii) Conduct disorders

These disorders are specific to childhood and adolescence. They are characterised by a repetitive and persistent pattern of dissocial and aggressive conduct. Such behaviour, when at its most extreme for the individual, should amount to major violations of age appropriate social expectations and is therefore more severe than ordinary childish mischief or adolescent rebelliousness.

iii) Hyperkinetic (hyperactivity) disorders

This group of disorders is characterised by early onset, a combination of overactive, poorly controlled behaviour with marked inattention and lack of persistent task involvement, and pervasiveness over situations. These behavioural characteristics persist over time.

iv) Peer problems

These disorders comprise enduring behaviour patterns which are maladaptive to a wide range of personal and social situations. They represent either extreme or significant deviations from the way the average individual in a given culture perceives, thinks and particularly relates to others. They are frequently but not always associated with various degrees of subjective stress and problems in social functioning and performance.

v) Depression

This disorder is characterised by mood change that is often accompanied by a reduction in the overall level of activity, together with other symptoms such as loss of interest, reduced self esteem and confidence, ideas of guilt and unworthiness, ideas or acts of self-harm or suicide, disturbed sleep and reduced appetite.

1.8.10 Co-morbidity

Having more than one mental health problem/disorder.

1.9 Theoretical framework

The examination of street children's mental health in residential care made the researcher to position the study in the multi-modal model, a framework suggested by Vostanis (2003). The underlying premise of the multi-modal model is that a child or young person is embedded in a number of systems; individual, family, school/work, peer, and community (Henggeler, 1999).

The motivation to use the multi-modal model emanated from existing research evidence that looked after children are much more likely than other children to have various risk factors that predispose them to the development of mental health disorders and ultimately to enter the care system (Richardson and Lelliot, 2003). Some of the major risk factors include abuse and neglect, family dysfunction, family in acute stress, socially unacceptable behaviour, and low income and absent parenting (Richardson & Lelliot, 2003; Dimond et al., 2004). The concept of three "Ps" i.e. precipitating, predisposing and perpetuating is mostly used to illustrate these risk factors (Specialty Advisory Committee, 2002). Predisposing factors may include temperament, developmental delay, low Intelligence coefficient (IQ). Precipitating factors on the other hand may include, family dysfunction, family in acute stress, absent parenting. Perpetuating factors include low income, conflict and hopelessness.

Considering the fact that various risk factors predispose looked after children to mental health problems, interventions or services for such children should have a multi-modal approach. According to Schmid, (2008: 12) a multimodal intervention concept includes the following; “child and adolescent diagnostic procedures, medication, weekly case conferences, family therapy, and behavioural therapy and counselling for school workers, residential care staff, and social workers”. Callaghan et al. (2004) evaluated an intervention model of this kind in which residential care staff attested to the effectiveness of the model.

At the centre of the multimodal intervention model is co-ordination between concerned agencies. Effective mental health services for children in residential care need sustained collaboration from key stakeholders; service users, carers, education services, social and health care managers, voluntary organizations and child and adolescent mental health services (CAHMS). These range from primary care services to highly specialist services. These services are described within the framework of a four-tier model (table 1), with each tier addressing different types of problems with the level of severity increasing from Tier 1 to 4.

In summary, the multi-modal model views mental health problems in looked after children as stemming from a combination of various factors which include genetic, socio-economic, familial and psychological factors. As such, mental health interventions/ service provision should have a broad focus to encompass a wide range of mental health problems.

The model also emphasises the importance of inter- agency collaboration in the provision of mental health services to looked after children.

Table 1 Four-tier model for mental health services (NHS Health Advisory Service, 1995)

<p>Tier 1 A primary level, which includes interventions by:</p> <ul style="list-style-type: none"> ✓ health visitors ✓ residential social workers ✓ juvenile justice workers ✓ school nurses ✓ teachers ✓ social services ✓ Voluntary agencies. 	<p>These non-specialist staff:</p> <ul style="list-style-type: none"> ❖ Identify mental health problems early in their development ❖ Offer general advice and, in certain cases, treatment for less severe mental health problems ❖ Pursue opportunities for promoting mental health and preventing mental health problems
<p>Tier 2</p> <p>A level of service provide by professionals working on their own who relate to others through a network rather than with a team:</p> <ul style="list-style-type: none"> ✓ clinical child psychologists ✓ educational psychologists ✓ paediatricians – especially community; ✓ community child psychiatric nurses/nurse specialists ✓ child and adolescent psychiatrists 	<p>CAMHS professionals offer:</p> <ul style="list-style-type: none"> ❖ Training and consultation to other Professionals (who might be at Tier 1) ❖ Consultation for professionals and families ❖ Outreach to identify severe or complex needs where children or families are unwilling to use specialist services ❖ Assessment which may trigger treatment at his level or in a different tier.
<p>Tier 3</p> <p>CAMHS professionals offer:</p> <ul style="list-style-type: none"> ✓ training and consultation to other professionals (who might be at Tier 1) ✓ consultation for professionals and families ✓ outreach to identify severe or complex needs where children or families are unwilling to use specialist services ✓ Assessment which may trigger treatment at this level or in a different tier. 	<p>This is usually a multi-disciplinary team or service working in a community child mental health clinic or child psychiatry outpatient service offering:</p> <ul style="list-style-type: none"> ❖ Assessment and treatment of child mental health disorders ❖ Assessment for referrals to Tier 4 ❖ Contributions to the services, ❖ Consultation and training at Tiers 1 and 2 ❖ Participation in research and Development projects.
<p>Tier 4</p> <p>Access to infrequently use but essential services such as day units, highly specialised out-patient teams, and in-patient units for older adolescents who are severely mentally ill or at suicidal risk. These services may need to be provided on a district level, as not all districts can expect to offer this level of expertise.</p>	<p>More specialist CAMHS may provide for more than one district or region and might include:</p> <ul style="list-style-type: none"> ❖ Adolescent in-patient units and secure forensic adolescent units; ❖ Specialist services for young people with learning difficulties; ❖ Specialist forensic out-patient teams for risk assessment and offence specific treatments; ❖ Specialist teams for neuro-psychiatric Problems.

Chapter Two: Literature Review

2.0 Introduction

This chapter seeks to review relevant literature related to the present study. The review focuses on prevalence of mental health problems/disorders in looked after children, co-morbidity of mental health problems and how it relates to social functioning (impact of mental health problems), and mental health service provision for children in residential care.

2.1 Prevalence of Mental Disorders in Looked After Children

There is considerable research evidence on the existence of significant mental problems/disorders in looked after children including those in residential care. Comparisons between studies are difficult to make, as their purposes, methodologies and definitions vary. In addition, child welfare systems depend on the social cultural context thus, the system in the United Kingdom may differ from the one in Zambia, and the reasons for young people entering the care system and the kind of care provided for them are influenced by geography and history. Research instruments used vary, as well as research designs. Nonetheless, there are common trends which can be drawn from the studies (Richardson and Lelliot, 2003).

McCann *et al.* (1996) conducted a study in which they looked at the mental health of 88 (aged between 13 and 17 years) looked after adolescents in Oxfordshire and found some form of mental health disorders in 67 percent of the looked after young people. The prevalence rates were particularly high among those living in residential care. The prevalence rate was 96 percent for residential care, 57 percent for foster care and 15 percent for those living with their families. The most common disorder was conduct (28 percent), followed by overanxious disorder (26 percent), major depressive disorder accounted for 23 percent, with 8 percent accounting for unspecified functional disorder.

Dimigen et al. (1999) carried out a research on 70 children at the time of admission into the local authority care involving 36 girls and 34 boys. Twenty six of these children were in residential care and 44 were placed in foster care. The results of the study indicated conduct and depression disorders as common disorders among the group studied. Thirteen boys and 12 girls showed severe conduct disorder. A higher proportion of the children in residential establishments had severe depression (emotional problems) than was the case for children in foster care. Of the 70 children, 21 had severe attention difficulties and 18 had autistic-like detachment, 15 had very elevated levels of acute problems and 11 had anxiety disorders.

Nicol et al. (2000) undertook a psychological assessment involving 116 young people in residential care in the Midlands (England). The results of the study indicated that more than 75 percent of the sample was assessed as having a clinically significant mental health problem.

A study conducted by Graf et al. (2002), reported an 80 percent prevalence of mental disorders in a study of 103 children and adolescents in German group homes, although this was based only on general clinical judgement.

The Office for National Statistics (2002) carried out a survey among young people aged between 5 and 17 years who were looked after by local authorities in England. The main purpose of the survey was to produce rates of three main categories of mental disorder; conduct, emotional and hyperactivity disorders. Overall nearly three quarters of the young people in residential care, (72 percent) were rated to have a mental disorder; 60 percent had conduct disorders, 18 percent were assessed as having emotional disorders, 8 percent had less common disorders.

Meltzer et al., (2003) undertook the most comprehensive survey in the United Kingdom (UK) for the Office of the National Statistics (ONS). The study had a sample of 1039 looked after children aged 5-17 drawn from 134 English local authorities. The study combined data from carers, teachers and from interviews with young people to produce a picture of mental distress which could be compared with the results of an earlier ONS study (Meltzer et al. 2000) of mental health problems of young people in the general population. Forty five percent of the looked after young people were identified as having a mental health problem with higher rates among those in residential care in comparison to those in foster care or those placed with their families. This reflected a 4 to 5 times higher rate than that found in the 2000 ONS study's general population.

