HEALTH AND WELL-BEING OF HOMELESS YOUTH IN GHANA

Submitted in partial fulfilment of the requirement for the degree
Doctor of Philosophy (Psychology)

By

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March 2015
DECLARATION

I certify that the work in this thesis entitled “Health and Well-Being of Homeless Youth in Ghana” has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree to any other university or institution other than the University of KwaZulu-Natal.

I also certify that the thesis is an original piece of research and it has been written by me. Any help and assistance that I have received in my research work and the preparation of the thesis itself have been appropriately acknowledged.

In addition, I certify that all information sources and literature used are indicated in the thesis.

Kwaku Oppong Asante (Student No: 212556250)

March, 2015.
DEDICATION

My wife, Eunice and my mother for your understanding and continued support throughout my academic career.
ACKNOWLEDGEMENTS

The author wishes to express gratitude to the following people for their contributions toward the successful completion of my PhD study.

Thank you Lord Almighty for how far you have brought me. It is in You I live and have my being.

I owe a depth of gratitude to my wife, Eunice Oppong Asante, for the patience and sacrifices she made in order for me to complete this program. I would also like to thank my family members who were emotionally present with me over the course of my studies despite the geographical barrier.

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I am grateful to my PhD colleagues in the Discipline of Psychology for their support throughout these years. My stay in Durban and UKZN in particular would not have been successful without you. Thank you.

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Last but not the least, I am thankful to Regent University College of Science & Technology for the partial support I received to complete this program.
ABSTRACT

**Background:** Homeless youth have been described as being resilient, and vulnerable to poor mental and behavioural health. However, literature on factors promoting resilience of these homeless youth in an African context, especially in Ghana, is scarce. The main aim of the present study was to examine the mental and behavioural health and well-being of homeless youth and the protective factors that could be strengthened to promote their mental health and reduce risky health related behaviours. Specifically this doctoral thesis investigated: 1) factors fostering resilience among homeless youth, 2) the experiences of homeless youth in relation to their health and well-being, 3) the validation of the factor structure of Connor-Davidson Resilience Scale (CD-RISC), 4) the prevalence of health risk behaviours and status of psychological well-being, and 5) the relationship between resilience and health risk behaviours among homeless youth in Ghana.

**Method:** An exploratory mixed method approach was adopted in which qualitative data was first collected followed by a quantitative survey. For the qualitative study a purposive sample of 16 homeless youth from the Central Business District of Accra were interviewed using a semi-structured interview schedule. A cross-sectional study with an interviewer-administered questionnaire was used to assess the mental health variables from a relatively large sample of 227 conveniently selected homeless youth. The participants were between the ages of 9-19 years, and had lived on the street for a period of between 6 months to 8 years. Interpretive Phenomenological Analysis (IPA) was used to analyse the interview transcripts in the qualitative study whilst exploratory factor analysis, One-Way ANOVA, independent samples t-tests, Chi-Square tests for independence, Pearson- moment correlation coefficient, standard multiple regression and logistic regression models were used to analyse the quantitative data.
Data collection lasted for 8 and 12 weeks for the qualitative and quantitative phases of the study respectively.

**Results:** The qualitative results showed that strong religious beliefs, engagement in meaningful activities, peer group support, adherence to cultural norms and support from community-based organizations were important factors that promote resilience among participants. The quantitative results showed that participants exhibited poor mental health with high levels of psychological distress, substance use and suicidal ideation. Clustering of health risk behaviours was found in this study among homeless youth who were using substances and engaging in unprotected sex with multiple sexual partners. Some evidence for the engagement in survival sex was also found. Overall poor psychological functioning was predicted by experiences of perceived stigmatization and discrimination, self-stigma, suicidal ideation and exposure to violence. The results also showed that perceived resilience served as a protective factor for suicidal ideation and having multiple sexual lifetime partners, suggesting that youth with higher perceived resilience were less likely to engage in health risk behaviours.

**Conclusion:** These findings seem to suggest that homeless youth are resilient, but nevertheless are susceptible to various mental health problems, with substance use acting as a gateway for sexual risk behaviours. Development of multilevel prevention interventions are recommended to build resilience in youth through access to psychological counselling and to develop better coping strategies at the individual level; facilitate health enhancing social networks that provide homeless youth with an alternative network to that of gains in social support at the interpersonal level and to address the social determinants of poor mental health at community and societal levels.
## ACRONYMS

<table>
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<tr>
<th>Acronym</th>
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<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
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<tr>
<td>CAS</td>
<td>Catholic Action for Street Children</td>
</tr>
<tr>
<td>CBD</td>
<td>Central Business District</td>
</tr>
<tr>
<td>CFC</td>
<td>Chance for Children</td>
</tr>
<tr>
<td>CMB</td>
<td>Cocoa Marketing Board</td>
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<tr>
<td>CSC</td>
<td>Consortium for Street Children</td>
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<tr>
<td>HIV</td>
<td>Human Immunodeficiency Disease</td>
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<tr>
<td>MOWAC</td>
<td>Ministry of Women and Children</td>
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<tr>
<td>NGOs</td>
<td>Non-governmental Organizations</td>
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<tr>
<td>STI(s)</td>
<td>Sexually Transmitted Infection(s)</td>
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<tr>
<td>UNICEF</td>
<td>United Nations International Children’s Fund</td>
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<td>WHO</td>
<td>World Health Organization</td>
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DEFINITION OF TERMS

AIDS: The Acquired Immune Deficiency Syndrome or acquired immunodeficiency syndrome (AIDS) is a human immune system disease caused by the human immunodeficiency virus (HIV).

Circle: This is a popular round about (intersection) in Accra, the capital of Ghana. It was named after Dr. Kwame Nkrumah (Ghana’s first president) as Kwame Nkrumah Roundabout but it is locally called “Circle”.

Cocoa Marketing Board: This is the headquarters of the Ghana Cocoa Board located in the Central Accra. The street children who sleep in and around the shops in this area commonly refer to this place as CMB

Health: The concepts Health stems from the WHO Constitution of 1948 definition of health i.e. “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity and the ability to lead a socially and economically productive life” (WHO, 1998, p.1)

HIV: The Human Immunodeficiency Virus (HIV) is a virus of the retrovirus family resulting in HIV infection and ultimately the acquired immunodeficiency syndrome (AIDS). HIV attacks the immune system while the immune system attacks the virus making the person ultimately susceptible to various opportunistic infections like tuberculosis.

Kubolo: A derogatory and belittling word used for the street child in the Greater Accra region of Ghana

Mental Health: The concept of mental health according to the World Health Organization is “a state of well-being in which an individual realizes his/her own abilities, can cope with the
normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his/her community.

**NGOs:** Non-governmental Organizations that provide psychosocial services and technical skills training to street connected children and youth.

**Prevalence:** Prevalence measures the total number of people infected with HIV or who have developed AIDS at a specific point in time.

**Psychological well-being:** Psychological well-being and or psychological functioning as used in this thesis refers to feelings of anxiety, sadness, irritability and emotional vulnerability of street children/adolescents and youth. It this therefore, a more biomedical definition and not positive psychology is chosen for this thesis.

**Resilience:** In this study, Ungar’s (2008) definition of resilience was adopted. He indicated that “in the context of exposure to significant adversity, resilience is both the capacity of individuals to *navigate* their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and collectively to *negotiate* for these resources to be provided and experienced in culturally meaningful ways” (Ungar, 2008, p. 225).
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PROLOGUE

Having done both undergraduate and master’s degree using quantitative approaches to research and the fact that it was the dominant and popular paradigm in Ghana, the researcher used a qualitative approach to examine the lived experiences of homeless youth in Ghana as part of the researcher’s doctoral study. This methodological approach allowed the researcher to examine and describe the subjective experiences of the participants in detail using their own words and actions (Silverman, 2013). This approach to research also helped the researcher to capture how those being interviewed view their world, to learn their terminology and judgments, and to capture the complexities of their perceptions and experiences (Neuman, 2011; Ungar, 2004).

This study, with the aim of exploring the lived experiences of street youth and to find out the factors that enhance their survival on the street was conducted in 2012 using a purposively selected sample of 16 homeless adolescents (9 male and 7 female) from the Central Business District, Accra, Ghana. A semi-structured interview schedule consisting of questions on issues ranging from reasons and the circumstances which led participants to leave home, how they cope and survive and how living on the street has influenced their lifestyles and behaviours, were used to conduct interviews in a preferred language and at a place of convenience to the participant. Conventional ethical processes were followed. Institutional ethical clearance to conduct this study was obtained from the Human and Social Sciences Ethics Committee of the University of KwaZulu-Natal, South Africa (Protocol number: HSS/1144/012D) and the Department of Social Welfare, Accra, Ghana. Participation in the study was voluntary and the homeless youth were informed that they could withdraw consent at any time during the interview process.

With the help of a reflective journal which was kept during the data collection process, the common themes identified from my study and the researchers own experiences
were summarized in a form of two descriptive poems. These poems entitled *Why choose the streets?* and *Narratives of street life* are described in the sections below. The former presents the researcher’s journey in finding the participants as well as the various reasons given by the participants for their state of homelessness. The latter, reflects on the participants’ life, as lived on the street.

**Why choose the streets?**

Walking bare footed, in tattered clothes
From railways stations to bus stations
From big markets to slums
On pavements, to loggia’s

In a quest to find them, I searched
Through a hustling and bustling city center
Visible, yet apprehensive
I mean no harm, yet they were not convinced
Just when I thought of giving up on them
They consented to interaction

Stories were told
Painfully and shamefully
Of how they ended up on the street
“Abusive mamas”
“Sexually exploitative papas”
“Fleeing from home to be free”
As the pains were no longer to be contained
Escaping from poverty bosom to blossom
Now, lonely walking the streets of the unknown
The new way as it’s known.

Narratives of street life
“We do smoke ‘weed’, it makes us feel good”
“You become weak, if you don’t have it”
“When I am lonely, I smoke it more”
“When I am with my friends, they give me more”
“I can’t help it, than to continue with it”

With friends you are happy in different ways
Without them, you go hungry for days
If you don’t give me when you have it
I will not give you when I get it
It’s a tit for tat situation
No pain, no gain

We sleep in a group
To avoid being raped
If you sleep too deep; your money gets feet
If you sleep alone, you are sexual meat
Yet, silence is told and behold
Or either weakness will show
Here on the street; that’s not to be known

“We are not lazy”; maybe a bit crazy
Working makes us busy
Scraps are our route to making money
Playing football is our way to nakeding our minds
Music and dance are our style to barring our miseries
Do you want to hear more?
“Religion is our core”
And “Jah lives forevermore”
So we are restored

It was a hard task gaining the confidence of the street youth for the interview but once this had been done, they seemed to use the opportunity to narrate their stories of how they ended up on the street, and what their experiences of being homeless have been like. Many of them narrated various reasons that led them to the street ranging from extreme family poverty to the quest for freedom from parental control. Some of them were overwhelmed by the harsh conditions on the street but others saw these as normal challenges of streetism.

The experiences of females were remarkably different from their male counterparts as they are exposed to severe health risk behaviours including sexual violence, abuse and possible rape. Notwithstanding these problems encountered on the street, I was surprised by how participants derive their source of strength to navigate the odds of the streets. This, they do by deriving meaning from their environment through activities such as listening to music and playing football, strong religious beliefs, and good and reciprocal friendships. The reflective journal which I kept during the data collection process helped me capture their moods; something that my voice surely would have failed to do.
CHAPTER 1
INTRODUCTION

1.1 Background

The pressures of rural life does not only compel men and women to seek employment in industries but also force children and youth to migrate to the more developed urban cities and towns hoping for better employment opportunities and living facilities. The phenomenon of homeless /street children is global, in both developed and developing nations; it is alarming and escalating (UNICEF, 2006). About 60% of the homeless population in Africa and South Asia are children (UNICEF, 2012), and in most developing countries the proportion of the young is growing (World Bank, 2006). The negative effect of urbanization has led to the increase of children and youth who leave their families prematurely to live and work on the streets (McAdam-Crisp, Aptekar & Kironyo, 2005). These circumstances makes street children a high risk, insecure and vulnerable groups in society that suffers from various kinds of psychological problems, are exposed to various risk behaviours making them vulnerable to contracting STIs including HIV and AIDS (Burns et al., 2004).

According to UNICEF (2012), more than one billion children were growing up on urban streets around the world. They, however, acknowledge that the exact number of street children is impossible to quantify, but the figures almost certainly runs into over a billion across the world. It is likely that the numbers are increasing as the global population grows and as urbanization continues apace (UNICEF, 2012). The statistics across Africa are quite staggering and alarming as there are about three million street children and young adults in Africa (World Bank, 2006), and as many as one million (of which a greater proportion had dropped out of school and a significant number had never been to school) are believed to be on the streets in Egypt (Consortium for Street Children (CSC), 2009).
Evidence from Ghana indicates that there are an ever increasing number of street children in recent years. The Catholic Action for Street Children (CAS, 2010) headcount conducted in 2009 indicated that there are about 35,000 and more street children in the Greater Accra region alone. Key child labour indicators from the Ministry of Women and Children Affairs in 2011, indicated that over 50,000 children are living and working on the streets with nearly 50 percent in the Greater Accra region alone (MOWAC, 2012). The large number of street children in Ghana could become a public health issue as there are considerable numbers of them especially in Southern Ghana due to various reasons such as poverty, disintegrated families and divorce (Boakye-Boaten, 2008; Orme & Seipel, 2007).

In urban centers like Accra, street children work mainly as porters and sales workers and sometimes as child commercial sex workers. These activities expose them to great risks such as violence, sexual abuse, serious physical and psychological harm and sexually transmitted infections including HIV and AIDS. What makes the already difficult situation worse is that these homeless youth in general are seen as a societal burden and not necessarily in need of protection, care and love (Quarshie, 2011).

Researchers have indicated that homeless youth are vulnerable to suicidal ideation and substance abuse (Rew, Taylor-Seehafer, Thomas and Yockey, 2001; Kidd & Scrimenti, 2004; Kidd & Carroll 2007), have less knowledge about sexuality than other youth (Anarfi, 1997; Kruger & Richter, 2003; Wutoh et al. 2006; Gatu, 2000) and are more likely to engage in unprotected sex and other high risk sexual behaviour as a means of survival (Anarfi, 1997; Burns et al., 2004; Walters, 1997; Wutoh et al. 2006; Oduro, 2012). They are also socially stigmatized due to their state of homelessness (Kidd, 2007). Mental health problems such as depression, trauma, conduct disorders and psychotic symptoms have been shown to be prevalent among homeless youth in developed countries (Kelly & Caputo, 2007; Kidd, 2004). Although some attributed their mental health problems to their state of homelessness with its
accompanying stressors, others indicated that their existing problems develop or worsen due to the stresses and strains of street life (Kelly & Caputo, 2007; Kidd, 2004).

The mental health status of homeless youth is critical because of its linkages to a variety of risky and protective behaviours. Risk factors are those characteristics of individuals that increase the likelihood of developing a mental health problem or increasing the severity of the problem, whilst protective factors on the other hand, serves to modify or ameliorate the effects of mental health problems (Petersen, 2010). Among the homeless youth population, risk factors to their mental health include the number of years spent on the street (Embleton et al., 2012; Hodgson, Shelton, van den Bree & Los, 2013); substance use (Kelly & Caputo, 2007; Flick & Röhnsch, 2007); suicidal ideation (Cleverley & Kidd, 2011); stigma (Kidd, 2004; 2007) and physical and sexual abuse (Whitbeck, 2009). Perceived resilience (Cleverley & Kidd, 2011; Kidd, 2004; Kidd & Shaher, 2008) and social support (Nyamathi et al., 2012; Stein, Dixon, & Nyamathi, 2008; Zhang & Fogarty, 2007) were identified as protective factors against various mental health problems in the above studies.

Recent literature has started to broaden the factors influencing health and well-being to protective factors such as resilience. The concept of resilience has enjoyed enormous scrutiny from numerous researchers over the past two decades. Resilience is defined by Masten (2001) as positive outcomes despite the experience of adversity, continued positive or effective functioning in adverse circumstances, and/or recovery after significant trauma. It has become an important concept in understanding how homeless youth cope and survive in adversity. The strengths perspective explanation of resilience suggests that a resilient individual possess inherent strengths (protective factors) which empower them to cope with adverse circumstances (Barton, 2005; Theron, 2004). According to Rew et al. (2001) youths who are perceived to be resilient, have lower levels of hopelessness, loneliness and are less likely to engage in life-threatening behaviours. Additionally, Kidd and Shaher (2008) found
that risk and resilience factors were significantly related to mental health, subjective health status and substance use, implying that lower levels of resilience render them physically and mentally vulnerable.

Several qualitative studies have been conducted to examine resilience among homeless youth and to identify the factors helping them to survive. Analysis of narratives of homeless youth on resilience have identified the importance of cultural values and practices (Ungar et al. 2007; Ungar, 2008; Theron & Malindi, 2010; Theron et al. 2011), religious affiliation, sense of humor, assertiveness and a sense of agency (Theron & Malindi, 2010; Theron et al., 2011) as protective factors for resilient homeless youth. Other qualitative analyses revealed themes such as sense of mastery and developing independence to serve as resilience protective factors for homeless youths (Kidd, 2003; Malindi, 2014a, 2014b).

Resilience has been associated with both individual characteristics and supportive family and community environments. One particular area that is relatively less explored is the role of culture in fostering resilience in an African context. Culture according to Nitcher (2003) is an enduring set of social norms and institutions that govern the life of a particular group of people, giving them a sense of community and continuity. According to Van der Watt and Bowman (2007) culture comprises collective values, norms and rules and practices unique to a group of people. These norms and rules invariably define and keep such people together (Burke, Joseph, Pasick & Barker, 2009; Kruger, Lifschitz & Baloyi, 2007). Over the past few years, researchers have started recognizing that cultural values and contexts foster resilience across cultures (Rutter, 2006; Ungar, 2005). Understanding the complexities of culture and how it promotes thriving in high risk contexts is crucial. In a study, Theron et al. (2011) found that relatedness, culture of sharing and religious commitment are some of the attributes that foster resilience among youth in Mexico and South Africa. Additionally, Ungar
et al. (2007) identified cultural adherence among other attributes as part of youth's resilience narratives.

1.2 Rationale of the study/problem statement

Most of the interventions for risky behaviours aimed at homeless youth have had limited success due to an incomplete understanding of the determinants of risk behaviours, in particularly that of the mental health status of this vulnerable group. Previous studies among homeless young adults in Ghana have focused on economic, social and cultural causes of homelessness, their engagement in risky sexual behaviours and the prevalence of STI including HIV and AIDS (Anarfi, 1997; Boakye-Boaten, 2008; Kumoji, 2002; Oduro, 2012; Orme & Seipel, 2007; Quarshie, 2011; Wutoh et al., 2006). We therefore have little knowledge of the mental health status of these homeless youth and its role in risky sexual behaviours; neither do we understand the role of resilience as a protective factor in ameliorating the consequences of the adverse conditions of these homeless youth in Ghana. Additionally, no research to the knowledge of the researcher, has addressed the issue of resilience and the role that cultural values plays in this regard within the Ghanaian context, an important aspect, thus remains unexplored. Further, the role of resilience in mental health is unclear. The purpose of the study is therefore to examine the protective factors that strengthen the health and well-being of homeless youth.

As previous studies conducted among homeless youth have been either quantitative (e.g. Kidd & Shahar, 2008; Kelly & Caputo, 2007; Kidd, 2007) or qualitative (e.g. Oduro, 2012; Theron et al., 2011; Ungar et al., 2007) in nature, the use of a mixed-methodological approach is used in this study to generate rich data that will give rigor to a complex topic and broaden the understanding of resilience as a protective factor for mental health among the homeless youth in an African context. An exploratory mixed method design which included first a qualitative and then a quantitative component was used. The qualitative data were used
to develop the quantitative instrument to measure resilience within the Ghanaian context. The qualitative data were also used to gain a better understanding of the health and well-being including the resilience of homeless youth in Ghana and to refine the quantitative instruments that were used to measure mental health status and resilience among homeless youth. The quantitative component of the study sheds light on the status of mental health among homeless youth and the role of protective factors (e.g. resilience) in this regard. In conclusion, insights gained from the present study extend the existing body of knowledge around mental health and well-being of homeless youth in an African context. Furthermore, the findings of the present study could be used to develop policy guidelines for ensuring access to health services and to guide mental health promotion interventions among homeless youth.

1.3 Aims and objectives of the study

The main aim of the present study was to examine the mental and behavioural health and well-being of homeless youth and the protective factors that could be strengthened to promote their mental health and reduce risky health related behaviours using an exploratory mixed method design. In order to address the broad aims of the study, the specific objectives of the study were to:

- Gain an in-depth understanding of the lived experiences of homeless adolescents and youth, and to explore the various factors that foster resilience in their daily activities on the street.
- Understand how homeless adolescents and youth living in Ghana describe their health and well-being and the various reasons they give for engaging in high risk behaviour including drug use.
• Determine the prevalence of health risk behaviours, psychological well-being, and their associated factors.

• Examine the factor structure and psychometric properties of the CD-RISC among a sample of homeless youth in Ghana.

• Investigate the association between the impact of perceived resilience of homeless adolescents and their mental health and engagement in high risk behaviours.

• Investigate the best predictors of psychological well-being and sexual risk behaviours.

1.4 Research Questions

In lieu of the objectives, the study strived to provide answers to the following research questions which are presented below accruing to the various phases of the study:

**Phase 1: Qualitative study**

1. What are the lived experiences of street children and adolescents in Accra, Ghana?
2. How do homeless youth in Ghana understand the factors that foster resilience?
3. How do homeless youth experience their health and what reason do they give for their engagement in health risk behaviours?

**Phase 1: Quantitative study**

4. Does gender and age play any significant role in the different types of health risk and mental health problems experienced by homeless youth?
5. What is the relationship between sexual risk behaviours and substance use among homeless youth?
6. What are the psychometric properties of the Connor-Davidson Resilience Scale (CD-RISC)?
7. What is the relationship between perceived resilience as measured by CD-RISC and health risk behaviours among homeless youth?
8. What are the predictors of psychological well-being of street youth?

1.5 Ethical Considerations

Ethical approval for this study was obtained from the Humanities and Social Science Research Ethics Committee of the University of KwaZulu-Natal, South Africa. The fieldwork was conducted in Ghana, so ethical approval was also granted by the Department of Social Welfare, under the Ministry of Employment and Social Welfare, Ghana. Participation in the study was voluntary as participants were informed of their right to withdraw from the study at any point without any harm to them. Ethical principles (informed consent, anonymity, confidentiality and voluntary participation) were completely followed. Details of the ethical procedures are described in the data collection section (Chapter 3). See Appendix 1 and 2 for evidence of the ethical approval from the reviews boards of the above mentioned institutions.

1.6 Outline of the thesis

The outline of the thesis and the various aspects that are discussed in each chapter are presented below:

Chapter 1: Introduction

The section above addressed the background to the study, aim and objectives, rationale as well as the typical research questions of the study. The general outline of the thesis is presented here under:

Chapter 2: Literature Review

In this chapter, an overview of the literature review pertaining to the literature on the health risk behaviour and mental health aspects of homeless youth. As this study has a strong focus on resilience among homeless youth, literature pertaining to resilience and the factors which contribute to resilience is presented. First, this chapter is introduced by providing a general
overview of the definition of homeless youth, prevalence of the phenomenon and possible contributory factors to the problem of youth homelessness. This section is followed by examining the various health risk behaviours and the mental health of homeless youth. Health risk behaviours and their possible interactive effect specifically suicidal ideation, violence and sexual risk behaviours are examined. Mental health issues that are prevalent among homeless youth are also reviewed with specific focus on suicidal ideation, depression and conduct problems. This chapter is concluded by presenting the theoretical framework that informed the study.

Chapter 3: Research Methodology

Chapter three describes the research approach used for the study. The justification for the use of a mixed-method involving the combination of both qualitative and quantitative designs is provided. The rest of the chapter describes the research setting, instruments, data collection, and how ethical issues were addressed.

Chapter 4: Results and Discussions of Qualitative Study

Chapter four describes the in-depth qualitative research study that focuses on the lived experiences of homeless youth with regards to aspects of their psychological well-being, and the enabling resilient factors that enhance their survival. As such, the first part of this chapter explores personal, interpersonal and community-based factors that foster resilience among homeless youth. The second part of this chapter focuses on the psychological experiences of homelessness. In addition, a presentation of results of the lived experiences of homeless adolescents and the factors that foster resilience as emerged themes from the analysed qualitative results was discussed. The implications of the qualitative study for the quantitative phase of the thesis were provided. This chapter is concluded by highlighting the limitations related to the qualitative approach.
Chapter 5: Age and gender differences in health risk behaviours and mental health problems

Chapter five is the first of five chapters that present the findings from the quantitative phase of this doctoral thesis. This chapter begins with the demographic characteristics of the research participants. This is then followed by examining gender and age differences in health risk behaviours, and psychological well-being. The findings are discussed and appropriate interventions are suggested.

Chapter 6: Sexual risky behaviours and their associated factors

Empirical findings of the prevalence of the various health risk behaviours are presented in chapter six. The associations between sexual risk behaviours and substance use after controlling for demographic characteristics are examined. The results are discussed in relation to existing literature on substance use and risky sexual behaviours among the homeless youth population.

Chapter 7: Validation of the Connor-Davidson Resilience Scale (CD-RISC)

This chapter explores the appropriateness of the Connor-Davidson Resilience Scale (CD-RISC) for use within the Ghanaian context. The characteristics of the extracted factors, intercorrelations between the full scales and the subscales are presented in this chapter. Evidence of external validity of the constructed scales and other measures are presented as well. The findings were discussed, and recommendation for future research suggested.

Chapter 8: Perceived resilience and mental health risk behaviours

The relationship between perceived resilience and mental health risk behaviours are explored in this chapter. Specifically, the role of resilience as a protective factor for such mental health behaviours was examined through the use of regression analysis. This chapter is concluded by relating the findings to international literature and providing possible implications for policy and interventions.
Chapter 9: Predictors of psychological well-being

Chapter nine examined the predictors of psychological well-being. The prevalence of the overall psychological symptoms and their various dimensions as measured by the SDQ are presented. This is then followed by determining the best predictors of psychological well-being and its domains.

Chapter 10: Integrative discussions and conclusion

This chapter provides a general discussion of all the research results of this thesis, both the qualitative findings derived from the in-depth interview with purposively selected homeless youth, and the quantitative results gathered through a cross-sectional survey with a relatively large group of participants. This chapter, thus, summarises the findings reported in this thesis with consideration of relevant and current literature. This chapter is concluded by indicating the doctoral study’s significant contribution to scholarship, and providing recommendations for interventions and suggestions for future research. Limitations of the study are also outlined in this section.
CHAPTER 2
LITERATURE REVIEW

2.1 Introduction
In this chapter, a literature review is presented pertaining to the health risk behaviours and mental health status of homeless youth. As this study was conducted among homeless youth, literature pertaining to resilience and the factors that contribute to resilience are presented. First, this chapter is introduced by providing a general overview of the definition of homelessness in youth, prevalence of the phenomenon and possible contributory factors to the problem of youth homelessness. This section is followed by examining the various health risk behaviours and the mental health challenges of homeless youth. In particular, health risk behaviours and their possible interactive effect, specifically suicidal ideation, violence and sexual risk behaviours are examined. Mental health issues that are prevalent among homeless youth are also reviewed with specific focus on suicidal ideation, depression and conduct problems.

In the section that follows, attention is given to resilience and its possible influence on the health and well-being of homeless youth i.e. resilience and its contributory factors, as well as its relationship with various psychological well-being indices. Then an overview is presented on the determination of an appropriate instrument to measure resilience. Specifically, the review focuses on resilience measures developed over the years and the justification for the validation and use of the CD-RISC scale in this study.

This chapter is concluded by presenting the Bronfenbrenner socio-ecological theory in which the study is located. The socio-ecological framework indicates that our behaviour is influenced by multiple interactive systems, suggesting that in understanding behaviour, we do have to take cognisance of the immediate and the broader community level influences with consideration of the interactions between these levels. In the application of this framework to
the study, these interactive systems were categorized to understand the streams of influence on the behaviour of homeless youth. These levels of influence includes intrapersonal influences at the individual level, the interpersonal influences i.e. peers, significant others and then environmental/cultural influences that may impact the well-being of homeless youth.

2.2 HOMELESS YOUTH: A GENERAL OVERVIEW

Homeless youth as individuals at risk have been described in both grey and scientific research with different terminologies. In this section, the definition of homeless youth, the prevalence of the phenomena (globally and in Ghana) and the possible causes of homelessness are outlined under this section.

2.2.1 Definition of Homeless Youth

Homeless children/young adults have been described in various ways, often linked to a particular context. These descriptions are mainly linked to where they live or their living arrangements (e.g. street youth, street child/children, homeless youth) and the conceptualisation of causality (e.g. runaway, throwaway and unaccompanied). In the developed countries such as the United States and Canada, runaway and throwaway are used to justify the myriad of reasons given by parents and youth respectively as reasons for being homeless (Hammer, Finkelhor & Sedlak, 2002). According to Hammer et al. (2002), youth who leave home without parental consent can be described as runaway, while a throwaway refers to youth who have been asked to leave home by parents for reasons such as disobedience, conduct disorders etc. Females are more likely to runaway as a result of either physical, sexual abuse or both than males (Cause et al., 2000; Oduro, 2012).

In Africa, the term “street child/street children” are commonly used to describe youth who are on the street for several reasons including poverty, divorce, truancy, physical abuse, death of parents and the desire to be free from parental control (Boakye-Boaten, 2008;
Kwankye, Anarfí, Tagoe & Castaldo, 2007; Oduro, 2012; Swahn, Palmier, Kasirye & Yao, 2012). Among the “street children” are two categories: children of the street and children on the street. Children of the street are typical street children who have no permanent place of residence and stay perpetually on the street. The latter groups of street children are children who have family relatives, permanent place of residence but sometimes come to the street either to sell items to supplement family income or to help with addressing individual needs.

Some researchers suggest that the use of the term ‘street’ in the description of homeless youth can be considered as being derogative (Panter-Brick, 2002; Consortium for Street Children [CSC], 2011). Other researchers have used different terminologies to reflect different situations and experiences of the street youth. These include descriptions such as child migrants (Kwankye, Anarfí, Tagoe & Castaldo, 2009), delinked children (McAlphine et al., 2010), detached children (Smeaton, 2009) and children in street situations (Terres des Hommes, 2010). According to the Consortium for Street Children [CSC] (2011), the use of non-derogative words is based on the fact that researchers and practitioners have recognised homeless youth as social actors who are capable of adapting to new environments, just like any other individual. In fact, street youth in Indonesia have rejected being labelled as ‘deviant’, and suggested a focus on the positive attributes that are associated with living on the street (Beazley, 2003).

For the purpose of this study, homeless youth refers to youth who ran away from their families and live alone or with a group of other youth on the street, have no stable place of residence and experience movements in short periods of time. This definition aligns with the United Nation Center for Human Settlement (2007) which describes street children as any individual for whom the street (including unoccupied dwellings) have become their place of living and/or source of livelihood, inadequately protected and supervised by responsible adults. To avoid any kind of terminological confusion, throughout this thesis, "homeless
“youth” and “street children” will be used interchangeably to refer to this group of youth. However, when referring to specific studies, the language used by the authors to identify the subgroup of homeless youth they studied will be used. The United Nations (2004) refers to people age 13–19 as teenagers, 15–24 years as youth and those 20–24 years as young adults. Studies on homeless youth have included individuals of varying ages ranging from 10-17, 18, 19, 21 or 24 years. The term “youth” as used in this study refers to those between the ages of 10-24 years (inclusive).

2.2.2 Prevalence of the Homelessness

The phenomenon of homelessness is seen to be universal and alarming. However, estimating the actual number of children/youth living on the street has been a challenge. According to UNICEF (2003), an estimated 100 million children were growing up on urban streets around the world. About a decade later, the same institution admitted that the exact number of street children is impossible to quantify, but the figure almost certainly runs into tens of millions across the world. It is likely that the numbers are increasing as the global populations grow and migration and urbanization continues to increase (UNICEF, 2012). The statistics across Africa are quite staggering and alarming as there are estimated to be about three million street children and young adults in Africa (World Bank, 2006), and as many as one million (of which a greater proportion had dropped out of school and a significant number had never been to school) are believed to be on the streets in Egypt (Consortium for Street Children (CSC, 2009).

Evidence from Ghana indicates that there are an ever increasing number of street children in recent years. The Catholic Action for Street Children (CAS, 2010) headcount conducted in 2009 indicated that there are about 35,000 and more street children in the Greater Accra region alone. Key child labour indicators from the Ministry of Women and Children Affairs in 2011, indicated that over 50,000 children are living and working on the
streets with nearly 50 percent in the Greater Accra region alone (MOWAC, 2012). Current information available from child experts in Ghana has estimated the number of street children to be approximately 90,000 in Accra alone (Accra Metropolitan Assembly [AMA], 2014).

The inability to get a consistent definition of homeless youth, might have contributed to the varied number of street youth in Ghana, and globally as a whole. Some researchers (Edidin, Ganim, Hunter & Karnik, 2012; Ennew & Swart-Kruger, 2003) have indicated that both the transient and nomadic nature contribute to the varied prevalence of homeless youth. Ennew and Swart-Kruger (2003) indicated that due to such variations in the definition, it was impossible to accurately determine the number of street youth. Others have argued that the inflated and frightening figures could possibly push international donors to fund support programmes that would help reduce the escalating number, something that could have helped explore the experiences and circumstances of these homeless youth (Consortium for Street Children, 2011; Molla, 2012).