Further, Schmid et al. (2008) analysed the mental health status of 689 children and adolescents (mean age 14.4 years, standard deviation [SD = 3], range 4-19 years, median 15years) from 20 German residential homes using dimensional and categorical measures of psychopathology. Fifty nine point nine percent (59.9 percent) of the children and adolescents, fulfilled the criteria for an International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10) diagnosis as revealed by the Diagnostic System for Mental Disorders for Children and Adolescents (DISYPS-KJ) (Schmid, 2008). The study revealed that 452 (81.2 percent) scored above the clinical range in the Child Behaviour Checklist (CBCL), rated by the residential care worker, and/or the Youth Self Report (YSR), which is self-rated. The most common diagnoses among children and adolescents in residential care were conduct disorder (26 percent), combined attention-deficit hyperactivity disorder (22 percent), depression (10 percent) and drug and alcohol abuse (9 percent).

These studies are an indication that children in residential care are a high risk population when it comes to mental health problems an aspect which calls for more research in this area to underpin interventions.

Table 2 gives an overview of different studies with regards to prevalence rates of mental health problems/disorders in looked after children (residential care and foster care). Most of the studies were conducted in North America and the UK.

Table 2 Overview of Prevalence Rates of Mental Health Problems in Different Studies

Study	Sample sites	Sample Size (n)	Prevalence (percent)	ICD-10 Diagnoses
Mc Cann et al (1996)	Foster and residential care in the UK	n = 103 (n =38 in residential care)	96% in residential care 57% in foster care	Yes
Hukkanen et al (1999)	Residential care in Finland	n = 91	59	No
Dimigen et al (1999)	Residential and foster care in the UK	n= 70	30%-50% in the different subscales	No
Graft et al (2002)	Residential care in Germany	n= 103	80%	Yes
Meltzer et al (2003)	Foster and residential care in the UK	n = 1039 (n = 168 in residential)	Total 45%-49% 68% in residential care	No
Burns et al (2004)	Foster care and residential care in the US	n = 3,803	88.6% in residential care 63.1% in foster care	No
Blower et al (2004)	Foster and residential care in the UK	N = 48	44% in residential care	Yes
Mount et al (2004)	Foster and residential care in the UK	N = 50	70%	No
Schmid et al (2007, 2008)	Residential care in Germany	689	81%	Yes

Source: Schmid, (2008)

2.2 Co-morbidity of Mental Health Disorders

Clark et al. (2005) reports that a considerable number of children present at the interface of education, social care and mental health services complex and co-morbid mental health problems and needs that require substantial packages of care.

The great majority of studies of children in residential care describe a high prevalence of complex and co-morbid disorders (Schmid, 2008). McCann et al. (1996) in their study noted that the young people showed high levels of co-morbidity, indicating the complexities of their problems. Dimigen et al. (1999) in a study involving 70 children found co-morbidity in over a third of the children and concluded that the results were an indication of a serious problem of unmet need, because the children were just entering the care system and had not yet been referred to mental health services. Kelly et al. (2003) cited research which indicated that conduct disorder was the most common, but that it was the co-morbidity and complexity of these children's needs which impacted on all aspects of their lives, emotionally, socially and educationally.

A study conducted in Manchester involving 60 children identified as children with complex mental health needs revealed that fifty three (53 percent) had two or more disorders and that these children exhibited poorer functioning (Clark et al, 2005). Another study by Schmid et al. (2008) indicated that one third of the study sample (689 children) had more than one mental disorder.

The findings stress the vulnerable mental status of children in care and the need for additional support for professionals working with children.

2.3 Mental Health Services Provision

Children and young people living in residential care need support that enables understanding and change through promotion of their mental health and social functioning (Claire, 2004). However, existing research evidence reveals a shortfall between the mental health needs of the children in residential care and the services/treatment options available to them, as alluded to in the first chapter of this paper (Schmid, 2008).

McCann et al. (1996) in his first systematic study on the mental health of looked after children noted that the mental health needs went unrecognised and that accessing services was difficult. Further a study conducted in Britain involving social workers indicated that 80 percent of the children were considered by the social workers to require treatment, but only 27 percent had received help from mental health professionals (Philips, 1997). Another study by Clarke et al. (2005) also found that children with mental disorders had very high unmet mental health needs among other needs,

Ofsted (2010) carried out a survey on looked after young people over the age of 16 years accommodated in 27 children's homes in eight local authorities across England. The study found inconsistent mental health provision for young people in care, with provision varying from good to none at all.

The study noted that a key strength in the children's homes was the care, support and commitment the young people received from the carers. Over time, carers in non-specialist children's homes developed skills and good awareness and understanding of mental health issues. This enabled them to effectively identify young people's needs and intervene accordingly.

Another considerable strength in all the children's homes was the recognition by staff that young people's involvement in interventions was a key part of their role. Managers generally were of the view that young people were old enough to make their own decisions regarding the type of intervention required (Ibid).

In all the homes visited, young people had received an assessment of their needs before admission to the home except some of the homes had inadequate information on the assessments. However, the findings suggested that training and development across non-specialist homes was varied thus, the inconsistencies in service delivery (Ibid).

Dimond et al. (2004) came up with recommendations on how best to deal with mental health problems amongst children and young people in care as presented below;

- (i) Managers should address the considerable resource implications of the known high rates of mental health problems found in children and adolescents in care and the demands placed on their carers in terms of time and the need to develop their skills in this area of work. It is important to recognise that the provision of comprehensive mental health care in residential care is still at an early stage and that all the many systems of care are still evolving. Managers will, therefore, need to keep abreast of any of the changes that may occur.
- (ii) Residential care managers should ensure that the structure and culture of their institution promotes mental health. They need to identify mental health as an important factor affecting young people in residential care. The mental health status of a young person can have direct and indirect negative effects on a young persons' behaviour. It may do this indirectly by affecting the ability of young persons' parents, carers and other important adults in their lives, such as their carers and teachers, in their role of providing effective care, guidance and education.

- (iii) The provision of effective mental health promotion and mental health care for young people in residential care will only be achieved through integrated inter-agency work supported by stakeholders at all levels of the tiers (discussed in detail in the literature review section). In order to ensure that practitioners have access to a comprehensive range of services, managers should identify and network with local services.
- (iv) Managers should ensure that all practitioners are equipped with the skills and confidence required to work with children with substantial mental health needs.
- (v) Strategic partners need to address the requirements for additional training that may be necessary to improve the mental health knowledge and skills of staff working in residential institutions and key partnership agencies.
- (vi) Further, strategic partners should ensure that mechanisms are in place for collection of data required for multi-agency monitoring and evaluation, and supporting the implementation of key elements of effective practice. This should enable strategic partnerships to assess how well the mental health needs of young people are being met and plan improvements where necessary.
- (vii) Strategic partnerships should review process and outcome data from monitoring and evaluation systems to assess the effectiveness of interventions.

2.4 Summary of the Reviewed Literature

The literature review consistently shows that looked after children have poor mental health and that (where comparisons have been made) the mental health of those in residential care is worse than that of children in foster care.

The studies represent data from almost five thousand children and whilst there are differences in the levels of mental health problems according to age, gender and placement type, the results show that a large proportion of looked after children have mental health problems which are severe enough to be noticed by their carers, teachers and social workers and which may affect their ability to function alongside their peers. The overall conclusion that can be reached is that around 50 percent of looked after children have a diagnosable disorder and that up to 70-80 percent have recognizable mental health problems.

The studies reveal that the most common disorders are conduct (behavioral problems) and emotional problems. Further the reviewed literature indicate that there is a relationship between multiple mental health problems (co-morbidity) and levels of mental health needs i.e. levels of stress and impact of mental health problems on children and young people in the care system.

The literature further shows that there is an imbalance or rather inconsistencies in providing mental health services to children in residential care. These inconsistencies relate to mental health assessment processes, staffing, referral to mental health services, to mention but a few.

In conclusion, it can be stated that children in residential care are vulnerable to mental health problems, an aspect which stresses the need for substantial support for professionals working with children in residential care as well as the children themselves. It is especially of importance therefore, to know the mental health status and the impact of mental health on children in residential care and to examine the mental health services provided to these children in order to safeguard their welfare.

Chapter Three: Methodology

3.0 Introduction

This chapter focuses on the methodology that the researcher used in the present study which includes, the research design, the study subjects, procedures of data collection, ethical considerations, data collection tools, pilot study and data analyses.

3.1 The Study Design

The study used both qualitative and quantitative approaches. It used a cross-sectional study which provided numeric or quantitative descriptions of mental health problems/disorders amongst street children in residential care.

3.2 Study Participants

Seventy four (74) children between the age of 7 and 17 years were included in the study and constituted all the children from five street children residential centres in Lusaka namely Lazarus Project, Zambia Shanty, St Lawrence Children's Centre, Jesus Cares and Fountain of Hope. The study included 68 boys (92 percent) and 6 girls (8 percent). The mean age for the sample was 14 years.

The sample size was similar to that used in McCann et al.'s study, (1996), Nicky et al.'s study (2005) and Mount et al.'s study (2004) and was considered adequate to reflect a range of mental health problems, while also fitting in the time-frame set for the research.

3.3 Ethical Considerations

The research obtained ethical approval from the University of Zambia Research Ethics Committee. All the individuals involved in the study were provided with a Participant Information Sheet which stated the purpose of the study, the need for their involvement, what their participation would entail and issues pertaining to ethics and confidentiality.

Informed written consent was obtained from all individuals participating in the study. Residential care managers, carers and the children who took part in the study were debriefed and appreciated for their participation and cooperation during the study.

Anonymity codes were assigned to all participants to protect personal and organizational identity. All data obtained were kept under strict confidence.