2.2.3 Causes of Homelessness

Homelessness is a result of multiple factors in complex associations, and as such, there is no single reason that can be identified as the cause. However, most of the reasons can be categorised in three broadly-related factors: push factors, pull factors and the desire for freedom from parental control (CASS, 2002; Oduro, 2012; Ward & Seager, 2010). Push factors refer to factors or circumstances that compel young children and adults to live on the street. Some of these factors include abuse from family relatives, death of family relatives, and family dis-integration/ breakdown including divorce (Boakye-Boaten, 2008; CASS, 2002; Huges et al., 2010; Ward & Seager, 2010). In a South African study of homeless children, Ward and Seager (2010) found that the death of a single or both parents were evident in over 79% of the explanations given by participants interviewed about why they left home. This assertion is supported by a study conducted in Uganda, which found that over
75% of the youth reported the death of one or both parents as an underlying reason for their current state of homelessness (Swahn et al., 2012). In developed countries, however, parental drug and alcohol use has been cited as the reason most often mentioned for leaving home by young people (Edidin et al., 2012). Parental drug use is associated with family violence, neglect, physical and sexual abuse (Ferguson, 2009).

Pull factors on the other hand refer to urbanization experiences brought to young adults by their peers, and the prospects of seeking a better life (CASS, 2002). Family poverty and the quest to make money and survive have been documented as key reasons given by street children for their state of homeliness (Abdullah et al., 2014). In their extensive review of street life in Accra and Bamako, Hatløy and Huser (2005) identify poor infrastructure in the rural areas and the low quality of schools in the remote areas as critical factors contributing to homelessness for children and young adults in Ghana and Mali.

Another reason why youth run away from home is the desire for freedom and escape from parental restrictions. Oduro (2012) indicated that some of the participants on the street of Accra, Ghana revealed that their parents were of good socioeconomic status but because of their desire for freedom, they ran away from home. According to some participants interviewed in the study, the street offers so much freedom, that “you can do whatever you like, and can even decide not to brush your teeth” (Oduro, 2012, p. 45).

2.3 HEALTH RISK BEHAVIOURS OF HOMELESS YOUTH

There are significant developmental changes that take place during the transition from childhood to adolescence, which is accompanied by physical and psychological challenges (Sinha, Cnan & Gelles, 2007). These changes seem even more severe for homeless youth who would have to adapt to their environment on the street, and the accompanying development and psychological changes in their lives. It is therefore likely that homeless youth will be at a greater risk for engaging in health risk behaviours. The specific health risk
behaviours that will be reviewed include multiple sexual partners and inconsistent condom use, transactional and survival sex, violence and violent related behaviours and substance use/misuse (alcohol and drug use).

2.3.1 Risky sexual behaviours - Multiple Sexual Partners and Inconsistent Condom Use

It has been argued that youth living on the street are highly likely to engage in risky sexual behaviours (Tyler, Whitbeck, Chen & Johnson, 2007). Risky sexual behaviours increase the likelihood of adverse sexual and reproductive health consequences [WHO, 2002]. These health consequences may include unwanted pregnancy, unsafe abortion, HIV/AIDS and other STIs.

Street youth are generally sexually active and have earlier sexual debut, than youth in the general population (Anarfi, 1997; Habtamu & Adamu, 2013). This is strongly linked to their social environment which may lead them to engage in risky sexual activities including the initiation of new sexual relations (Tadesse, Awoke, Mengesha & Alene, 2013). Their sexual activities are often unprotected (without the use of condom), rendering them particularly vulnerable to acquiring sexually transmitted infections (STIs) including HIV. A study conducted among 280 street youth in Ethiopia indicated that 77% of the sample who indicated they were sexually active at the time of the study, did not use condom in their last sexual encounter (Solomon, Tesfaye & Erosie, 2002). The sexual behaviour trends of street youth show that not only are street youth not protected sexually, they also have multiple sexual partners (Habtamu & Adamu, 2013; Kayembe et al., 2008; Nada & Suliman, 2010; Owoaje & Uchendu, 2009; Tadesse et al., 2013; Wutoh et al., 2006). In the study by Tadesse et al. (2013) referred to above, 62% of their participants were sexually active and 97% of the sexually active youth had multiple sexual partners. The same study further showed that 80.5% of the street youth used condoms inconsistently, particularly those that have stayed longer on the street. Reasons for non-condom use among street youth include negative beliefs
about condoms i.e. reduction in sexual pleasure; limited access to condom i.e. not being able to buy condoms; negligence in condom use especially when using it in the “heat of the moment” and substance use, making condom use less likely (Kayembe et al., 2008; Oduro, 2012; Tadesse et al., 2013).

Further evidence shows that having multiple sexual partners among street youth is determined by various factors. Drug use (e.g. alcohol, marijuana, inhalants), number of years lived on the street, early sexual debut, social networks, and being female have been documented as determinants for multiple sexual partnerships among homeless populations (Nada & Suliman, 2010; Owoaje & Uchendu, 2009; Tadesse et al., 2013; Slesnick, Bartle-Haring, Dashora, Kang & Aukward, 2008). The use of drugs such as Khat chewing (which is known to contain amphetamine) particularly among youth in Ethiopia, cause the release of neurotransmitters such as norepinephrine and dopamine (Tadesse et al., 2013). Such neurotransmitters subsequently influence the sympathetic nervous system which informs the human body to react unthinkingly in situations and possibly influence sexual initiations (Tadesse et al., 2013). Alcohol also interferes physiologically with behaviour (Embleton, Mwangi, Vreeman, Ayuku & Braithstein, 2013; Nada & Suliman, 2010). Furthermore, individuals with a history of frequent alcohol use are more likely to engage in sexual risk behaviours including non-condom use and having multiple sex partners (Embleton et al., 2013; Kayembe et al., 2008; Nada & Suliman, 2010).

Closely related to having multiple sexual partners with inconsistent condom use, is survival and transaction sex, especially for female street youth (which include sex for money and sometime for protection on the street) (Wutoh et al., 2006; Lockhart, 2002; Nada & Suliman, 2010; Valente & Auerswald, 2013). Among homeless children in Egypt, Nada and Suliman (2010) found that 25% of the girls had sold sex to males, while Lockhart (2002) reported from a study in Tanzania that those aged between the ages of 11-17 years engaged in
commercial sex. A recent study in Ghana reported that insecurity on the street and the avoidance of forced sex, compelled females to seek protection from older boys also living on the street, by forming sexual relationships with them (Oduro, 2012). In an ethnographic study with street youth in San Francisco, USA, Elepe (2002) indicated that male-controlled social hierarchy on the street compels their female counterparts to have sexual relationships with them for security. Power dynamics and females’ inability to find some economic resources through work, have also been seen as a contributory factor in “pushing” female street youth to engage in survival sex or some form of sex work. While a few studies in Ghana have reported on the socio-demographic characteristics of street youth, their group dynamics and survival mechanisms (Boakye-Boaten, 2008; Minez & Ofusi-Kusi, 2010; Orme & Seipel, 2007), little is however known about their sexual risk behaviours and the gender-power dimensions related to these behaviours. Again previous studies in Ghana are based on relatively small sample sizes, and were more qualitative and descriptive in nature.

2.3.2 Violence and Violent-related Behaviours

Homelessness increases the risk for abuse of street youth (Coates & McKinze-Mohr, 2010; Edidin et al., 2012; Slesnick, Dashora, Letcher, Eden & Serovich, 2009). Compared with other young adults in the general population, street youth are at a higher risk for violence and violence-related behaviours (Slesnick et al., 2009). The living conditions of homeless youth may compel them to exhibit violent behaviour themselves, or to become victims of violent behaviour from the general population. Slesnick and colleagues (2009) suggest that as homelessness is associated with extreme isolation and marginalization, homeless youth may be in situations that increase their risk for abuse. Living with such predisposition to physical, sexual and traumatic experiences, homeless youth tend to exhibit more psychological problems than their peers with permanent residence (Slesnick et al., 2009). This is particularly more prevalent among homeless youth with a history of abuse.
prior to moving to the street, as those with a history of abuse are more than twice as likely to be abused physically or sexually on the street (Slesnick et al., 2009).

One of the most often reported violent-related behaviours among homeless youth is coerced sex/sexual harassment of females, often being the victims in these situations (Coates & McKinze-Mohr, 2010; Kayembe et al., 2008; Lockhart, 2002; Nada & Suliman, 2010; Oduro, 2012). In their study of street children in Egypt, Nada and Suliman (2010) showed that a majority of their participants had experienced various forms of violence and abuse from older street children and even the police. The authors further reported that over half of the young girls aged 11-17 years had been sexually abused (Nada & Suliman, 2010).

2.3.3 Substance Use/Abuse

Substance use among homeless youth populations is generally higher than among youth living in households (Van Leeuwen et al., 2004; Zerger, Strehlow & Gundlapalli, 2008; Embleton, Mwangi, Vreeman, Ayuku & Braitstein, 2013). However, the type of substance used and the prevalence rate vary remarkably according to context and geographical location. In a comprehensive review, Embleton et al. (2013) reported that street youth in high income countries usually use injecting drugs and other substances that are not commonly used by homeless adolescents from low and middle income countries (LMIC). While the prevalence rate of substance has been found to be in the range of 70%-90% in resourced developed countries such as Canada and the United States (Zerger et al., 2008; Nyamathi et al., 2010), drug use prevalence in LMIC are generally lower, ranging from 14%-54% (Embleton et al., 2013).

Interviews with street children in Egypt revealed that 62% of the participants reported substance use, with the highest substance used being alcohol use (35%) with only 3% indicating injection drug use (Nada & Suliman, 2010). Similarly, Kayembe et al. (2008) found a higher rate of substance use among a group of street children in the Democratic
Republic of Congo (DRC). Eighty-two percent of the participants used marijuana, 63.5% used alcohol and 3.8% used cocaine (Kayembe et al., 2008). A similar pattern of substance use was also reported among street youth in Kenya, where lifetime and current substance use was 83% and 74% respectively (Embleton, Ayuku, Atwoli, Vreeman, & Braitstein, 2012).

Substance use among homeless youth has been found to be influenced by factors such as gender, age, duration of homelessness and social networks (e.g. peer influence). Research has indicated that more males than females use alcohol, marijuana, cocaine and inhalants (such as glue) (Ahamad et al., 2014; Habtamu & Adamu, 2013; Hadland et al., 2011; Hathazi, Lankena, Sanders & Bloom, 2009; Kayember et al., 2008). Further evidence shows that although differences in the choice of substances exist, the prevalence of substance use disorders is similar among males and females (Slesnick & Prestopnik, 2005). Another factor that influences substance use is age (Nada & Suliman, 2010; Hadland et al., 2011). In a study of drug use among young and older homeless youth, Hadland et al. (2011) found that younger participants (less than 21 years) where more likely to be engaged in excessive drinking of alcoholic beverages, while older participants (21 years and older) were more likely to be involved in crack cocaine and injecting drug use e.g. heroin. The number of years lived on the street seems to be positively related to substance use (Embleton et al., 2012; Hodgson, Shelton, Van den Bree & Los, 2013; Rosenthal, Mallet, Milburn & Rotheram-Borus, 2008). Similarly, Milburn, Rotheram-Borus, Rice, Mallet, and Rosenthal (2006) reported from their cross-national study that the length of homelessness was associated with higher rates of substance misuse and psychiatric disorders.

Apart from the rate of substance use and the likelihood that individuals will engage in risky sexual behaviours, including non-condom use and multiple sexual partners (Embleton et al., 2013; Kayembe et al., 2008; Nada & Suliman, 2010), substance use also heightens the
probability of presenting with severe psychological problems including suicide ideation and attempts (Evans, Hawlon & Rodham, 2004; Kidd & Carroll, 2007).

2.4 MENTAL AND EMOTIONAL HEALTH OF HOMELESS YOUTH

Homeless youth are exposed to several mental and emotional health problems. This section of the literature review focuses on suicidal ideation, and internalising and externalising problems such as depression and behavioural disorders respectively.

2.4.1 Suicide Ideation and Attempts

Suicide is one of the leading causes of death in homeless youth (Roy et al., 2004; WHO, 2011), and the prevalence varies according to the context within which homeless youth are found. Suicide ideation is concerned with the thought about or an unusual preoccupation of suicide, whilst suicide attempt refers to attempts made by individuals to kill themselves. Available evidence in Canada and the United States of America showed suicide attempts to range from 20% to 86% (Frederick et al., 2012; Kidd & Carroll, 2007; Kidd & Kral, 2002). Within sub-Saharan Africa, few studies have examined suicidality among homeless youth, but available evidence shows suicide attempts to range from 20 to 32 percent (Swahn et al., 2010; Swahn, Palmer, Kasirye & Yao, 2012). Among a large group of street youth in New York and Toronto, a significant proportion (46%) of respondents reported to have made at least one suicide attempt while on the street (Kidd & Carroll, 2007). Similarly, Swahn et al. (2012) found that approximately 31% of homeless children who live in the slums of Kampala reported to have tried killing themselves. These prevalence rates were higher than what was reported by Frederick et al. (2012) in Toronto, which showed that approximately 27% and 15% of the participants reported suicide ideation and suicide attempts respectively in the past year.
Several factors have been shown to be associated with suicidal behaviours among homeless youth. These include substance use (Evans, Hawlon & Rodham, 2004; Kidd & Kral, 2002; Kidd & Carroll, 2007; Kelly & Capito, 2007), family abuse (both physical and sexual) (Kidd, 2004; Kidd, 2004; Jorgensen, Jorgensen, Heard & Whitbeck, 2010) and death of a family member (Swahn, Palmier, Kasirye & Yao, 2012; Jorgensen et al., 2010). In their study of 150 homeless and street-involved youth in Toronto, Frederick, Kirst and Erickson (2012) found that being a female, having a history of sexual abuse, depression, and engagement in non-suicidal self-harm behaviours, were positively associated with both suicidal ideation and suicide attempts. Their study further showed that homeless youth who had a mental health diagnosis, were twice more likely to experience suicidal ideation and attempted suicide (Frederick et al., 2012).

In support of the above mentioned factors, Swahn et al. (2012) reported that parental neglect, sadness, and expectation to die before the age of 30 were associated with both suicidal ideation and suicide attempts by homeless youth. It was also noted that being an orphan, trading sex for food and feelings of loneliness were found to be independently associated with suicide ideation (Swahn et al., 2012). Some studies have reported gender difference in suicidal attempts and ideation (Frederick et al., 2012; Swahn et al., 2012). When comparing males to females, more females reported suicidal ideation, and this was associated with higher levels of depression. Indeed, the study of Frederick et al. (2012) indicated that female homeless youth were five times more likely to attempt suicide than males. Similarly, Swahn et al. (2012) found that females were more likely to experience suicidal ideation and suicide attempts than males.

2.4.2 Social Stigma

Stigma occurs as a result of inadequate or a possible gap in knowledge between what is considered as a society’s identity and society’s expectation of a virtual identity. According to
Goffman (1963), stigma lets people or groups see differences or "others" in a negative light while confirming their own sense of normalcy and decency. In such instances, we may consider people who are stigmatised as individuals who possess an identity that is different from what is considered to be normal (Jones et al., 1984; Millar, 2001). Other researchers have argued that stigmatised individuals are devalued or belittled by the general society as a result of a characteristic or attribute that they possess (Goffman, 1963; Link & Phelan, 2001).

Due to the precarious situations that street youth find themselves, they are sometimes stigmatised by the general society through labeling, name calling, and possible discrimination. Some studies examined the relationship between perceived stigma and mental health of homeless youth/adolescents. In a study conducted by Kidd (2007) among 208 youths in New York and Canada, it was shown that social stigma experienced by homeless youth was dependent on self-reliance and the number of years spent on the street. The same study showed a significant relationship between experiences of perceived stigma and suicidal ideation, low self-esteem, loneliness and feelings of being trapped (Kidd, 2007). According to Kidd (2007), self-blame (a component of internalised stigma) had a strong relationship with mental health status. It has been argued that internalised stigma by the homeless youth, which occurs as a result of how they are perceived by the community, plays a role in how discrimination by members of society affects their mental health (Lee, Kochman & Sikkema, 2002).

Although social stigma faced by homeless youth have been documented in developed countries (Kidd, 2003, 2004, 2007), this has not been explored within an African context. It is unclear to what extent stigma (either perceived stigma or self-stigma) influences the health and well-being of homeless youth.
2.5 RESILIENCE AND HOMELESS YOUTH

Resilience, as a psychological construct, has undergone several changes over the past three decades. Following the initial attempt of explaining the construct as positive adjustment by individuals exposed to significant high risk or behavioural outcomes (Garmezy, 1987), attention has been shifted toward what constitutes resilience and whether it is influenced by the environment in which the person lives or a combination of both individual attributes and socio-cultural factors. Psychological research has indicated that resilience should not be considered as an inherent trait that is stable across time and situations (Cicchetti, 2010; Rutter, 2007), nor does it represent an attribute possessed by an individual (Luthar et al., 2000; Masten, 2001). Current understanding is that resilience is derived from an interaction between the individual and their environment/ecologies that support positive adjustment to adversity (Ungar 2008, 2011, 2013; Wright, Masten, & Narayan, 2013).

Homeless youth as a population, are exposed to various adverse conditions on the street, and understandings of how they strive in such conditions would enable us to better understand which factors foster resilience among this group. Few studies have been conducted to examine the role of resilience as a protective factor for both health and emotional problems, as the ability of youth to navigate these odds are necessary for their physical and psychological well-being. In the section below, the following issues will be discussed: 1) factors that foster resilience among homeless youth, 2) measuring resilience among people in adverse situations and 3) the role of resilience as a protective factor against behavioural and mental health problems.

2.5.1 Factors that foster resilience among homeless youth

In identifying resilience fostering factors, it is recognized that “in the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-
being, and their capacity individually and collectively to negotiate for these resources to be provided and experienced in culturally meaningful ways” (Ungar, 2008; p. 225). In line with the above definition of resilience, the factors that are identified in the literature were categorised in terms of personal resources, interpersonal and environment and or socio-cultural factors.

*Personal resources* that enable resilience are personal strengths and assets that enable street youth to cope in times of adversity. Such resources identified in the literature include a sense of agency, sense of humour, assertiveness, sense of independence, goals and aspirations, optimism about the future, and unconventional methods such as wearing of dirty clothes to elicit pity when seeking help from the public (Malindi & Theron, 2010; Theron, & Malindi, 2010; Kidd, 2003; Malindi, 2014a, 2014b). Teasing of friends, although unconventional, is used by street youth to create humour, and as a resource for survival. Three South African studies (Malindi & Theron, 2010; Malindi, 2014b; Theron, & Malindi, 2010) showed that street youth generated humour in the context of the street, which promotes survival in adverse conditions. These studies also reported that teasing of one another enables street youth not only to shift their focus from the stressor of street life, but also to temporarily forget about their problems. In such situations, humour may thus appear to be used as an adaptable coping mechanism (Carr, 2004). In a recent study, listening to music and dancing, have also been found to promote resilience (Malindi, 2014a). In Malindi’s South African study (2014a), street youth indicated that the therapeutic use of music and dance may enable street youth to be resilient. This suggests that street youth do not only rely on unconventional means in coping but also have the capacity to use other conventional approaches to cope with the adverse conditions associated with homelessness.

Studies have shown that homeless youth, despite the adverse conditions that they live in, have future aspirations (Reaffaelli & Koller, 2005; Theron & Theron, 2014; Malindi,
In a study among Tanzanian street youth, Nalkur (2009) found that although the homeless youth talked about their future in vague terms, they nevertheless have hopes about a better life in the future. However, the predominant focus was on the immediate needs such as physical safety, a sense of belonging and caring relationships. Thus it could be inferred that Tanzanian street youth prioritise goals that promote coping and survival, and as such their future expectations were focused on money, belonging and being accepted as well as improving their education. On the other hand, Raffaelli and Koller (2005) found that Brazilian street youth were more concerned with achieving personal success and future aspirations.

Social relationships and interpersonal resources contribute to resiliency among street youth in coping with adversity. In the absence of their immediate family, dependence on friendship, which is created as a model of intimacy and connectedness within the street environment, becomes an important factor for survival (Mizen & Ofosu-Kusi, 2010; Nalkur, 2009). In the study of over 70 street working children in Ghana, Minez and Ofusi-Kusi (2010) indicated that friendships formed on the street are based on actions pertaining to food, shelter to sleep, and help during illness. The same study indicated that these friendships are reciprocal and are based on the building of a sympathetic understanding of problems encountered by a street friend, and being prepared to help in a meaningful way (Minez & Ofusi-Kusi, 2010). Friendships therefore seems critical for survival as it may help a fellow street friend with basic survival such as preventing them from sleeping on an empty stomach, getting a safe place to sleep at night and buying medicine for a sick friend. Some researchers have suggested that this reciprocal friendship only existed when a street youth belongs to a group (usually 3 to 4 people) who share some unique attributes and behaviours (Oduro, 2012; Orme & Seipel, 2007). This suggests that reciprocal help is strongly influenced by the social network to which one belongs. This is supported by studies conducted in South Africa where
belonging to a cohesive group was shown to enhance survival for street children (Awad, 2002; Dass-Brailford, 2005). In addition, other studies showed that the ability to access support from friends helps in regulating behaviour on the street. According to Orme and Seipel (2007), supportive friendships are valuable to youth to stay away from criminal activities as a result of high social, emotional and financial support that they receive from their fellow street children. On the other hand, it can also be argued that adherence to delinquent group values and behaviours might contribute to confrontations with law enforcement officials.

Other interpersonal factors necessary to foster resilience among street youth include having positive mentors and role models. Studies have demonstrated that these role models are mostly people who have striven for success despite adverse situations in which they live, or previously successful street youth (Malindi, 2014b; Malindi & Theron, 2010). Knowledge of such local or national models serves as ideals to strive for and also in creating a sense of future and hope for these homeless individuals.

*Socio-cultural/environmental-based factors* that have been shown to promote resilience may include availability of community based services, strong faith in God (or a higher being) and strong cultural values and norms (Vogel, 2001; Malindi 2014a; Ungar, 2011). According to Ungar (2011), availability of social services that are usually provided by community-based organisations is necessary in enabling street youth to resile. Services that include support from peers, provision of financial help and advice, and the psychosocial services and opportunities offered to homeless youth to develop positive identities, values and social acceptance (Malindi & Theron, 2010). These services promote resilience as the support structures imbedded in the work of community based organisations, enable these homeless youths access to therapy and counselling advice, personal and technical skills development as well as develop as sense of competence.
In a recent study, Malindi (2014a) suggested that reading of the Bible by street youth, enables them to cope with the stressors of the street because of the positive messages of endurance and hope contained in the Bible. Inspiring religious messages gives them hope that their situation will change for the better, and make them feel protected and loved at all times (Malindi & Theron, 2010). On the street, religious beliefs are strengthened by attending church services, where they are advised and taught to do the “right thing” under all conditions. In Ghana, street children felt that believing and relying on God, and adhering to society rules, would help them overcome the odds in their environment and to eventually succeed (Orme & Seipel, 2007).

Another emerging area in resilience research is the role of culture in fostering resilience in a particular context (Rutter, 2006; Ungar, 2005). Culture according to Nitcher (2003) is an enduring set of social norms and institutions that govern the life of a particular group of people giving them a sense of community and continuity. Van der Watt and Bowman (2007) indicated that culture comprises of collective values, norms and rules and practices unique to a group of people. These rules invariably define and keep such people together (Burke, Joseph, Pasick & Barker, 2009; Kruger, Lifschitz & Baloyi, 2007). Understanding the complexities of culture and how it promotes thriving under vulnerability, is crucial as values and practices that foster resilience might vary from one culture to another (McCubbin & McCubbin, 2005; Ungar, 2007). In a study of young people from both Mexico and South Africa, collectivist cultural values of relatedness and sharing were found to foster resilience. Ungar et al. (2007) identified cultural adherence among other attributes, to be part of the resilience narratives of homeless youth. In a recent South African study among young homeless youth, they indicated that they were proud of their Zulu and Sotho cultures, and that they have learnt a lot from their cultural beliefs and practices which had enabled them to be resilient (Theron, Theron, & Malindi, 2013). The same study indicated that knowing where
one comes from and having adequate knowledge of cultural practices, for example the principles of Ubuntu (humanity towards others), helped foster resilience in street youth (Theron et al., 2013). As culture seem to significantly influence resilience among homeless youth (Ungar, 2011, 2013; Theron & Theron, 2014), it would be important to examine factors that could foster resilience within a particular socio-cultural context. Thus, where homeless youth are concerned, such influences include the individual characteristics, connections with peer groups, friends, local community, the society in general and even connections with family.

The above reviewed studies suggest that resilience is a complex process rooted in dynamic relationships between individual characteristics and supportive socio-cultural and community or environmental contexts (Ungar 2008; Masten and Wright 2010). Thus, the development of resilience and its role in fostering survival among individuals in adverse situations is best understood from a socio-ecological perspective (Ungar, 2008, 2011). In the Ghanaian context, although studies have identified reciprocal friendships and having faith as resources for resilience (Minez & Ofusi-Kusi, 2010; Oduro, 2012; Orme & Seipel, 2007), no study to the best of the researcher’s knowledge has explored more holistically, the factors that enable resiliency among street youth in Ghana.

Quantitative research pertaining to resilience among homeless youth is sparse, especially in terms of its protective role against the engagement of health risk behaviours within the African context. In developed countries such as Canada and the US, studies have shown that resilience was significantly associated with mental well-being as homeless youths who are perceived to be resilient experienced lower levels of hopelessness, loneliness, suicidal ideation (Kidd & Shahar, 2008; Rew et al., 2001; Cleverley & Kidd, 2011) and are less likely to engage in substance use (Kidd & Shahar, 2008). In their study of homeless youth in Canada, Cleverley and Kidd (2011) revealed that street youth’s perceived resilience
was associated with less suicidal ideation and other life threatening behaviours. Similarly, Mistry, McCarthy, Yancey, Lu and Patel (2009) and Kidd and Shaher (2008) suggested that perceived resilience among young adolescents may serve as a protective factor against health risk behaviours such as smoking, alcohol use and physically inactivity. There are currently no data regarding the psychological well-being and its associated factors within the African context. Most of the previous studies have been conducted in developed and economically resourced countries, particularly Canada and the United States.

2.5.2 Measuring resilience among homeless youth

Several qualitative studies have been conducted to examine resilience among homeless youth and to identify which factors helps them to survive. Analysis of homeless youth’s narratives on resilience, have identified the importance of cultural values and practices (Ungar et al. 2007; Ungar, 2008; Theron & Malindi, 2010; Theron et al., 2011), religious affiliation, assertiveness, a sense of humour and agency (Theron & Malindi, 2010; Theron et al. 2011) as protective factors among resilient homeless youth. There are however, only a few instruments that have been developed to measure resilience among young adults in adversity.

The shortage of reliable instruments to measure resilience may have resulted in the predominant focus on the psychopathological state of individuals instead of the strengths of such individuals in most quantitative investigations. Measures that were developed to measure resilience started about three decades ago. This section will focus on the review of three key measures that have been used in the general population to measure resilience, namely the Resilience Scale for Adults (Friborg, Hjemdal, Rosenvinge & Martinussen, 2003), Resilience Scale (Wagnild & Young, 1993) and the Connor-Davidson Resilience Scale (Connor & Davidson, 2003).
The Resilience Scale (RS) (Wagnild & Young, 1993) was developed to assess two main factors related to resilience, namely personal competence and acceptance of self and life. The Cronbach’s alpha was considered to be high ($\alpha = 0.910$) and have been found to be considerably reliable across different populations and cultures (Nygren et al., 2005; Tajudeen & Owiodoho, 2011). The 2-factor Resilience Scale has been shown to be positively associated with self-perceived mental health and well-being, sense of coherence and purpose of life, and life satisfaction (Heilemann et al., 2003; Nygren et al., 2005), but negatively associated with feelings of hopelessness, loneliness, depression, anxiety, and frequency of physical illness in older people (Leppert et al., 2005; Rew et al., 2001; Tajudeen & Owiodoho, 2011).

Another measure that was developed to measure resilience was the Resilience Scale for Adults (RSA) (Friborg, Hjemdal, Rosenvinge & Martinussen, 2003) which measures resilience on five dimensions: personal competence, social competence, family coherence, social support and personal structure. These five factors which were identified through exploratory factor analysis had an overall Cronbach’s alpha value of 0.93. Studies validating the RSA have established negative relationships between other constructs i.e. such individuals with higher scores were more likely to self-report lower levels of pains and stress (Friborg et al., 2006).

The above mentioned scales, seems to lack generalizability and to be limited in scope. In order to help address some of the identified shortfalls in resilience measures, a more reliable scale called Connor-Davidson Resilience Scale (CD-RISC) was developed by Connor and Davidson (2003). The Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) was developed as a brief self-rated assessment to help quantify resilience and as a clinical measure to assess treatment responses among various patients in the USA. It consists of 25 items along five dimensions of resilience. The CD-RISC has been shown to
have acceptable concurrent validity where the total score correlate significantly and positively with hardiness and social support but negatively related to perceived stress and vulnerability to stress. Connor and Davidson (2003) concluded that the CD-RISC is a multidimensional measure of resilience that varies according to an individual’s subjective circumstances, time, context, age and gender. The scale also showed that resilience can be quantified (greater or lesser) and influenced by health status, is modifiable and can be improved with treatment and support (Connor & Davidson, 2003).

Since the development of the CD-RISC, several studies have been conducted to validate the resilience measure with different samples from different contexts. The majority of the studies have been done in India (Singh & Yu, 2010), China (Yu & Zhang, 2007; Yu et al., 2011; Fu, Leoutsakos & Underwood, 2014), USA (Campbell-Sills & Stein, 2007; Lamond et al. 2009; Sexton, Byrd & von Bluge, 2010), Australia (Burns & Anstey, 2010), Turkey (Karairmak, 2010), Iran (Khoshouei, 2009), Korea (Baek et al., 2010; Jung et al., 2012) and one study in South Africa (Jorgensen & Seedat, 2008).

Three studies (Sexton et al., 2010; Jung et al., 2012; Yu et al., 2011) have confirmed the five-factor structure of the CD-RISC with different factor loadings. Sexton et al. (2010) assessed psychological resilience among 40 women with fertility problems from 9 fertility clinics in the United States. The researchers found a five-factor structure similar to that of the original study (Connor & Davidson, 2003) but with different factor loadings. Their 5-factor model explained 65.4% of the total variance with an internal reliability of .92. Their findings further revealed that resilience among the women with fertility problems were negatively correlated with stress, and general distress; but positively associated with active coping skills; giving support to both discriminant and convergent validity respectively. However, Sexton et al. (2010) noted that the use of a female sample currently experiencing adversity may partially account for the disparate findings and may indicate the alternative presentations of
resilience depending on the type of stress or stressor severity. Additionally, Yu et al. (2011) conducted a study to examine the properties of the Chinese version of the CE-RISC with 2914 adolescents. Their findings supported the 5-factor structure as reported in the original study. The Cronbach’s alpha of the overall scale was 0.89, and the internal consistencies for the five factors ranged from 0.50 to 0.83. The resilience measure showed adequate concurrent validity such that scores were positively correlated to social support, and negatively related to depression and anxiety. Using a sample of 321 (n= 194 general population; n= 122 psychiatric patients), Jung et al. (2012) confirmed a 5-factor structure in Korea but the loadings were not the same as in the original study. The five factors consisted of a sense of control and tenacity, self-efficacy, tolerance of negative affect and easy recovery, positive acceptance of change and secure relationships, leadership and trust in one’s instincts and spiritual influences. These accounted for 47.9% of the total variance, and had a high inter-item reliability coefficient of 0.92. Their resilience measure negatively correlated with perceived stress and depression, but was positively related to positive affect.

Using 323 Iranian students aged 19-34 years; Khoshouei (2009) evaluated the psychometric properties of the CD-RISC. The findings showed a four-factor structure of resilience (achievement motivation, self-confidence, tenacity and adaptability) explaining 64% of the variance. In lending support to the above, the study of Lamond et al. (2008) among women aged 60 years and above living in a community-dwelling in the USA, yielded a four-factor structure with a Cronbach’s alpha value of .92. The factors identified in their study were named as personal control and goal orientation, adaptation and tolerance for negative affect, leadership and trust in instincts, and spiritual coping. They also confirmed that the measure of resilience among the participants was positively correlated with emotional health, physical functioning, optimism and successful aging. Similarly, in their attempt to validate the psychometric properties of CD-RISC, Singh and Yu (2010) administered various
psychological measures on a group of 256 Indian students aged 17-27 years. A confirmatory factor analysis could not support the five-factor structure as in the original study. Their exploratory factor analysis (EFA) supported a four-factor model i.e. hardiness (7 items), optimism (7 items), resourcefulness (6 items) and purpose (5 items). These four factors accounted for 47% of the total variance, with a Cronbach alpha value of .89, the same value as reported by Connor and Davidson in 2003. Consistent with other studies, the resilience measure correlated negatively with neuroticism and negative affect but positively associated with extraversion, positive affect, consciousness and life satisfaction. The reliability estimates were very high for the various factors. However, the study did not measure the convergent validity of the scale.

Yu and Zhang (2007) conducted a study using a sample of 560 Chinese people, recruited from the community, workplaces and universities aged 20-60 to assess the validity and reliability of the CD-RISC. A confirmatory factor analysis could not support the five-factor structure of the original study. Their exploratory factor analysis (EFA) showed support for a three-factor model delineated as optimism (4 items), strength (8 items), and tenacity (13 items), which altogether explained 45% of the total variance. The resultant Chinese version of the CD-RISC displayed strong internal consistency (α = .91). The 3-factor resilience was positively associated with self-esteem and life satisfaction, but negatively associated with neuroticism. The researchers attributed the fact that spirituality as a factor did not come out solely because the Chinese are considered to be the least spiritual people in the world (Yu & Zhang, 2007). In addition, they attributed the differences in their findings from the original study to cultural differences between Western and Eastern conceptualizations of resilience.

Karairmak (2010) explored the validity of the CD-RSIC using both exploratory and confirmatory factor analysis with a trauma surviving sample of 246 people in Turkey. A three factor structures was obtained explaining 52% of the total variance in the scale. The three
factors in their study were named as tenacity and personal competence (15 items), tolerance of negative effect (6 items) and tendency towards spirituality (3 items) with reliability coefficients of .93, .79 and .50 respectively. The Turkish version of the CD-RISC had a Cronbach’s alpha of 0.92. Only 24 items were used in Karairmak’s (2010) study as item 2 was excluded in the analysis because it had a factor loading of less than .30. The study also yielded strong validity evidence as the 24 items CD-RISC was positively correlated with self-esteem, hope, optimism but negatively associated with negative emotions. This finding did not reveal any gender differences in the resilience score. Although the Turkish version of CD-RISC was very reliable and valid; it failed to verify the five factor structure as suggested by Connor and Davidson (2003).

In a recent study to examine resilience in children and adolescent who survived an earthquake in China, Fu, Leoutsakos and Underwood (2014) found only a two factor structure as emerged from their factor analysis. These two factors, named as positive thinking (20 items) and self-awareness (5 items) accounted for 99% of the variance. The overall Cronbach’s alpha for the measure was .86, and it correlated negatively with depression.

Previous studies suggested that the CD-RISC should be used as a uni-dimensional measure of resilience. For example, Burns and Anstey (2010) used confirmatory factor analysis in a group of 1,775 participants from Australia to verify the five-factor structure of the CD-RISC. Their finding indicated that 25 items correlated strongly with one another and invalidated the original factor structure that was posited. Additionally, the highest item loadings on the single factor differed from past findings (e.g., Campbell-Sills & Stein, 2007) on a number of items. As a result, a 22-item revised single dimensional inventory of resilience was suggested. Burns and Anstey (2010) concluded that a one-factor model was more appropriate in accounting for the variance (54%). They therefore concluded that the CD-RISC can be used as a uni-dimensional instrument to measure resilience. This scale
correlated positively with positive affect and was inversely associated with negative affect. In support of their study, Campbell-Sills and Stein (2007) validated the CD-RISC using a large sample (n= 1,743) of undergraduate students. Following exploratory factors analysis (EFA) with the first two samples, the authors noted that the five-factor structure could not be determined with the original 25 items as a result of few factor loading and multiple loadings of items on different factors. Based on these and other issues associated with the original inventory of items and factors, items with irrelevant or unpredictable factor loadings were removed. The remaining items were subjected to EFA with two groups (n group 1 = 532, n group 2 = 539). However, the high correspondence between the two revealed factors (persistence and hardiness) required CFA in a third group to determine whether the loading of the items on the two factors was the result of variance error. Compared to the two-factor model, the analyses revealed stronger support for a single factor comprised of a 10-item measure, which was further supported when combining the three groups. The reported Cronbach’s alpha (α = .85) for the adapted measure indicated adequate reliability. Additionally, individuals with higher CD-RISC scores exposed to childhood maltreatment exhibited fewer psychiatric symptoms compared to students with lower scores on the measure.

Even though the CD-RISC has had empirical support for use among individuals from different context, there is a dearth of studies investigating the suitability of the CD-RISC for homeless youth. Within sub-Saharan Africa, only a single study had validated the CD-RISC. In applying the CD-RISC to South African adolescents in schools, Jorgensen and Seedat (2008) found a three factor structure (tenacity, adaptability and spirituality) through exploratory factor analysis. Their confirmatory factor analysis did not replicate the five factor structure. To the best of the researcher’s knowledge, the CD-RISC has not yet been applied to any homeless youth population in Africa, suggesting that the resilience structures of
Ghanaian adolescents including homeless youth remain unexplored. Since culture is likely to influence how resilience is enacted or reported on, using the original scale in the Ghanaian context might be problematic, since the suitability of the scale has not to have been validated. While developing a scale in a local language would be desirable; validating an existing scale would be more economical and also enable possible comparisons with other previous studies in this regard. It was therefore important to validate the CD-RISC in the Ghanaian context, as the concept of resilience is nuanced and influence by socio-cultural and physical resources (Ungar, 2011). Examination of this measure would assist to delineate a more culturally appropriate model of resilience within Ghana in particular, and in Sub-Saharan Africa in general.

2.6 THEORETICAL FRAMEWORK

The study was located within the broad framework of the ecological theory of Bronfenbrenner (1979; 1986, 1990), as this framework explains the multiple levels of influences which interact across each of the different systems (microsystem, mesosystem, exosystem and macrosystem) that may affect the mental health of homeless youth in particular, either individually or cumulatively. In order to study and understand health and well-being among homeless youth according to this theory, we need to consider the different levels of influence not only at an individual level alone, but also at the immediate and the broader community and society levels as well as consider the interactions between these levels. Similar to these understandings is the resilience theory which examines the ability of individuals and communities to overcome, positively adapt or cope with adversity (Luthur & Cecchetti, 2000; Masten, 2001; Newman, 2002; Rutter, 1987). Resilience theory, akin to the ecological approach provides an orientation that highlights multiple influences from within the individual and external to the individual to combine in enhancing the survival and well-being of individuals in adverse life situations. Both of these models indicate that behaviour is
a multifaceted phenomenon, based on the interplay between personal, situational and socio-cultural factors. Secondly, the models suggest that an individual’s behaviour is influenced by multiple levels of influences.

In order to study and understand mental health and well-being of homeless youth, the multilevel influences at individual, immediate and the broader community/society levels were considered as well as the interactions between these levels. For this particular study, these theoretical understandings were adapted and integrated to understand the streams of influence on the health and well-being of homeless youth. These levels of influence includes intrapersonal influences at the individual level, the interpersonal influences i.e. peers, significant others and then environmental/cultural influences that may impact on mental health and well-being of homeless youth (Harvey & Delfabbrro, 2004; Rimer & Glanz, 2005; Swartz, Delarey & Duncan, 2006) (figure 3).

**Bronfenbrenner's social-ecological theory**

Bronfenbrenner’s (1979) model focuses on the nature of the interaction of people with their environment. Bronfenbrenner conceptualized development as a multifaceted phenomenon based on the interplay between personal, situational and socio-cultural factors. The model proposes influences on development as series of layers or ecological environments, which are in nested arrangement of concentric structures, social web, mutually interacting and each contained in the next. This implies that each layer has a resulting impact on the next layer. The innermost layer represents the individual, who is then surrounded by differing levels of environmental influences (Bronfenbrenner 1994). The individual is seen as living within a series of 5 interconnected systems or layers conceived as widening concentric circles labeled from the innermost to the outmost as the individual, microsystem, mesosystem, exosystem and macrosystem.
The understanding of such a nested and inter related system is that a person’s development and behaviours is influenced by the behaviours and development of those with whom he/she interacts in the social web. Additionally, his/her behaviours and development also influences the others he/she interacts with. According to Bronfenbrenner (1989), an individual’s development can therefore be considered as an interaction between factors in his/her biological make-up, family/immediate environment and the broader community, with changes in any one system influencing the others (Bronfenbrenner, 1979). In order to study any behaviour, we focus on the individual level, its immediate environment and the broader community level with consideration of the interactions between these levels.
Bronfenbrenner’s theory is viewed as providing a useful way of understanding the outcomes of the inter-connectedness of the spheres of influence on disadvantaged youth as highlighted by Harvey and Delfabrro (2004).

The *microsystem* entails relational factors that may be associated with resilience and mental health behaviours such as parenting styles, family environment and composition, conflicts and domestic violence, social isolation and interactions among family members. Thus, an individual’s roles, activities, and interactions on a face-to-face basis within specific settings form this microsystem (Berk, 2000).

The second layer is known as the *mesosystem*, comprised of the interaction between an individual’s microsystems i.e. the interaction between two or more microsystems, such as communication and the dynamics in the family either between parent figures or between parents and children. These factors may not directly influence psychological problems per se, but they frequently contribute to negative patterns of family functions that may heighten risks for distress.

The *exosystem* consists of settings beyond an individual’s immediate experiences, such as relationship with friends or colleagues. Nevertheless, this affects a person indirectly. Thus, community contexts in which social relationships are embedded such as schools, neighbourhood, church, peer-groups, and the socio-economic status of neighbourhood forms the exosystem. Finally, the *macrosystem* refers to the culture, values and beliefs of the larger society within which an individual resides. The macrosystem cannot be linked to any specific setting but could be seen to build the consistencies across the other systems. The interconnected relation between these nested layers means that any change in one layer would have ramifications in the others (Addison 1992).

As suggested by Elder et al., (2007), the ecological framework can be used to understand specific behaviours and contexts. Evidence for the wide use of the ecological
framework is enormous. For instance, Turbin et al. (2006) examined the degree of the influence of individual and social factors on health behaviour among young adults in China and the United States. Results indicated that risk and protective factors in the social context accounted for more unique variance than individual protective and risk factors (Turbin et al. 2006). In another study, Doku (2012) utilized a multi-systemic theoretical framework to examine the mental health of orphans and vulnerable children in Ghana, indicating that contextual factors (paid labour, physical abuse, psychological abuse and neglect) create negative, heightened (cumulative) risk for the higher psychological difficulties in children affected by HIV/AIDS. Similarly, Killian (2004) adapted the socio-ecological framework to examine resilience and risk of orphaned and vulnerable children with special attention to their contexts in the development of a psychosocial intervention programme in South Africa. The application of the socio-ecological framework to this study would be discussed in the sections to follow.

**Resilience Theory**

Resilience is generally concerned with the ability of an individual to overcome, positively adapt or cope with adversity. Resilience theory stems from the perspective that numerous factors both within and outside of the individual or child combine to determine the general course of development as well as specific behavioural patterns (Newman, 2002). Resilience has been used to understand the impact of adversity on children, adolescents, families, communities and organizations. Over the past two and half decades, several explanations have been postulated to explain the complex nature of resilience but only three different types of models have been described.

The first explanation is that resilience is the direct opposite of risk (Rutter, 1987). Early researchers thus maintained that risk and resilience represent opposite ends of a single continuum. For example, having poor attachment patterns with parents is a risk factor while
the opposite contributes to resilience (Baylis, 2002; Luthur & Cecchetti, 2000). The second explanation maintains that resilience is an ever-present human ability that enables an individual group or community to overcome adversity (Grotberg, 1995). It is therefore not surprising that resilience has been described as ordinary magic (Masten, 2001). The third and final explanation indicates that certain individuals have protective capacities/processes that enhance coping and adaptation in the advent of vulnerability (Luthur & Cecchetti, 2000). These protective factors include intrapersonal strengths; interpersonal resources as well as resources from family and the community. These factors have been found to have the power to mediate the adaptive responses to adverse conditions (Ungar, 2008; 2011). This means that low levels of resilience could render homeless youth physically and mentally vulnerable as risk and resilience factors have been shown to be significantly related to mental health, subjective health status and substance use (Kidd & Shaher, 2010) as discussed earlier.

The adopted frameworks (ecological theory and resilience theories) provided a broad framework for the study to enable a comprehensive understanding of resilience as well as extent of homeless youth’s health and well-being in view of informing timely and appropriate interventions. From this perspective, the state of homelessness is likely to bring changes within the ecological environment which are likely to affect their physical and psycho-social well-being. This notion is supportive of Bandura’s (1986) view of reciprocal determinism between the individual and the environment. Again their personal state of homelessness is likely to affect their future values, beliefs, attitudes and behaviours. Understandings of the interactions between these ecological systems are necessary in understanding the well-being and mental health as well as for the development of appropriate guidelines to ensure access to health services and to guide health promotion and in particular mental health promotion interventions among homeless youth. These interventions should not focus specifically on the vulnerable youth per se, but also focus on the immediate influences as well as the context that
directly or indirectly influence the person. However, homeless youth’s experiences of the interplay of these different levels of influences at the intrapersonal level are likely to determine their behaviours and resilience in contexts of adversity. In this study the focus was on the individual’s perception of both interpersonal and context factors that influence their behaviour. While we cannot ignore the contextual factors, homeless youth’s sense of self and perceived supportive socio-cultural and contextual factors comprises their reality.
CHAPTER 3

METHODOLOGY

3.1 Introduction

This section of the thesis addresses the methodology used for the study. Description of the research setting and justification for the selection of the research design is provided. The sample and sampling strategy, the measures for data collection as well as the data analysis are presented separately for both the qualitative and quantitative phases of the study.

3.2 The research setting - Ghana

Ghana, a republic state in West Africa with a population of about 24 million people (Ghana Statistical Service, 2012) is distinguished by several local languages and religions. The study was carried out in southern Ghana, specifically the Greater Accra region, the smallest of the 10 administrative regions in Ghana. It occupies an area size of 3.4 square kilometers and a population of 3.9 million people (approximately 16%) of the general Ghanaian population. As the capital city of Ghana, governmental ministries, departments and agencies, corporate headquarters of international and financial institutions as well as NGOs are located in Accra.

The cosmopolitan nature of Accra makes it possible to find people from different socio-cultural and economic backgrounds including homeless youth. Previous studies on street children/youth in Accra identified various localities such as markets, bus stations and train stations where they live (Hatløy & Huser, 2005). This study therefore focused on homeless youth in the Central Business District of Accra. This area was selected purposively because within Ghana, it has the second largest number of street children as reported by the Catholic Action for Street Children [CAS], (2003). The Ministry of Women and Children Affairs (MOWAC, 2012) now Ministry of Gender, Children and Social Protection, indicated that there are about 50,000 children living and working on the streets with about 50% of
them in the Greater Accra Region. Additionally, cost, convenience and proximity are other factors that informed the selection of the study area.

Figure 2: Map of Ghana showing the location of study area- Accra, Greater Accra Region
3.3 Research design

Every research investigation is unique and it is the aims and focus of a study that determines the methodological research approach to be used. The method adopted influences the kind of data to be obtained, the analyses that will be conducted and the likely interpretation that would follow. The research approach adopted for this study was an exploratory mixed methods research design, involving a combination of qualitative and quantitative research techniques as mentioned above.

The mixed method is a procedure for collecting, analyzing and using quantitative and qualitative data within a study to understand a research problem (Creswell, 2005). An advantage of using a mixed method design in a study is that narratives can be used to situate the contexts and gain a good understanding of youth’s views, supplementing and making meaningful quantitative data (Creswell & Plano-Clark, 2011). Consequently, the mixed method design is considered as a continuum approach that enables the research process to be both objective and subjective (Tashakkori & Teddlie, 1998). According to Creswell (2005) neither quantitative nor qualitative data is sufficient on their own to capture trends and details of a situation (as research methodologies). This approach is appropriate when a researcher wants to triangulate the methods by directly comparing and contrasting qualitative data with quantitative results for corroboration and validation processes (Creswell & Plano Clark, 2011). Additionally, Tashakkori and Teddlie (1998) have demonstrated that combining qualitative and quantitative approaches in a single study can produce a more powerful design than when used separately. Although there are different types of mixed-method approaches, this study used an exploratory mixed method design as mentioned above.
Exploratory mixed method

The exploratory mixed method design was carried out in two sequential phases. The main purpose of this design was to use qualitative findings to develop a deep understanding of the health and well-being of homeless youth, inform the modification of the quantitative research instrument as well as help to give depth to the quantitative findings. The exploratory design, according to Ivankova, Creswell and Plano Clark (2007) is used when a researcher wants to explore a research problem using qualitative data before attempting to measure or test it quantitatively. According to York (1998), exploratory research is necessary when research is sparse on a given topic or when a new perspective on the current topic is taken. The lack of research on the mental health status of homeless youth and the role of protective factors such as resilience, particularly in the Ghanaian context, called for in-depth interviews to be conducted first. This generated rich data that gave rigor and broadened the complexity of protective factors i.e. resilience in the mental health of the homeless youth in an African context. The qualitative aspect of the study as Wilson (1994, p. 38) concluded “put meat on the bones of quantitative findings” and inform and expand the interpretation of the findings of the quantitative data (Creswell, 2009).

The study was thus conducted in two phases; the first phase comprised of the collection of qualitative data and analysis followed by phase two, the quantitative study, which was informed by the findings of the previous study. The first phase which was qualitative in nature was used to explore the lived experiences of homeless youth. It also explored the various factors that were likely to foster resilience among this vulnerable group. The quantitative phase was used to examine factors that are perceived to increase emotional and behavioural problems, and to determine the best predictors of the mental health status of homeless youth. The exploratory mixed method design used in the study is illustrated in the figure 1 below.
The specific steps used in the collection of the data based on the above mentioned design are outlined as follows:

**Step 1:** Conducted a qualitative study with 16 homeless adolescents within the ages of 11-17 within the Central Business District of Accra to explore their lived experiences on the street.

**Step 2:** Analysed the qualitative data of 16 interviews using Interpretative Phenomenological Analysis (IPA) to identify additional and new constructs relevant for the quantitative phase.

**Step 3:** A pilot study was conducted with 26 homeless adolescents to test the adequacy of the questionnaires which were selected based on the outcome of the qualitative study, and informed instrument refinement. The pilot study showed that the participants had a low level of education and hence the use of an interviewer-administered questionnaire for the main quantitative study was suggested.

**Step 4:** Conducted a cross-sectional quantitative study among 227 homeless adolescents using interviewer-administered questionnaires. The data collection period lasted for a period of 8 weeks. The questionnaire used was made up of six sections, with each section containing specific questions related to a particular variable linked to the key research questions in the study.

**Step 5:** Data were entered into Excel and imported into SPSS version 21 for analysis. Descriptive statistics, bivariate and multivariate analysis were used explore the research questions.

**Step 6:** Discussed both qualitative and quantitative findings and noted points of convergence and divergence.
Figure 3: Exploratory mixed-method design adopted from Creswell & Plano Clark (2011, p. 88)
Phase 1: Qualitative Study

3.4 Introduction

The qualitative research was done to explore the lived experiences of homeless youth and identify factors related to resilience and other health risk behaviours in order to gain a better understanding of the challenges and strengths of homeless adolescents. Furthermore, these understandings informed the selection and or adaptation of research instruments used in the quantitative phase.

3.4.1 Research design

The study adopted a qualitative research design which allows for a ‘thick description’ of participants perceptions, and their experiences as well as capturing the subjective feelings of the participants (Neuman, 2011; Ulin, Robinson, Tolley & McNeill, 2002). This approach to research enables researchers to capture how those being interviewed view their world, to learn their terminologies and judgments, and to capture the complexities of their perceptions and experiences (Patton, 2002; Ungar, 2004). The interpretative phenomenological analysis (IPA) approach to qualitative research was used (Smith, Flowers & Larkin, 2009). An interpretive approach is based on the notion that people create meanings in their worlds, and these meanings are constructed and built from the interaction with others in the community. This approach to qualitative research is directed at exploring the meanings of actions and experiences of those who engage in them (Neuman, 2011). Detail of the participants’ lived experiences and the meanings that they derive from these experiences are at the heart of IPA (Smith et al. 2009). This approach to qualitative inquiry was viewed as relevant for the first phase of the study as the objectives of the research was to gain a deep understanding of the experiences of homeless youth and the factors that promote resilience that enable them to cope and survive. IPA has been found to be an appropriate approach to qualitative research when attempting to understand how individuals perceive and experience particular situations
they are facing; how they make sense of their personal and social world in which they live (Silverman, 2011).

3.4.2 Sample and sampling procedure

A total of 16 homeless youth within the ages of 11-17 were selected and included in the study. Non-probability sampling namely convenience and purposive techniques (exclusion and inclusion criteria) were used to select the research participants. Snowball sampling strategy was used to supplement convenience sampling due to the transient nature of these homeless adolescents.

The convenience sampling strategy was used as it allowed the researcher to select participants who met the inclusion criteria as and when they are met on the field and interviewed by the researcher where found. The participants were selected from the Central Business District of Accra, Ghana, and included in the study if they met the following inclusion criteria: self-identified as homeless, lived on the street for a month or more, agreed to participate in the study and willing to answer questions related to their experiences. Another exclusion criterion was that street youth who had come to the street for economic activity and return back to their parents, were not selected. In addition, snowball sampling was used using the same inclusion and exclusion criteria as outlined above to supplement the initial convenience sampling method. Snowball sampling as a technique is used for locating participants by asking one key informant to identify individuals who have experienced a similar phenomenon (Ulin et al., 2002) and illustrates some features or processes in which the researcher is interested in (McBurney & White, 2004; Neuman, 2011). The researcher identified some of the participants who were willing to participate in the study and was then referred to other friends with similar experiences.
3.4.3 Interview schedule

A semi-structured interview schedule was used to collect the data during individual in-depth interviews with the youth. The use of semi-structured interviews conformed to the objectives of the IPA which among other things is to acquire in-depth information about an individual’s experiences in relation to a particular situation, issue or event. As suggested by Silverman (2011), the flexible nature of semi-structured interviews enables an interaction between the research participant and the researcher. This dialogue allows the researcher to modify and ask further probing questions during the course of the interview. As emphasised by Ulin et al. (2002), the use of semi-structured interviews encourage participants to be actively involved in the determination of the flow of the interview process, thereby generating more scientific data.

The interview schedule only served as a guide and probing questions were used to explore the youths’ own views and experiences during the interview process. The interview schedule used for the in-depth interview was developed based on the literature review, the theoretical frameworks and the researcher’s understandings of the concept of health and well-being gained from critical engagement with the literature in this regard. The interview schedule consisted of questions which focused on homeless adolescents’ experiences of how they live, cope and survive on the street, the circumstances which led to them living on the street and reasons for remaining there. Lastly they were also asked about how living on the streets had influenced their lifestyles and behaviours. The interview schedule used for the study can be found in Appendix 3.
3.4.4 Data collection and procedures

The researcher wrote a letter to the Department of Social Welfare under the newly created Ministry of Gender, Children and Social Protection of the Government of Ghana. The researcher was invited for a meeting to clarify and elaborate on the objectives of the study. A few weeks after the meeting, the researcher was granted permission to conduct the study with the homeless adolescents in Accra and to adhere to all the protocols as stated.

After ethical clearance had been granted and permission given by the Ethics Committee of the University of KwaZulu-Natal, two social workers who had extensive working experience with homeless young adults through involvement with two Non-Governmental Organizations (Catholic Action for Street children (CAS), and Chance for Children), were recruited to help with the identification of the participants and data collection. These research assistants had an average of 8 years working experience with street children in various social and psychological domains related to their health and general well-being. Their involvement was justified in that they were seen as to bridge the gap between the researcher and the street children, so that the youth would feel comfortable in answering the interview questions. The research assistants served as mediators for the researcher to help identify street children at specific locations that met the inclusion criteria identified in the sampling section above and to assure them of the legitimacy of the study as most street youth feel reluctant to open up to people they do not know or trust (Oduro, 2012). The research assistants were however not present at the time of interviewing the participants.

The participants were approached with the help of the research assistants on the street to ask for their participation. The aims and objectives of the study were explained to the participants in the language that they understood, they were informed of the voluntary participation of the study, the rights to withdraw from the study at any time as well as issues of anonymity and confidentiality. Some of the participant listened and asked questions about
the purpose of the study, and this was clearly explained to them. Permission to audio-tape the interview was asked and granted. Thereafter, an informed consent form was read to participants by the researcher to provide verbal informed consent for their participation in the interview. Due to the low educational background and their inability to read, it was appropriate to seek informed consent orally from the research participants. Young homeless adolescents felt uncomfortable and apprehensive when they are asked to sign any document. The informed consent form (Appendix 1) which was translated to each participant had information about the aims and objectives, as well as ethical principles as mentioned above.

After the informed consent was given and permission to record the interview was granted, the interview was conducted at the point of contact because homeless youth often move from one location to the other. The majority of the participants did not want to move far away from the area where they were found, requiring the researcher to find a suitable and somewhat quiet place to conduct the interview. The entire interview was tape-recorded and each interview session lasted for about 45 - 60 minutes. The interviews were conducted by the researcher who is fluent in the two commonly languages (Ga and Twi) spoken by the street youth. Data collection lasted for a period of eight (8) weeks. The participants were provided with some refreshment at the beginning of the interview as a token of appreciation for their willingness to participate in the study.

### 3.4.5 Data Analysis - Interpretative Phenomenological Analysis

Audio tapes were transcribed verbatim, and every effort was made to minimise the effects of distortions and bias. The researcher translated and transcribed the data. Since most of the interviews were conducted in the local language, the researchers first translated the audio-tape interview into the English language. With the aid of qualitative data analysis software, NVivo 10.1, the researcher made meaning from the data by coding and writing down significant points of convergence and divergence as outlined by the Interpretative
Phenomenological Analysis (IPA) methodology. It has been argued by Smith et al. (2009) that although the main outcome of IPA is about the lived experiences of the research participant and the meaning made from these lived experiences, “the end result of the analysis is the end product of how the researcher thinks the research participant is thinking” (p. 80).

The principles and guidelines for the IPA as outlined by Storey (2007) were followed in the analysis of the data. These steps are summarised as follows:

1. Gaining an understanding of the transcribed interview by reading and re-reading of the data and identifying points of interest
2. Linking identified and harmonized quotes together to form themes
3. Making connections with identified themes
4. Summarizing main themes together with their sub-themes with their appropriate quotations

In the first phase of the analysis, the researcher read and gained an in-depth understanding of each transcribed interview. This stage allowed the researcher to actively engage with the data and to begin the process of entering into the participants’ worlds. In the second step, the researcher identified and made notes on important statements and phrases that were re-occurring from the transcripts. Additionally, non-verbal utterance such as long pauses and laughter were also included to give a general meaning to the content of a participants experience (Smith et al., 2009). The iterative nature of this allowed the researcher to immerse himself into the important quotes and phrases from the interview and thereby fostering a relationship between the researcher and the transcribed text (Smith & Osborn, 2003). Since themes are important patterns in the data that are related to the research objectives and help to answer appropriate research questions, the third step in the analysis was to develop a thematic framework for coding the data. In doing this, the researcher grouped important phrases that
speak to a particular theme under that theme. This was done to ensure that critical issues in the transcribed data were identified. The emergent themes captured and reflected an understanding of issues in the transcribed text with specific quotes and phrases to support them. In the final step, the identified themes which had similar characteristics were grouped together to form super-ordinate themes.

3.4.6 Trustworthiness and credibility in qualitative research

Validity of interpretation is a major concern in qualitative studies (Nieuwenhuis, 2007). Several ways of ensuring the trustworthiness of the outcome of this study was applied. Communicative validation was used where the researcher ensured throughout the interview that what he had summarized reflected what was recorded on the audio tape. The researcher used independent coders (two research assistants), who were given 2 copies of the recoding and the various constructs used in the study. The independent codes identified by the research assistants were compared to the themes identified by the researcher, and final decision was made as to which themes to be used in the study. Coding of the themes was also discussed with the supervisors of the study. This was done to enhance the outcome of the qualitative finding as divergent views increases confidence and reduces bias in interpretation of qualitative data (Creswell, 2009; Nieuwenhuis, 2007).

To enhance validity of the data, and to ensure that the researcher understood the participants; some of the statements made by the research participants were repeated or paraphrased during the interview process. This procedure ensured that interpretations of participants’ answers by the researcher were confirmed by the immediate paraphrasing of the intended meaning of information communicated during the interview.
Phase 2: Quantitative Study

3.5.1 Research design

In order to achieve the objectives of the second phase of the study, a quantitative research approach was used. A cross-sectional quantitative survey was used, whereby a sample was drawn from a population at any one point in time (Shaughnessy & Zechmeister, 2012). A cross-sectional design typically comprised of different individuals who are examined in terms of one or more variables at approximately the same time (Huysamen, 1994). Since the research aimed to explore the psychological well-being and to examine relationships between demographic characteristics from the sample, a cross-sectional design was appropriate and supported by the views of Shaughnessy and Zechmeister (2012) as this design is suitable for studies that are ideally descriptive and predictive in nature.

3.5.2 Sampling strategy and research participants

According to Neuman (2006) a non-probability sampling strategy is used when the researcher has limited knowledge of the population in which the sample is chosen. Since the research participants were hard to reach and transient (moving from one place to the other), it was not possible to use a probability sampling technique. In this study a convenience non-probability sampling technique was used to recruit homeless youth within the Central Business District of Accra, Ghana. This research sampling was used because it was convenient and cost effective as it offered the researcher the opportunity to collect the data within the limited time frame available to the researcher. This sampling method is also more economical than probability sampling (Huysamen, 1994). The researcher and the research assistants moved to places where the homeless youth meet on a regular basis and interact with others, all within the Central Business District of Accra.

Out of 265 participants approached, 227 agreed to participate in the study. This represents a response rate of approximately 86%. In effect, approximately 38(14%) did not
take part in the study. The 227 homeless adolescents had ages ranging from 11–19 years. The
majority of the participants had migrated from 6 regions and came to Accra (the capital city
of Ghana) either alone or with the help of a family member. Street children who were housed
in one of the community based NGOs and drop-in centers were excluded from the study.
Males comprised approximately 53.7% of the sample size with the remaining 46.3% being
females.

3.5.3 Research instruments
Data collection was in the form of an interviewer-administered questionnaire due to the
varied literacy levels of homeless youth which would hamper the completion of the
questionnaires should they have been responsible to complete it themselves. The
questionnaire consisted of a section to gain socio-demographic information, general
information about health and well-being and four psychological scales (measuring variables
in the study). The scales used in the study include the Strengths and Difficulties
Questionnaire (SDQ), the Multidimensional Scale Perceived Social Support (MSPSS),
Connor-Davidson Resilience Scale (CD-RISC), Social Stigma Scale and the self-developed
questionnaire to assess behaviours related to mental health. Refer to Appendix 4 for the
complete research questionnaire used in the study.

Bio-demographic Data: Bio-demographic data were collected and used to gain some
understanding of the characteristics of the sample and to aid statistical investigation. These
included questions related to gender, age, number of years living on the street, reason(s) for
homelessness, available support structures, access to shelters, health care and other support
services.
The Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997) assesses young adults psychological outcomes along five subscales: emotional symptoms, conduct problems, hyperactivity, peer relationship problems and prosocial behaviours in the form of a 25-item self-report instrument with each sub-scale having five (5) items. The SDQ is rated on a 3-point Likert scale (Not True, Somewhat True, and Certainly True) with the score range of 0-40. The sum of the first four subscales gives the total psychological difficulties per child. The five sub-scales of the SDQ can be distinguished, namely emotional symptoms (5-items; for example “I am often unhappy, down-hearted or tearful”), conduct problems (5-items; for example “I get very angry and often lose my temper”), hyperactivity (5-items; for example “I am restless, I cannot stay still for long”), peer relationship problems (5-items; for example “I am usually on my own. I generally play alone or keep to myself”) and prosocial behaviours (5-items; for example “I often volunteer to help others”). The total difficulty can be classified as mild/low (0–13), moderate/borderline (14–16), significant/abnormal (17–40) for total scale. The SQD which has been used to study individual at risk particularly HIV orphans in Ghana (Doku, 2010; 2012), South Africa (Cluver, Gardner & Operario, 2009; Mueller, Alie, Jonas, Brown & Sherr, 2011) and Uganda (Okello, Onen, & Misisi, 2007) showed good psychometric properties. The overall Cronbach’s alpha coefficient for this study was 0.72.

Multidimensional Scale Perceived Social Support (MSPSS) (Zimet, Dahlem, Zimet & Farley (1988) measures perceived social support along three dimensions: from the family, friends and significant others in the form of a 12-item, self-administered questionnaire. The scale is rated on a 5-point Likert type ranging from 5 (strongly agree) to 1 (strongly disagree). The MSPSS internal reliability Cronbach’s coefficients are 0.91, 0.87 and 0.85 for support from significant others, family and friends respectively. The MSPSS have been found reliable in various different samples internationally including orphan and vulnerable children in Ghana (Doku, 2012; α = 0.91), paramedic trainees in South Africa (Fjeldheim et al., 2014; α = 0.93),
Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) was developed as a brief self-rated assessment to help quantify resilience and as a clinical measure to assess treatment response among various patients in the USA. It consisted of 25 items along five dimensions of resilience. The first dimension is personal competence, high standards and tenacity which endorses one’s sense of power and adherence to one’s goal when facing setback situations (8 items; for example “I like challenges”). The second dimension is trust in one’s instincts, tolerance of negative affect, and strengthening effect of stress, which measures one’s calmness, decision and promptness when dealing with stress (7 items; for example “coping with stress strengthens me”). The third dimension is positive acceptance of change and secure relationships with others, which accesses one’s adaptability (5 items; for example “I am able to adapt to changes”). The fourth dimension is sense of control, which implied one’s control of achieving one’s own goal and getting assistance from other (3 items; for example “I am in control of my life”). The last dimension is spiritual influence, which assesses an individual’s faith in God (2 items; for example “Sometimes fate or God can help”). The scale is rated based on how the subject has felt over the past month. The CD-RISC is scored on a 5-point Likert scale ranging from 0 (“not true at all”) to 4 (“true nearly all the time”). The total score ranges from 0–100, with higher scores reflecting greater resilience. The CD-RISC scale has demonstrated internal consistency with Cronbach alpha reliability coefficients ranging between 0.86 and 0.92 (Baek et al., 2010; Fu et al., 2014; Jung et al. 2012; Karairmak, 2010; Yu et al., 2011). The overall Cronbach’s alpha coefficient for the CD-RISC is 0.89. The calculated Cronbach alpha in this study was 0.91.
The factor structure and psychometric properties of the instrument for this sample was explored in depth as presented in Chapter 7. In light of the fact that there was a strong correlation between the original and the 18-item scale, the original scale was used for the purpose of this study. Further validation studies of the instrument are suggested.

The Social stigma scale

The 12 item questionnaire was developed by Kidd (2007) using 7 items from an HIV stigma scale with additionally statements to measure stigma experienced by homeless street youth. The stigma scale includes items assessing the experience of being stigmatized, self-blame, and attitudes of the public. The scale has two main dimensions: self-blame (2 items; for example “hurt by how people react to me being homeless”) and general stigma (10 items; for example “Some people act as though it is my fault that I am homeless”) and scored on a 4-point Likert type ranging from strongly agree = 4, agree = 3, disagree = 2 and strongly disagree =1. The social stigma scale has an overall internal reliability of 0.87, with the subscales of self-blame and general stigma having Cronbach’s reliability coefficients of 0.78 and 0.89 respectively (Kidd, 2007). The overall Cronbach’s alpha coefficient for the study was 0.90.