3.4 Data Collection Procedure

Children were recruited from five centres looking after street children within Lusaka. The centres were identified through the Lusaka District Social Welfare Office Directory for Child Care facilities. For each identified child, the key care worker (carer) most involved in delivery of care to the child was asked to complete brief questionnaire (Strengths and Difficulties Questionnaire) [SDQ]) to measure the child's mental health status. In addition to the questionnaire that was completed by key carers, older children (11-17) were required to give a self report using a similar questionnaire though the wording was slightly different in order to have more reliable information. The researcher administered the self-rated SDQ to the children who could not read. The wording for the self-rated SDQ was slightly altered for some statements without changing the meaning of the statements. This was because during the pilot study some respondents were not familiar with certain phrases in the SDQ such as 'constantly fidgeting or squirming'. This phrase was changed to read as 'constantly impatient or unease'.

The residential centre managers were interviewed using a semi structured interview with regards to mental health service provision in residential care. Children's case files/ records were also used to validate certain information given by the care managers.

Each participant was contacted and availed with the details of the nature of the study. Consent was sought from service providers including the children identified and the responsible care workers.

3.5 Pilot

A pilot study involving 5 children from one of the residential centres was done in the initial first month of the study in October, 2010. The aim of the pilot study was;

- (i) to gain familiarity and expertise in the use of the instruments;
- (ii) to test if respondents could easily understand the questions

After the pilot study a decision was made by the researcher to alter some phrases of the SDQ which the respondents could not understand. The final instruments are attached to the report as appendices (See Appendix I).

3.6 Data Collection Techniques and Measures

The study used both quantitative (standardized questionnaires) and qualitative techniques and the measurement instruments were as follows;

3.6.1 The Strengths and Difficulties Questionnaire (Goodman 1997, 2001)

The strengths and difficulties questionnaire (SDQ) was used to assess mental health problems/disorders. The SDQ is a brief behavioural questionnaire administered to parents/caregivers of 4-to-17-years olds and to 11-to- 17-year olds themselves. (See appendix VII for a detailed description of the SDQ)

Good reliability and validity of the SDQ has been well documented (Goodman, 1997, 1999, 2001, Goodman & Scott, 1999, Menon et al., 2009). Its limitations however have been found in “its sensitivity in detecting specific phobias, separation anxiety and eating disorders, in comparison to individuals with conduct, hyperactivity and depressive disorders” (Goodman,

2000). This limitation however, did not affect the present study as the focus was on the problems addressed in the SDQ which are assumed to be highly prevalent among children and adolescents in residential care (Schmid, 2008).

3.6.2 Semi-Structured Interview

To examine the mental health service provision for street children in residential care a semi-structured interview was conducted with the residential centre managers/staff. The focus of the interview was on the services/ interventions available for the children. Some of the research questions were adopted from Donald et al. (2000 in, MCDSS, 2006). The questions were based on the ideology that clear and precise assessment of needs and appropriate program design can lead to effective programme delivery and implementation, thereby achieving the intended objectives (Ibid).

3.6.3 Case Records/files

Case files/records for street children in residential care were used to collect information on intervention/service provision, assessment and progress reviews.

3.7 Data Analysis

The software Statistical Package for Social Sciences (SPSS) was used to analyse quantitative data in order to generate tables and figures.

Already existing computerised algorithms for predicting mental disorder were used to bring together information on symptoms and impact from the completed SDQs (see <http://www.sdqinfo.com>). The algorithms made separate predictions for three groups of disorders, namely behavioural disorders (conduct-oppositional disorders), hyperactive/concentration disorders and emotional disorders (anxiety and depressive

disorders. Predictions of these three groups of disorders were combined to generate an overall prediction about the presence of a disorder.

For inferential statistics, one way ANOVA and correlation tests (Bivariate-Spearman Rank Order Correlation (ρ) and partial correlation) were used to test the research hypothesis i.e. children and young people with multiple mental problems would be significantly impaired compared to those with less or no mental health problems. Interpretation of findings from the correlation tests were based on Cohen's (1988) guidelines. The guidelines suggest the following correlation sizes;

Small $\rho = .01$ to $.29$

Medium $\rho = .30$ to $.49$

Large $\rho = .50$ to 1.0

Responses from the semi structured interview and case files were analysed qualitatively in terms of common themes, patterns and interrelationships among the data.

Chapter Four: Results

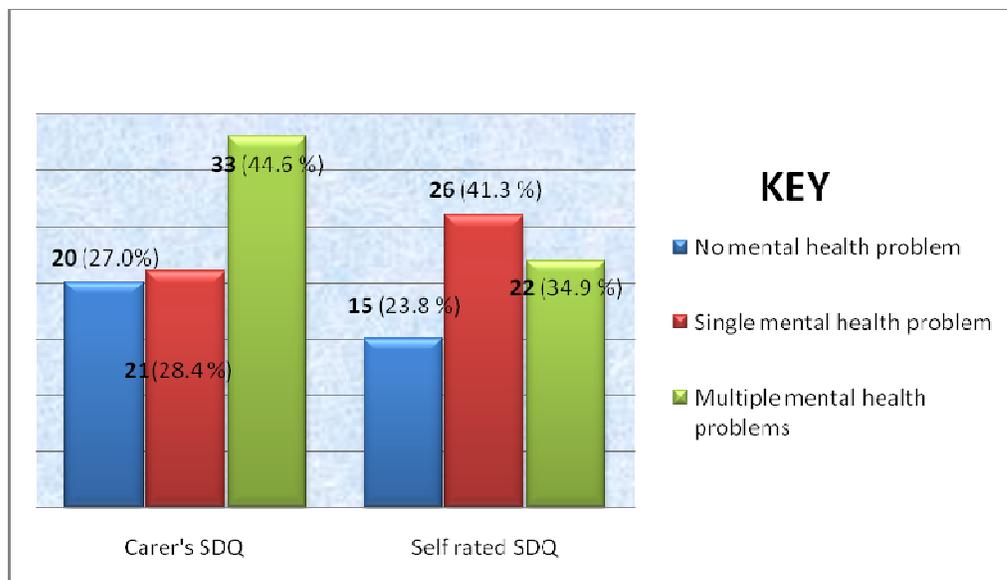
4.0 Introduction

This chapter presents the results of the present study. The results obtained correspond with the objectives of the study.

4.1 Prevalence of Mental Health Problems/Disorders

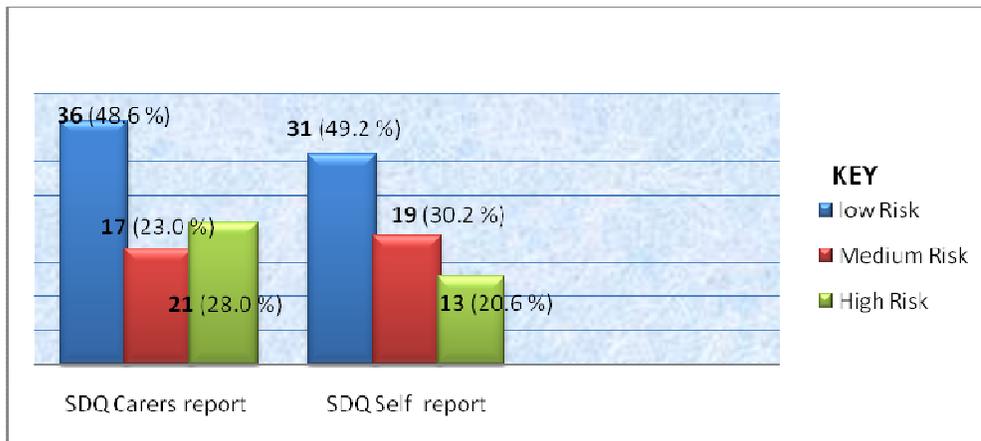
Findings from the self rated SDQ (n = 63) indicated that 15 children (23.8 percent) were unlikely to have a mental health problem, 26 (41.3 percent) were assessed as having a single mental health problem and 22 (34.9 percent) were assessed as having multiple mental health problems (co-morbidity). On the other hand, findings from the carers' SDQ (n = 74) indicated that 20 children (27.0 percent) were unlikely to have a mental health problem, 21 (28.4 percent) were assessed as having a single mental health problem and 33 (44.6 percent) were rated as having multiple mental health problems. Figure 1 shows the prevalence of mental health problems among street children in residential care.

Figure 1 Prevalence of mental health problems according to the SDQ clinical prediction



Findings according to the diagnostic prediction for mental disorders from the self rated SDQ (n=63) indicated that 31 children (49.2 percent) were in the low risk category, 19 (30.2 percent) were in the medium risk category and 13 (20.6 percent) were in the high risk category. On the other hand, findings from the carers SDQ (n=74) showed that 36 children (48.6 percent) were in the low risk category, 17 (23.0 percent) were in the medium risk category and 21 (28.0 percent) were in the high risk category. The findings on the prediction for mental disorders are shown in figure 2.

Figure 2 Prediction for mental disorders



4.1.1 Specific Mental Health Problems

Table 3, shows specific mental health problems based on the self rated SDQ scores as well as the scores from carer’s SDQ. The results shown include the scores obtained on the ‘abnormal range’ (significant problems) scale for specific mental health problems, including the average total difficulties score. The findings from the self rated SDQ (n=63) indicated that on average, 17 children (27.0 percent) scored in the ‘abnormal range’ with regards to the total difficulties score, 30 (47.6 percent) scored in the emotional problems category, 10 (15.8 percent) scored in the conduct problems category, 29 (46.0 percent) scored in the peer

problems category and 2 (3.2 percent) scored in the pro-social problems category. The results indicated no score for hyperactivity.

Results from the carer’s SDQ (n= 74) indicated that on average, 16 children (21.7 Percent) scored in the ‘abnormal range’ with regards to the total difficulties score, 12 (16.2 percent) scored in the emotional problems category, 24 (32.5 percent) scored in the peer problems category, 5 (6.8 percent) scored in the hyperactivity category and 40 (54.0 percent) scored in the pro-social problems category.

Table 3 SDQ scores for the self report and carers: Abnormal range

	SDQ Self rated scores	SDQ Carer’s scores
	n (%)	n (%)
Total difficulties	17 (27.0%)	16 (21.7%)
Emotional symptoms	30 (47.6 %)	12 (16.2%)
Conduct problems	10 (15.8%)	24 (32.5%)
Hyperactivity	0 (0%)	5 (6.8%)
Peer problems	29 (46.0%)	33 (44.6%)
Pro-social scores	2 (3.2%)	40 54.0%)

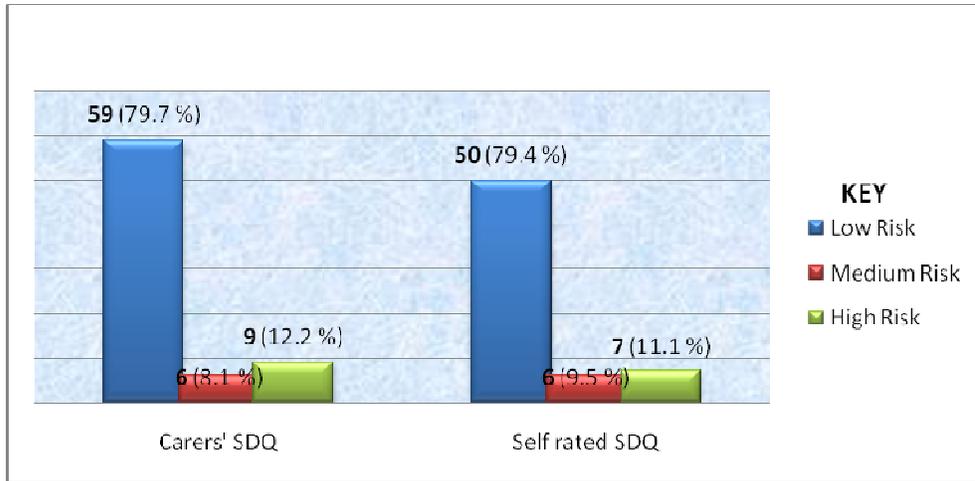
4.2.2 Specific Mental Health Disorders

The strengths and difficulties questionnaire (SDQ) as earlier mentioned in the methodology section provides prediction for mental disorders for three categories of disorders namely, emotional, behavioural and hyperactivity/concentration disorders. The study thus focused on the three specific disorders.

The results from the self rated SDQ (n= 63) show that 50 children (79.4 percent) were in the low risk category, 6 (9.5 percent) were in the medium risk category and 7 (11.1 percent) were

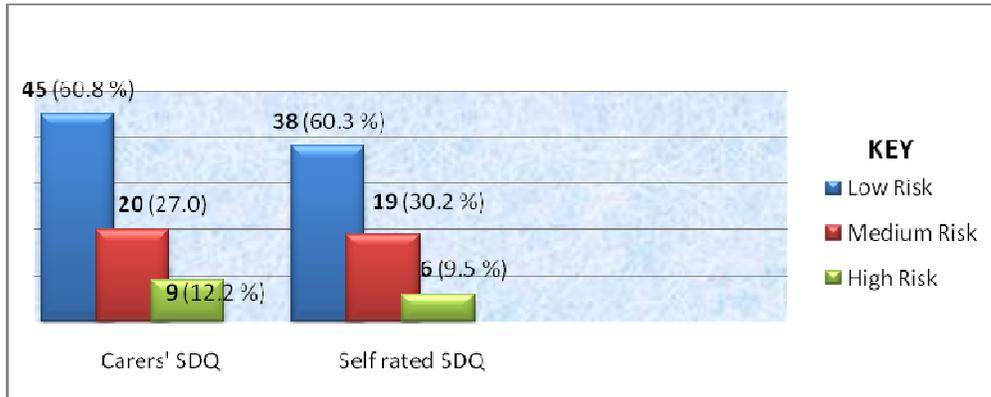
in the high risk category. Findings from the carers' SDQ prediction show that 59 children (79.7 percent) were in the low risk category, 6 (8.1 percent) were in the medium category and 9 (12.2 percent) were in the high risk category. Figure 3 shows the SDQ's prediction for emotional disorder.

Figure 3 **Prediction for emotional disorder**



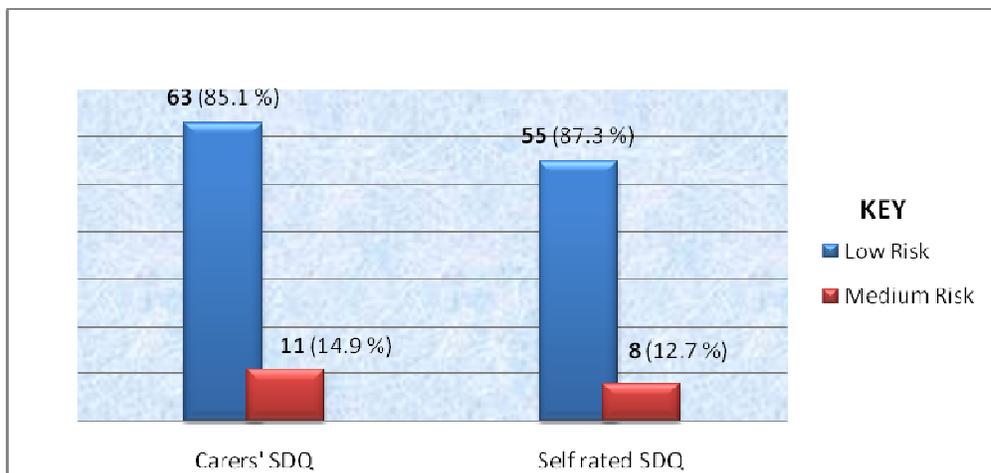
The results from the self rated SDQ indicated that 38 children (60.3 percent), were in the low risk category, 19 (30.2 percent), were in the medium risk category and 6 (9.5 percent), were in the high risk category. Findings from the carers' SDQ indicated that 45 children (60.8 percent), were in the low risk category, 20 (27.0 percent) were in the medium category and 9 (12.2 percent) were in the high risk category. Figure 4 below shows prediction for behavioural disorder.

Figure 4 Prediction for behavioural disorder



With regards to prediction for hyperactivity/concentration disorder (figure 5), the self rated SDQ indicated that 55 children (87.3 percent) were in the low risk category and 8 (12.7 percent) were in the medium risk category. Findings from the carers' SDQ indicated that 63 children (85.1 percent) were in the low risk category and 11 (14.9 percent) were in the medium risk category.

Figure 5 Prediction for hyperactivity disorder

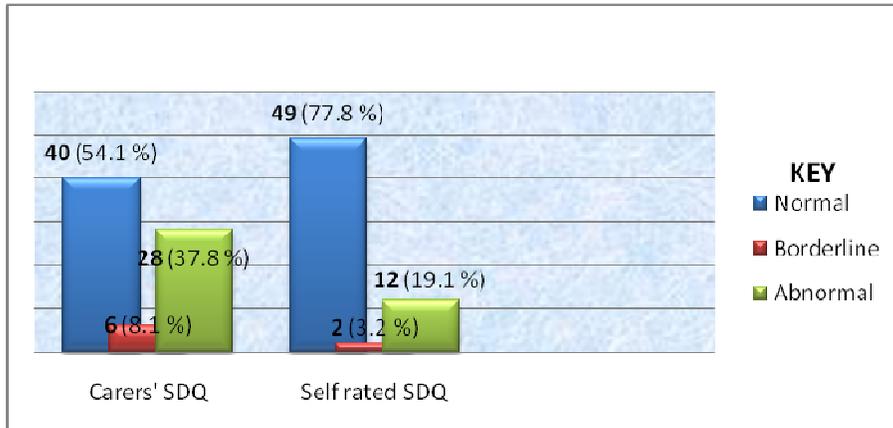


4.2 Impact of Mental Health Problems on the Children

Findings from the self rated SDQ (n = 63) show that 49 children (77.8 percent) scored in the normal range, 2 (3.2 percent) scored in the borderline range and 12 (19.1 percent) scored in

the abnormal range. On the other hand, findings from the carers' SDQ show that 40 children (54.1 percent) scored in the normal range, 6 (8.1 percent) scored in the borderline range and 28 (37.8 percent) scored in the abnormal range. Figure 6 shows the impact of mental health problems on the children.

Figure 6 Impact of mental health problems



4.3 Co-morbidity of Mental Health Problems in Relation to Impact of Mental Health Problems

One way analysis of variance (ANOVA) indicated a significant difference on the impact of mental health problems between children with multiple mental health problems in comparison with those with a single or no problem, $F(2, 74) = 20.0, p < .01$, (table 4a) the significance value (.000) is less than the p value. The post hoc tests for multiple comparisons also indicated significant mean differences between the comparison groups as shown in table 4b. This implies that children with multiple mental health problems had significant impairment compared to those with a single or no problem.

Table 4a ANOVA for impact of mental health problems

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	47.817	2	23.909	20.011	.000
Within Groups	84.831	71	1.195		
Total	132.649	73			

Table 4b Multiple comparisons for impact of mental health problems

Dependent Variable: Impact of mental health problems
Tukey HSD

(I) Mental health problems	(J) Mental health problems	Mean Difference (I-J)	Std. Error	Sig.	99% Confidence Interval	
					Lower Bound	Upper Bound
No problem	Single problem	-.9524	.34152	.018	-1.9803	.0755
	Multiple problems	-1.9394*	.30975	.000	-2.8717	-1.0071
Single problem	No problem	.9524	.34152	.018	-.0755	1.9803
	Multiple problems	-.9870*	.30513	.005	-1.9054	-.0687
Multiple problems	No problem	1.9394*	.30975	.000	1.0071	2.8717
	Single problem	.9870*	.30513	.005	.0687	1.9054

*. The mean difference is significant at the .01 level.