Behaviours Related to Health Risk Behaviours

A set of questions were constructed by the researcher based on the outcome of the qualitative study to assess the prevalence of risk behaviours. The questionnaire included questions on suicidal behaviours, substance use (tobacco use, alcohol use and illegal drugs), and risky sexual behaviours. The following measures were used to examine the above mentioned behaviours:
Substance abuse

Five (5) questions were asked to assess substance use or abuse. These questions were posed to participants to elicit information about their engagement in substance use or abuse. The total score was computed by summing up the different items. Responses were coded such that a higher score would indicate greater engagement in substance abuse. This scale has been administered to South African high school students with reported alpha coefficient of 0.82 (Govender et al., 2013). The Cronbach’s alpha for this scale in this study is 0.81.

Sexual risk behaviours

Participant’s sexual activity was assessed based on 4 questions inquiring into sexual behaviour. These questions were primarily focused on condom use and sexual practices. Examples of such questions include “Have you ever had sex with someone before”, and “Did you use a condom in your last sexual intercourse”. These questions were used individually in the analysis and not as an overall measure of sexual risk behaviour.

Suicidal ideation

Four questions adapted from the South African Youth Risk Behaviour Survey (Reddy et al., 2008) were used to assess the frequency of suicide-related thought over the past one month. A high score on this scale indicates higher levels of suicidal ideation. Examples of such questions include “Have you ever attempted suicide” and “Have you made a plan to commit suicide”. This scale has been administered to South African high school students with a reported alpha coefficient of 0.89 (Govender et al., 2013). The reliability Cronbach’s alpha of 0.745 was found in this study.

Violence and violent related behaviours

A violence index (VIOX) was constructed to assess the extent of behaviours related to trauma and injury among homeless youth. This scale consisted of 11 questions (scored as
either Yes or No options) which assessed various violent and violence-related behaviours among street children. These questions were framed to measure specific behaviours related to violence, violence related and aggressive behaviours such as fighting and coerced sex. A total score was created by summing up all the 11 items to form the VIOX. The responses on the scale were coded in such a way that a higher score represented higher levels of engagement in violence and violence related behaviours. This scale has been administered to South African high school students with a reported alpha coefficient of 0.76 (Govender et al., 2013). The violence measure yielded an acceptable Cronbach’s alpha reliability coefficient of 0.72 in this study.

3.5.4 Pilot study

According to Polit, Beck and Hungler (2001) a pilot study is done in preparation for a major study, which could help a researcher to determine whether the proposed research instruments are appropriate or too complicated (van Teijlingen, Rennie, Hundley & Graham, 2001). A pilot study was conducted before the commencement of the main study, to examine the appropriateness of the questionnaire, and to preliminary test some of the stated research questions. In this study, a pilot study was conducted with a conveniently selected sample of 26 youths to test the appropriateness of the questions, comprehension, and data collection procedures. Despite the fact that the sample was small, exploration of the psychometric properties of the measures were nevertheless done and supported some of the findings of the qualitative study, i.e. the social stigma scale, and the Connor-Davidson Resilience Scale (CD-RISC).

Generally, the participants found the research instrument suitable and captured the relevant information related to the homeless adolescent health and well-being. Missing data were very low (between 0.02% - 0.04%) on all the psychological measures. Approximately 58% of the participants were males, and over 40% of them had spent 4 years or more on the
street. Despite the fact that the sample for the pilot study was very small, the findings suggested that it was likely that these measures would be reliable in a larger sample. The social stigma scale had an inter-item reliability coefficient of 0.834 whilst the Connor-Davidson Resilience Scale (CD-RISC) had a Cronbach’s alpha of 0.894 for the general scale.

The following modifications and decisions were made based on the findings of the pilot study:

- Word choices on the some of the psychological instruments were modified to improve understanding of the concepts. However, this was done without compromising the meaning of the items and content of the questionnaire.
- The questionnaire should be interview-administered as a result of the low educational background of the participants. Approximately 70% of the participants included in the pilot study had a primary education (Grade 1 to 6). The participants felt they would be able to express themselves more in a language they prefer than the English language. This also necessitated the researcher to reduce the Likert response on the Multidimensional Scale Perceived Social Support (MSPSS) from a 7 point scale to a 5 point scale. This afforded the participants better understanding and respond appropriately on the scale items.

The descriptive statistics and psychometric properties of the scales used in the main study are presented in Table 1 below.

### 3.5.5 Data collection and procedure

Ethical clearance for the study was granted by the Humanities and Social Science Research Ethics Committee of the University of KwaZulu-Natal and permission was obtained from the Department of Social Welfare, under the Ministry of Employment and Social Welfare, Accra, Ghana. A staff member of the Department was assigned to assist the
researcher in the collection of the data and to ensure that all the ethical protocols were followed and adhered to. Two research assistants who were fluent and knowledgeable about the language spoken by homeless youth were recruited and trained for one week. During the training period, they were taught how to interpret a question, how to approach and develop rapport with the research participants and how to administer the questionnaire to them. This study was not psychologically harmful to the research participants. However, should there have been any negative consequences of the research study, arrangements had been made by the researcher for the services of clinical and counselling psychologists, who would have been able to assist the participants should the need have arisen. None of the participants expressed the need for psychological services although they were told of the availability of a psychologist should they require such a service.

On each of the data collection days, the researcher met the research assistants at a designated place and briefed them on data collection and on the location where they would concentrate for that day. At the designated places, the street youth were approached and efforts were made to develop a rapport with them. After rapport has been established, the participants were asked whether they would take part in the study. Those who agreed were informed about the objectives of the study and gave verbal informed consent to participate in the study (See appendix 2 for informed consent form). The participants were informed that their participation was voluntary and that they could withdraw from the study without any consequences to them during the course of the study. The data was collected in the form of an interviewer administered questionnaire and most of the participants listened attentively as they were asked questions related to their well-being and health. It took an average of 30 minutes to administer a questionnaire. The majority of the participants were interviewed in Twi and Ga (two predominant local languages spoken in Accra, Ghana). Each participant
was compensated with a gift voucher worth about GHc 2.50 (US$2.00) as a reward for volunteering participation in the study.

3.6 Data management and storage

All the tapes and transcribed materials from the interview were stored on a CD and the questionnaires are kept safely in a locked compartment provided by the researcher’s supervisor in the Discipline of Psychology, School of Applied Human Sciences, Howard College Campus, University of KwaZulu-Natal, Durban, South Africa. This will be kept for a period of five (5) years after which it will be destroyed. Both electronic copies of the qualitative and qualitative data were kept safely to ensure confidentiality and avoid possible access by any third party to the data.

3.7 Data quality control and processing

The collected data were entered into Microsoft Excel format. The data was subjected to a thorough quality control process to ensure accuracy and completeness of the data. Descriptive statistics on both continuous and categorical variables were obtained using the Statistical Package for the Social Sciences version 21.0 for Windows (SPSS Inc., Chicago IL, USA). As recommended by Pallant (2013), the minimum and the maximum scores were generated for each item, to ensure that all scores on the various measures were within the expected range of the possible score on a particular variable. This strategy helped cleaning for duplicates, errors and missing values. Missing values were included in the analysis as the most efficient way to deal with missing data is to use the “exclude cases pairwise” (Pallant (2013). This ensured that individual item scores were included in all statistical analysis, except for where they have missing data that is required for a specific statistical test.

3.8 Recoding of some variables

Recoding of some variables was done to improve the response categories for analysis.
Participants’ ages were re-coded to ensure equal distribution between the ages. The ages were re-coded as 7– 10 years = 1; 11– 13 years = 2; and 14 years and older = 3. These categorizations closely correspond to late childhood, early and middle to late adolescence. These stages of development have distinctive features and abilities (UNICEF, 2011; Cauce et al., 2000). Although it may be somewhat unusual to ask children as young as 7 years to answer questions on sensitive issues such as sexual risk behaviours, the strong rapport developed between the participant and the research assistants (who were professional social workers) enabled them to freely answer the questions that were asked. Recoding of some variables was done to improve the response categories for analysis.

The number of years lived on the street were also re-coded as follows: < 1– 2 years = 1 and 3 years and longer = 2.

Due to the small numbers of responses of participants with respect to the regions they migrated from, the regions were also re-categorised into 2 regions. Southern Ghana (5 regions; i.e. Greater Accra, Eastern, Volta, Western and Central regions) were coded as 1, and Northern Ghana (5 regions: i.e. Brong-Ahafo, Ashanti, Northern, Upper-East and Upper-West regions) were coded as 2. This categorization was done as these regions are separated by distinct social and economic conditions (UNDP, 2007).

Five (5) questions related to assault (violent bahaviour) coded as Never = 1; Sometimes = 2 and Always = 3 were re-coded. The new coding was Never = 0 and Sometimes and Always =1
Table 1
Summary of Psychological Measures Used to Measure Constructs in the Quantitative Phase

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measure</th>
<th>Items</th>
<th>Scale Range</th>
<th>Mean</th>
<th>SD</th>
<th>Cronbach alpha (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological (Internalizing and</td>
<td>Strengths and Difficulties Questionnaire (SDQ)</td>
<td>25</td>
<td>7 – 31</td>
<td>20.82</td>
<td>6.13</td>
<td>0.721</td>
</tr>
<tr>
<td>Externalizing ) Problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>Connor-Davidson Resilience Scale (CD-RISC)</td>
<td>25</td>
<td>8 – 86</td>
<td>50.49</td>
<td>17.97</td>
<td>0.901</td>
</tr>
<tr>
<td>Perceived Social Support</td>
<td>Multidimensional Scale Perceived Social Support (MSPSS)</td>
<td>12</td>
<td>14 – 52</td>
<td>36.04</td>
<td>7.88</td>
<td>0.866</td>
</tr>
<tr>
<td>Suicide ideations</td>
<td>Suicide ideations index adapted from Reddy et al. (2008)</td>
<td>4</td>
<td>0 – 4</td>
<td>1.66</td>
<td>1.29</td>
<td>0.745</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>Substance abuse index adapted from Reddy et al. (2008)</td>
<td>5</td>
<td>0 – 5</td>
<td>3.63</td>
<td>1.65</td>
<td>0.812</td>
</tr>
<tr>
<td>Violence and violent related</td>
<td>A violence index developed for this study</td>
<td>11</td>
<td>5 – 11</td>
<td>13.87</td>
<td>3.03</td>
<td>0.717</td>
</tr>
<tr>
<td>behaviours</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual risk behaviours</td>
<td>A measure of risk sexual behaviours</td>
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<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Stigma</td>
<td>Social Stigma Scale (SSS)</td>
<td>12</td>
<td>17 – 48</td>
<td>40.18</td>
<td>6.88</td>
<td>0.902</td>
</tr>
</tbody>
</table>

*NA – Not Applicable
3.9 Assumptions underlying data analysis

Assumptions underlying any statistical test ensure that the selected sample of the study exhibit similar characteristics as the population from which it was drawn. In this study the assumption of normality of the scores and homogeneity of variances were tested. The Kolmogorov-Smirnov test was used to examine normality of the measures. The results indicated most of the scores were fairly normal ($p > 0.05$). The Levene’s test for homogeneity of variance did not reveal much variance in the score of the various measures. We can therefore conclude that the data was fairly normally distributed and the assumption of homogeneity of variance was not violated.

3.10 Statistical Analysis

Statistical data analyses were performed using SPSS 21 for Windows (IBM SPSS Inc., Chicago IL, USA). All the analyses were two-tailed and a $p$-value of 0.05 or less was considered statistically significant. Specific statistical analyses strategies were employed to answer each of the quantitative research questions of the study and are presented in detail in chapters’ five to nine.

3.11 Conclusions

In this chapter, the methodology used for the thesis was described and justified with specific reference to the phased mixed method approach (i.e. qualitative and quantitative phases). The research setting, design, sampling, research instruments, and data collection procedures were outlined. Reliability and validity of measures used, ethical consideration and storage of data were also presented. The results and discussions of the qualitative study are presented in the next chapter followed by the different quantitative research questions that are addressed in chapters’
five to nine. All the chapters pertaining to the research findings will consist of a short introduction and methodology section followed by a more detailed presentation of the results and discussion sections.
CHAPTER 4

HOMELESS YOUTHS’ EXPERIENCES OF LIFE ON THE STREET

4.1 Introduction

Homeless youth as a population, are exposed to various adverse conditions on the street, and exploring how they thrive in such conditions would enable us to better understand which factors foster resilience among this group. Few studies have been conducted to examine the role of resilience as a protective factor for both health and emotional problems, as their ability to navigate these odds are necessary for their physical and psychological well-being. In the Ghanaian context, although studies have identified reciprocal friendships and having faith as processes for resilience (Minez & Ofusi-Kusi, 2010; Oduro, 2012; Orme & Seipel, 2007), no study to the best of the researcher’s knowledge has explored more holistically, the factors that enable resiliency among street youth. This qualitative was therefore conducted to provide answers to the following questions: i) what are the lived experiences of street children and adolescents in Accra, Ghana, ii) how do homeless youth in Ghana understand the factors that foster resilience? and iii) How do homeless youth experience their health and well-being? To help achieve these questions, a semi-structured interview schedule was used to conduct 16 in-depth interviews. Transcripts of the recorded interviews were translated verbatim into English language. Data were analysed using the four (4) steps of IPA (Storey, 2007) as outlined earlier.

4.2 Results

4.2.1 Socio-demographic characteristics of the sample

Participants in the study were within the ages of 10-16 years, with a mean age of 14. Of the total sample (n = 16), 9 were males and 7 were females. The majority of the participants (n = 10) have had an education up to primary level (Grade 6), and 11 of them have lived on the street for a
period of 3 years and more. The majority (n = 10) considered themselves to be Christians with only one participant indicating to be a Muslim with the remaining 5 participants not indicating their religious affiliations. Furthermore, approximately two-thirds of the participants had visited either one or two of the community-based organisations that work with street children. Finally, all the participants that participated in this study during the time of the interview were living on the street. Summarized demographics of the participants are presented in Table 1.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>9</td>
<td>56.3</td>
</tr>
<tr>
<td>Female</td>
<td>7</td>
<td>43.7</td>
</tr>
<tr>
<td><strong>Ages groups (Mean age = 14)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 – 12</td>
<td>3</td>
<td>18.7</td>
</tr>
<tr>
<td>13 – 15</td>
<td>8</td>
<td>50.0</td>
</tr>
<tr>
<td>16+</td>
<td>5</td>
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<tr>
<td><strong>Religious Affiliation</strong></td>
<td></td>
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<tr>
<td>Christian</td>
<td>10</td>
<td>62.5</td>
</tr>
<tr>
<td>Muslim</td>
<td>1</td>
<td>6.3</td>
</tr>
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<td>Not indicated</td>
<td>5</td>
<td>31.2</td>
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<tr>
<td><strong>Previous level of education</strong></td>
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<td></td>
</tr>
<tr>
<td>Primary school (Grade 1 – 6)</td>
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</tr>
<tr>
<td>Junior secondary school (Grade 7– 9)</td>
<td>6</td>
<td>37.6</td>
</tr>
<tr>
<td><strong>Years living on the street</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 year</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>1-2 years</td>
<td>3</td>
<td>18.7</td>
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<td>9</td>
<td>56.3</td>
</tr>
<tr>
<td>6 years and more</td>
<td>2</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Using Interpretive Phenomenological Analysis, three major themes were identified. While presenting these findings thematically, the researcher acknowledges that these themes are interrelated. These broad areas were: reasons for living on the street, named “push” factors; resilience
factors related to survival and coping; and psychological and mental health issues. Within these broad themes, different sub-themes were identified as outlined in Figure. 3.

4.2.2 Push and Pull Factors for Homelessness

Participants in the study talked about various reasons that contributed to them living on the street. Commonly identified sub-themes include maltreatment in the home from family members and step-parents, accompanying parents to the street, and lastly the desire to be free from parent control.

4.2.2.1 Maltreatment from family relatives

In some cases, the responses of the participants painted a picture of disorganized or broken homes. Two of the participants, mentioned how a step-parent treated them differently from what they were used to, and this prompted them to leave home. Although not explicitly stated in the interview, this could be as a result of parental divorce. Some of the responses indicating maltreatment from step-parents are indicated below:

*My step-mother that I was staying with was not taking good care of me. She was maltreating me. She did not treat me well, not giving me food, and then I will go hungry for some time. I sometimes wished my mother was around.* (Participant 13)

*I was living with my sister and she was maltreating me, and never liked me. Sometimes when I am playing with her children, then she comes to beat me. She would beat me severely, so I had to run away from home.* (Participant 3)

*I was with my father in the North [Northern Ghana] when my step-mother moved in with us. She started maltreating me so I left home for Accra to sell water [sachet water] and I later met one of my friends and we came here [street].* (Participant 12)
From the above quotes, it seems that these participants made a conscious effort to escape their current predicament (maltreatment), and their only viable alternative was to run away from home and go to the street. In the case of Participant 12, meeting a friend enabled and encouraged her to leave, as she felt that she would not be lonely on the street.

The inability of family members to care for children left behind by deceased relatives was also found to contribute to participants leaving home. One participant narrated how she ran away from home and ended up on the street:

> When my mother passed away [died], my auntie [aunt] promised to take care of me. She even promised my mother that she was going to do this before she died. After my mother’s funeral I was taken to my aunt’s place and things were moving on well. Then all of a sudden, things changed. She told me there was no money to pay my school fees because she was not having enough money. After I stopped school, I would sometimes go hungry for a day without food. I get beaten with little provocation, so one day I said it was enough, so when she sent me to buy something in the nearby shop, I did not go back home again (Participant 5).

This participant realized that the promise made to her and her deceased mother by her aunt [caregiver] that her needs would be met and that she was so looking forward to became illusive. After being subjected to several abuses, she decided to escape from such an abusive environment which eventually led her to live on the street.
Figure 4: Summary of themes and subthemes of the qualitative findings

Push and Pull Factors
- Maltreatment and neglect at home
- Following parents to the city
- Desire for freedom from parental control

Impact on socio-emotional well-being
- Behavioural Responses
  - Violence and violent related behaviour
  - Sexual harassment and Rape
  - Alcohol and drug use
- Emotional Responses
  - Depressive Responses
  - Social stigma/Self-esteem

Resilience
- Personal Resources
  - Belief in God
  - Coping strategies
- Interpersonal Resources
  - Friendships
  - Inspirational role models
  - Health enhancing Activities
- Socio-cultural Resources
  - Cultural Norms
  - Community-based care and support structures
4.2.2.2 Moving with caregivers to the city

About a third (n = 6) of the participants justified their stay on the street as being a result of their wish not to violate a socio-cultural norm of obeying their parents. They felt that they were not expected to disagree with their caregivers. This may also be due to the fact that they were dependent on them. This means that there would be no one to take care of them should they indicate otherwise. The dependency factor was therefore crucial in these scenarios:

* I followed my mother here [street]. She left to town [Accra] and I decided to follow here.
* I was forced to follow her because there was no one to take care of me after she had left

(Participant 2)

Another participant’s [who has lived on the street for 2 years] response to a question of how he ended up on the street explained:

* Life at home was really good. I liked it a lot. I like going to school to with my friends, and going to the farm to fetch firewood…but my mother said things were difficult, so we had to leave home to come and live here [on the street]. I had no other option than to say yes. We had nobody at home to take care of us. I had to obey my mother and follow her to Accra and live with her (Participant 4).

Another participant said:

* I didn’t want to go to Accra [the city] with my brother, but since he [the brother] was the only one taking care of me, so I had to follow him. I did not know who would have taken care of me since our parents were no longer alive (Participant 9).

It can be deduced from Participant 4’s explanation that he was hesitant to follow his mother but was compelled by the fact that there was no other caregivers at home. The situation was also compounded by what he re-counts as “things being difficult”. The mother’s desire to escape
from the difficult life (poverty) in her village, had led to an abrupt end to her child’s education. This resulted in a drastic change from his cherished activities with peers to a new and an uncertain environment (the street).

**4.2.2.3 Desire for Freedom**

Experimentation is often associated with adolescence (Sumter et al. 2009). Adolescents also desire to become more independent from their care givers. Consequently, their relationship with friends gains more importance. More females than males wanted to be free from parental control. A participant narrated her desire to escape from her parent’s control:

*I just decided to leave home because I wanted to be free from my mother’s control. I think she is so strict on me. I feel that I am old so I could be on my own. I do sometimes go home but do not sleep there (Participant 14).*

During the course of the interview, some of the phrases used which exemplified their state of freedom on the street include “nobody check(s) anyone”, “wo ye die wope” [you do what you like], “aha ye aplodo” [street life]. Unlike children at home whose activities and behaviours are monitored by their parents, these participants were free from parental control and free to do what they liked whether positive or negative, right or wrong. The views expressed by these participants reflect the ideological thinking of adolescents in developed countries. According to Arnot (2009) the new generation of young adolescents use language that emphasizes a more independent and individualistic way of living, which eventually is used as a justification for their choice to move from home. The perceived freedom on the street they so wished for, became an illusion, as life on the street is masked by extreme violence and poverty experienced on the street.
4.2.3 Socio-emotional well-being

This theme addresses participants’ behavioural and mental health.

4.2.3.1Behavioural responses

This theme reports on the behaviour of the youth. Analysis showed three main themes namely violent and violent behaviours, sexual harassment and rape, and alcohol and drug use.

4.2.3.1.1Violence and violent-related behaviours

Participants in this study revealed a high prevalence of violent behaviours such as fighting. Some of these fights arose as a result of territorial dominance where male street children from a particular location moved into an area occupied by another group of male street children.

One such incidence that was reported seemed to have been the result a gang [who usually reside about 2 miles away] accusing another group of “taking their girls”

> Yes, just like yesterday in the night, some boys came here (where we sleep) and wanted to bring troubles ... and fight with us. They said that the boys here [Accra Central came to their place [Kaneshie] for their girls. They don’t understand why the boys should walk all this distance and come to their area. All these are not necessary because as someone will say we are Kubolo, so for you to come from Kaneshie and come to Accra to come and fight with us.... (Participant 12).

Other violent behaviours reported occurred as a result of poor socialization and conflict resolution skills. This was narrated by the participant below:

> For example someone will go and gamble and they would lose his money, and this will bring a fight. Sometimes we also gamble with playing cards and put money on it and even dice throwing (ludo dice). Some of the elderly boys, when the games /cards in which we
bet does not go in their favour, then they would like to beat the young ones. They try to take the money even if they lose (Participant 7)

The level of violent behaviours among the participants in the study could be seen partly as an adaptive behaviour which could help in their survival in the street context.

4.2.3.1.2 Sexual harassment and rape

Over two-thirds of the female participants indicated knowing someone who had been raped or sexually harassed, but none of them indicated that they themselves had been a victim. A 15 year old female who revealed that she has gone through a lot of struggles on the street, including the use of drugs narrated how she escaped a possible gang rape:

*Sometime past they [a group of boys] took me to go and have sex with them but I told them no. I ran from them down a hill and even fell. I saw an old woman down the hill and sat by her pretending she was a relative. When they were passing by again and saw me, I ran into a police station to report* (Participant 13).

Although female street children recognised rape as a health and social problem, they indicated that they had to adjust to the situation and cope with it, as possible rape is one of the challenges girls living on the street have to face. One way of avoiding being sexually harassed or possibly being raped was for girls to seek protection sleep in a group.

*Some of them will try to have sex with you forcefully, but we sleep in a group to avoid these boys worrying us when we sleep in the night. I know some of my friends who have been raped by some of these boys. This is one of the hard things for us girls over here* (Participant 9)

Other girls, who could not sleep with other members in groups, reported having to forgo having a deep sleep in order not to become a victim of sexual violence.
I don’t sleep, and I barely sleep until day break. If you sleep deep too much you will be exposing yourself to them and they can do it to you as well. I don’t want to fall into their tricks and traps (Participant 14)

Even sometimes a girl would wear a short to sleep and by the time she wakes up, some people have used some shape object like blade to cut her and slept with her “rough rough” (meaning mercilessly). Even your slippers would not be there. It is also taken away (Participant 16)

4.2.3.1.3 Alcohol and drug use

The use of alcohol and drugs was found to be very high among the youth on the street. Participants in the study reported the use of alcohol, which they indicated helped them forget unpleasant feelings

\textit{I drink alcohol once a while, but not always} (Participant 13).

\textit{I do drink alcohol, especially when I am sad I will go and get some ‘tots’ (quarter of a glass). I like ‘GO’ and ‘Agya Appiah’ [local names of alcoholic beverages]} (Participant 7).

Poor coping skills to manage the challenges of streetism can be deduced from the narrative of participant 7. The use of alcohol helped participants cope with life on the street.

A large number of the participants (n= 11) indicated to have used some form of drugs, especially marijuana (which is popularly called “wee”) on the street. The narratives below illustrates the prevalence of drug use
Smoking of wee is a normal thing here. Most of the people you see do it (smoke it). When we want to do it (smoke the marijuana), we go to a place where it will be difficult to see us (Participant 2)

Ahhh, a lot of people smoke it here (referring to marijuana). Even some of my female friends also do it. But not all of us smoke ‘wee’ (Participant 9)

The challenge of resisting the desire to smoke marijuana on the street comes with some consequences such as being coerced or beaten. This is especially the case for young street children who had recently come to the street. Some of these cases are illustrated in the responses below:

When I came here (on the street), they [the older boys) tried to teach me how to smoke it but I refused. They beat me up when I said I would not do it. This made me to run away from them. They smoke it a lot here and sometimes, they smoke cigarettes too. They have this person who supplies the wee and they know where to go and buy it. Even the last time, one of our friends was caught by the police holding a “wee”. He was taken to the police and was later told to go and not to do that again (Participant 4)

When I came here, it was my friends who taught me how to smoke and drink (alcoholic beverages). When I started, I smoke the ‘wee’ everyday (Participant 13)

The narratives above paints a picture of socialized practices where new entrants are taught and trained on how to access and possibly smoke drugs such as marijuana. It was evident that the risk of being arrested by the law enforcing authorities such as the police is high, as the use of marijuana is prohibited in Ghana. For the female participant below, learning how to smoke marijuana started as a cordial friendship with a close friend but she was subsequently coerced to smoke against her will.
For the ‘wee’, I got it from a friend. I did not know her but she said she would like me to be her friend. We then started walking together, and then one day she took me to a place and gave me some of the ‘wee’ to smoke. I was told if I don’t smoke it, I would be beaten. So that is where I learn these things (Participant 16).

Some of the participants further indicated that they were aware of the negative effects of smoking marijuana, and thus wanted to stop. They however, said that the pressure and presence of their friends, who also smoke make it difficult to quit, no matter how had they try to stop.

I know it is not good and I want to stop. But when my friends are going to smoke the ‘wee’ I will follow them, then “something” tells me to smoke, smoke. But I don’t really like it. What actually happens is that, they would not tell me that they are going to “light” [smoke marijuana] but they will tell me to follow them to somewhere, only to find out that they are going to smoke wee. I find it difficult to resist it at that moment (Participant 10).

It is like you don’t smoke it alone. If you are in a group doing it then you can pass it from one person to the other until the fire goes down, then you all walk away. So if you are there and someone “passes it over to you” then you can have it as well (Participant 8).

It can be understood from the above narratives that the social context in which individuals are compelled to conform to pressure from the group, may result in unintended risky behaviour. This, as explained by participant 8, makes it difficult to resist smoking marijuana. It seems that thus their poor refusal skills and low levels of self-efficacy make it difficult to resist the pressure from their peers to smoke marijuana.

A number of male participants who smoked marijuana indicated the seemingly “good effects” they derived from smoking it. These are illustrated in their responses below:
It makes me go wild, and when you are doing something, you do it quickly (Participant 8).

I think sometimes the wee makes us strong and healthy (Participant 7).

The ‘wee’ helps us to survive these harsh conditions. Those who do not smoke the wee suffer from ulcer. This makes them go hungry and they have severe stomach aches (Participant 15).

An important misconception can be identified from Participant 15’s response where a stomach ache was associated with not smoking of marijuana. Such misconceptions about the health effects of marijuana could have influenced their perceptions about the outcomes on their psychological health and well-being.

4.2.3.2 Emotional responses

This theme elucidates the emotional life of street youth. Here, two main issues are highlighted: depressive responses and social stigma

4.3.3.2.1 Depressive responses

The study revealed that feelings of sadness and loneliness experienced by the street children arose as a result of persistent reflections on their previous life compared to their current situation; the circumstances through which they ended up on the street. Some of their feelings are expressed in the narrative below:

I sometimes feel lonely, and wished I was at home. You can sit down at one place just thinking about my situation. It’s tough (Participant 7)

Other participants revealed that remembering the “good environment” that they previously experienced before coming to the street, generated some feelings of sadness. Thoughts that future ambitions could no longer be achieved exacerbated their sense of despair for the future. This is illustrated in the narrative below:
I sometimes feel like going home. I feel very sad. Where I was initially, I used to go to school and now that I not going to school, I feel sad. I had wanted to go to school and become a responsible adult to take care of my mother and my other siblings. When I remember this, then I become sad (Participant 4).

4.2.3.2.2 Social stigma

Street youth are faced with discriminatory and socially oppressive actions from the general public. These activities result in them being vulnerable to public violence as they are mistaken to be thieves and pick pockets. The findings in this study revealed heightened perceived public stigma towards street youth. The majority of the participants indicated that they were beaten, wrongly accused of stealing, and are called derogative names by the public. The sentiments expressed by participants in the study can be summed up from a narrative below:

Some people think that we are slaves for being a street child. But when you don’t know someone you might think he is a slave but when the person goes to his hometown, he is not a slave there. They think that we don’t have money; we are poor, homeless, sleeping anywhere. They just do not give us any respect at all. They think we are not even part of humans. They regard us nothing. They have a place to sleep; and we don’t have anywhere to sleep, so they think that we are not part of life, they are the ones who enjoy life. What can we do, we can’t say anything about that [shakes the head and smiles] (Participant 4).

This negative public behaviour does also affect their self-esteem:

The way we are treated here makes you think that you are nothing, cannot do anything that is good. (Participant 1)
4.2.4 Resilience promoting factors

In explaining their daily living conditions and survival strategies, it was clear that the youth demonstrated some level of resilience which enabled them to cope within the street found environment, despite adversity. They derive their strength from (1) personal resources, which refer to intrapersonal characteristics that enhances ways to survive (2) interpersonal resources, which center on their interaction with friends, peers and other significant people and (3) environmental resources available, referring to the cultural influences and community support. These socio-ecological factors identified are in agreement with Ungar’s (2008) definition of resilience which indicated that “in the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and collectively to negotiate for these resources to be provided and experienced in culturally meaningful ways” (p. 225).

4.2.4.1 Intrapersonal Resources

For the youth, adapting appropriate coping mechanism and gaining hope and meaning through humours and their belief in God were essential personal resources for their survival.

4.2.4.1.1 Coping with humour

Besides the difficult situations that these street children face on a daily basis in street life, they have adopted some coping strategies that they rely on most of the time. In this study, street children relied mostly on humor to relieve stress and temporarily forgetting about their problems. This was done through teasing and cracking of jokes, as a way to see the bright side of life and served as an adaptive mechanism to use in their situations of distress. A participant shared his narrative below:
But my friend will come and crack jokes and I would not cry again. She would come and say something funny, then I would not cry but if not I can be quite for a long time (Participant 3)

It is my friends who come around me and they tell me not to worry. They come around to crack jokes, sometimes some of the funny things we see in the video, they try to act in that way. Then we all begin to laugh. That is what I do to come from my sadness (Participant 4)

4.2.4.1.2 Spirituality/religion

The participants indicated that their belief in an eternal Being (God) helped them to cope and survive on the street. This manifested in their actions and behaviours on the street. They acknowledged that conditions on the street were very difficult but they believed that things could change for the better by God:

I believe that things can change. I believe in God that things can change as to how it is going to change I don’t know. I know God is going to bless me. That I believe (Participant 3)

Believing in God gives us hope that things will be good and better one day. I believe in God because whatever He [God] says, he does it. He does not disappoint me (Participant 4)

What is obvious from the narratives above is a strong faith and belief that life can be better. Although they acknowledged their current tough living conditions, they demonstrated here that it would not remain this way forever. Their belief in God was also thought to facilitate access to food and made through others by “touching their hearts” to help them when need:
God helps me to get food to eat, if not for his grace, I would not get anything when I go to the traffic light to beg. He is the one who touch the hearts of the people to give me money to buy something to eat (Participant 5).

Anytime I am going to work [selling of sachet water], I ask God for His protection and for me to get a good market [enough sales]. When I do this, at the end of the day, I sell a lot of the water (Participant 15).

In an interview with Participant 14, he clearly illustrated how important and significant God is to him:

I believe [that things can change for the better]. Eeih [exclaims] I believe in God. This is because I believe that he would let my life be well with me. Who can survive in this situation that we are in without God, He watches and protects me all day. God [is the one] who gives me the strength and courage to live here [on the street]. He does everything for me. For example, in a day if I am going to work or do something, I will pray to God and then ask Him that “God let what I am going to do be Ok” and I will go and everything will be OK with me. There would be no problems (Participant 14).

It was also observed that some pastors, who preach the word of God in and around where these street children live, help to strengthen their faith and belief. This is illustrated in the narratives of these participants below:

I used to go to church but nowadays I do not go to church. There is this man called Pastor William, who said he will like to take us to church. So on every Sunday, we meet him and he takes us to his church. We meet him every Sunday at 3:00pm. He gives us advice, and sometimes gives us some money he brings from his church (Participant 1)
I sometimes go to church on Sundays. We are taught that we should not sin, “love your sister and brother as yourself” and they teach us how to pray and they also teach us a lot of quotations [Bible quotations]. I try to follow the Bible instructions, because when I do that, God will bless me (Participant 2).

...during Sundays, some people [preachers] come here to preach the word of God to us (Participant 5).

The presence of some elderly people, who teach and advise the street children, also reportedly helped strengthen their religious faith. This was done through the religious teaching from the Bible which guides their actions and behaviours, helping them to distinguish right from wrong.

Sister Akos [an elderly blind woman] taught us memory verses and also the Ten Commandments from the Bible. She also teaches us not to steal, lie but to tell the truth always. She said that when people want to “cut off your head” [kill you] they will let you go because you say and live by the truth.

The significance of God in the lives of the street youth is captured in the quotations of the participants below who acknowledge that a higher being [God] is their protector and provider.

Some people are even in hospital [sick and not well] and if God has protected me throughout the night, what can’t he do. God can do everything (Participant 1)

He [God] is the one who takes care of all of us here and if it is not for Him, you will not know what will happen to you. That is why I pray to God that he will help me to be someone good in society (Participant 8).
4.2.4.2 Interpersonal resources

Apart from the intrapersonal sources of strength mentioned above, the participants talked about social engagement in health enhancing activities including music, dance and sports.

4.2.4.2.1 Health enhancing activities: music, dance and sports

For some youth, they engaged in health enhancing activities which protected them against engaging in high risk behavior on the street. These health enhancing activities help them to cope temporarily forgetting about their problems, and enhanced their survival. As one participant remarked “in the evening, we do enjoy ourselves by listening and dancing to music played at CMB. That is one way to entertain ourselves and sometimes it really helps us to forget about the problems we face on the street”. The music they dance to from drinking spots and bars within the area where the street youth sleep and serve as a means of entertainment:

We entertain ourselves with the music they play in the area, we go there to dance and then come back to sleep. (Participant 1)

We do not go to the disco [night clubs], those drinking spots play lots of different music, so we hang around and entertain ourselves by listening and dancing to it. (Participant 8)

As one participant put it: “sometimes the owner of one of the spots [drinking bars] will play some dance [music]. When we hear the sound, then we will gather around to enjoy the music and when we are tired, we leave to sleep”.

These drinking spots and bars found in the areas where the street children reside, use loud music as a strategy to attract customers and the children. The participants indicated that the presence of older people who patronize these drinking bars protect them from buying alcoholic beverages
even if they could afford them. One participant said that he was chased away when he attempted to buy a drink:

After saving some money from the work [selling sachet water] that I did in the day, I wanted to buy a drink from the spot where they play music for us to listen and dance but I was told not to come there again, because it was not a playing place for kids. They didn’t sell the drink to me (Participant 3)

The majority of the male participants indicated that playing football was one of the main activities that they really like doing during the day. This was explained narratives below:

We play football, if we are not doing anything in the day, we gather ourselves and play it there [pointing to a bare ground about 30 meters away] (Participant 4)

Sometimes when we are not doing anything, we group ourselves into 2 and play football with each other. We do it as if there is some trophy to be won [laughs] because you do not want to find yourself in the losing team (Participant 16)

Some of the male participants did not only see playing of football as means of entertainment but also as a way of opening up a professional football career in the future. The view of one of the participant’s is presented below:

The football that I play over here is what I believe will make a way for me. I believed that it can help me in the future, so that is what I do and it encourages me to go on with it. I believe that it can push me further and one day, maybe someone can come and look at me and invite me to train with a good team [football team] in Ghana (Participant 6).

About half of the male participants were of the view that playing football in their spare time or when they were idle prevents them from engaging in some socially unacceptable behaviour. Some of their views are illustrated below:
Playing football is very good for us. It makes our minds busy and prevents us from doing some bad things like “lighting of the thing” [smoking of marijuana], or to just plan to do something bad. (Participant 5)

If they [friends] are playing football and you are not involved, you might end up of thinking of doing something different, which may not help but can get you into problems (Participant 16)

It is obvious from the above narratives that these participants identified that being idle might lead to engaging in troublesome activities. Thus, playing of football was seen as an activity that prevents street youth from involving themselves in drug abuse and other deviant behaviours.

4.2.4.2.2 Friendship

Friendship and the reciprocal nature of it, was viewed as being important to street youth’s survival on the street. These friendships are based on receiving and giving of food, sharing of clothes and provide medicines in times of ill health. This was illustrated in the narratives of the majority of the participants:

I only get help from my friends. A close friend can get you some money to buy food, and then you can give the money back [to the person] when you get it. A good friend can also share his food with you. The last time, my friend was not having any food to eat, I called him to come and share my food with me (Participant 14).

It’s your friend who will give you some food that is if she has enough. If they don’t give me [some food] when I am in need, I will also not give them when they ask me (Participant 3).
4.2.4.2.3 Inspirational role models

The success story of youth who previously lived on the street encouraged and gave this study’s participants some hope for the future. This is illustrated in the narrative of had with a 15 year old young woman:

**Interviewer:** Do you know of anyone who has succeeded?

**Participant 12:** Yes. There was a sister [a former street girl] here who is now making it. She even used to sleep on the streets but now she has her own job.

**Interviewer:** How did she do it?

**Participant 12:** She went to CAS and they helped her to learn hairdressing. She stayed with them for a while until she was sponsored to a school [apprenticeship school]. Now she has a certificate and her own job. People [her employees] even call her madam.

**Interviewer:** What have you learnt from her story?

**Participant 12:** [I have learnt from her story that] I will have to listen and learn what they teach us at CAS so that I can also become someone in the future, and for my employees to also call me “madam”

The above narrative not only reflects the desire to succeed and be respected by others, that is, to be called “a madam” but also this is possible for people to who have defied the odds of the street. These "success" stories that they have read or personally observed, seem to positively reinforce their desire to learn and utilise support services they receive from the community based NGO’s to better themselves.

4.2.4.3 Environmental/socio-cultural factors

Environmental or socio-cultural factors that enhance survival of the homeless children were divided into two categories: cultural norms and community-based support (e.g. help from NGO’s and other community members).

4.2.4.3.1 Cultural norms
The term cultural norm is used in this context to refer to stories and advice received by participants from their parents and or relatives before moving to the streets. These values were adhered to and included in their daily lives and seemed to regulate and guide their behaviours in times of difficulties. Some participants shared their views in this regard as seen below:

_I overcome challenges here [on the street] by remembering what my father and mother told me. He [my father] told me not to be sad, and that even if he died, I should not be sad. I thanked him. I told him not to say that, but after another one week, he was sick again, and died. My mother also told me that I should not be sad because God was with me and He will take care of me. For the Lord who created me will protect and take care of me_ (Participant 1).

This narrative of the participant above [an orphan who lost both parents before her 9th birthday] indicates how she relied so much on the advice given to her by her parents, and that her ability to cope was as a result of the adherence and reflections on these values.

Furthermore, participant 1 recounted that although she did not know her mother personally, the advice she left her (before she died) in a form of a written letter helped her a lot in her life on the street.

_Sometimes I remember the advice that my mother gave to me. The advice she gave me was that....... but when my mother died I was a little child when I was about 7 years. But when I grew up the letter that she wrote to me and my sister made me to know that my mother really loved me. What she wrote in the letter was what I and my little sister should be careful and make sure that no man deceives us and make use of us and leave us miserable. Even if we don’t have any helper, we should work hard to sell or do something for ourselves, or we should get someone who would look after us to become good adults_
because God will one day provide and make a way for us. She told us not be lured [by men], but when I came to Accra, friends have made me sleep with men (Participant 13).

The internalization of such wisdom into their moral values helped regulate their behaviours irrespective of where they lived. A violation of these values or the inability to live accordingly created feelings of sadness and a sense of regret. The quote below shows how a participant felt that her inability to follow the advice of her late mother left her feeling disappointed in herself.

*When I remember what my mother told me, then I become very sad. The things that she said, I could not follow them and I think that I have disappointed her. The things [advise given to her] that she said [in the letter], when I remember her, make me to cry* (Participant 14).

Male participants remembered gendered-based norms that were given to them by their fathers and grandparents when they were still in their villages, prior to moving to the street:

*My father told me that men do not show signs of weaknesses [but mental toughness], so when I am doing anything, even if it is so difficult, I would not give up. Sometimes when some people would beat me so that I will cry, but I refuse to cry for them to laugh at me* (Participant 6).

*My grandfather used to tell me that as a boy, I should not give up when things become hard [difficult] in life. Every time this saying comes to my mind, then it gives me some confidence that I can make it, and succeed in life* (Participant 10)

The narratives from the participants above, shows how these gender-based norms were internalized, and from which they drew strength in difficult times. This could be interpreted as the cultural construction of masculinity and femininity in Ghana. Men in Ghana are generally socialized, trained and expected to cope and survive in situations irrespective of the challenges
they encounter in life (Adomako Ampofo, 2001). Men are expected to face adversity bravely and demonstrate a capacity to endure when faced with pain and suffering (Adinkrah, 2012).

4.2.4.3.2 Community-based care and support structures

Participants reported that they were receiving enormous support and help from different people within the community. Being homeless and living in adverse conditions, gave them a chance to accept help from other individuals and organizations. The majority of the participants indicated that they had visited and received help from a community based NGO working with children and youth living on the street:

*I have been to CAS (Catholic Action for Street Children). They give us books and pens, and then give us class work to do. When we go there in the morning, they give us water to bath and give us some clothes to wear. They will give us money to buy porridge for breakfast. After 12:00 noon, we will get our lunch, and then we leave there to our various places at 4:00pm in the afternoon (Participant 4).*

*I have been to the Catholic Action for Street Children [CAS]. They train us and they advise us to live well. I know that if I follow the advice they give us I know it would help me in my life, but the problem is, most of us do not follow the advice. Some of the girls listened to them are now doing their own work (having jobs). We go there in the morning to learn a trade [apprenticeship], and when they see that you are OK, they will take you to a place in Ashiaman [a suburb in Tema] where you will learn more. When they think that you are now ready, then they will open a shop for you to be on your own (Participant 13).*

The above mentioned NGO does not only provide for the physical basic needs of these street youth, but also provide them with some skills training including life skills in view of youth
becoming economically independent adults the future. A strong belief was explained by Participant 4 that they could succeed if they followed the advice given to them as some previous street girls who were willing to be trained, had done. The instructions given to them through training had helped the former street girl to succeed and to become independent.

A few male participants indicated they were not given an opportunity to be selected into one of the community based NGOs because they were too old:

Even the last time, some of the NGOs wanted to help, but they said that I am too old. They said they were looking for younger one, those who are aged 8-10 years. They don’t want those of us whom they consider to be old (Participant 11).

Furthermore, participants mentioned that preachers and pastors who come to preach the word of God to them also helped them by giving them food:

When the pastors come with some other people, pray with us, give us some food, distribute it to us and then they leave. There are some people who are always hungry. As we talk now there is a woman lying down here, maybe she does not have money to buy food, these people (pastors) give us food and they help us a lot, that’s why I said we get help from such people (Participant 1).

Moreover, they also mentioned that some organizations and individuals do sometimes invite them to attend a fete where they are provided with food. Even though some found the locations to be too far way, they do not easily forgo the opportunity to go and get enough to eat.

It’s today that they [some of her friends] said that there is a party in Tema [about 20 minutes’ drive from Accra] so they wanted us all to go to the place. I will go this time because last year I did not go. When they came back, they brought us rice, sardines [caned fish], and so many other things (Participant 9).
Some of the participants mentioned that they do receive gifts from the visually impaired people they assist, e.g. by taking them to events organized by philanthropists for disabled people:

*We usually go with the blind people to such party’s. When they go there, they were given some gifts. They give to the blind person some drink, food and even money. They also give it to the person who came with the blind man. Anything they give to the street child, they give to the blind too* (Participant 4).

### 4.3 Discussion

This study was conducted to explore factors that promote resilience among street youth in the Central Business District in Accra, Ghana. In this study, the participants indicated the various aspects that contributed to their homelessness including maltreatment from family relatives, following caregivers to the city, and the desire for freedom from parental control. The study also revealed that participants were involved in health risk behaviours such as being victims of sexual harassment and rape, as well as being perpetrators of violence. There was evidence of mental health problems such as depression. The study further revealed that homeless youth relied on personal, interpersonal and community resources to navigate the odds of the street.

#### 4.3.1 Socio-emotional well-being

The results showed that participants in this exploratory study experienced various socio-emotional problems including violence and violent behaviours (for example rape and sexual harassments), and were involved in alcohol and drugs use. Participants also reported feelings of depressive symptoms and reported being stigmatized by others.

Violence and violent-related behaviours such as fighting, sexual harassment and rape are prevalent among homeless youth globally (Coates & McKinze-Mohr, 2010; Kayembe et al., 2008; Lockhert, 2002; Nada & Suliman, 2010). In a study of street children in Egypt, over 93%
of the participants indicated that violent behaviour was seen as normal in their day-to-day living and a crucial determinant of the ability to cope with street life (United Nations Office for Drug Control, 2001; Nada & Suliman, 2010). Further, incidences of sexual harassment and rape as found in this doctoral study have been reported in previous studies among street children in Ghana (Oduro, 2012; Boakye-Boaten, 2006). The street environment in which survival through domination might have influenced male participants to be aggressive, could have contributed to them using females as the ‘object’ to which violent behaviour is re-directed (Coates & McKinze-Mohr, 2010). Female homeless youth are therefore at risk of becoming the victims of violence-related behaviours on the street.

Although the majority of the participants interviewed revealed that they know someone who had been raped or sexually assaulted, none indicated to have been a victim themselves. Boakye-Boaten (2008) suggests that female street youth reluctance to disclose that they had been victims of such acts is based on a fear of being stigmatized and considered to be physically weak and, losing their boyfriends who would not want to be seen with someone who has been raped (Oduro, 2012). It was however interesting to note that female participants adapted different strategies to avoid being raped such as safety in numbers by sleeping in a group. Other researchers such as Mizen and Ofosu-Kusi (2010) reported a similar finding that sleeping close to one another afforded girls security from the reassuring presence of friends and the formidable strength in the number of friends around each other.

Youth in this study provided insight about reasons for substance use and the context within which it is used. Participants used drugs for the relief of emotional problems, but at the same time indicated that its use placed them at risk for engaging in other health risk behaviours. Temporary benefits of substance use were thus identified, helping them to cope with the
challenges of streetism (e.g. feelings of neglect, to be overly alert and attentive). This corroborates the findings of other studies which found that substance use among homeless youth was used to help them cope with their difficult situations (Flick & Rohnsch, 2007). However, youth also recognized the various ways in which substance may endanger them of engaging in criminal behaviours. The social context within which substances are abused can be likened to the exploration youth of vulnerabilities to get them hooked into the cycle of addiction. In such cases early entrants, who are very young and inexperienced are introduced to drug use, leading to late addiction and more deeply entrenched in street life.

Participants in this study also revealed that they were stigmatized and subjected to ruthless treatment by the public. Generally the street is not an ideal place for children to live (Koller & Hutz, 2001) and previous studies in Ghana show that the environment is very hostile to street children as they are considered to be drug users, and involved in other socially undesirable activities like petty theft and even robbery (Quarshie, 2011). This contributed to the view that street children are a threat to society and not as people who are in need of help from society (Corsaro, 2011). A recent study conducted in Nigeria, revealed that street youth were ignored and feared by society in general (Ogunkan & Adeboyeyo, 2014). Their study further revealed that respondents considered homeless youth to be “an environmental eyesore and not nice to be looked at” (p. 43). These perceptions about street children could influence negative public behaviour towards them as indicated by the participants in this doctoral study.

This findings of the study also revealed that these negative perceptions and attitudes towards homeless youth influenced their self-esteem. Although this study did not investigate the relationship between perceived stigma and self-esteem, there is evidence to suggest that perceived stigma is associated with low self-esteem among homeless youth populations (Kidd,
2004; 2007). This thus suggests that continued stigmatization of homeless youth may compromise their already challenged mental health and well-being through negative emotions including depression.

In this study, depressive symptoms were identified in the narratives of the youth. These findings support previous studies that have shown mental health problems such as depression, trauma, conduct disorders and psychotic symptoms to be prevalent among homeless youth in developed and developing countries (Kelly & Caputo, 2007; Kidd, 2004). The narratives of the youth suggested that separation from family and isolation as well as the inability to adhere to parental advice, was some of the sources of sadness. The majority of the youth interviewed revealed they used drugs as escapism from emotional problems possibly accounting for the high prevalence of drug use among this group.

4.3.2 Resilience promoting factors

Notwithstanding the negative impact of street living on their mental and behavioural health, the study also revealed that street youth relied on personal capacities and interpersonal resources as well as community-based care and support as resources for building resilience. The combination of these resources (intrapersonal, interpersonal and socio-cultural resources) gives credence to how resilience has been conceptualized as a culturally appropriate and bidirectional process that involves youth and their ecologies (Masten & Wright, 2006; Ungar, 2008; 2011)

4.3.2.1 Intrapersonal resources

The findings showed street youth to be social actors who actively develop ways of coping. Their involvement in activities such as listening to music and dancing, as well as participating in sports enabled them to cope and to some extent forget about the problems they face in their daily lives. This reflects adaptability, which has been argued as an attribute of
resilient individuals in adversity (Connor & Davidson, 2003; Masten, 2001). The process of adaptability as evident in this study by the participants showed signs of being particularly resilient (Williams, Lindsey, Kurtz & Jarvis, 2001). An individual’s ability to make meaning from a new environment is influenced by the coping mechanism adopted, the problems faced and the availability of resources within one’s environment (Ungar & Liebenberg, 2005; Theron & Theron, 2014). According to Lazarus and Folkman (1984), coping can be defined as changing ones cognitive and behavioural efforts to manage specific internal and/ or external demands that are perceived as exceeding one’s personal resources. This therefore presupposes that the types of coping strategy adopted by individuals to deal with daily problems or hassles are contextually driven. The use of humour as a coping strategy as found in this study has also been reported among street youth in South Africa (Evans, 2002; Theron et al., 2010). Although teaseing may be seen to be socially unacceptable within the general population, it is used as an adaptive coping style for street youth where street youth tease one another to distract their focus from the stressors associated with street life, and thus shifting their thoughts away from what was worrying them.

Studies have shown that one way in which individuals are able to be resilient during difficult situations is through religion (Osafo et al., 2013). This strong belief seems to be protective against stress as an individual belief that help would come during times of crisis. In these situations, individuals conceptualize God as a source of support which can bring stability and relieve distress (Levine, 2008). The findings of this study revealed that positive adjustment is influenced by spiritual attachments. Participants had a strong religious belief in God, which was used as a resource for survival. According to Pobee (1992), religion is central to Ghanaians’ life although it’s a secular country (Assimeng, 2010). This is clearly reflected in the thought and
actions of the participants. Religion establishes a moral system which guides an individual’s behaviour, and in Ghana, research has established that religion (such as Christianity) exercises a strong regulatory influence, helping socialize young people’s behaviour including their sexuality (Osafo, Asampong, Langmagne, & Ahiedeke, 2013; Anarfi, & Owusu, 2011). What could have contributed to this could be religious socialization of the Ghanaian child. Although not under the supervision of an adult or a caregiver, such belief in a higher being (God) does exist and helps regulate the lives of the street youth.

The religious connection developed by these street youth with God, could also be seen a kind of substituted parental guidance that is non-existent in their lives (Williams et al., 2006). For these participants, their religiosity manifested in their personal relationship with God, which they believed played, a salient role in their lives. Narratives such as “I pray to God for food”, “Who can survive in this situation without God”, and “I believe in God, and “I know that things will change for the better”, indicate that participants did not only view God as helping them in their current predicament, but also to maintain an intimate connection with an external being through prayer. Thus, participants had a strong faith and a sense of divine intervention, which has been shown to be associated with resilient people (Osafo et al., 2013; Williams and Lindsey, 2006). According to Williams and Lindsey (2006), having faith in God plays a key role for many resilient young adults. They argued that resilient street youth who are rescued from negative events experienced on the street are more likely to attribute that to the divine intervention of God.

4.3.2.2 Interpersonal resources

Sharing important basic needs such as food with friends is done in anticipation of receiving a favour in exchange. Friendships based on reciprocity thrive when the people involved
understand the problems and are willing to act meaningful ways. This form of street living arrangement has been described as “shared living” among street children where a street child in a difficult condition has a strong sense of reciprocal living (Mizen & Ofosu-Kusi, 2010; Malindi & Theron, 2010). This phenomenon has also been described by Kovats-Bernat (2006) as redistributive exchange, where street children in Port-au Prince bring their resources together in order to guarantee daily meals for each other. Although this was not observed among the street children in this study, giving of money and food with the intent of receiving the favour back may have saved other street children from going hungry.

It was also observed that the majority of youth living on the street walked in a group of 2-3 people, and that sharing of resources was based on the relationship in the group. In remarking that “If you are not my friend, I would not borrow you my dress” (Participant 15) and “I only give to my friend that I walk with, and sometimes with those who stays with me always” (Participant 3), participants indicate that reciprocating favours among them is greatly influenced by the social network to which you belong. This clearly shows the importance of belonging to a group or having close ties with friends whom you identify with. Peer group support has also been reported among South Africa street youth who reciprocate and help their friends and encourage them to seek and search for other available resources (Malindi & Theron, 2010). These living arrangements where street children live in a cohesive group and help those with whom they are closely ‘connected to’, may offer some form of security and emotional attachment (Awad, 2002).

In the absence of family, previous research has shown that the most important factor for survival and coping is friendships (Nalkur, 2009; Mizen & Ofosu-Kusi, 2010). Friendships were found to provide street children with family and intimacy, a finding which conform the assertion that supported relationships foster resilience among individuals in adversity (Dass-Brailford,
In their study of street youth, Malindi and Theron (2010) reported that South African street youth reciprocated and helped their friends and encouraged them to seek and search for other available resources. Therefore friendship may offer some form of security and emotional attachment for homeless youth in Ghana.

4.3.2.3 Socio-cultural resources

Internalized cultural values were reframed as resources in times of difficulties among street youth in this study. This finding supports the study of Theron and Donald (2012) who indicated that resilience among Black South Africa youth is strengthened by living in a community that accepts, supports and encourages cultural traditional practices and beliefs. Other researchers such as Ungar et al. (2007) have suggested that for at-risk youth who have considerable knowledge of their cultural heritage, adherence to such cultural rites can facilitate positive identification with a larger social grouping, along with its associated protective process of cultural pride. Ghanaian street youth in this study, who used such internalized values as resources, had benefited from a strong cultural background with intense interaction with a close family relative (either father or grandparents). This history encouraged them to uphold such values and norms at all times irrespective of the situation. We can therefore conclude that cultural values helped promote resilience. However, since culture has been shown to be fluid it can be implied that culture as a protective mechanism may not be true all the time (Donald et al. 2010).

4.4 Implications of the findings for the quantitative phase

The findings of the qualitative study showed that homeless youth do experience and suffer from diverse behavioural and psychological problems but that they are also resilient.
Specific measures that assess health risk behaviours (e.g. suicide attempt, violence behaviours, coerced sex, fighting and bullying) were included to examine the prevalence of such behaviours among homeless youth in Ghana. Since participants indicated feelings of depression and other psychological symptoms, the Strength and Difficulties Questionnaire (SDQ) was selected to screen and assess the psychological well-being of participants. The SDQ includes subscales for prosocial behaviour, hyperactivity/attentional, emotional, conduct and peer-relationship problems: behaviours that have been suggested in this study but also to be prevalent among homeless youth in developed countries. The motivation for selecting this scale is that it is well validated in several developed and developing countries including Ghana. Furthermore, this scale was considered appropriate to determine whether participants who are considered to be resilient had lower levels of psychological symptoms and health risk behaviours as it provides a range of symptoms from no psychological symptoms (normal) to moderate psychological symptom (borderline) to severe psychological symptoms (abnormal). Scales measuring social support and social stigma were also included as these constructs have been shown to be associated with psychological functioning, and seem to play an important role in the life of street youth in Ghana.

Participants in this study were considered to be resilient, but resilience within the African context has not been measured quantitatively. This highlighted the importance of measuring resilience among homeless youth to determine the various levels of resilience. In order to measure resilience among individuals exposed to significant adversity and risk, a reliable and valid instrument is necessary. The Connor-Davidson Resilience Scale (CD-RISC) developed by Connor and Davidson (2003) has been considered as valid, reliable and well used resilience scale. The selection of CD-RISC was also important to validate it suitability within the African context.
context. Using the original scale in Ghana might be flawed, since the suitability of the scale has not been established. Developing a scale in a local language would be desirable; however, validating an existing one would be more economical and also enable possible comparison with other previous studies.

4.5 Limitations of the qualitative study

This study is not without limitations. The small sample size and the non-probability sampling method used mean that the findings cannot be generalised to all street children in Ghana. The sample used in this study were only street youth who lived entirely on the street, and as such the experiences of those in the shelter could have yielded another understanding of resilience. Further studies should therefore include street youth who are housed in the various shelters provided by community-based organizations in Ghana as there are NGO’s that provide education and reproductive health service to homeless children in Accra. Their views could validate and provide further understanding of the general risk and resilience factors for homeless youth in Ghana.

4.6 Conclusions

This chapter explored how homeless youth describe their everyday life on the street, their health and well-being and the factors that foster resilience among them. Evidence of psychological and mental health problems were present among the participants. Violence and violence-related behaviours such as fighting, rape and sexual harassment were found to be present among street youth with female participants being vulnerable as victims of violent related behaviours. The majority of the participants abused substances including marijuana as a maladaptive coping strategy, even though they acknowledge being aware of the negative health consequences of drugs. The findings also showed street youth to be social actors who draw on personal,
interpersonal and community resources to cope. The study points to the importance of strong religious beliefs, the importance of social support and social capital, and reliance on internalised cultural values and norms to enhance coping and survival among street youth in this study. The qualitative study highlights important protective factors which need to be strengthened through the development of mental health interventions to help reduce the impact of adverse conditions of on the lives of these street youth. The implications of these findings for interventions are discussed in concluding chapter of this dissertation (see chapter 10).

The results of the quantitative phase of the study will be presented in the following chapters.
CHAPTER 5

AGE AND GENDER DIFFERENCES IN HEALTH RISK AND MENTAL HEALTH
PROBLEMS EXPERIENCED BY HOMELESS YOUTH

5.1 Introduction

Based on the literature review on mental health and health risk behaviours of homeless youth, the researcher found that little studies have been conducted on their sexual risk behaviours and the gender dimensions related to these behaviours. Again previous studies are based on relatively small sample sizes, and are more qualitative and descriptive in nature. The first goal of this chapter is to describe the prevalence rates of substance use, violence related behaviours, risky sexual behaviours, and the prevalence of psychological problems among street connected children and youth in Accra, Ghana. The second goal was to assess the age and gender differences in respect to psychological problems, and health risk behaviours, as well as outline implications for future health promotion programmes aimed at reducing the adverse health problems associated with homelessness.

To help achieve the objectives of the study a series of statistical analyses (as mentioned in chapter 3) were conducted using the Statistical Package for the Social Sciences version 21.0 for Windows (IBM SPSS Inc., Chicago IL, USA). Individual items measuring sexual risk behaviour, suicidal ideations, violence and substance abuse were used. Significant Chi-square ($\chi^2$) results relating to engagement in the various risk behaviours within the sample were presented. A One-Way ANOVA was used to determine the effect of age groups on the psychological problems (as measured by SDQ), and where necessary, Post-hoc analysis, specifically (Turkey-HSD) was used to examine where specific differences exist with regards to age-groups on the various psychological problems. The independent sample t-test was used to
examine whether male and females differ on the various psychological problems, and Cohen d effect size was used to measure the magnitude of such differences where they existed. The results are presented and discussed. The chapter is concluded with suggestions for interventions.

5.2 Results

5.2.1 Characteristics and background of participants

The demographic characteristics of the sample are presented in Table 3. The final sample in this study consisted of 122 boys (53.7%) and 105 girls (46.3%) with a mean age of 12.58 (SD = 2.51). Over 80% of the sample were 14 years and younger. The majority of the participants self-identified themselves as Christians (61.7%), Moslem (34.7%), and the remaining 3.6% did not indicate their religious affiliation. Over a third (43%) had lived on the street for a period ranging from 3–8 years. Over half (58.9%) have had up to some basic education (i.e. up to grade 6 or Primary level) and 30.5% had no formal education. Just over a half (51.1%) of the sample came from Southern Ghana (i.e. Greater Accra, Eastern, Volta, Western and Central regions) with the remaining 48.9% coming from the Northern part of Ghana (Brong-Ahafo, Ashanti, Northern, Upper-East and Upper-West regions).

The major reasons identified by the participants as the main cause for their state of homelessness were poverty (59.2%) and maltreatment (either physical or sexual abuse) (26.6%). This varied by gender, $\chi^2(2, N = 223) = 23.87, p < .001$. While girls were more likely to report poverty (52.5%) and sexual harassment (19.8%), boys were most likely to report poverty (64.8) and physical harassment (17.2%) (See figure 5). Dysfunctional problems and divorce were found to be the least important reasons that brought them to the street with a response of 6.7% and 5.4% respectively.
### Table 3
Demographic profile of the sample in Phase 2

<table>
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<th>Characteristics</th>
<th>N</th>
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<th>%</th>
</tr>
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<tbody>
<tr>
<td><strong>Gender</strong></td>
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<tr>
<td>Male</td>
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<td>122</td>
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<td>105</td>
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<tr>
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<td>222</td>
<td>137</td>
<td>61.7</td>
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<td>Moslem</td>
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<tr>
<td>Other</td>
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<td>8</td>
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<tr>
<td><strong>Age</strong> (M = 12.58, SD = 2.51, Range: 8-19)</td>
<td>223</td>
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<tr>
<td><strong>Ages Groups</strong></td>
<td></td>
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<tr>
<td>7 – 10 years</td>
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<td>50</td>
<td>22.4</td>
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<tr>
<td>11-14 years</td>
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<td>129</td>
<td>57.9</td>
</tr>
<tr>
<td>15 years and over</td>
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<td>44</td>
<td>19.7</td>
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<tr>
<td><strong>Previous level of education</strong></td>
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<td></td>
<td>69</td>
<td>30.5</td>
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<td>Primary school (Grade 1-6)</td>
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<td>133</td>
<td>58.9</td>
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<tr>
<td>Junior secondary school (Grade 7-9)</td>
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<td>24</td>
<td>10.6</td>
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<tr>
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<tr>
<td>&lt; 1 year</td>
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<td>26</td>
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<tr>
<td>1-2 years</td>
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<td>101</td>
<td>45.1</td>
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<tr>
<td>3-5 years</td>
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<td>69</td>
<td>30.8</td>
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<tr>
<td>5 years and more</td>
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<td>12.5</td>
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<td><strong>Reasons for being homeless</strong></td>
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<td>Maltreatment: Physical abused</td>
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<td>34</td>
<td>15.3</td>
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<td>Divorce</td>
<td></td>
<td>12</td>
<td>5.4</td>
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<tr>
<td>Other reasons</td>
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<td>7</td>
<td>3.1</td>
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<td><strong>Which region/province do you come from</strong></td>
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<td>Greater Accra</td>
<td></td>
<td>35</td>
<td>15.8</td>
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<td>Central</td>
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<td>6.8</td>
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<td>17</td>
<td>7.7</td>
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<td>Western</td>
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<td>25</td>
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<tr>
<td>Brong-Ahafo</td>
<td></td>
<td>12</td>
<td>5.5</td>
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<td>Ashanti</td>
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<td>12.2</td>
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<td>Northern</td>
<td></td>
<td>20</td>
<td>9.0</td>
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<tr>
<td>Upper-East</td>
<td></td>
<td>28</td>
<td>12.7</td>
</tr>
<tr>
<td>Upper-West</td>
<td></td>
<td>21</td>
<td>9.5</td>
</tr>
</tbody>
</table>
The majority (85.8%) of the participants indicated to have been in contact with a family relative, out of which 61.1%, 12.4% and 11.4% of these family relatives were their mother, sister and brother respectively. Out of 85.8% who indicated to be in contact with a relative, only 38.6% could ask such a relative for help when needed.

**Figure 5: Male and Females Reasons for been homeless**
5.2.2 Gender and age groups differences in health risk behaviours of homeless youth

Substance use, sexual risk behaviour, violence and violent-related behaviours and suicidal behaviour among street children and youth, and how they vary according to gender and age-groups are presented in Tables 4, 5 and 6. The results are presented with reference to the specific health risk behaviour.

5.2.2.1 Substance Use/and Abuse

Substance use was relatively high among the sample in this study. The results as presented in Table 4 showed that over 66.2% of the sample reported to have ever smoked cigarettes, 81.3% reported having used alcoholic beverages, out of which 70.1% had used alcohol in the preceding month to the study. Approximately 72% indicated to have ever smoked marijuana. Of the participants who indicated to have ever smoked cigarettes, 53.0% of them have tried to quit smoking. There was a statistical significant gender difference in substance use in this study. As compared to boys, females (73.4% vs. 60.3%) were more likely to have smoked cigarettes $[\chi^2 (1, N = 139) = 3.96, p < 0.05]$, drunk alcoholic beverages (90.1% vs. 73.7%), $[\chi^2 (1, N = 178) = 9.58, p = 0.002]$, and more likely to have ever used marijuana (79.0% vs. 65.5%), $[\chi^2 (1, N = 149) = 4.73, p < 0.05]$.

The results in Table 5 also revealed age-group differences in relation to substance use. Alcohol use in the last month varied by age, $[\chi^2 (2, N = 146) = 12.08, p = 0.002]$. Street children aged (11-13 years) reported using alcohol (81.1%) more than those aged (14–19) years (71.4%) and (7–10) years’ olds (52.3%). Participants aged 11-13 years (92.6%) were more likely to have reported ever drinking alcohol than those aged 14-19 years (83.6%) and 7-10 years (59.6%), $[\chi^2 (2, N = 177) = 23.73, p < 0.001]$. The findings therefore suggest that early adolescents were more
likely to have ever drunk and use alcohol compared to both those in their late childhood and late adolescence years in the study.