The findings from the ANOVA were further supported by the Bivariate Spearman Rank Order Correlation (rho) test (table 5) which indicated a medium correlation between co-morbidity and the impact of mental health problems, $\rho = .55$, $n = 74$, $p < .01$ i.e. co-morbidity helps to explain nearly 31 percent shared variance on the impact of mental health problems scale.

Even after controlling for age, the findings as shown in table 6 indicated that there was a medium partial correlation between co-morbidity and impact of mental health problems, $\rho = .49$, $n = 74$, $P < .01$. An inspection of the zero order correlation ($r = .54$) suggests that controlling for age had very little effect on the strength of the relationship between the two variables.

Table 5 Spearman’s Rank Order Correlation between co-morbidity and impact of mental health problems

		Impact of Problems
Co-morbidity	Correlation Coefficient	.553**
	Sig. (2 tailed)	.000
	n	74

N.B ** Correlation is significant at level .01 (2 tailed)

Table 6 Partial and Zero Order correlation between co-morbidity and impact of problems controlling for: Age

		Impact of Problems
Partial correlation- Co-morbidity	Coefficient	.4915
	sig. (2tailed)	.000
	d.f	71
Zero Oder Partial -Co-morbidity	Coefficient	.5389
	Sig. (2 ailed)	.000
	d.f	71

4.4 Mental Health Service Provision

Findings from the interview with residential care managers and data obtained from case files/records are presented in four parts which include, service, the assessment process, staffing, monitoring and evaluation and challenges in service provision.

4.4.1 Services

- (i) In four of the five residential centres visited, the major services that were provided to the children and young people included education support, rehabilitation, health services, family counseling, and re-integration. One out of the five centres, only focused on education support and reintegration.

- (ii) The major objectives of the services provided for all the homes visited were quite similar i.e. to uplift the living standards of street children and vulnerable children as well as to make street children and vulnerable children become responsible citizens. The major activities that were linked to these objectives were counseling, sports and recreation, feeding, mentoring, education and medical care.
- (iii) Four of the five centres indicated that they offered specific interventions for children with mental health problems mainly through having one to one discussions with the children and their families where possible, sharing of experiences and involving them in sporting activities and entertainment. One care manager stated that *“we involve them in sports e.g. football, and also dances and drama as tools to express their feelings, emotions etc.”*
- (iv) Three centre managers indicated that they based their intervention on contemporary understanding of the problems the children faced. The other two managers on the other hand indicated that their intervention was based on both contemporary understanding as well as research depending on the nature of the case.

4.4.2 The Assessment Process

- (i) All the five centres made assessments of the children’s mental health upon admission and the children were involved in completing the assessment except in one of the centres. To assess the needs, four of the five homes were using a Child Intake Form by Africa KidSAFE. This form contains background information regarding a child i.e. family history, education history, health history as well as social (behavioral) health and emotional health. The form also includes information on the necessary intervention to be taken regarding the status of the child. However, case files for children in four of the residential centres lacked data on the outcomes of children after intervention, except for school progress reports.

- (ii) Four residential centres indicated that the assessment process involved the child's motivation for participation. A care manager of one of the centres stated that; *“Intervention follows the child's motivation. Firstly, we look at factors that would motivate the child to participation in the process of assessment. We then work on these factors and make the child participate fully in the process of intervention. Rare are the times when children wilfully want to participate in any form of assessment. Therefore it is imperative that children are motivated.”*

4.4.3 Staffing

- (i) Carers or staff in three of the residential centres had a Diploma in either Social Work or Psycho-social Counselling. The other two residential centres did not have well defined qualifications for staff working with the children i.e. the centres were using the available human resource regardless of qualifications.
- (ii) A general observation, however, was that staff expressed a good understanding of mental health issues and had developed some level of skill in dealing with children and young people with mental health. A number of case files from one of the residential centres without qualified staff had records indicating counselling sessions addressing several aspects of mental health such as respect, decision making, relationships, solving conflicts, behavioural change and self awareness to mention but a few.
- (i) One of the managers reported that his members of staff were given support and ongoing mentoring. He stated that; *“We conduct assessment on monthly basis and intervene wherever there is need depending on the results we get. Staff are also given handouts to study to perfect their work”*.

4.4.4 Networking

- (i) Managers from all the five residential centers reported that they worked with various partners to compensate for the services they did not have.
- (ii) No centre indicated working with an institution specifically involved in mental health services.
- (iii) Major cooperating partners with the residential centres included the Police (Child Protection Unit), The Ministry of Community Development and Social Services, Ministry of Youth, Sport and Child Development and Community Health Centres.

4.4.5 Challenges in Service Delivery

- (i) Almost all the managers reported that there were no referral institutions offering mental health services for children with significant mental health problems as one of the managers put it “*there are no referral institutions specialized in handling psychological and emotional problems*”.
- (ii) The other challenge common to all the residential centres was inadequate funding for programmes as well as lack of motivation for staff due to low salaries/allowances for staff. One of the managers stated that “*qualified professionals in mental health demand high salaries which the residential homes cannot afford to pay*”.

Chapter Five: Discussion of Results

5.0 Introduction

This chapter discusses the findings of the present study. The findings are discussed according to the objectives of the study. The chapter also looks at the strengths and limitations of the study and the implications of the findings in relation to mental health service provision to street children in residential care. However, the discussion starts by giving a brief background, purpose and scope of the study.

Previous research evidence shows that looked after children are characterised by high rates of mental health problems (McCann et al, 1996; Mount et a, 2004; Ford et al, 2007). However prevalence rates vary to a greater extent partly because previous studies have focused on different populations and have used different methodologies. There is also an imbalance between the mental health needs of this peculiar group and the service response to these needs (Schmid, 2008). The Purpose of the present study therefore, was to explore the mental health problems/disorders of street children in residential care to and examine the service response to their mental health needs. The study hypothesised that the impact of mental health problems would be more on children with multiple mental health problems (co-morbidity) in comparison to those with a single or no problem.

The statistical analyses for the present study confirmed the hypothesis. The results from the ANOVA tests on the impact of mental health problems showed that the impact of mental health problems was more on children with multiple mental health problems than those with a single or no problem. Correlation tests (Bivariate Spearman Rank Order, partial and zero order correlations) supported this finding by indicating that there was a medium relationship between multiple mental health problems and the impact of problems on the children.

5.1 Prevalence of Mental Health problems

Nearly three quarters of street children in residential care were rated as having a mental health problem, as indicated by findings from both the self rated SDQ and the Carers' SDQ i.e. 48 children (76.1 percent) and 54 children (73.0 percent) respectively. Out of this population a considerable number had multiple mental health problems which indicated significant levels of impairment. Prediction for mental disorders showed that half of the children were at risk of having a mental health problem, 32 children (50.8 percent) according to the self rated SDQ and 38 children (51.0 percent) according to the carers SDQ. The findings of the present study support previous research evidence which indicated that looked after children are characterised by high rates of mental health problems (McCann et al., Dimigen et al., 1999; 1996, Meltzer et al., 2003; Mount et al., 2004; Clark et al., 2005; Schmid et al., 2008). However, the results of the present study could probably represent an underestimate in one way that is, internalizing disorders (such as emotional problems) may have gone undiagnosed in some of those instances when only a carer was interviewed as they may not have been able to precisely describe the child's emotions and cognitions.

Findings with regards to specific mental health problems/disorders as reported by both the children and carers indicated a high prevalence of behavioural problems (conduct and peer problems) and emotional problems. This finding was consistent with results from previous studies (Lindsey, 2000; Meltzer et al., 2003; Burns et al., 2004). According to the Speciality Advisory Committee (2002), such mental health problems can manifest in various distressing behaviours such as aggression, self harm, substance misuse and other activity that compromises sexual health.

The self rated SDQ score for emotional problems in the current study was higher than that of the carer's SDQ i.e. 30 children (47.6 percent) and 12 children (16.2 percent) respectively. As

earlier stated this could present an under estimation as the carers may not be able to precisely describe the child's emotions. The sample had low scores on the hyperactivity scale for both the self rated SDQ (8 children [12.7 percent]) and the carers' SDQ (11 children [14.9 percent]), a finding which was similar to Meltzer et al.'s study (2003).

Findings from the pro-social scale were striking in that the scores from the self rated SDQ showed that 2 children (3.2 percent) were rated with pro-social problems against 40 children (54.0 percent) from the carers SDQ. There would be need for more research in order to find an explanation for the huge differential margin between the self rated SDQ score and the carers' SDQ score on this scale. Janssens and Deboutte (2010) noted a similar trend in their study and made an assumption that if children were able to assess their mental health using valid and reliable instruments, it would seem that children disagree with their carers concerning their mental health problems. These findings stress the importance of using multi-informants in assessing mental health problems in children if one is to yield valid and reliable results.

5.2 Impact of Mental Health Problems on the Children

Significant impact of mental health problems was evidenced for a considerable proportion of children i.e. 14 children (23.3 percent) based on the self rated SDQ scores and 34 children (45.9 percent) based on the carers' SDQ scores. The implication of this research finding is that these children had significant levels of distress and social impairment an aspect which should be of concern for agency carers and other mental health service providers (Goodman, 2001)

5.3 Co-morbidity of Mental Health Problems in Relation to Impact of the Problems on the Children

The study found a relationship between multiple mental health problems (co-morbidity) and impact of the problems on the children. This finding is congruent to previous studies (McCann et al., 1996; Dimigen et al., 1999; Kelly, 2003; Clark et al., 2005). The implication of the finding is that children in residential care who have multiple and complex problems are at the apex of professionals' and carers' concern. There is thus, need for formal assessment of children for effective targeting of resources, including exploration and development of appropriate interventions (Clark et al., 2005). The findings thus, stress the vulnerable mental status of street children in residential care and the need for additional support for professionals working with children as well as the children themselves.