The results further shows that the use of marijuana increases with age, $[\chi^2 (2, N = 148) = 6.33, p < 0.05]$. Late adolescents (14-19 years) were most likely to have used marijuana (77.3%), followed by early adolescents (11-13 years) (76.0%) and those in their late childhood (7-10 years) (57.1%). A majority of the late adolescents (14-19 years) (67.6%) indicated to have tried quitting smoking than both early adolescents (11-13 years) (42.9%) and late childhood (7-10 years) (50.0%). This observed difference was found to be statistically significant, $[\chi^2 (2, N = 106) = 9.71, p = 0.008]$.

5.2.2.2 Sexual Risk Behaviour

Concerning street children’s sexual behaviours, the majority (69.3%) were sexually active. This varied according to gender, $[\chi^2 (1, N = 151) = 4.30, p < 0.05]$, and age groups, $[\chi^2 (2, N = 150) = 14.54, p < 0.001]$. Girls (76.2%) were more likely to be sexually active than boys (63.2%) in the last month prior to the study. Early adolescents (11-13 years) were more likely to be sexually active (78.1%), followed by late adolescents (14-19 years) (70.8%) and those in their late childhood (7-10 years) (51.1%). Age of sexual debut also varied by age, $[F(2, 175) = 24.09, p < 0.001]$. Participants in their late childhood reported to have had their first sex at age of 8.79($SD = 2.37$) years, early adolescents at 10.08($SD = 2.08$) years and late adolescents at 11.81($SD = 2.12$). Although there was no statistical gender differences in sexual debut, boys reported on the average to have had their first sex at age 10.59($SD = 2.33$) years and girls at 10.21($SD = 2.56$) years.

The results also revealed that the majority of the participants had not used condoms as only 17.1% indicated to have used condoms in their last sexual activity over the past one month.
Over half (54.9%) had more than two lifetime sexual partners. This varied according to age groups, \(\chi^2 (2, N = 117) = 11.00, p = 0.004\], and the number of sexual partners increased with age. Late adolescents (14-19 years) (62.5%) were more likely to have multiple sexual partners than both early adolescents (60.2%) and youth in late childhood (34.0%). Overall, 53% of the street children have had sex in exchange for food, money, clothes or even a place to sleep, with girls (62.4%) more likely to engage in such behaviours than boys (44.8%) \(\chi^2 (1, N = 115) = 6.68, p < 0.05\). This behaviour also increased with age: the older the participant the more likely they repeated to have engaged in such health risk behaviour, \(\chi^2 (2, N = 115) = 13.81, p = 0.001\].

5.2.2.3 Violent Behaviour

With regards to violence, this study showed that 66.2% of the participants reported that they had been threatened with a weapon and 67.9% have been assaulted with a weapon such as a knife, stick or some other sharp objects such as blades. During the past one month, 90.7% of the participants had been bullied and approximately 9 out of 10 have been beaten up on the street. A majority (81.1%) of the participants indicated to have been robbed on the street, but more girls (89.9%) had been robbed on the street than boys (73.9%), \(\chi^2 (1, N = 172) = 9.93, p < 0.01\]. In terms of coerced sex, roughly 1 in 3 street youth have been forced to have sex with someone, with girls (47.4%) more likely to be victims than boys (20.7%), \(\chi^2 (1, N = 71) = 17.56, p < 0.001\]. Over 75% know someone who has been raped, and 28.6% of the street children had coerced someone to have sex against their will.
<table>
<thead>
<tr>
<th>Risk Behaviours</th>
<th>Total N (%)</th>
<th>Males N (%)</th>
<th>Females N (%)</th>
<th>Chi-Square (p-values)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Substance Abuse/Misuse Items</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoked cigarette</td>
<td>139 (66.2)</td>
<td>70 (60.3)</td>
<td>69 (73.4)</td>
<td><strong>0.047</strong></td>
</tr>
<tr>
<td>Tried quitting smoking</td>
<td>107 (53.0)</td>
<td>55 (49.5)</td>
<td>52 (57.1)</td>
<td>0.282</td>
</tr>
<tr>
<td>Had drunk an alcoholic beverage</td>
<td>178 (81.3)</td>
<td>87 (73.7)</td>
<td>91 (90.1)</td>
<td><strong>0.002</strong></td>
</tr>
<tr>
<td>Alcohol use in the last one month</td>
<td>147 (70.1)</td>
<td>76 (66.7)</td>
<td>71 (75.5)</td>
<td>0.162</td>
</tr>
<tr>
<td>Ever used marijuana ( “wee” )</td>
<td>149 (72.0)</td>
<td>70 (65.5)</td>
<td>79 (79.0)</td>
<td><strong>0.030</strong></td>
</tr>
<tr>
<td><strong>Sexual Risk Behaviour Items</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexually active in the last one month</td>
<td>151 (69.3)</td>
<td>74 (63.2)</td>
<td>77 (76.2)</td>
<td><strong>0.038</strong></td>
</tr>
<tr>
<td>Condom use in last sexual activity</td>
<td>37 (17.1)</td>
<td>17 (14.5)</td>
<td>20 (20.2)</td>
<td>0.225</td>
</tr>
<tr>
<td>Multiple sexual partners (i.e. two or more)</td>
<td>118 (54.9)</td>
<td>58 (50.0)</td>
<td>60 (60.2)</td>
<td>0.119</td>
</tr>
<tr>
<td>Transactional sex/ or survival sex</td>
<td>115 (53.0)</td>
<td>52 (44.8)</td>
<td>63 (62.4)</td>
<td><strong>0.010</strong></td>
</tr>
<tr>
<td><strong>Violence Items</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ever forced to have sex</td>
<td>71 (32.6)</td>
<td>25 (20.7)</td>
<td>46 (47.4)</td>
<td>&lt; <strong>0.001</strong></td>
</tr>
<tr>
<td>Ever forced someone to have sex</td>
<td>62 (28.6)</td>
<td>32 (26.7)</td>
<td>30 (30.9)</td>
<td>0.490</td>
</tr>
<tr>
<td>Know someone who had been raped</td>
<td>124 (57.1)</td>
<td>67 (55.8)</td>
<td>57 (58.8)</td>
<td>0.665</td>
</tr>
<tr>
<td>Injured in a fight</td>
<td>162 (74.3)</td>
<td>96 (79.3)</td>
<td>66 (68.0)</td>
<td>0.058</td>
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<tr>
<td>Ever been bullied</td>
<td>195 (90.7)</td>
<td>106(90.6)</td>
<td>89 (90.8)</td>
<td>0.956</td>
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<tr>
<td>Bullied someone</td>
<td>136 (63.3)</td>
<td>68 (58.1)</td>
<td>68 (69.4)</td>
<td>0.088</td>
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<tr>
<td>Beaten someone?</td>
<td>136 (63.6)</td>
<td>69 (59.0)</td>
<td>67 (69.1)</td>
<td>0.127</td>
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<td>Ever been beaten</td>
<td>190 (89.6)</td>
<td>106(92.2)</td>
<td>84 (86.6)</td>
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</tr>
<tr>
<td>Ever been robbed</td>
<td>172 (81.1)</td>
<td>84 (73.4)</td>
<td>88 (89.9)</td>
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<td>Assaulted with a weapon</td>
<td>146 (67.9)</td>
<td>74 (63.8)</td>
<td>72 (72.8)</td>
<td>0.162</td>
</tr>
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<td>Threatened with a weapon?</td>
<td>141 (66.2)</td>
<td>72 (62.1)</td>
<td>69 (71.1)</td>
<td>0.164</td>
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<tr>
<td><strong>Suicidal Ideation</strong></td>
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<tr>
<td>Feelings of hopelessness</td>
<td>181 (84.6)</td>
<td>103 (87.3)</td>
<td>78 (81.3)</td>
<td>0.224</td>
</tr>
<tr>
<td>Attempted suicide</td>
<td>59 (27.6)</td>
<td>28 (23.7)</td>
<td>31 (32.3)</td>
<td>0.163</td>
</tr>
<tr>
<td>Planned to commit suicide</td>
<td>56 (26.2)</td>
<td>23 (19.5)</td>
<td>33 (34.4)</td>
<td><strong>0.014</strong></td>
</tr>
<tr>
<td>Made one or two suicide attempts</td>
<td>60 (28.0)</td>
<td>24 (20.3)</td>
<td>36 (37.5)</td>
<td><strong>0.005</strong></td>
</tr>
</tbody>
</table>

*Note:* Statistical significant *p* values in bold
**Table 5**

Age differences in Health Risk Behaviours

<table>
<thead>
<tr>
<th>Risk Behaviours</th>
<th>Total N (%)</th>
<th>7–10 years N (%)</th>
<th>11–13 years N (%)</th>
<th>14–19 years N (%)</th>
<th>Chi-Square (p-values)</th>
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<tbody>
<tr>
<td><strong>Substance Abuse/Misuse Items</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoked cigarette</td>
<td>138 (67.0)</td>
<td>27(58.7)</td>
<td>60(68.2)</td>
<td>51(70.8)</td>
<td>0.365</td>
</tr>
<tr>
<td>Tried quitting smoking</td>
<td>106 (53.3)</td>
<td>22(50.0)</td>
<td>36(42.9)</td>
<td>48(67.6)</td>
<td><strong>0.008</strong></td>
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<tr>
<td>Had drunk an alcoholic beverage</td>
<td>177 (82.3)</td>
<td>28(59.6)</td>
<td>88(92.6)</td>
<td>61(83.6)</td>
<td>&lt; <strong>0.001</strong></td>
</tr>
<tr>
<td>Alcohol use in the last one month</td>
<td>146 (71.6)</td>
<td>23(52.3)</td>
<td>73(81.1)</td>
<td>50(71.4)</td>
<td><strong>0.002</strong></td>
</tr>
<tr>
<td>Ever used marijuana (&quot;wee&quot;)</td>
<td>148 (72.5)</td>
<td>24(57.1)</td>
<td>73(76.0)</td>
<td>51(77.3)</td>
<td><strong>0.042</strong></td>
</tr>
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<td><strong>Sexual Risk Behaviour Items</strong></td>
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<td></td>
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</tr>
<tr>
<td>Sexually active in the last one month</td>
<td>150 (69.8)</td>
<td>24(51.1)</td>
<td>75(78.1)</td>
<td>51(70.8)</td>
<td><strong>0.001</strong></td>
</tr>
<tr>
<td>Condom use in last sexual activity</td>
<td>37 (17.4)</td>
<td>5(10.6)</td>
<td>18(18.9)</td>
<td>14(19.7)</td>
<td>0.385</td>
</tr>
<tr>
<td>Multiple sexual partners (i.e. two or more)</td>
<td>117 (55.2)</td>
<td>16(34.0)</td>
<td>56(60.2)</td>
<td>45(62.5)</td>
<td><strong>0.001</strong></td>
</tr>
<tr>
<td>Transactional sex/ or survival sex</td>
<td>115 (53.3)</td>
<td>15(31.9)</td>
<td>51(53.7)</td>
<td>48(66.7)</td>
<td><strong>0.004</strong></td>
</tr>
<tr>
<td><strong>Violence Items</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Ever forced to have sex</td>
<td>69 (32.2)</td>
<td>13(26.5)</td>
<td>28(29.5)</td>
<td>28(40.0)</td>
<td>0.109</td>
</tr>
<tr>
<td>Ever forced someone to have sex</td>
<td>61 (28.6)</td>
<td>9(18.4)</td>
<td>24(25.5)</td>
<td>28(40.0)</td>
<td><strong>0.025</strong></td>
</tr>
<tr>
<td>Know someone who had been raped</td>
<td>122 (57.7)</td>
<td>29(59.2)</td>
<td>49(52.1)</td>
<td>45(64.3)</td>
<td>0.085</td>
</tr>
<tr>
<td>Injured in a fight</td>
<td>160 (74.8)</td>
<td>44(89.8)</td>
<td>61(63.5)</td>
<td>55(79.7)</td>
<td><strong>0.010</strong></td>
</tr>
<tr>
<td>Ever been bullied</td>
<td>192 (91.0)</td>
<td>44(97.8)</td>
<td>86(90.5)</td>
<td>62(87.3)</td>
<td>0.112</td>
</tr>
<tr>
<td>Bullied someone</td>
<td>135 (64.0)</td>
<td>23(51.1)</td>
<td>59(62.1)</td>
<td>53(74.6)</td>
<td><strong>0.032</strong></td>
</tr>
<tr>
<td>Beaten someone?</td>
<td>136 (64.8)</td>
<td>27(60.0)</td>
<td>55(58.5)</td>
<td>54(76.1)</td>
<td><strong>0.049</strong></td>
</tr>
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<td>Ever been beaten</td>
<td>187 (89.5)</td>
<td>41(89.1)</td>
<td>83(88.3)</td>
<td>63(91.3)</td>
<td>0.390</td>
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<tr>
<td>Ever been robbed</td>
<td>170 (81.7)</td>
<td>30(66.7)</td>
<td>83(89.2)</td>
<td>57(81.4)</td>
<td><strong>0.006</strong></td>
</tr>
<tr>
<td>Assaulted with a weapon</td>
<td>144 (68.2)</td>
<td>24(53.3)</td>
<td>70(73.7)</td>
<td>50(70.4)</td>
<td><strong>0.048</strong></td>
</tr>
<tr>
<td>Threatened with a weapon?</td>
<td>139 (66.2)</td>
<td>25(55.6)</td>
<td>68(71.6)</td>
<td>46(65.7)</td>
<td>0.119</td>
</tr>
<tr>
<td><strong>Suicidal Ideation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feelings of hopelessness</td>
<td>178 (84.8)</td>
<td>44(95.7)</td>
<td>74(81.3)</td>
<td>60(82.2)</td>
<td>0.063</td>
</tr>
<tr>
<td>Attempted suicide</td>
<td>59 (28.1)</td>
<td>16(34.8)</td>
<td>35(38.5)</td>
<td>8(11.0)</td>
<td>&lt; <strong>0.001</strong></td>
</tr>
<tr>
<td>Planned to commit suicide</td>
<td>55 (26.2)</td>
<td>14(30.4)</td>
<td>31(34.1)</td>
<td>10(13.7)</td>
<td><strong>0.010</strong></td>
</tr>
<tr>
<td>Made one or two suicide attempts</td>
<td>60 (28.6)</td>
<td>18(39.1)</td>
<td>27(29.7)</td>
<td>15(20.5)</td>
<td>0.110</td>
</tr>
</tbody>
</table>

*Note:* Statistical significant *p* values in bold
As presented in Table 5, age group differences existed on violent and violence-related behaviours of the participants in the study. Incidence of forcing someone to have sex, $\chi^2(2, N = 61) = 7.40, p < 0.05$; and bullying someone, $\chi^2(2, N = 135) = 6.89, p < 0.05$, were found to increase with age. The results further revealed significant age groups differences in ever being injured in a fight, $\chi^2(2, N = 160) = 13.17, p = 0.001$, ever beaten someone, $\chi^2(2, N = 136) = 6.03, p < 0.05$; having been robbed $\chi^2(2, N = 170) = 10.06, p = 0.006$ and being assaulted with a weapon $\chi^2(2, N = 144) = 6.07, p < 0.05$.

5.2.2.4 Suicidal Ideation

The study also revealed moderate levels of suicidal ideation and suicide attempts as shown in Table 4. Approximately 85% had feelings of hopelessness about the future during the past one month, and 27.6% reported to ever having considered attempting suicide. Only 26.2% and 28.0% reported to have made a plan to commit suicide or attempted suicide on one or two occasions respectively. This varied according to gender: girls were more likely to have made a plan to commit suicide than boys, $\chi^2(1, N = 56) = 6.07, p < 0.05$, and were more likely to have made one or two suicide attempts, $\chi^2(1, N = 60) = 7.73, p = 0.005$.

The results as presented in Table 5 also revealed that age group differences exist in considering to commit suicide, $\chi^2(2, N = 59) = 16.47, p < 0.001$, and having planned to commit, $\chi^2(2, N = 60) = 9.24, p <.05$. When compared to the other age-groups, late adolescents (14-19 years) were less likely to have considered attempting suicide (11.0%) and made a plan to commit suicide (13.7%). Over 38.5% of the 11-13 year olds and 34.8% of the 7-10 year olds indicated to have considered attempting suicide. Additionally, more of 11-13 year olds (34.1%) and 30.4% of 7-10 year olds reported to have made a plan to commit suicide.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Male (N=117)</th>
<th>Female (N=99)</th>
<th>t – value</th>
<th>95% CI LL</th>
<th>95% CI UL</th>
<th>d – value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Difficulties Score</td>
<td>21.90</td>
<td>6.31</td>
<td>19.65</td>
<td>5.77</td>
<td>2.62**</td>
<td>0.56</td>
</tr>
<tr>
<td>Emotional Symptoms</td>
<td>7.33</td>
<td>2.25</td>
<td>6.33</td>
<td>2.45</td>
<td>3.14**</td>
<td>0.37</td>
</tr>
<tr>
<td>Conduct Problems</td>
<td>5.16</td>
<td>2.94</td>
<td>4.71</td>
<td>2.93</td>
<td>1.08</td>
<td>–0.37</td>
</tr>
<tr>
<td>Hyperactivity/Inattention</td>
<td>5.66</td>
<td>2.16</td>
<td>4.98</td>
<td>2.14</td>
<td>2.23*</td>
<td>0.07</td>
</tr>
<tr>
<td>Peer Relationships Problems</td>
<td>4.85</td>
<td>1.45</td>
<td>4.86</td>
<td>1.43</td>
<td>0.69</td>
<td>–0.42</td>
</tr>
</tbody>
</table>

Note: 95% Confidence interval (CI) for the mean difference; Cohen $d$ is the effect size for the t-test values; LL- lower limits and UL-Upper limit

*p < .05; **p < .01
5.2.3 Gender and age groups differences in psychological functioning

5.2.3.1 Gender differences in psychological functioning

Gender differences were observed in overall psychological functioning (Total SDQ score), emotional problems and hyperactivity. (Refer to Table 6). Male participants ($M = 21.9$, $SD = 6.31$) showed worse psychological functioning than females ($M = 19.65$, $SD = 5.77$); $[t(206) = 2.62, p < 0.01, d = 0.37]$. Emotional problems was significantly higher in males ($M = 7.33$, $SD = 2.25$) than females ($M = 6.33$, $SD = 2.45$), $[t(206) = 3.14, p < 0.01, d = 0.45]$. The results also revealed a statistical significant difference in hyperactivity problems, $[t(206) = 2.23 p < 0.05, d = 0.32]$. Males ($M = 5.66$, $SD = 2.16$) were found to exhibit more hyperactive problems than females ($M = 4.98$, $SD = 2.14$). Even though males ($M = 5.16$, $SD = 2.94$) had more conduct problems than females ($M = 4.98$, $SD = 2.92$), this difference was not strong enough to yield any statistical significance, $[t(206) = 1.08, p > 0.05]$.

5.2.3.2 Age group differences in psychological functioning

The One-Way Between groups ANOVA was used to determine whether there were any differences between the 3 age groups on psychological functioning. The results as presented in Tables 7 and 8, show that there is a statistical significant difference in overall psychological functioning among the 3 age groups, $[F(2, 195) = 9.19, p < 0.01]$. Multiple comparisons, using Turkey HSD indicated that the mean score for 11-13 year olds ($M = 18.81$, $SD = 6.11$) were significantly different from both 7-10 year olds ($M = 22.28$, $SD = 5.35$), $p = 0.001$, and the 14-19 year olds ($M = 22.45$, $SD = 5.97$), $p = 0.002$.

There was a significant difference in emotional problems $[F(2, 212) = 3.38, p < 0.05]$, conduct problems $[F(2, 210) = 11.63, p < 0.01]$, and hyperactivity $[F(2, 211) = 3.33, p < 0.05]$ among the 3 age groups of participants in the study. Further multiple comparison analysis on
Table 7
Psychological Functioning of Homeless Youth According to Age Groups

<table>
<thead>
<tr>
<th>Variable</th>
<th>7 – 10yrs (N=50)</th>
<th>11– 13yrs (N=98)</th>
<th>14– 19yrs (N=75)</th>
<th>Post hoc Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td></td>
</tr>
<tr>
<td>Total Difficulties Score</td>
<td>22.38 (5.35)</td>
<td>18.81 (6.11)</td>
<td>22.45 (5.97)</td>
<td>[1&gt;2]*<strong>, [3&gt;2]</strong></td>
</tr>
<tr>
<td>Emotional Symptoms</td>
<td>7.12 (2.47)</td>
<td>6.33 (2.27)</td>
<td>7.14 (2.08)</td>
<td>[1&gt;2]*</td>
</tr>
<tr>
<td>Conduct Problems</td>
<td>5.67 (2.67)</td>
<td>4.00 (2.97)</td>
<td>5.93 (2.48)</td>
<td>[1&gt;2]*<strong>, [3&gt;2]</strong>**</td>
</tr>
<tr>
<td>Hyperactivity/Inattention</td>
<td>5.90 (2.02)</td>
<td>4.99 (2.30)</td>
<td>5.57 (1.92)</td>
<td>[1&gt;2]*</td>
</tr>
<tr>
<td>Peer Problems</td>
<td>4.80 (1.34)</td>
<td>4.84 (1.61)</td>
<td>4.99 (1.22)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Note: 7 – 10yrs (Late childhood); 11– 13yrs (Early Adolescence) and 14– 19yrs (Late Adolescence).

Table 8
One-Way ANOVA Results for Different Age Groups in Psychological Functioning of Homeless Youth

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Difficulties Score</td>
<td>638.33</td>
<td>2</td>
<td>319.16</td>
<td>9.19***</td>
</tr>
<tr>
<td>Emotional Symptoms</td>
<td>34.57</td>
<td>2</td>
<td>17.29</td>
<td>3.38*</td>
</tr>
<tr>
<td>Conduct Problems</td>
<td>176.57</td>
<td>2</td>
<td>88.28</td>
<td>11.63***</td>
</tr>
<tr>
<td>Hyperactive</td>
<td>29.97</td>
<td>2</td>
<td>14.98</td>
<td>3.33*</td>
</tr>
<tr>
<td>Peer relation</td>
<td>33.93</td>
<td>2</td>
<td>16.97</td>
<td>3.18</td>
</tr>
</tbody>
</table>

Note: *p < .05; **p < .01; ***p < .001
emotional symptoms showed that the mean score for 11-13 year olds ($M = 6.33, SD = 2.27$) was different from that of the 14-19 year olds ($M = 7.14, SD = 2.08$). This mean difference approached statistical significance, $p = 0.059$. With regards to conduct problems, multiple comparison results showed that mean score for the 11-13 year olds ($M = 4.00, SD = 2.97$) was significantly different from the mean score of those 7-10 years old ($M = 5.67, SD = 2.67$), $p = 0.002$; and 14-19 years old ($M = 5.97, SD = 2.48$), $p > 0.001$. There was however, no difference in the mean scores of 7-10 year olds ($M = 5.67, SD = 2.67$) and 14-19 year olds ($M = 5.97, SD = 2.48$) on conduct problems. The results as presented in Table 7 further shows that with regards to hyperactivity among the participants, a statistical significant difference exist between 7-10 year olds ($M = 5.90, SD = 2.02$) and the 11-13 year olds ($M = 4.99, SD = 1.92$), $p > 0.05$.

5.3 Discussion

The findings of the study showed that more females had smoked cigarettes, used alcohol and marijuana than males in the past month. This finding contradicts previous studies among homeless youth where males generally reported higher substance use than females (Ahamad et al., 2014; Habtamu & Adamu, 2013; Hadland et al., 2011; Kayembe et al., 2008). The sex difference may possibly be attributed to the fact that female adolescents with sexual abuse histories are more likely to abuse drugs on the street (Chen et al., 2004). In this study, more females reported sexual abuse as a reason for being homeless than male participants. The extent of their engagement in survival sex is possibly linked to supporting their substance use behaviours.

There were significant variations on sexual behaviour, violent behaviour, and suicide ideation by gender. Girls showed more engagement in health risk behaviour and suicidal behaviours than boys. Compared with boys, girls were more likely to have had sex in exchange
for food, money, clothes or even a place to sleep (64.2%), more likely to have been a victim of violence-related sex (47.4%), more likely to have made a plan to commit suicide (34.4%) and more likely to have made one or two suicide attempts (37.5%). These findings are supported in other studies (Gwadz, Nish, Leonard & Strauss, 2007; Oduro, 2012; Kidd & Carroll, 2007). As in the general population of adolescent girls, street girls in this study have reported more suicidal attempts and higher levels of suicidal ideation than their male counterparts. This could be attributed to the heightened levels of risk girls are exposed to on the street. According to Oduro (2012) young street girls suffer from psychological and emotional effects of rape, compounded by keeping these experiences to themselves (without sharing it) due to the associated stigma. This may likely increase their state of depression and suicidality.

Other contextual factors that could have influenced the likelihood for street girls to have had sex for money and coerced to have sex include the harsh conditions on the street as it may be at times unbearable for the girls, and since finding a source of income is very difficult, the high rate of commercialization of sex could be a plausible reason. Additionally, power dynamics on the street could play a role (Oduro, 2012; Elepe, 2002). Ghanaian women often experience relative powerlessness, compared with men, because of poor economic empowerment and traditional social norms (Wutoh et al., 2006). As a result, they often submit to the will of their male counterpart/boyfriends/sexual partners. These unequal power relationships with men, generally, along with limited life choices on the street, could make female street youth vulnerable to sexual advances through the use of violence to have sex.

While early adolescents were more likely to abuse alcohol than the other age groups, marijuana use increased with age. Early adolescence as a stage of development is characterised with experimentation (Sumter et al. 2009), and is likely to explain the vulnerability of this age
group to experiment with alcohol which is generally accessible to both minors and adults in Ghana (Adu-Mireku, 2003). The increase of marijuana use with age is not surprising as it is against the law and not easily accessible, so homeless youth have to develop various mechanisms to access it. This finding is also suggestive of the fact that the longer youth live on the street, the more likely they are to engage in substance use including marijuana (van Leeuwen et al., 2004), linked to the experiences of homelessness rendering them vulnerable to substance use (Embleton et al., 2012; Hodgson et al., 2013). Social estrangement, that occurs when street youth become deep-rooted in street life with time, may also explain youth susceptibility with increasing age to engage in more high risk behaviours including substance use (Bender et al., 2012). Substance use with increased age may be associated with increased sexual risk sexual behaviours.

The results of the study revealed that the overall psychological well-being, emotional, and hyperactivity problems varied by gender, with males most often fitting into the criteria for these mental health problems. These findings support previous studies conducted in developed countries such as Canada and the United States of America (Cauce et al., 2001; Slesnick & Prestopnik, 2005) but contradicts a study conducted by Rice et al. (2012), which reported that female homeless youth generally suffer more from depressive symptoms and other psychological problems than their male counterparts. In an extensive literature review, Edindin et al. (2012) reported that the experience of homelessness appears to influence both mental and physical health of street youth. Whilst males and female homeless youth are known to differ on externalizing and internalizing problems (Slesnick & Prestopnik, 2005), the results seem to suggest that males significantly suffer from both internalizing (i.e. emotional problems) and externalizing problems (i.e. hyperactivity) behaviours in this study.
Age group differences were observed in four (4) out of the five indexes of psychological well-being among the participants. Late childhood and late adolescent youth experienced higher psychological problems than their counterparts in early adolescence. What seem to be an obvious trend in the results was that psychological symptoms seems to be very high at late childhood, remain stable at early adolescence, and then peak again at late adolescence. Taking into consideration that fact that these participants comes from troubled families, and most often left home due to physical and sexual abuse, it is expected that this would have resulted in some form of behavioural and emotional problems as evidenced in the study participants. The findings confirm that of a previous study conducted by Cauce et al. (2001) where no consistent pattern of age differences in psychological symptoms was found.

5.4 Conclusion

The findings reveal that drug use other than alcohol increases with age, which means that as homeless youth become older, they would be more likely to engage in substance abuse and abuse. It is therefore important for NGOs and international organizations that provide psycho-social services for homeless youth to target early entrants to the street before they entrenched in the street sub-culture which is characterized with violence, substance abuse and sexual risky behaviours. This could be done by initiating harm reduction programmes that would address the needs of this population by ensuring that they use condoms correctly and consistently when engaging in sexual intercourse, especially for those who have multiple sexual partners. This initiative could use previously successful street youth to act as peer educators, as peer-to-peer contact has proven to be one of the effective approach to reaching most-at-risk young people (UNAIDS Inter-Agency Task Team on HIV and Young People, 2010).
Cognizance of gender dimensions is important in developing interventions for homeless population. A client-centered approach could be used through the development of trust when dealing with psycho-social problems, especially in respect of females who might have been sexually abused or involved in some form of survival sex. On the contrary, since males are known to be perpetrators of sexual violence on the street (Cauce et al., 2000), programmes must focus on reducing or limiting such abuses.
6.1 Introduction
In chapter two, the literature on sexual risk behaviours, and substance use among homeless youth had been presented. However, sparse literature on age and gender differences exists regarding substance use among homeless children and youth in Ghana. There are also few studies about the prevalence of substance use, and the relationships between substance use and risky sexual behaviours among a sample of street connected children and youth in the Central Business District (CBD) of Accra, Ghana.

To provide answers to these questions, the following statistical analyses were conducted. Descriptive statistics were conducted to examine demographic information, the prevalence, type and frequency of substances used and HIV risk behaviours i.e. ever had sexual intercourse, inconsistent condom use, multiple sexual partners and engagement in survival sex. Univariate and multivariate logistic regression models were fitted to determine the substance use predictors of the four risky sexual behaviours mentioned above after controlling for the following demographic variables i.e. age, gender, years living on the street, previous level of education, and reasons for being homeless. As stated in chapter 3, all the assumption underlying the use of logistic regression (i.e. sample size, multicollinearity and outliers) were met. The results from the regression analyses are presented as odds ratio (OR) and 95% confidence interval (CI). All analyses were two-tailed, and a $p$-value of less than 0.05 was considered statistically significant.

6.2 Results
6.2.2 Type and frequency of substances use
Street children’s use of drugs, as presented in Tables 4 and 9 showed that the most frequently used substances mentioned were alcohol, marijuana, tobacco (cigarettes) and “glue”. Over 12.0%
of the participants drink alcohol daily, whilst 83.4% indicated that they sometimes use it; 16.2% reported to use marijuana on a daily basis, whilst 68.8% reported that they use it sometimes; cigarettes were reported to be smoked by 13.4% on a daily basis and by 59.3% sometimes. About a third (27.7%) of the street children reported to either use “glue” sometimes with only 3.8% indicating that they use it daily.

Table 9
Frequency of Substances Used by Street Children in Accra, Ghana (N = 227)

<table>
<thead>
<tr>
<th>Frequency of Use</th>
<th>Marijuana (N=160) (%)</th>
<th>Alcohol (N=175) (%)</th>
<th>Smoking (N=209) (%)</th>
<th>Glue (N=213) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>15.0</td>
<td>4.6</td>
<td>27.3</td>
<td>68.5</td>
</tr>
<tr>
<td>Sometimes</td>
<td>68.8</td>
<td>83.4</td>
<td>59.3</td>
<td>27.7</td>
</tr>
<tr>
<td>Daily</td>
<td>16.2</td>
<td>12.0</td>
<td>13.4</td>
<td>3.8</td>
</tr>
</tbody>
</table>

6.2.3 Predictors of substance used and sexual risk behaviours

Inconsistent condom use was very high (82.9%) and over 53% and 54% of the participants had engaged in survival sex and had multiple sexual partners respectively. In the logistic regression analyses (Table 10, Model 2), after controlling for socio-demographic factors, alcohol and marijuana use were independently associated with ever had sexual intercourse. Homeless youth who use alcohol were about six times more likely to have had sexual intercourse compared to non-alcohol users (OR= 5.6, 95%CI= 1.3 – 24.3). Also marijuana users were also more likely to be sexually active than their counterparts who do not use marijuana (OR= 24.0, 95%CI= 9.7–59.8). Furthermore, marijuana use among the sample in the study was associated with having multiple sexual partners (OR= 19.4, 95%CI= 7.0–50.5) and engaging in survival sex (OR= 7.5, 95%CI= 3.4–16.2).
Table 10
Odds Ratio and 95% Confidence Interval (CI) of Risky Sexual Behaviours by Substance Use Among Homeless Youth in Logistical Regression Multivariate Analyses

<table>
<thead>
<tr>
<th>Health Behaviour</th>
<th>Had sexual intercourse</th>
<th>Inconsistent Condom Use</th>
<th>Multiple sexual partners</th>
<th>Survival sex</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 2* OR (95% CI)</td>
<td>Model 2* OR (95% CI)</td>
<td>Model 2* OR (95% CI)</td>
<td>Model 2* OR (95% CI)</td>
</tr>
<tr>
<td>Smoking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Yes</td>
<td><strong>12.3</strong>&lt;8.6–26.9)</td>
<td>---</td>
<td><strong>5.6</strong>&lt;2.7–12.1)</td>
<td><strong>3.2</strong>&lt;1.8–7.6</td>
</tr>
<tr>
<td>Ever drunk alcohol</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Yes</td>
<td><strong>14.4</strong>&lt;5.5–37.5)</td>
<td><strong>7.8</strong>&lt;2.0–59.3)</td>
<td><strong>12.9</strong>&lt;4.1–41.2)</td>
<td><strong>9.4</strong>&lt;2.9–30.6</td>
</tr>
<tr>
<td>Had alcohol in past month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Yes</td>
<td><strong>22.2</strong>&lt;9.3–53.6)</td>
<td><strong>3.1</strong>&lt;1.1–15.1)</td>
<td><strong>11.4</strong>&lt;5.2–25.6)</td>
<td><strong>8.8</strong>&lt;3.4–18.9</td>
</tr>
<tr>
<td>Marijuana use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Yes</td>
<td><strong>24.0</strong>&lt;9.7–59.8)</td>
<td>---</td>
<td><strong>19.4</strong>&lt;7.0–50.5)</td>
<td><strong>7.5</strong>&lt;3.4–16.2</td>
</tr>
<tr>
<td>Other drug use (including glue)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Yes</td>
<td>---</td>
<td><strong>3.1</strong>&lt;1.4–7.7)</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

*Adjusted for age, gender, years living on the street, previous level of education, and reasons for being homeless. Statistical significant odds ratios are boldfaced ($p < 0.05$).