5.4 Mental Health Service Provision

The study revealed that services provided in residential care for street children covered more than one sector. This finding was consistent with other studies (Volpi et al., 2002). In fact, the health, educational, survival, and emotional needs of street children are often impossible to address separately. For instance, a drug-addicted, ill, or malnourished child will not be able to benefit from education alone; children require psychological support before being re-integrated back into their families; skills training works better if it is provided in conjunction with counselling on health and life skills; recreation, sport, and culture are essential to gain children's trust, and to motivate them to participate in other program activities (Ibid).

Every street child has his/her own needs, medical and family history, skills, and aspirations. The complex combination of factors that take him/her to the street is also unique. Programs should therefore, invest time and multidisciplinary expertise in assessing the individual situation of each participant and in designing tailor-made life plans and services (Ofsted,

2010). They should also build on the positive resource such as skills and cultural background of the children involved, to enhance their self-confidence and chances for a successfully independent life (Volpi et al., 2002). The present study revealed that individual assessment of mental health problems and other aspects concerning children and adolescents in residential care was conducted by the majority of the homes at the time of admission into the home, as revealed in previous studies (Ofsted, 2010). However, information in the children's case records/files was scanty for four of the residential centres and outstanding in one of them. This indicated a gap in the assessment process which could pose a challenge in mental health service provision to children in residential care.

Much of the literature on children's programs emphasizes that children should participate in activities that involve them in order to ensure positive and long-lasting outcomes (Volpi et al., 2002; and Ofsted, 2010). Four of the five residential centres in this study involved children and adolescents in the assessment process. Children and adolescents are subjects of their own development and therefore, activities should be designed in accordance with children's aspirations and life plans.

All the residential centres indicated challenges with funding for programmes and activities, making service delivery ineffective. In addition the findings revealed that there was lack of motivation for staff (carers) and professionals working with children in the homes due to poor salaries and allowances. According to Volpi et al. (2002) quality programme services require adequate and continuous funding. The implication is that funding for programme activities corresponds with the quality of service delivery.

Managers in two of the residential centres reported that their staffs (carers) were not trained in mental health. The other three managers revealed that their staff had specific qualifications in psychosocial counselling and social work. However, all the managers reported that their

staff had not received specific training in mental health. Lack of resources and limited funding were cited as prohibiting factors. This finding also indicated a gap in mental health service provision for street children in residential care. However, the findings indicated that carers had gained knowledge and skills in mental health through experience and thus, were able to handle less challenging mental health problems.

5.5 Strengths and Limitations of the Study

The findings of the study have to be considered in the methodological strengths and limitations of the study. The major strength of the study is that it was the first one of its kind to look at the mental health of street children in residential care. The study recruited all the children in the identified five residential centres for street children. The response rate was very good, despite previous studies indicating that children and adolescents were a difficult group to study (Janssens & Deboutte, 2010; Richardson and Lelliot, 2003).

Methodological limitations included failure of the study to use the earlier proposed sample size of 100 children (20 from each identified institution), because four of the institutions identified had less than 20 children at the time of the study. With regards to informants for the study, teachers were not included in the study because not all the children were in school and in some instances, the carers happened to be the teachers to the children. To this effect, there was no possibility to cross validate the data with a teacher's assessment. In addition, no mental health interview was conducted with the children for cross validation of the results. Vorria, et al. (1998) using observations, interviews and questionnaires in their research found that data from the child interview and observational data confirmed the between-group difference resulting from the parent and teacher questionnaires.

5.6 Implications for Mental Health Service Provision

Overall, about three quarters of street children in residential care were rated to have had substantially significant mental health problems. Given the challenges faced by agencies to recruit skilled mental health professionals there should be cross-boundary/inter-agency collaboration in order to improve the mental health outcomes for these vulnerable children. This could be a practical approach to supplement the limited resources of specialised mental health services. Mental health specific training programmes for professionals/agency carers on the other hand could help in the prevention and reduction of mental health problems.

Currently, the country has no specific child mental health services, which calls for the need to develop a specific mental health strategy for children that would inform the development and implementation of mental health services.

The assessment of mental health needs and vulnerability, and the promotion of mental wellbeing of young people in residential care are integral to the effective delivery of child mental health services. These are complex issues that demand significant levels of management time and knowledge from residential care managers.

Chapter Six: Summary, Conclusion and Recommendations

6.0 Introduction

This last chapter constitutes a summary of the findings of the study and the main conclusion including recommendations for future research. The conclusion is made from the findings of this study and the reviewed literature.

6.1 Summary of the Research Findings

The main purpose of this study was to explore the mental health problems/disorders of street children in residential care and to examine the service provision to their mental health needs. The study was anchored on the Multi-modal model, arguing that mental health problems in looked after children stem from a combination of various factors which include genetic, socio-economic, familial and psychological factors. As such, mental health interventions/ service provision should have a broad focus to encompass a wide range of mental health problems. The implication being that there should be individual assessment for children's needs and problems as well as bringing on board various stakeholders in dealing with mental health issues.

The study found that three quarters of the children in residential care had a mental health problem. This finding was according to the general prediction for mental health problems. However findings according to the diagnostic prediction revealed that almost half of the children in residential care were at risk of having a mental disorder. The findings were consistent with previous studies conducted on similar topics. The findings also showed that a considerable proportion of the children had multiple mental health problems (co-morbidity). The most frequent mental health problems/disorders were behavioural problems (conduct problems and peer problems) and emotional problems. The results indicated a relationship between co-morbidity and impact of mental health problems.

With regards to service response to mental health needs, the majority of the centres made initial assessments of mental health problems upon admission of children into residential care. However the assessment information contained in the children's case files was scanty which indicated a gap in service provision. Further, the residential care managers reported to have had challenges with referral mental health services, in addition to lack of staff training in mental health related issues. However, most of the care workers had developed skills in dealing with some of the mental health problems amongst children in their care through experience. The study also showed that residential centres had challenges with funding for programmes making it difficult to implement programmes and deliver services effectively.

6.2 Conclusion

In conclusion, street children in residential care are a high risk population to mental health problems/disorders. A considerable proportion of this population of children were rated as having multiple mental health problems which reflect significant impairment. With regards to mental health service provision there is a significant gap which is as a result of various factors which include, lack of training in mental health issues for staff working with the children in residential care, inadequate resources for programmes, which in the long run affect the motivation of staff to work effectively. The other constraint is lack of referral institutions specialized in mental health issues.

6.3 Recommendations

In view of the above findings, there is need for collaborative efforts from various stakeholders, including educationists, social workers, child mental health specialists, and health practitioners to mention but a few. In addition, training for carers working with children and young people is of utmost importance to ensure professionalism. Further there is need to ensure mechanisms for monitoring and evaluation are put in place for monitoring

progress with regard to the mental health needs of this vulnerable group as well as for planning purposes. There is need to raise the financial base of the residential care homes in order to improve the quality of services offered to the children and young people in care.

6.3.1 Recommendations for Future Research

- (i) Since the current study focused on the mental health of street children in residential care, there would be need to conduct a comparative study between street children in residential care and those that are not.
- (ii) A longitudinal study should be undertaken to measure the impact of programmes and services in residential care for street children.

References

- Arcelus, J., Bellerby, T. & Vostanis, P. (1999) A mental health service for young people in the care of the local authority. **Clinical Child Psychiatry and Psychology**, **4**, 233–245.
- Burns, B., Phillips, S. Wagner, R. (2004) Mental health need and access to mental health services by youths involved with child welfare: a national survey. **American Journal for Academic Child and Adolescent Psychiatry**, **43**, 960-970.
- Blower, A., Addo, A. & Hodgson, J. (2004) Mental Health of ‘looked after’ children: a needs assessment. **Clinical Child Psychiatry**, **9**, 117-129.
- Callagan, J., Young, B. & Pace, F. (2003a) Mental Health Support for youth offending teams. **Health and Social Care in the Community**, **11**, 55-63
- Clark, A.F., O’Malley, A., Woodham, A., Barret, B., & Byford, S. (2005). Children with Mental Health Problems: Needs, Costs and Predictors Over One Year. **Child and Adolescent Mental health**, **10**, 170 178.
- Cohen, R.J. (1988). Statistical power analysis for behavioural sciences, 2nd Ed. In J. Pallant, **SPSS Survival Manual** (pp. 79-81), Berkshire: Open University Press.
- Department of Social Welfare (2009) Social Welfare Annual Report. Ministry of Community Development and Social Services, Lusaka.
- Dimigen, G., Del Priore C., Butler, S., Evans S., Ferguson, L. & Swan, M. (1999) Psychiatric disorder among children at the time of entering local authority care: Questionnaire survey. **British Medical Journal** **319**, 668-675.

Dimond, C., Floyd, A. & Misch, P (2004) **Key Elements of Effective Practice-Mental Health**. Youth Justice Board.

Donald, D., Dawes, A. & Louw, J. (2000). Addressing Childhood Adversity. In Ministry of Community Development and Services. **Children on the streets of Zambia: working towards a solution** (pp: 82-83). MCDSS/UNICEF.

Ford, T., Vostanis, P., Meltzer, H. and Goodman, R., (2007). Psychiatric disorder among British children looked after by local authorities: comparison with children living in private households. **The British Journal of Psychiatry: The Journal of Mental Science**, **190**, 319-325.

Goodman, R. (1997). The strengths and difficulties questionnaire: A research note. **Journal of American Academy and Psychiatry**, **38**, 581-586.

Goodman, R. (1999). The extended version of the strengths and difficulties questionnaire as a guide to child psychiatric caseness and consequent burden. **Journal of American Academy and Psychiatry**, **40**, 791-799.

Goodman, R., & Scott, S. (1999). Comparing the strengths and difficulties questionnaire and the child behavioural Checklist: Is small Beautiful? **Journal of Abnormal Child Psychology**, **27**, 1-7.

Goodman, R., (2001). Psychometric properties of the strengths and difficulties questionnaire. **Journal of American Academy and Psychiatry**, **40**, 1337-1345

Goodman, R., R., Ford, T., Simmons, H., Gatward, R., & Meltzer, H. (2000). Using the strengths and difficulties questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. **British Journal of Psychiatry**, **177**, 534-539

Graf, E., Bitzer, M., & Zimmermann-Wagner, M (2002) Unsere Jugend. In M. Schmid, **Psychiatry in Europe: Children and Adolescents in Germany Youth Welfare Institutions** (pp: 10-12), University of Basel: Touch Briefings.

Hagel, A (2002) **The mental health of young offenders**. The Mental health Foundation.

Huckanen, R., Sourander, A., Bergroth, L. & Piha, J (1999) Child and adolescent mental health in residential care. **European Child and Adolescent Psychiatry**, **8**, 268-275.

Henggeler, S., Schoenwald, S., Borduin, C., et al (1998) **Multi-systematic Treatment of Anti-social Behavior in Children and Adolescents**. New York: Guilford Press.

Kelly, C., Allan S., Roscoe, P., & Herrick E. (2003).The mental health needs of looked after children: an integrated multi-agency model of care. **Clinical Child Psychology & Psychiatry**, **8**, 323-35.

Lindsey, C. (2000). Why focus on the mental health needs of looked after children? In Richardson & Joughin. **The mental health needs of looked after children**. Focus: Gaskell.

Lungwangwa, G., & Macwan'gi, M. (1996). **Street Children in Zambia: A situation Analysis**. Institute for African Studies.

Mayeya, J., Chazulwa, R., Mayeya, P.N., Mbewe, E., Magolo L.M., Kasisi. F. & Bowa A.C. (2004). Zambia mental health country profile. **International Review of Psychiatry**, **16(1-2)**, 63-72.

McCann, J.B., James, A., Wilson, S. & Dunn, G. (1996) Prevalence of psychiatric disorders in young people in the care system. **British Medical Journal**, **313**, 1529–1530.

Meltzer, H., Gatward, R., Goodman, R. & Ford T. (2000) **Mental Health of Children and Adolescents in Great Britain**. The Stationary Office, London.

Meltzer, H., Gatward, R., Corbin T., Goodman, R. & Ford T. (2003) **The Mental Health of Young People Looked after by Local Authorities in England**. The Stationary Office, London.

Menon, A., Gazebrook, C. & Ngoma M.S. (2009) Mental Health of HIV Positive Adolescents in Zambia. **Medical Journal of Zambia**, **4**, 151-156

Mount, J., Lister, A., & Bennun I. (1999) Identifying the mental health needs of looked after young people. **Clinical Child Psychology**, **9**, 363-82.

Ministry of Community Development and Social Services (2006). **Children on the streets of Zambia: working towards a solution**. MCDSS/UNICEF.

Ministry of Sport Youth and Child Development (2004). **Orphans and Vulnerable Children in Zambia: A situation analysis**. MSYCD/UNICEF.

NHS Health Advisory Service (1995) Together we stand: **The commissioning role and management of child and adolescent mental health services**. London: HMSO.

Newton, J. (1988) **Preventing Mental Illness**. London and New York: Routledge and Kegan Paul.

Nicol, R., Stretch D., Whitney I., Jones K., Garfield P., Turner K. & Stanton B. (2000) Mental health needs and services for severely troubled and troubling young people including young offenders in an NHS region. **Journal of Adolescence** **23**, 243–261.

Phillips, J. (1997) **Psychiatric Bulletin**, **21**, 609–11.

Project Concern International and The United Nations Children’s Fund, (2002). **Rapid Assessment of Street Children in Lusaka: PCI/UNICEF**.

Richardson, J., & Lelliott, P. (2003) Mental Health. In M. Schmid, **Psychiatry in Europe: Children and Adolescents in Germany Youth Welfare Institutions** (pp: 10-12), University of Basel: Touch Briefings.

Rutter, M. (1985) Resilience in the face of adversity: protective factors and resistance to psychiatric disorder. **British Journal of Psychiatry**, **147**, 598–611.

Rutter, M. (2000). Children in substitute care. In M. Schmid, **Psychiatry in Europe: Children and Adolescents in Germany Youth Welfare Institutions** (pp: 10-12), University of Basel: Touch Briefings.

Schmid, M. (2008). **Psychiatry in Europe: Children and Adolescents in Germany Youth Welfare Institutions**, University of Basel: Touch Briefings.

Schmid, M., Goldbeck, L., & Nützel, J. (2008). Child and adolescent mental health. In M. Schmid, **Psychiatry in Europe: Children and Adolescents in Germany Youth Welfare Institution**, (pp. 10-12), University of Basel: Touch Briefings.

Speciality Advisory Committee (2002) **Services to meet the Psychological and Mental Health Needs of Looked After Children in Northern Ireland**, A Consultation Document.

Surgeon General's Report (1999) **Mental Health**. United States Public Health Services.

Tacon, P., & Lungwangwa, G. (1991). **Street children in Zambia**. Institute for African Studies.

The Office for standards in Education, Children's Services and Skills (Ofsted) (2010) **An evaluation of the provision of mental health services for looked after young people over the age of 16 accommodated in residential settings**. London: Crown.

Thompson, M.L. (2007). **Mental Illness**. Westport: Greenwood Press.

Volpi, E. (2002), **Street Children: Promising practices and approaches**. World Bank Institute

Vorria P., Wolkind S. & Rutter M. (1998) A comparative study of Greek Children in long term residential group care and two-parent families: Social, emotional and behavioral differences. **Child Psychology Psychiatry**, **39**, 225-236.

Wolkind, S. & Rushton, A. (1994) Residential and foster family care. In M. Rutter, E. Taylor, and L. Hersov (Eds) **Child and Adolescent Psychiatry: Modern Approaches**, 3rd Ed. (pp. 252–266) Oxford: Blackwell.

Appendix I: Strengths and Difficulties Questionnaire S 11-17

Strengths and Difficulties Questionnaire

S 11-17

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain. Please give your answers on the basis of how things have been for you over the last six months.

Your name
Date of birth.....

Male/Female

	Not True	Somewhat True	Certainly True
I try to be nice to other people. I care about their feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am restless; I cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get a lot of headaches, stomach-aches or sickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I usually share with others, for example Books, games, food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get very angry and often lose my temper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I would rather be alone than with people of my age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I usually do as I am told	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I worry a lot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am helpful if someone is hurt, upset or feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am constantly impatient or uneasy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have one good friend or more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I fight a lot. I can make other people do what I want	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am often unhappy, depressed or tearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other people my age generally like me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am easily distracted, I find it difficult to concentrate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am nervous in new situations. I easily lose confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am kind to younger children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am often accused of lying or cheating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other children or young people pick on me or bully me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I often offer to help others (parents, teachers, and children)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I think before I do things	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I take things that are not mine from home, school or elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I get along better with adults than with people my own age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have many fears, I am easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I finish the work I'm doing. My attention is good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you have any other concerns?
Please turn over-there are few more questions on the other side

Overall, do you think that you have difficulties in one or more of the following areas:
emotions, concentration, behaviour or being able to get on with other people?

No	Yes- mi nor difficulties	Yes- definite difficulties	Yes- severe difficulties
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you have answered “Yes”, please answer the following questions about these difficulties:

• How long have these difficulties been present?

Less than a month	1-5 months	6-12 months	Over a year
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

• Do the difficulties upset or distress you?

<input type="checkbox"/>	Not at all	Only a little	Quite a lot	<input type="checkbox"/>	A great deal
--------------------------	---------------	------------------	----------------	--------------------------	-----------------

• Do the difficulties interfere with your child’s everyday life in the following areas?

	Not At all	Only a little	Quite a lot	A great deal
CENTRE LIFE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FRIENDSHIPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEARNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEISURE ACTIVITIES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

• Do the difficulties put a burden on you and other people at the centre?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Signature.....

Today’s Date

Thank you very much for your help

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Appendix II: Strengths and Difficulties Questionnaire C 11-17

Strengths and Difficulties Questionnaire

C 11-17

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain. Please give your answers on the basis of the child's behavior how over the last six months. Child's name

Male/Female

Date of birth.....

	Not True	Somewhat True	Certainly True
Considers other people's feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restless, overactive I cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often complains of headaches, stomach-aches or sickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shares readily with others, for example books, games, food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often loses temper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Would rather be alone than with people of my age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally well behaved, usually does what adults request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many worries or often seems worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpful if someone is hurt, upset or feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constantly impatient or uneasy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has at least one good friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often fights with other youth or bullies them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often unhappy, depressed or tearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally liked by other youth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easily distracted, concentration wanders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervous in new situations, easily loses confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kind to younger children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often lies or cheats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Picked or bullied by other youth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often offers to help others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thinks things before acting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steals from home, school or elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
gets along better with adults than with other youth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many fears, easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good attention sees chores or homework through to the end	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you have any other concerns?

Please turn over- there are few more questions on the other side

Overall, do you think that the child has difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?

No	Yes- mi nor difficulties	Yes- definite difficulties	Yes- severe difficulties
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you have answered "Yes", please answer the following questions about these difficulties:

• How long have these difficulties been present?

Less than a month	1-5 months	6-12 months	Over a year
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

• Do the difficulties upset or distress the child?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

• Do the difficulties interfere with the child's everyday life in the following areas?