This result implies that that homeless youth who were using marijuana were seventeen and eight times more likely to have multiple sexual partners and engagement in some form of transactional sex respectively. The results further show that inconsistent condom use in previous sexual activity was associated with ever drinking alcohol (OR= 7.8, 95%CI= 2.0–59.3), used alcohol in the past month (OR= 3.1, 95%CI= 1.1–15.1) and other drug use (OR= 3.1, 95%CI= 1.4–7.7 ). These results suggest that street adolescents who have ever drunk alcohol and used alcohol in the past month were independently associated with all the four indices of risky sexual behaviour (ever had sex, non-condom use, multiple sexual partners and survival sex).
6.3 Discussion

The prevalence of substance use in this study is comparable to figures from other studies (e.g. Embleton et al., 2012; Nada & Suliman, 2010) but lower than the rates found in other African countries (Adebiyi, Owaoje, & Asuzu, 2008; Elkoussi & Bakheet, 2011; Embleton et al., 2013). In the past one month the sample reported 12.0% and 16.2% daily use of alcohol and marijuana respectively. Even though, these rates are relatively low, they suggest that these drugs are easily accessible to this group. Comparing this prevalence to studies in the general population, Doku, Koivusilta and Rimpelä (2012) reported a 12.7% alcohol use and 5.2% among school going adolescents in Ghana. The high prevalence of marijuana use could be attributed to street socialising by peers on the street as suggested by Chen, Tyler, Whitbeck, and Hoyt (2004), and as coping mechanisms to reduce emotional problems found in another study (Slesnick & Prestopnik, 2005). The fact that approximately one in six of the youth reported using marijuana shows the extent of drug risk street youth face in Accra.

The study also revealed that over 54% of the homeless youth reported having engaged in survival sex i.e. exchanged sex for food, money and even a place to sleep, with females more likely to engage in such behaviours than males. It is however, important to note that an equally high number of males in this study also reported involvement in survival sex as presented in the previous chapter. Over 54% of the sample had engaged in survival sex, and this implies that at least one out of every 2 homeless youth living on the street of Accra, are engaging in some form of sex work.

A striking result in the study was that substance use among street youth particularly alcohol use, marijuana and cigarette smoking were independently associated with having unprotected sex, multiple sexual partners and engagement in survival. This aggregation of health
damaging behaviours is consistent with the theory of problem behaviour (Jessor & Jessor, 1997). The clustering of health risk behaviours among homeless youth is more enhanced as they are predisposed to several risk factors heightening multiple vulnerabilities (Embleton et al., 2013; Kayembe et al., 2008; Nada & Suliman, 2010). Among street children in the Democratic Republic of Congo (DRC), a constellation of health compromising behaviours were reported where a history of drug use were linked to the engagement in sexual risk behaviour (Kayembe et al., 2008). Also among Egyptian, Malawian and Sudanese street children, similar evidence of co-occurrence of health compromising behaviours has been identified (Kudrati, Plummer, & Youisif, 2008; Mandalazi, Banda & Umar, 2013; Nada & Suliman, 2010). Substance use is viewed as a risk factor to other health damaging behaviours, particularly risky sexual behaviour (Kandel, 2002). In the present study, it is unclear whether homeless youth engaged in risky sexual behaviour because they were under the influence of substance use or whether they engage in risky sexual behaviours as a means to support substance use or some “third factor” such as the social environment that facilitated risky sex and or substance use. It is however known that substance use interferes with rational behaviours (Tadesse et al., 2013), which could make individuals more vulnerable to engage in unsafe behaviours.

Health compromising behaviours among homeless youth in this study shows their vulnerability for HIV infection as a result of their high levels of sexual risk behaviours i.e. multiple sexual partners, engagement in survival sex and inconsistent condom use in the contexts of a considerably high alcohol and drug use. This linkage between substance use vulnerability to acquiring HIV and AIDS is well established (Anarfi, 1997; Naranbhai, Karim, & Meyer-Weitz, 2011; Wutoh et al., 2006)
6.4 Conclusions

The findings from this part of the study focus suggest that over 10 percent of the homeless youth abuse substance such as alcohol and marijuana, and concurrently engaged in risky sexual behaviours. Substance use, especially alcohol and marijuana use among the sample was relatively high and was used as a means of fitting into street culture and used likely as a coping mechanism with adversaries linked to street life. Substance use was found to be a risk factor for risky sexual behaviours among Ghanaian homeless youth, placing them at risk for contracting STIs including HIV, with its accompanying health and social implications as well as bringing them into conflict with the laws. Harm reduction programmes targeting these youth must take into consideration the likelihood of substance use especially marijuana and alcohol use among the sexually experienced youth. Further studies are needed within the African context using stronger statistical models to explore the multiple pathways between substance use and risky sexual behaviours among homeless populations.

In the next chapter the validation of the Connor-Davidson Resilience Scale will be addressed as the measurement of resilience among youth living on the street for further research development.
CHAPTER 7

VALIDATION OF THE CONNOR-DAVIDSON RESILIENCE SCALE (CD-RISC)

7.1 Introduction

The main purpose of this chapter is to present the validation of the CD-RISC in the Ghanaian context, as the concept of resilience is nuanced and influence by socio-cultural and physical resources (Ungar, 2011). Examination of this measure would assist to delineate a more culturally appropriate model of resilience within Ghana in particular, and in Sub-Saharan Africa in general. To achieve this objective, the Principal Component Analysis (PCA) with Varimax rotation was used to extract factors. The adequacy of the data (individually as well as the full set of items) for factor analysis was determined with the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1970) and the Bartlett’s test of sphericity, the scree plot and Parallel Analysis (Watkins, 2000). The examination of the suitability of data for factor analysis indicated that the factorability was adequate as the Bartlett’s test is significant (p=0.000) and The Kaiser-Meyer-Olkin (KMO) index (0.877) was greater than 0.60. Pearson product-moment correlation coefficient (r) was used to evaluate the external validity of the constructed scales with the full scale of the Multidimensional Scale for Perceived Social Support. It was expected that resilience as measured by the CD-RISC-G would be associated with higher levels of social support as measured by the MSPSS. All statistical tests were performed using two-tailed tests, and a p value of 0.05 or less was considered statistically significant.
7.2 Results

7.2.1 Construction of the Ghanaian version of CD-RISC: Principal Component Analysis

The Exploratory Factor Analysis (EFA) started by testing the factorability of the items. A Confirmatory factory analysis (CFA) would have been desirable but given the common problems associated with using CFA, especially with the small sample size and that fact that this study is the first of its kind to be conducted in Ghana with the participants used in this study, exploratory factor analysis was favoured. Therefore, the choice of EFA was prompted by virtue of the fact that the study suffers from the disadvantage of being a small questionnaire-based study of 227 homeless youth, designed to make an added contribution to the body of literature. The examination of the suitability of data for factor analysis indicated that the factorability is adequate as the Bartlett’s test was significant ($p = 0.000$) and the Kaiser-Meyer-Olkin (KMO) index (0.877) is greater than 0.60.

In the PCA, all 25 items were entered on an equal footing into the analysis process. The initial exploratory factor analysis to the CD-RISC yielded without any extraction five factors with eigenvalues $\geq 1$. The Monte Carlo PCA Parallel Analysis software programme (Watkins, 2000) was used to generate average eigenvalues based on the size of the data in this study (i.e. number of variables = 20; number of cases = 227). The results of this analysis are presented in Table 11. After generating these criterion eigenvalues, the PCA generated eigenvalues from the five factors were compared to decide the number of factors to be extracted. On the basis of this comparison, the three factors were retained for further analysis. The results of this decision making on the number of factors to retain are summarized in Table 12. Seven (7) items (questions 1, 5, 6, 7, 15, 20, 21) which did not meet the inclusion criteria (i.e. having a commonality value $< 0.50$) were excluded from the analysis due to small shared variance with
Table 11
Output from Parallel Analysis

<table>
<thead>
<tr>
<th>Eigenvalue #</th>
<th>Random Eigenvalue</th>
<th>Standard Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.6647</td>
<td>0.0683</td>
</tr>
<tr>
<td>2</td>
<td>1.5546</td>
<td>0.0480</td>
</tr>
<tr>
<td>3</td>
<td>1.4700</td>
<td>0.0367</td>
</tr>
<tr>
<td>4</td>
<td>1.4023</td>
<td>0.0342</td>
</tr>
<tr>
<td>5</td>
<td>1.3430</td>
<td>0.0318</td>
</tr>
<tr>
<td>6</td>
<td>1.2886</td>
<td>0.0284</td>
</tr>
<tr>
<td>7</td>
<td>1.2385</td>
<td>0.0250</td>
</tr>
<tr>
<td>8</td>
<td>1.1904</td>
<td>0.0229</td>
</tr>
<tr>
<td>9</td>
<td>1.1436</td>
<td>0.0239</td>
</tr>
<tr>
<td>10</td>
<td>1.0923</td>
<td>0.0239</td>
</tr>
<tr>
<td>11</td>
<td>1.0502</td>
<td>0.0246</td>
</tr>
<tr>
<td>12</td>
<td>1.0035</td>
<td>0.0248</td>
</tr>
<tr>
<td>13</td>
<td>0.9660</td>
<td>0.0219</td>
</tr>
<tr>
<td>14</td>
<td>0.9302</td>
<td>0.0237</td>
</tr>
<tr>
<td>15</td>
<td>0.8886</td>
<td>0.0218</td>
</tr>
<tr>
<td>16</td>
<td>0.8535</td>
<td>0.0209</td>
</tr>
<tr>
<td>17</td>
<td>0.8111</td>
<td>0.0231</td>
</tr>
<tr>
<td>18</td>
<td>0.7774</td>
<td>0.0215</td>
</tr>
<tr>
<td>19</td>
<td>0.7386</td>
<td>0.0198</td>
</tr>
<tr>
<td>20</td>
<td>0.7003</td>
<td>0.0197</td>
</tr>
<tr>
<td>21</td>
<td>0.6614</td>
<td>0.0214</td>
</tr>
<tr>
<td>22</td>
<td>0.6267</td>
<td>0.0224</td>
</tr>
<tr>
<td>23</td>
<td>0.5866</td>
<td>0.0220</td>
</tr>
<tr>
<td>24</td>
<td>0.5432</td>
<td>0.0256</td>
</tr>
<tr>
<td>25</td>
<td>0.4879</td>
<td>0.0310</td>
</tr>
</tbody>
</table>

*Note: Monte Carlo PCA for Parallel Analysis (Watkins, 2000)*

the rest of the items. The Principal Component Analysis (PCA) with Varimax rotation yielded
three factor structures with 18 items. The three factor model explained 62.3% of the total
variance. The three factors identified could be broadly interpreted as follows: Factor 1 (8 items)
related to *personal competence and tenacity*; Factor 2 (7 items) related to *optimism* and Factor 3
(3 items) related to achievement motivation. The factors (1, 2 and 3) explained 33.5%, 18.6% and 10.2% of the variance in the items respectively. The factor structure is presented in Table 13.

Table 12
Comparison of Eigen Values from PCA and the Criterion Values from Parallel Analysis

<table>
<thead>
<tr>
<th>Component number</th>
<th>Actual eigenvalue from PCA</th>
<th>Criterion values from parallel analysis</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.833</td>
<td>1.6647</td>
<td>Accept</td>
</tr>
<tr>
<td>2</td>
<td>3.970</td>
<td>1.5546</td>
<td>Accept</td>
</tr>
<tr>
<td>3</td>
<td>1.960</td>
<td>1.4700</td>
<td>Accept</td>
</tr>
<tr>
<td>4</td>
<td>1.232</td>
<td>1.4023</td>
<td>Reject</td>
</tr>
<tr>
<td>5</td>
<td>1.056</td>
<td>1.3430</td>
<td>Reject</td>
</tr>
</tbody>
</table>

7.2.2 Internal consistency and homogeneity of the scale (Reliability evidence)

The Ghanaian version of the CD-RISC obtained a Cronbach alpha of 0.88. The internal consistency alpha values for the factors were 0.91 (factor 1), 0.78 (factor 2) and 0.68 (Factor 3). The reliability coefficient of factor 3 was acceptable since the number of items were only three. The correlation coefficients between the total score of the CD-RISC and the three factors were 0.79, 0.79 and 0.53 respectively. All the correlations were significant at p < .001, and this information is presented in Table 14. The mean inter-item correlation was .301 (range: -.233 to .702). A mean inter-item correlation of ≥ .30 shows reliability of the scales (Bowling, 2009). On the basis of a criterion of .30, as an acceptable corrected item-total correlation (Nunnally & Bernstein, 1994), all the items performed well.
Table 13
Item–Total Correlations and Rotated Factor Pattern of the Ghanaian Version of the Connor–Davidson Resilience Scale

<table>
<thead>
<tr>
<th>Items</th>
<th>Mean</th>
<th>SD</th>
<th>Item-total correlation</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 I am not easily discouraged by failure</td>
<td>2.339</td>
<td>1.320</td>
<td>.669</td>
<td>.836</td>
</tr>
<tr>
<td>11 I can achieve my goals/ambitions</td>
<td>2.260</td>
<td>1.292</td>
<td>.618</td>
<td>.827</td>
</tr>
<tr>
<td>24 I work towards achieving my goals</td>
<td>2.339</td>
<td>1.217</td>
<td>.627</td>
<td>.823</td>
</tr>
<tr>
<td>17 I think of myself as strong person</td>
<td>2.068</td>
<td>1.414</td>
<td>.625</td>
<td>.770</td>
</tr>
<tr>
<td>12 When things look hopeless, I don’t give up</td>
<td>2.443</td>
<td>1.329</td>
<td>.646</td>
<td>.750</td>
</tr>
<tr>
<td>10 I give my best effort no matter what</td>
<td>2.630</td>
<td>1.343</td>
<td>.613</td>
<td>.732</td>
</tr>
<tr>
<td>9  I think things happen for a reason</td>
<td>2.599</td>
<td>1.299</td>
<td>.559</td>
<td>.694</td>
</tr>
<tr>
<td>23 I like challenges</td>
<td>2.250</td>
<td>1.176</td>
<td>.622</td>
<td>.682</td>
</tr>
<tr>
<td>8  I tend to easily overcome difficulties times or illness</td>
<td>2.089</td>
<td>1.387</td>
<td>.552</td>
<td>.843</td>
</tr>
<tr>
<td>3 Sometimes fate or God can help</td>
<td>1.755</td>
<td>1.313</td>
<td>.618</td>
<td>.784</td>
</tr>
<tr>
<td>22 I feel I am in control of my life</td>
<td>2.255</td>
<td>1.381</td>
<td>.607</td>
<td>.780</td>
</tr>
<tr>
<td>4  I can deal with whatever comes</td>
<td>1.755</td>
<td>1.197</td>
<td>.502</td>
<td>.723</td>
</tr>
<tr>
<td>2  I have close and secure relationships</td>
<td>1.651</td>
<td>1.357</td>
<td>.701</td>
<td>.708</td>
</tr>
<tr>
<td>19 I can handle uncomfortable feelings</td>
<td>1.927</td>
<td>1.234</td>
<td>.584</td>
<td>.613</td>
</tr>
<tr>
<td>18 I make unpopular or difficult decisions</td>
<td>1.854</td>
<td>1.232</td>
<td>.640</td>
<td>.583</td>
</tr>
<tr>
<td>14 When I am under pressure, I focus and think clearly</td>
<td>1.438</td>
<td>1.325</td>
<td>.350</td>
<td>.768</td>
</tr>
<tr>
<td>13 I know where to turn for help</td>
<td>1.328</td>
<td>1.327</td>
<td>.422</td>
<td>.723</td>
</tr>
<tr>
<td>25 I take pride in my achievements</td>
<td>1.880</td>
<td>1.366</td>
<td>.467</td>
<td>.646</td>
</tr>
</tbody>
</table>

Eigen values
Percentage of total variance explained
Internal consistency (α )

Note: Factor loadings with absolute value greater than .40 are shown in boldface
Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization
Rotation converged in 8 iterations.
7.2.3 **External validity**

Regarding external validity, the new CD-RISC-G scale was positively correlated with overall perceived social support ($r = 0.215$, $p < 0.05$). This correlation was however moderate. The three factors of the CD-RISC-G were significantly correlated positively with social support. These correlation coefficients are Factor 1 ($r = 0.33$, $p < 0.001$), Factor 2 ($r = 0.49$, $p < 0.001$) and Factor 3 ($r = 0.17$, $p < 0.05$). These results indicate that among the participants, greater resilience is associated with high perceived social support. This information is presented in Table 15.

**Table 14**
Correlation Coefficients among the Ghanaian Version of the Connor–Davidson Resilience Scale Scores and Factor Scores

<table>
<thead>
<tr>
<th></th>
<th>CD-RISC-G</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD-RISC-G</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 1</td>
<td>.790***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 2</td>
<td>.792***</td>
<td>.317****</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Factor 3</td>
<td>.526***</td>
<td>.130</td>
<td>.440***</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note: CD-RISC-G: Ghanaian version of the Connor–Davidson Resilience Scale.*** $p < 0.001$ (two-tailed)*

**Table 15**
Correlation of the Ghanaian Version of the Connor–Davidson Resilience Scale Scores, its Factor Scores and Perceived Social Support

<table>
<thead>
<tr>
<th>Variables</th>
<th>CD-RISC-G</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Social Support</td>
<td>.22*</td>
<td>.33***</td>
<td>.49***</td>
<td>0.17*</td>
</tr>
</tbody>
</table>

*Note: CD-RISC-G: Ghanaian version of the Connor–Davidson Resilience Scale
* $p < 0.01$; *** $p < 0.001$ (two-tailed)*
7.3 Discussion

The findings revealed that the three-factor structure of 18 items was different from the five-factor structure reported by Connor and Davidson (2003). Moreover, the number and factor loadings of the items differed and therefore imply some cultural variations. The variations in the factor structure may not only reflect cultural differences in understanding the different items on the scale but might also stem from the variance in samples used in previous validation studies of the CD-RISC (Burns & Anstey, 2010). The previous studies that had produced inconsistent factor-structure to that of Connor and Davidson (2003) had used different samples from different geographical locations [e.g. Lamond et al.’s (2008) study with community-dwelling women aged 60 years and above in the USA; Jorgensen and Seedat (2008) research on South African adolescents; Karairmak (2010) on trauma survivors in Turkey; Singh and Yu (2010) on Indian university students; Sexton et al. (2010) on women experiencing infertility; Yung et al. (2012) and Yu et al. (2011) with psychiatric output patients and adolescents in China respectively]. Since cultures differ in terms of historical, geographical and social-environmental contexts, the conceptual structure and meaning of what constitute resilience may also vary for people living in different socio-cultural contexts (Claus-Ehlers, 2008; Yung et al., 2012). Since resilience research among young adults is increasing (e.g. homeless children and street youth, youth from disadvantage environment), further research including cultural differences are needed to verify its meaning in different contexts but also to have a reliable and valid measurement tool that will make cross-cultural comparisons meaningful.

Factor 1(personal competence and tenacity) had 8 items and takes up a large proportion of the explained variance (33.5%) of the 3-factor structure. This factor included 7 out of the 8 items in the factor named personal competence, high standards and tenacity in the original study (Connor & Davidson, 2003). The factor also extracted a single item from the spiritual influence
factor in the original study. This finding implies that the structure of resilience in Ghanaian homeless youth was interpreted differently from both the American (Connor & Davidson, 2003) and Australian sample (Gillespie et al., 2007). The finding could also suggest that a resilient homeless youth in Ghana would integrate behaviours of personal competence, high standards and tenacity as well as spirituality when found in a frustrating situation or when experiencing an extreme setback. The sample in this study may therefore perceive resilience to be more integrative of these items than being separated into different factors.

Factor 2 (optimism) also seems to be a mixture of the second (trust in one’s instinct, tolerance of negative effects and strengthening effect of stress), third (positive acceptance of change) and fourth factor (control) in the original study. The structure of the items in this factor seems to present issues concerning individual’s positive attitude and having the hope to overcome such risk or difficult situations, hence the name optimism. This factor therefore indicates a person’s ability to reflect on the positive side of events, and at the same time utilizing both personal and interpersonal resources available. It is therefore expected that a high score among Ghanaian youth on this factor would translate into one’s ability to overcome difficult situations through the use of both personal and interpersonal resources. The relevance of optimism as a construct of resilience has been documented in some psychological studies (Conversano et al., 2010; Ho, Cheung & Cheung, 2010) and has appeared as a separate factor in previous validation studies of the CD-RISC (Yu & Zhang, 2007; Singh & Yu, 2010). Young adults who are optimistic are more likely to report higher levels of satisfaction with life and less likely to experience psychosocial problems (Ho et al., 2010).

The items in Factor 3 (achievement motivation) also did not emerge from a single factor from the original study (Connor & Davidson, 2003). Rather they are a mixture of 3 items, each
of which is taken from factor one, two and four of the original study. This factor had been reported in a previous validation study of the CD-RISC (Khoshouei, 2009). Achievement motivation reflects an individual’s need to meet realistic goals and to experience a sense of accomplishment (Martin, 2002). It suggests that resilient individuals usually have the desire to succeed, and therefore consider adversity as part of normal life. Thus, they are motivated to achieve and be successful in different aspects of their life. This aspect of resilience has been referred to as a hardiness and ego resiliency in health psychology and psychopathology (Skodol, 2010).

The 3-factor structure which has been labelled as G-CD-RISC is very reliable. When compared with the original CD-RISC (Connor & Davidson, 2003), the newly developed instrument, which has been labelled as G-CD-RISC has an equally high internal consistency ($\alpha = 0.88$) compared to with 0.89 in the original scale with 25 items. The 18 item G-CD-RISC was also internally reliable among the homeless youth sample. However, one internal consistency coefficients of the three factors did not exceed the recommended, $\alpha = 0.70$ threshold. The low Cronbach alpha for factor 3 is acceptable as the mean inter item correlation (0.297) is found within the optimal range of 0.20 to 0.40 for scales with less than ten items (Briggs & Cheek, 1986).

The convergent validity of the G-CD-RISC is demonstrated by its significant and positive correlation with a measure of perceived social support. The finding that resilience was positively associated with greater social support is consistent with results of previous studies (Connor & Davidson, 2003; Connor, Davidson, & Lee, 2003; Armstrong, Birnie-Lefcovitch & Ungar, 2005; Yu et al., 2011). Studies have shown that social support as a contributing factor to resilience enables individuals to ‘bounce’ back from both psychological and physiological stressful events.
and experiences (Wilks & Croom, 2008; Horton & Wallander, 2001). Consistent with the original study, there was no gender difference with regards to the Ghanaian version of CD-RISC scores. The psychometric properties of the G-CD-RISC suggest that the 18 item scale could be used for both clinical practice as well as research purposes as it captures the core features of resilience among this sample. This is supported by the fact that total score of the G-CD-RISC measure are very highly correlated with scores on the original instrument \( r = 0.98, p < .001 \), which assessed five different domains of resilience.

The validation of the Ghanaian version of CD-RISC is very important as it would allow researchers to use the newly validated instrument to measure resilience and its associated characteristics as they may apply in Ghana among homeless youth. However, further studies are necessary to assess its application across youth not vulnerable and adult samples in Ghana. Recent studies have suggested that the concept of resilience is nuanced and influenced by social, cultural, and physical resources (Ungar, 2011). Examination of such processes would help delineate a more culturally appropriate model of resilience within Ghana in particular, and in Sub-Saharan Africa in general. Moreover, interventions, which strengthen resilience promoting factors such as social support, could be included to promote resilience among individual in adverse or stressful situations.

### 7.5 Conclusions

Despite these shortfalls, the present focus of the study is the first to provide preliminary information on the suitability of the CD-RISC in Ghana. The current study found the original 25-item CD-RISC unstable but found a shorter version of the instrument to have good psychometric properties. The 18 item G-CD-RISC possesses good psychometric properties, and it is a reliable tool for assessing resilience in the Ghanaian population. The result does not negate the
effectiveness of the original CD-RISC but rather to demonstrate that resilience can be reliably assessed with a shorter version of CD-RISC items in a different cultural context. In summary, the construct of resilience may be presented as a triad of Personal competence and tenacity, Optimism and Achievement motivation within the Ghanaian context.
CHAPTER 8
PERCEIVED RESILIENCE AND MENTAL HEALTH RISK BEHAVIOURS

8.1 Introduction

Homeless youth are generally regarded to be resilient (Theron & Malindi, 2010). Resilience also serves as a protective factor for various mental health illnesses. Cleverley and Kidd (2011) assert that resilient homeless youth were less likely to exhibit mental health behaviour such as suicidal ideation and loneliness. Although there are non-governmental organizations that provide psycho-social services to these homeless youth in Ghana, resilience as a psychological construct has received little attention and its protective effect on health risk behaviours have not been examined. There are currently no data regarding resilience and health risk behaviours within the Sub-Saharan Africa. Most of the previous studies have been conducted from developed and economically resourced countries, particularly Canada and the United States. Given that socio-cultural factors influence resilience significantly, it is therefore important to examine how resilience influences other mental health risk behaviours in other countries, especially in sub-Saharan Africa. To the best of the researcher’s knowledge, there are no similar research that has been conducted using a sample of homeless youth in Ghana.

The purpose of this part of the study was therefore to examine the association among the key health risk behaviours (suicidal ideation, substance abuse, violence and sexual risk) and perceived resilience as a protector factor in the sample of street youth in Accra, Ghana. It is expected that a negative significant relationship would exist between perceived resilience and each of the health risk indices. We further hypothesized that a significant positive relationship between each of the health risks behaviours would be found. It was hoped that the study would contribute to fill gaps in information about how resilience acts to ameliorate the effects of health risk behaviours among street youth.
Using the Statistical Package for the Social Sciences version 21.0 for Window (IBM SPSS), standard descriptive statistics were used to describe the sample characteristics. The Pearson product-moment correlation coefficients were conducted to examine the relationship between resilience and the four main health risk behaviours. Significant chi-square ($\chi^2$) results relating to engagement in the various risk behaviours within the sample were presented where necessary. A standard multiple regression analysis was used to predict resilience on the evidence of the 4 main health risk behaviours. All statistical tests were performed using two-tailed tests, and a $p$ value of 0.05 or less was considered statistically significant. Composite score was used for suicidal ideation, substance abuse, violence whilst four (4) categorical variables were used to assess sexual risk behaviours (i.e. ever had sex, condom use at last sex, multiple sexual partners and ex in exchange for money).

8.2 Results

8.2.1 Relationship between perceived resilience and health risk behaviours
The Pearson-moment correlation coefficient ($r$) was used to examine the relationship between resilience and the four main health risk behaviours (suicidal ideation, violence behaviours, substance abuse and sexual practices). Table 16 shows the correlations between health risk behaviours and perceived resilience in street children and adolescents. Significant correlations between the various health risk behaviours were observed. Suicidal ideation had a significant positive correlation with both substance abuse ($r = .18, p < .01$) and violence ($r = .46, p < .001$). Violence and substance abuse were positively correlated ($r = .51, p < .001$). The results also revealed a significant negative correlations between resilience and suicidal ideation ($r = -.55, p < .05$), substance abuse ($r = -.13, p < .001$) and violence ($r = -.43, p < .001$). This therefore suggests that high levels of health risk behaviours were associated with low levels of resilience.
### Table 16
Correlation Matrix Between Resilience and Health Risk Behaviours

<table>
<thead>
<tr>
<th>Variables</th>
<th>R</th>
<th>SI</th>
<th>SUBI</th>
<th>VOIX</th>
<th>HS</th>
<th>CUS</th>
<th>MSP</th>
<th>SEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience (R)</td>
<td>1</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Suicide Ideations (SI)</td>
<td>−.55 ***</td>
<td>1</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Substance abuse index (SUBI)</td>
<td>−.13 *</td>
<td>.18 **</td>
<td>1</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Violence Index (VOIX)</td>
<td>−.43 ***</td>
<td>.46 ***</td>
<td>.51 ***</td>
<td>1</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Ever had sex (HS)</td>
<td>−.43 ***</td>
<td>.43 ***</td>
<td>.67 ***</td>
<td>.38 ***</td>
<td>1</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Condom use at last sex (CUS)</td>
<td>.11</td>
<td>.21 **</td>
<td>.15 *</td>
<td>.19 **</td>
<td>.25 ***</td>
<td>1</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Multiple sexual partners (MSP)</td>
<td>−.47 ***</td>
<td>.31 ***</td>
<td>.52 ***</td>
<td>.42 ***</td>
<td>.62 **</td>
<td>.09</td>
<td>1</td>
<td>--------</td>
</tr>
<tr>
<td>Sex in exchange for money (SEN)</td>
<td>−.31 ***</td>
<td>.25 ***</td>
<td>.53 ***</td>
<td>.57 ***</td>
<td>.57 **</td>
<td>.22 **</td>
<td>.58 **</td>
<td>1</td>
</tr>
</tbody>
</table>

*p < .05; ** p < .01; *** p < .001
Table 17  
Summary of Multiple Regression of Resilience as a Protective Factor for Health Risk Behaviours

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SE B</th>
<th>B</th>
<th>t</th>
<th>Sig</th>
<th>95% CI (B)</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide Ideations</td>
<td>-6.06</td>
<td>1.05</td>
<td>-0.44</td>
<td>-5.79</td>
<td>.000***</td>
<td>-8.13 – -3.99</td>
<td>.711</td>
</tr>
<tr>
<td>Violence Index</td>
<td>.95</td>
<td>.52</td>
<td>.15</td>
<td>1.82</td>
<td>.071</td>
<td>-0.08 – 1.97</td>
<td>.617</td>
</tr>
<tr>
<td>Substance Abuse</td>
<td>-0.56</td>
<td>1.18</td>
<td>-0.05</td>
<td>-0.47</td>
<td>.638</td>
<td>-2.89 – 1.77</td>
<td>.413</td>
</tr>
<tr>
<td>Ever had sex</td>
<td>-2.70</td>
<td>4.18</td>
<td>-0.06</td>
<td>-0.65</td>
<td>.518</td>
<td>-10.97 – 5.56</td>
<td>.439</td>
</tr>
<tr>
<td>Multiple sexual partners</td>
<td>-12.05</td>
<td>3.25</td>
<td>-0.32</td>
<td>-3.71</td>
<td>.000***</td>
<td>-18.48 – -5.62</td>
<td>.579</td>
</tr>
<tr>
<td>Sex in exchange for money</td>
<td>-2.03</td>
<td>3.38</td>
<td>-0.05</td>
<td>-0.60</td>
<td>.548</td>
<td>-8.72 – 4.65</td>
<td>.518</td>
</tr>
</tbody>
</table>

Adjusted $R^2 = .437$  
$F = 18.49^{***}$

$^{***} p < .001$

Adjusted $R^2 = .437$, explained 43.7% of the variance in resilience; $F = 18.49; p < .001$
Further, negative but significant correlations was noted between resilience and street adolescent who have ever had sex ($r = -0.43, p < .001$), had more than two lifetime sexual partners ($r = -0.47, p < .001$) and have had sex in exchange for money ($r = -0.31, p < .001$). This implies that street adolescents who were engaging in sexual risk behaviours had low levels of resilience. The item “have ever had sex” was also positively correlated with suicidal ideation ($r = 0.43, p < .001$), substance abuse ($r = 0.67, p < .001$) and violent related behaviours ($r = 0.38, p < .001$); suggesting that street adolescents who were having sex at the time of the study were also experiencing high levels of suicidal ideation, engaged in substance use and exposed to violent related actions.

### 8.2.2 Resilience as a protective factor for health risk behaviours

A simultaneous multiple standard regression was conducted to examine resilience as a protective factor to the 4 main health risk behaviours. Only variables that had significant relationships with perceived resilience were used in the regression analysis. The main health risk behaviours (i.e. suicidal ideation, substance abuse, violent behaviours and sex risk behaviours) were entered as predictors and resilience as criterion variable into the regression model. The results are presented in Table 17. The full regression model was significant ($F = 18.49; p < .001$) and accounted for 43.7% of the variance in resilience (Adjusted $R^2 = .437$). Suicidal ideation and having multiple sexual lifetime partners were found to be the predictors of resilience. The strongest predictor of resilience was suicidal ideation ($\beta = -0.44; t = -5.79; p < .001$) and multiple sexual lifetime partners ($\beta = -0.32; t = -3.71; p < .001$). For every one standard deviation increase in suicidal ideation predicted perceived resilience was estimated to decrease with 6.06 standard deviation points. Further, for every one standard deviation increase in multiple sexual partners predicted perceived resilience was estimated to decrease with 12.05 standard deviation points. The results
implies that street adolescents who reported high levels of suicidal ideation and had two or more sexual lifetime partners tended to have lower levels of resilience.

8.3 Discussion

The purpose of the study was to examine the relationship between health risk behaviours and perceived resilience of homeless youth. The findings of this study showed that perceived resilience in the sampled homeless youth was significant and negatively correlated with suicidal ideation, substance use and violent related behaviours. Sexual risk behaviours (e.g. sex without condom, and having multiple sexual partners) were associated with low perceived resilience.

Resilience and health risk behaviours

Stronger perceived resilience was therefore associated with lower levels of exposure to health risk behaviours among homeless youth. Consistent with previous studies conducted in developed countries (Rew et al., 2001; Cleverley & Kidd, 2011), street youth perceived resilience was associated with less suicidal ideation and other life threatening behaviours. It is likely that street youth, who are resilient, access and mobilize resources that may offset health risk behaviours within their environment. Protective resources have been shown to modify individual’s responses to environmental hazards that may be associated with a risk for adverse health outcomes (Rew & Horner, 2003).