	Not At all	Only a little	Quite a lot	A great deal
CENTRE LIFE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FRIENDSHIPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEARNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEISURE ACTIVITIES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

• Do the difficulties put a burden on the child and other people at the centre?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Signature.....

Today's Date

Thank you very much for your help

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Appendix III: Strengths and Difficulties Questionnaire C 4-10

Strengths and Difficulties Questionnaire

C 4-10

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain. Please give your answers on the basis of the child's behavior how over the last six months.

Child's name
 Date of birth.....

Male/Female

	Not True	Somewhat True	Certainly True
Considers other people's feeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restless, overactive I cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often complains of headaches, stomach-aches or sickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shares readily with others, for example toys, food etc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often loses temper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rather solitary, prefers to play alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally well behaved, usually does what adults request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many worries or often seems worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpful if someone is hurt, upset or feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constantly impatient or uneasy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has at least one good friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often fights with other children or bullies them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often unhappy, depressed or tearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally liked by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easily distracted, concentration wanders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervous in new situations, easily loses confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kind to younger children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often lies or cheats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Picked or bullied by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often offers to help others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thinks things before acting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steals from home, school or elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
gets along better with adults than with other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many fears, easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good attention sees chores or homework through to the end	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you have any other concerns?

Please turn over- there are few more questions on the other side

Overall, do you think that the child has difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?

No	Yes- mi nor difficulties	Yes- definite difficulties	Yes- severe difficulties
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you have answered “Yes”, please answer the following questions about these difficulties:

- How long have these difficulties been present?

Less than a month	1-5 months	6-12 months	Over a year
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Do the difficulties upset or distress the child?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Do the difficulties interfere with the child’s everyday life in the following areas?

	Not At all	Only a little	Quite a lot	A great deal
PEER RELATIONSHIPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEARNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Do the difficulties put a burden on the child and other people at the centre?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Signature.....

Today’s Date

Thank you very much for your help

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Appendix IV: Interview guide for residential centre managers/staff

Interview guide for residential centre managers/staff

Designation of respondent..... **male/female**
Name of centre.....
Location
Implementing agency
Target Group.....
Type:.....

1. What services/programmes does your institution have?
.....
.....
.....
.....
.....

2. What are the objectives of the programmes, and what activities are linked to these objectives?
.....
.....
.....
.....
.....
.....
.....

3. What specific treatments/interventions does the institution offer to children with mental health problems e.g. emotional problems, hyperactivity/ inattention, peer relational problems, pro-social problems and conduct problems?
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.....

4. On what basis is the intervention design based? I.e. is it informed by relevant research evidence regarding the group of children targeted, contemporary understandings of the cause of problems or is it based on general knowledge?
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5. Are the children assessed individually prior to the intervention?

Yes/no

6. If yes to **Qn 5** how is this done?

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7. Does the assessment/intervention involve the child's motivation for participation?

Yes/NO

8. If yes to **Qn 7**, shed some light on how this is done

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9. Are the staff trained to do the job they do

10. Yes/No

11. If Yes to **Qn 13**, specify the nature and minimum qualifications of your staff /caregivers

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.....

12. What kind of support and ongoing mentoring do you offer to your staff/caregivers as part of their work?

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13. Is there a referral system in place to compensate for services that you do not offer?

Yes/No

14. If yes to **Qn 18**, outline some of your collaborating partners?

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15. What challenges does the institution face in delivering services?

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16. How best do you think these challenges can be addressed?

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.....
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Signature

Today's date.....

Thank you very much for your help

Appendix V: Consent Form for authorities looking after street children
Consent Form for authorities looking after street children

TITLE OF PROJECT: Mental health of street children in residential care

Name of Researcher:

You are being asked to join a research study. The goal is to determine the mental health of street children in residential care and the extent to which these needs are addressed.

First, you need to know all about this study and what you will need to do if you join this study. We will answer any questions you have. After we have told you everything and you understand, you can decide if you want to join or not. If you agree to join, you will need to sign. You can keep a copy and we will keep a copy here.

Information sheet

It is your choice to join this study.

- You may choose not to join the study.
- If you choose to join the study, you can leave the study at any time.
- If you choose to join the study, you do not have to answer any questions that you do not want to.
- If you choose to join the study, no information about you will be given to anyone.
- If you choose to not join this study, there will be no change in your medical care.

WHAT HAPPENS DURING THE STUDY:

If you want to join this study, first you need to sign this form. When you join the study, we will ask you questions to determine the mental health status and needs of street children in residential care and the extent to which these needs are addressed.

BENEFITS TO YOU:

By joining this study, you can help your caregivers to understand the mental health status and needs of street children in residential care and the extent to which these needs are addressed

COSTS TO YOU:

It does not cost anything for you to join this study.

YOUR RECORDS WILL BE PRIVATE:

The information we will get from you will be kept private. This information will be kept in safe storage that does not have your name on them. Only the code number will be used.

PERSONS TO CONTACT FOR PROBLEMS OR QUESTIONS:

Sarah Banda	Dr. M. Imasiku
University of Zambia,	University of Zambia
Psychology Department,	Psychology Department
Contact No. 0977538311	Contact No. 0977396176

Please tick to confirm

- I confirm that I have read and understand the information sheet datedfor the above study
- I have had enough opportunity to consider the information, ask questions and have had these answered satisfactorily.
- I fully understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.
- I fully understand that data collected during the study, may be looked at by responsible individuals from [University of Zambia] or from regulatory authorities, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.
- I agree to take part in the above research study

Name of Participant

Signature

Date

Name of Person taking consent
(if different from researcher)

Date

Appendix VI: Consent form for children aged between 11 and 17
Consent form for children aged between 11 and 17

TITLE OF PROJECT: Mental health of street children in residential care

Name of Researcher:

You are being asked to join a research study. The goal is to explore the mental health of street children in residential care and the extent to which these needs are addressed.

First, you need to know all about this study and what you will need to do if you join this study. We will answer any questions you have. After we have told you everything and you understand, you can decide if you want to join or not. If you agree to join, you will need to sign. You can keep a copy and we will keep a copy here.

Information sheet

It is your choice to join this study.

- You may choose not to join the study.
- If you choose to join the study, you can leave the study at any time.
- If you choose to join the study, you do not have to answer any questions that you do not want to.
- If you choose to join the study, no information about you will be given to anyone.
- If you choose to not join this study, there will be no change in your medical care.

WHAT HAPPENS DURING THE STUDY:

If you want to join this study, first you need to sign this form. When you join the study, we will ask you questions to examine your mental health status and needs.

BENEFITS TO YOU:

By joining this study, you can help your caregivers to understand your mental health status and needs and the extent to which these needs are addressed.

COSTS TO YOU:

It does not cost anything for you to join this study.

YOUR RECORDS WILL BE PRIVATE:

The information we will get from you will be kept private. This information will be kept in safe storage that does not have your name on them. Only the code number will be used.

PERSONS TO CONTACT FOR PROBLEMS OR QUESTIONS:

Sarah Banda	Dr. M. Imasiku
University of Zambia,	University of Zambia
Psychology Department,	Psychology Department

Please tick to confirm

- I confirm that I have read and understand the information sheet datedfor the above study
- I have had enough opportunity to consider the information, ask questions and have had these answered satisfactorily.
- I fully understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.
- I fully understand that data collected during the study, may be looked at by responsible individuals from [University of Zambia] or from regulatory authorities, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.
- I agree to take part in the above research study

Name of Participant

Signature

Date

Name of Person taking consent
(if different from researcher)

Date

Appendix VII: The Strengths and Difficulties Questionnaire (SDQ) Description

The SDQ is a brief behavioural questionnaire administered to parents/caregivers of 4-to-17-years olds and to 11-to- 17-year olds. Besides covering common areas of emotional and behavioural problems, it also enquires whether the respondent thinks that the child has a problem in these areas and so, asks about the distress and social impairment. It comprises 25 items (some positive others negative), with answers being rated on a 3-point scale (0 = 'not true, 1 = 'somewhat true', 2 = 'certainly true'. The SDQ provides the total difficulties score (TDS) as well as five (5) individual subscale scores of emotional problems, conduct problems, hyperactivity/inattention problems, peer relationship problems and pro-social behaviour. With the exception of the pro-social subscale, the sum of the other subscales generates the TDS (range 0-40). In addition the SDQ provides useful information which can give a rough probability of diagnosis.

The SDQ scores for the present study were classified as normal (clinically significant problems are unlikely), borderline (reflects clinically significant problems) and abnormal (substantial risk of clinically significant problems) as categorised by Goodman, (2000). The classifications were as follows;

1. Parent/Carers Versions

- (i) Emotional Symptoms score: Normal 0-3, Borderline 4, Abnormal 5-10.
- (ii) Conduct Problems score: Normal 0-2, Borderline 3, Abnormal 4-10.
- (iii) Peer Relations score: Normal 0-2, Borderline 3, Abnormal 4-10.
- (iv) Hyperactivity score: Normal 0-5, Borderline 6, Abnormal 7-10
- (v) Pro-social Behaviour score: Normal 6-10, Borderline 5, Abnormal 0-4.
- (vi) Total Difficulties Score: Normal: 1-13, Borderline 14-16, Abnormal 17-40

2. Self Rated Versions

- (i) Emotional Symptoms score: Normal 0-3, Borderline 4, Abnormal 5-10
- (ii) Conduct Problems score: Normal 0-2, Borderline 3, Abnormal 4-10
- (iii) Peer Relations score: Normal 0-2, Borderline 3, Abnormal 4-10
- (iv) Hyperactivity score: Normal 0-5, Borderline 6, Abnormal 7-10
- (v) Pro-social Behaviour score: Normal 6-10, Borderline 5, Abnormal 0-4.
- (vi) Total Difficulties Score: Normal 0-15, Borderline 16-19, Abnormal 20-40