Resilience among homeless youth may buffer the adverse effects of risk factors on their health as shown in this study. In fact, Mistry, McCarthy, Yancey, Lu and Patel (2009) as well as Kidd and Shaher (2008) suggested that a strong perceived resilience among young adolescents may serve as a protective factor against health risk behaviour such as smoking, alcohol use and physically inactivity. The findings do suggest that perceived resilience acts as a significant and independent factor in relation to increased health risk behaviours. This means that lower levels of
resilience among street youth render them physically and mentally vulnerable. Interventions that promote resilience enhancing factors among homeless youth should be considered to promote the health and well-being of these vulnerable individuals.

The association between resilience and suicidality can be explained by the buffering hypothesis (Johnson, Wood, Gooding, & Taylor, 2011). The authors indicated that resilience as a psychological construct consists of wide range of beliefs and abilities which are related, and that a specific psychological construct may confer resilience to a specific risk factor such as suicidal ideation (Johnson et al., 2011). Since resilience is multifaceted (Ungar, 2008; 2011) and homeless youth are regarded as resilient (Theron & Malindi, 2010; Theron et al. 2011), we can thus speculate that those who are resilient were less likely to be suicidal. This is supported by the fact that some factors (such as self-esteem, hopefulness, and sense of agency) that are known to be related to resilience were more effective buffers against suicidal ideation among homeless youth generally (Cleverley & Kidd, 2011; Kidd & Shahar, 2008; Nalkur, 2009).

**Substance abuse, violence and suicidal ideation**

Cumulative effect of health risk behaviours was also evident is this study. Significant associations were observed between 3 health risk behaviours (suicidal ideation, violence and substance use). Suicidal ideation had a significant positive correlation with both substance abuse and \( r = .18, p < .01 \) and violence \( r = .46, p < .001 \) respectively. Also violence and substance abuse were positively correlated \( r = .51, p < .001 \). Whereas these measures provide concurrent validity for the study, the result suggests that homeless youth who were experiencing suicidal ideation were using drugs and involved in violent behaviours. Clustering effect of health risk behaviours are associated with homeless youth who are predisposed to several risk factors, heightening their vulnerabilities (Kidd, 2007; Oduro, 2012; Rew et al., 2001; Wutoh et al. 2006).
Further research evidence shows that risk factors (physiological, social or environmental) have a multiplying effect on individuals (NCPC, 1995). For instance, several simultaneous risk factors can significantly multiply the likelihood of psychological problems, far more than the effect of different risk factors.

Suicide has been considered as a high risk factor associated with homelessness, with serious consequences for mental illness, including depression (WHO, 2011). In this study, approximately 28% of homeless youth reported to have planned to commit suicide in the previous month. Among a large group of street youth in New York and Toronto, a significant proportion (46%) of respondents reported to have made at least one suicide attempt while on the street (Kidd & Carroll, 2007). In a separate study of homeless children who live in the slums of Kampala, approximately 31% reported to have tried killing themselves (Swahn, Palmier, Kasirye & Yao (2012). This suggests that the relatively high suicide ideation among street youth is not unique to this study, but does appear to be a general problem associated with homelessness. We can attribute the differences in the prevalence of suicidal ideation to the differences in study location and methodological variations (especially the instruments used to measure suicide ideation).

Relevant to this discussion, is the relationship between substance use and suicidal ideation, which was found in this study to be significant and positively related. Substance use and abuse has been extensively linked with suicide risk (ideation, attempts, and depression) among homeless youth. The relationship between these variables has been reported in previous studies which indicate suicidal behaviour to be associated with depressive symptoms, substance use, antisocial behaviours, and physical and sexual abuse (Evans, Hawlon & Rodham, 2004; Kidd & Kral, 2002; Kidd & Carroll, 2007; Kelly & Capito, 2007). Precipitating factors associate
with suicidal behaviour in homeless youth are substance use (Evans, Hawlon & Rodham, 2004; Kidd & Kral, 2002; Kidd & Carroll, 2007; Kelly & Capito, 2007), family abuse (both physical and sexual) (Kidd, 2004; Kidd, 2004; Jorgensen, Jorgensen, Heard & Whitbeck, 2010) and death of a family member (Swahn, Palmier, Kasirye & Yao, 2012; Jorgensen et al., 2010). Although drug use among homeless youth serve as coping strategy which helps them to beat the odds of the street (Kelly & Capito, 2007; Flick & Röhnsch, 2007), its continued use could have psychological consequences on their health (Kidd & Carroll, 2007).

8.4 Implications for intervention

The findings have implications for future intervention efforts and research. First, our finding that homeless youth who are less resilient are at risk for suicidal ideation, substance abuse and violent behaviours, highlights the importance of developing interventions that foster resilience in homeless street youth. Such interventions could identify and include contextual factors that enhance resilience while also addressing the needs and behaviors of vulnerable youth and adolescents living on the street. This is necessary as resilience approaches prioritise assets and resources as the focus of change. Secondly, while there is little research on how resilience serves as a protective factor against the engagement of health risk behaviours among homeless youth, the researcher concurs with others (Rew et al., 2001; Cleverley & Kidd, 2011) who have suggested that interventions targeting homeless youth should engage youth as early as possible when they first become homeless to decrease the degree of deterioration in physical and mental health, as “prolonged periods of time on the street leads to having higher psychological distress and lower reported resiliency” (Cleverley & Kidd, 2011, p. 1053). Such interventions may address various behaviours that may yield positive effects due to the contextual and multifaceted nature of resilience. Thirdly, this study focus underscores the need for agencies and
NGOs who provide psychosocial services to homeless youth in ensuring access to clinical psychologists and other mental health professionals who can assess, support, and treat the varied mental health issues such as substance use and suicidality that are known to be associated with homelessness. This could be done (in the context of this study) in collaboration with the Government of Ghana through the Ministry of Gender, Children and Social Protection, whose duties include among others to promote the rights of women and children and to ensure their development in a coherent manner. Finally, the unanswered questions in our findings support the need for future mixed-methods studies to enhance understanding of the complex relationship between resilience, suicidality and substance use, particularly from the perspective of youth themselves. Attention to the different sub-structures of resilience in relation to suicidality and substance use is needed.

8.5 Conclusion

Despite its limitations, this is one of the first studies to have examined the relationship between perceived resilience and health risk behaviours among homeless youth in Sub-Saharan Africa. Thus, the findings fill some of the gaps in the literature and provided a relevant source of information for researchers and health promotion practitioners working with homeless youth. The findings from the study suggest that homeless children and adolescents with lower level of perceived resilience were more likely to engage in various health risks behaviours. This highlights the need for interventions to reduce health risk behaviour among homeless youth which will invariably pay attention to building resilience among youth.

In the next chapter attention will be paid to the psychological functioning and the determinants thereof.
CHAPTER 9
PREDICTORS OF PSYCHOLOGICAL FUNCTIONING

9.1 Introduction

There are significant developmental changes that take place during the transition from childhood to adolescence, which are accompanied by physical and psychological challenges (Sinha, Cnan & Gelles, 2007). These changes are more severe for street children who have to make this transition in the absence of financial, social and psychological support in their lives. It is thus not surprising that homeless youth have been found in high income countries to be at greater risk for mental health problems and engaging in high risk behaviours than other youth (Edidin, Ganim, Hunter, & Karnik, 2012; Tyler, Whitbeck, Chen & Johnson, 2007; Park, Kim, Kim, & Sung, 2007). According to UNICEF (2012) the rate of mental illness among homeless youth is also very high, and being two times greater than for youth in the general population (Whitbeck, 2009; Bassuk & Friedman, 2005).

Various studies suggest that psychological well-being of homeless youth is associated with a variety of risk and protective factors. Risk factors are those characteristics of individuals that increase the likelihood of developing a mental health problem or increasing the severity of the problem, whilst protective factors on the other hand serves to modify or ameliorate the effects of mental health problems (Petersen, 2010). Among homeless youth populations, risk factors to mental health include number of years spent on the street (Embleton et al., 2012; Hodgson, Shelton, van den Bree & Los, 2013); substance use (Kelly & Caputo, 2007; Flick & Röhnisch, 2007); suicidal ideation (Cleverley & Kidd, 2011); stigma (Kidd, 2004; 2007) and physical and sexual abuse (Whitbeck, 2009). Perceived resilience (Cleverley & Kidd, 2011; Kidd, 2004; Kidd & Shaher, 2008) and social support (Nyamathi et al., 2012; Stein, Dixon, & Nyamathi, 2008; Zhang & Fogarty, 2007) have been identified as protective factors against
various mental health problems. In their study of homeless youth in Canada, Cleverley and Kidd (2011) revealed that street youth perceived resilience was associated with less suicidal ideation and other life threatening behaviours. Similarly, Mistry, McCarthy, Yancey, Lu and Patel (2009) and Kidd and Shaher (2008) suggested that perceived resilience among young adolescents may serve as a protective factor against health risk behaviours such as smoking, alcohol use and physically inactivity. There are currently no data regarding the psychological well-being and its associated factors within the African context. Most of the previous studies have been conducted in developed and economically resourced countries, particularly Canada and the United States.

While Wutoh et al. (2006) found that homeless children were sexually active, and suffer from both physical and sexual abuse on the street, especially girls, the authors did not examine the psychological well-being of the participants in their study, although they did suggest the need for interventions that would address both mental health and risky sexual behaviours. In the context of this gap in knowledge on the psychosocial well-being of street youth in Ghana, the aims of this study focus was to determine i) the prevalence of behavioural and emotional problems among homeless youth in Accra; and ii) the factors associated with their psychological well-being. A better understanding of the psychological well-being of homeless youth and their correlates may help design appropriate interventions to improve the mental health status of this vulnerable and disadvantaged population.

To provide answers to these questions, the following statistical analyses were conducted. Descriptive statistics was used to examine prevalence of psychological symptoms. To determine the best predictors of psychological well-being, two analyses were conducted. First, the Pearson product-moment correlation coefficient ($r$) was conducted to examine the relationships between psychological well-being, perceived resilience, suicidal ideation, violence behaviours, substance
abuse, self-stigma, general stigma. The composite health risk behaviour indexes derived from the individual items measuring the various health risk behaviours (as used in the previous chapter) was used in this analysis. Secondly, five standard regression models were fitted using the total SDQ and its 4 domains (i.e. emotional problems, conduct problems, hyperactivity and peer problems) as DVs. This was used to determine the best predictors of psychological well-being and its domains, and to ascertain the variables which made a significant contribution in the regression models. Only predictors that had significant correlation coefficients with the criterion variables were entered into the regression models.

9.2 Results

9.2.1 Psychological functioning of homeless youth

The general psychological functioning of the participants in the study is presented in Table 18. The overall difficulty score (as measured by the SDQ) was very high ($M = 22.0$, $SD = 6.05$). Only 12.5% of the participants were not exhibiting any psychological symptoms, with approximately 87% exhibiting moderate to severe psychological symptoms. The results further revealed that of the sample, emotional problems were reported by 68.9% ($M = 6.75$, $SD = 2.32$); conduct problems by 73.8% ($M = 5.04$, $SD = 2.87$), hyperactivity/inattention problems by 53.9% ($M = 5.39$, $SD = 2.14$) and 88.6% reported peer relationship problems ($M = 4.88$, $SD = 1.14$).

The most frequently reported internalizing and externalizing psychological symptoms related to both emotional and behavioural problems respectively as measured by the SDQ are presented in Figures 6. The result shows that worries (87.5%), easily distracted (85.1), nervousness (82.7%), fears/easily scared (80.6%) and restlessness (65.9%) were the most common anxiety symptoms reported by the participants. Homeless youth also reported relatively high depressive symptoms such as unhappiness (82.1%), solitary (80.7%) and temper tantrums
(68.9%) and frequent complains of headaches/illness (68.4%). The most common externalizing behavioural symptoms reported by the participants include fidgeting (77.8%), lying and cheating (64.3%), stealing (69.2%), and fighting (69.9%).

Figure 6: Frequently reported psychological symptoms of street youth
Table 18
Summary Statistics for the SDQ (N = 227)

<table>
<thead>
<tr>
<th>Category</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>Normal</th>
<th>Borderline</th>
<th>Abnormal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Difficulty</td>
<td>22.00</td>
<td>6.05</td>
<td>9-32</td>
<td>12.5</td>
<td>21.0</td>
<td>66.5</td>
</tr>
<tr>
<td>Emotional Symptoms</td>
<td>6.75</td>
<td>2.32</td>
<td>0-10</td>
<td>31.0</td>
<td>15.6</td>
<td>53.4</td>
</tr>
<tr>
<td>Conduct Problems</td>
<td>5.04</td>
<td>2.87</td>
<td>0-10</td>
<td>26.2</td>
<td>12.0</td>
<td>61.8</td>
</tr>
<tr>
<td>Hyperactivity/Inattention</td>
<td>5.39</td>
<td>2.14</td>
<td>0-9</td>
<td>46.1</td>
<td>21.6</td>
<td>32.3</td>
</tr>
<tr>
<td>Peer Relationships Problems</td>
<td>4.88</td>
<td>1.41</td>
<td>2-10</td>
<td>11.4</td>
<td>54.1</td>
<td>34.5</td>
</tr>
<tr>
<td>*Prosocial behaviour</td>
<td>5.42</td>
<td>1.82</td>
<td>0-10</td>
<td>43.6</td>
<td>32.1</td>
<td>24.3</td>
</tr>
</tbody>
</table>

* This sub-scale is excluded from the computation of total difficulty score per participant
9.2.2  Relationship between psychological functioning and other study variables

The Pearson-moment correlation coefficient ($r$) was conducted to examine the relationship between psychological well-being, perceived resilience, suicidal ideation, violent related behaviours, substance abuse, self-stigma, and general stigma. Table 19 shows small to moderate correlation coefficients for the predictor variables that are associated with total difficulty and its 4 domains. A significant positive relationship existed between overall total difficulty of a participant and suicidal ideation ($r = .24; p < 0.001$), exposure to violence ($r = .14; p < 0.05$), self-stigma ($r = .33; p < 0.001$) and experienced stigma ($r = .15; p < 0.05$). These results suggest that higher scores on the total SDQ scale (reflecting poor psychological well-being) were associated with increased levels of exposure to violence, self-stigma and experienced stigma.

The following correlation analyses were also done on the sub-scale of the SDQ and their relationship with the various independent variables. Emotional problems in homeless youth correlated positively with suicidal ideation ($r = .30; p < 0.001$), substance abuse ($r = .23; p < 0.01$), self-stigma ($r = .47; p < 0.01$) and experienced stigma ($r = .40; p < 0.01$). A negative correlation was found between emotional problems and perceived resilience ($r = –.36; p < 0.001$). The results imply that as emotional problems increase, homeless youth are more likely to report higher levels of suicidal ideation, general and self-stigma and elevated substance use. The results further suggest that higher levels of emotional problems were associated with lower levels of perceived resilience.

Conduct problems positively correlated with suicidal ideation ($r = .16; p < 0.01$), exposure to violence ($r = .36; p < 0.01$) and social support ($r = .47; p < 0.01$). The results suggest that high levels of conduct problems were associated with high levels of suicidal ideation, exposure to violence and social support. There was a positive relationship between hyperactivity and self-stigma ($r = .38; p < 0.01$). Similarly, hyperactivity correlated with
general stigma \( (r = .15; p < 0.05) \). This implied that as hyperactivity levels increase, both self-stigma and experienced stigma increases. The results as presented in Table 19 show that peer/relationship problems were positively associated with exposure to violence \( (r = .19; p < 0.01) \) and negatively related to social support \( (r = -.17; p < 0.05) \).

### 9.2.3 Predictors of psychological functioning

To determine the predictors of total difficulty (total score on the SDQ) and its domain, five (5) regression models were conducted, using only predictors/independent variables that had significant relationship with the criterion variable in Table 20. The first regression model used the overall score of SDQ (psychological well-being) as criterion, and the second to fifth models included the domains of SDQ as criteria. The predictors included in the regression analysis were perceived resilience, suicide ideations, substance abuse, exposure to violent related behaviours, self-stigma, general stigma and social support. The results of the analysis are presented in Table 20

In Model 1, the results showed a significant joint influence of self-stigma, experienced stigma, exposure to violence and suicidal ideation on overall psychological well-being, \( R^2 = .220, F = 12.74; p < .001 \). The results indicated that 22% of the variance in psychological well-being could be explained by the predictors. The independent predictors showed that all the predictors had a significant effect on psychological well-being (i.e. total psychological difficulties). Experienced stigma \( (\beta = .55; t = 4.67; p < .001) \), exposure to violence \( (\beta = .29; t = 4.00; p < .001) \), self-stigma \( (\beta = .23; t = 2.00; p < .05) \) and suicidal ideation \( (\beta = .22; t = 2.99; p < .001) \) had a significant positive influence on overall psychological well-being. The second model showed a significant joint effect of the predictors on emotional symptoms, \( R^2 = .391, F = 16.91; p < .001 \), and explained 39% of the variance in emotional problems. The independent predictors revealed that experienced stigma
(β = .42; t = 3.77; p < .001), perceived resilience (β = –.27; t = –3.46; p < .001), exposure to violence (β = .26; t = 3.12; p < .01) and substance use (β = .23; t = 2.58; p < .05) were significant predictors of emotional problems. However, self-stigma (β = .13; t = 1.16; p > .05) had no significant influence on emotional problems.

The third model revealed a significant joint influence of three (3) predictors on conduct problems, $R^2 = .336$, $F = 25.31; p < .001$, and explained 33.6% of the variance in conduct problems. Suicidal ideation (β = .22; t = 2.58; p < .05), exposure to violence (β = .46; t = 5.46; p > .001) and social support (β = .35; t = 4.69; p < .001) were found to be significant predictors for conduct problems. The fourth regression model indicated that a significant joint influence of the predictors of hyperactivity, $R^2 = .20$, $F = 27.17; p < .001$, and explained 20% of the variance in hyperactivity. Moreover, the independent predictors showed that experienced stigma (β = .72; t = 6.98; p < .001) and self-stigma (β = .43; t = 4.15; p < .001) were significant predictors of hyperactivity. The fifth model revealed a significant effect of 2 predictors of peer problems, $R^2 = .065$, $F = 7.31; p < .01$, explaining only 6.5% of the variance in peers problems. Exposure to violence (β = .21; t = 2.99; p < .01) and social support (β = .19; t = –2.62; p < .01) were significant predictors of peer problems.

9.3 Discussion

This study was conducted to examine the prevalence of psychological problems, and to determine factors that predicted these psychological problems among homeless youth. The results showed that approximately 87% of the participants in this study exhibited moderate to severe psychological symptoms. Overall psychological well-being was predicted by stigma (self-stigma and experienced stigma), exposure to violence and suicidal ideation. Substance use and perceived resilience were significantly associated with emotional problems.
Table 19
Correlation Matrix between Psychological Functioning and Other Study Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total difficulty</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Problems</td>
<td>.75***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct Problems</td>
<td>.73***</td>
<td>.29***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyperactivity</td>
<td>.79***</td>
<td>.53***</td>
<td>.39***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peer Problems</td>
<td>.30***</td>
<td>.09</td>
<td>.08</td>
<td>.09</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilience</td>
<td>.13</td>
<td>-.36***</td>
<td>.06</td>
<td>-.08</td>
<td>.04</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicide Ideations</td>
<td>.24**</td>
<td>.30***</td>
<td>.16*</td>
<td>-.03</td>
<td>.03</td>
<td>-.55***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance abuse</td>
<td>.10</td>
<td>.23**</td>
<td>.07</td>
<td>.07</td>
<td>.12</td>
<td>-.43***</td>
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*p < .05; ** p < .01; *** p < .001
### Table 20
Summary of multiple regressions of the best predictors of psychological functioning and its domains

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<th>Models/Criterion Variables</th>
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<th>R²</th>
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* p < .05; ** p < .01; *** p < .001
The prevalence of emotional, conduct, hyperactivity and peer relationship problems among the participants were 69%, 73.8%, 54% and 89% respectively. These findings suggest that homeless youth in this study experienced poor mental health. This is consistent with previous studies conducted in developed countries (Cauce et al., 2001; Nyamathi et al., 2012; van Leeuwen et al., 2004). Several studies from developed countries show risk factors for psychological well-being of homeless youth. A literature search was unable to access any similar studies on the risk factors for poor psychological well-being of street youth within sub-Saharan Africa. The findings of this study showed that overall psychological well-being was influenced by experienced stigma, self-stigma, suicidal ideation and exposure to violence. This finding suggests that these factors impact the psychological well-being of a street youth and are likely to compromise their mental well-being.

Experienced stigma and self-stigma were found to be associated with the poorer psychological well-being of homeless youth in this study. These finding lends support to a previous study conducted in the United States of America which found that perceived discrimination and negative stereotypic behaviours towards street youth influenced their mental health resulting in higher levels of loneliness, social alienation and depression (Kidd, 2004; 2007). According to Crocker, Major and Steele (1998) individuals who are stigmatized are often perceived to have characteristics that are not valued by a particular group or society and stigma seems to directly affect the mental health of homeless youth in this study. Research in Ghana has shown that public perceptions of street youth are very hostile and undesirable (Quashie, 2011). In the study of public perceptions of street youth among various stakeholders in Ghana, Quashie (2011) revealed a bleak picture as street youth are perceived as drug users, and thieves who are involved in petty criminal activities. This is even compounded by the use of derogative and belittling words such as “kubolo”- a derogatory and belittling word used to describe homeless youth in Accra, Ghana.
The findings of this study also indicate a significant positive independent influence of suicide ideation on total psychological difficulty, suggesting that higher levels of suicidal ideation correspond to poor psychological well-being. This finding supports the research of Frederick et al. (2012) who found that homeless youth who had a diagnosis of a mental disorder were twice more likely to experience suicidal ideation and suicidal attempts. Previous studies in Ghana have shown street youth to be adaptable in the face of adversity (Mizen & Ofosu-Kusi, 2010), but there may be limits to this adaptability, with the cumulative effect of abuse, substance use, public stigma and other health risk factors affecting their psychological well-being and subsequently leading to suicidal thoughts.

The findings of this study showed that exposure to violence were associated with lower levels of psychological well-being. Exposure to violence assessed abuse, being beaten and coercive behaviours such as been forced to have sex with someone. These forms of maltreatment have also been reported as reasons why homeless youth left home in Ghana (Oduro, 2012), and are re-enacted on the street, with boys more likely to suffer from physical assault and girls more likely to be sexually abused or raped (Slesnick, Erdem, Collins, Patton, & Buettner, 2010; Oduro, 2012; Cauce et al., 2001). These findings indicate that those exposed to severe forms of abuse and violence displayed a higher number of psychological symptoms. This finding corroborates previous studies that draw an association between violence related behaviours of homeless youth and mental health problems (Bender, Ferguson, Thompson, & Langenderfer, 2014; Whitbeck, Hoyt, Johnson, & Chen, 2007). For example, using a purposively selected sample of 601 homeless youth in Denver, USA, Bender et al. (2014) found physical and sexual assault to significantly predict mental health outcomes such as major depressive symptoms and PTSD. Similarly, a high rate of comorbid diagnosis of PTSD have been found in homeless youth who have been assaulted or injured by a weapon on the street (Whitbeck et al., 2007). These findings are thus supported by the
literature and suggest that direct exposure to violence on the street may have negative mental health consequences for homeless youth.

Resilience is understood to be derived from both the individual and the social context in which the person lives (Ungar, 2008; 2011). Ungar (2008) indicated that when individuals are exposed to adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity to individually and collectively negotiate access to these resources. Resilience is thus considered to be a socio-ecological construct that does not reside entirely in an individual, but a combination of both individual and socio-cultural factors (Theron & Malindi, 2010). Perceived resilience as measured by the CD-RISC, revealed a negative relationship with emotional problems, suggesting that higher perceived resilience was associated with lower emotional problems. This finding corroborates previous studies that report resilience as being a protective factor against the onset of various mental health problems (Mistry, McCarthy, Yancey, Lu & Patel; 2009; Kidd & Shaher, 2008; Cleverley & Kidd, 2011) and provides support for the protective model of resilience that suggests that protective factors assist in neutralizing the effect of risk, thus reducing the impact of a negative outcome (Fargus & Zimmerman, 2005).

Substance use increases the likelihood of individuals engaging in risky sexual behaviours, such as non-condom use, multiple sexual partners (Embleton, Mwangi, Vreeman, Ayuku, & Braithstein, 2013) and heightens the probability of having psychological problems. Substance use was found in this study to be positively related to higher levels of emotional problems. This supports previous research that has shown substance use, including alcohol and hard drugs, to be associated with greater emotional distress (Kidd & Carroll, 2007; Stein et al., 2008). Substance use among the homeless population has, however, also been reported to be used as a coping strategy (Kelly & Caputo, 2007; Flick & Röhnsch, 2007).
Perceived social support received by street youth was found to be positively associated with both conduct problems and peer relationship problems among homeless youth. In the absence of support from mainstream society like family and relatives, homeless youth rely on peers and “street family” for support to cope with stressful events on the street. However, these supports systems have been shown to further entrench them into street life thereby putting them at greater risk for mental health related problems (Solorio et al., 2008). While gangs provide social support they also influence members to engage in anti-social behavior, hence the positive relationship between social support and conduct problems. These findings corroborate past studies that have indicated that social support available to homeless youth on the street could have deleterious effects on their overall mental health (Bender et al., 2012; Solorio et al., 2008).

### 9.4 Conclusion

The focus of chapter highlights that the majority of street youth in Ghana display moderate to severe psychological symptoms. The need for mental health services to help youth cope with multiple mental health problems is thus highlighted. The findings revealed that risk factors for poor mental health amongst street youth include experienced stigma, self-stigma, suicidal ideation and exposure to violence. Using an ecological systemic framework (Petersen & Govender, 2010), the need for multilevel prevention interventions is highlighted. First, at the individual level, there is a need for programmes aimed at building resilience in youth to cope better with the stressors of living on the streets, for example, through addressing self-stigma and building conflict resolution skills. Secondly, at the interpersonal level there is a need to develop health enhancing social networks that provide homeless youth with an alternative network for gaining social support to gangs which promote anti-social behavior. Thirdly at the community and societal levels there is a need for programmes to address the social determinants of their poor mental health. In this regard, violence reduction
programmes, including early parenting programmes to reduce exposure to violence in the home, as well as anti-stigma campaigns are indicated.
CHAPTER 10
INTEGRATIVE DISCUSSION AND CONCLUSION

10.1 Introduction

Homeless youth’s ability to navigate the challenges of life on the street is testimony to their resiliency and creativity to enable survival in these contexts. The life on the street impacts their behaviours, often directed at survival, and the interplay between risk and resilience influence their psychological functioning. In this doctoral thesis, resilience, psychological experiences and functioning, the engagement in health risk behaviours and the relationship between resilience and health and well-being, have been investigated.

The first phase of this doctoral thesis reported on a qualitative study conducted with a purposively selected sample of homeless youth in the Central Business District of Accra, Ghana. The second phase of this thesis, a quantitative cross-sectional survey among a larger sample of homeless youth, examined the prevalence of various health risk behaviours and psychological well-being in homeless youth as well as its relationship to resilience. The protective nature of resilience in mental health is specifically explored as well as the validation of a measure of resilience for the Ghanaian context. The findings of both the qualitative and quantitative phases of the thesis are summarized and are briefly discussed in relation to exiting literature in the various sections to follow as more focused discussions appear in the previous chapters. Limitations of the study are also outlined in this section. This chapter is concluded by indicating significant contributions to academic scholarship, and recommendations for interventions are offered as well as suggestions for future research.

10.2 Resilience enabling factors

As part of the qualitative study, factors that build resilience in homeless youth were explored. Through the use of an in-depth semi-structured interview, a number of factors previously identified to foster resilience by various authors seemed to have played a role in
resilience among homeless youth in Ghana (Cicchetti, 2013; Malindi, 2014; Malindi & Theron, 2010; Masten & Wright, 2010; Theron et al., 2010; Theron & Donald, 2012; Theron & Theron, 2010, 2013; Ungar, 2013; Williams et al., 2006). The first set of factors were categorised as intrapersonal factors because they reflect personal resources that enhances survival on the street. Under this main factor, two main coping resources were identified namely coping with humour and through strong religious beliefs – having faith in God. The use of humour in the form of teasing friends has previously been found among South African street youth, who indicated that this coping strategy distracts their thoughts from the stressors associated with street life to less harmful activities (Malindi & Theron, 2010; Theron et al., 2010; Evans, 2002). A strong faith in God seems to be protective against the harsh conditions of streetism, as it kindles hope among homeless youth that change is possible and that help could come in times of adversity. The presence of strong religious beliefs among street youth have been reported on by other African studies (Theron et al., 2010) and in research conducted in the United States where faith in God played key role in the life of resilient homeless young adults (Williams et al., 2006; Williams & Lindsey, 2006).

The second group of resilience promoting factors related to interpersonal resources refers to the social capital derived from the interaction with friends and other significant people within their social setting, necessary for survival on the street. Here three key issues were identified: reciprocal friendships, cohesive group living, and the positive influence of role models i.e. former street youth. The importance of reciprocal friendships and cohesive group living seems to replace the social capital derived from family networks as effective strategies to not only survive, but to fulfill in their needs of social connectedness. Similar findings have been identified among homeless youth in Haiti (Kovats-Bernat, 2006), South Africa (Malindi & Theron, 2010; Dass-Brailford, 2005), Ghana (Mizen & Ofuso-Kusi, 2010) and Tanzania (Nalkur, 2009). As Malindi and Theron (2010) reported, street youth
reciprocate and help friends who are in need, although sometimes this is done exclusively for those who live in a cohesive group, thus suggesting that help on the street may be restricted to those whom they are closely connected to, namely so the so called the “in-group”. An additional interpersonal factor contributing to resilience was the role played by previous street youth who had succeeded in overcoming the odds of the street by using available opportunities to develop themselves and to become successful. In such cases, the success stories of these role models inspire participants to greater participation in the psycho-social services and educational skills training opportunities offered by NGOs. The findings suggest that supportive environmental contexts for homeless youth have the potential to alter their life course.

Cultural norms and community-based support systems were identified as important environmental factors that enhance resilience, similar to findings in previous studies among youth conducted elsewhere (Donald et al., 2010; Theron & Donald, 2012; Ungar et al., 2007). Accessibility to community-based services which provide training and fulfill the physical needs of homeless youth plays a significant role in their survival and adaptation as previously reported by Ghanaian researchers (Oduro, 2012; Orme & Seipel, 2007). In the absence of governmental funded organizations mandated to take care of homeless youth in Ghana, these community-based organizations provide homeless youth with opportunities to receive various services that are likely to help alleviate the adverse health and well-being effects resulting from living on the street.

10.3 Behavioral and emotional impact of homelessness

In the qualitative study, effects of homelessness on the life of youth living on the street were explored as little is known about how homelessness impacts their lives. The findings suggest homelessness impacts youth primarily at the behaviour and emotional levels. The behavioural patterns of the homeless youth and in particular risky behaviours were
primarily focused on strategies for survival such as violent related behaviours and survival sex as outlined in more detail in the next section. Violence and aggression are often used to intimidate and dominate others and seems accepted as normative for “survival of the fittest and strongest” while gender based violent-related behaviours is evident in sexual harassment, coercion and even rape Some of these findings are corroborated by studies conducted previously among street youth in Africa and developed countries (Boakye-Boaten, 2008; Edidin et al., 2012; Kayembe et al., 2008; Nada & Suliman, 2010; Oduro, 2012; Zerger, Strehlow & Gundlapalli, 2008). For example in a study conducted by Nada and Suliman (2010), street children and adolescents in the cities of Alexandria and Greater Cairo in Egypt reported that 93% of their participants had suffered from some kind of violence related behaviours. They also reported that violence in general was considered as a norm on the street, and determines the ability to survive on the street. Boakye-Boaten (2008) and Oduro (2012) reported similar findings among Ghanaian street children and adolescents.

The common substances that are being used by the homeless youth in the study include alcohol and marijuana use. Substance use and abuse have also been reported by Kayembe and colleagues (2008) in the DRC where 82%, 63.5% and 3.8% of the participants had used marijuana, alcohol and cocaine respectively. A similar pattern has also been reported among street youth in Kenya (Embleton et al., 2012).

The emotional impact of street life exacerbates young people’s emotional vulnerability. The emotional impact is evidenced in their feelings of exclusions due to social stigma and feelings of despondency and depression. The stigma experienced by these homeless youth was as a result of name calling and maltreatment from the general populace. Similar stigmatizing tendencies towards homeless youth have been documented in Nigeria, where the public consider them to be ‘unwanted’ (Ogunkan & Adeboyeyo, 2014). Depressive symptoms arose primarily from separation from family relatives and a sense of regret for not
being able to adhere to parental advice. These negative emotional experiences were further worsened as they became overwhelmed by an enormous responsibility to fend for themselves and not having a nurturing and protective environment. The evidence of despondency among the youth is simultaneously juxtaposed against an amazing sense of resilience, a humbling experience for the researcher (Oppong Asante & Meyer-Weitz, 2014).

In addition to the qualitative account of behavioural and emotional responses to the effect of homelessness on street youth, this doctoral thesis also examined the prevalence of health risk behaviours in relation to age and gender differences as presented in chapters 5 and 6. About one in every six homeless youth had used marijuana, and one out of every 2 were having sex in exchange for food, money or even a place to sleep. The results also indicated that one out of every three homeless youth had been forced to have sex with someone. Similar prevalence rates of violence related behaviours, substance use and coercive behaviours have been reported elsewhere (Embleton et al., 2012; Lockhert, 2002; Oduro, 2012; Tadesse et al., 2013; Wutoh et al., 2006). The findings also demonstrated that as compared to males, females were most likely to have been involved in substance use (smoked cigarette, use marijuana and alcohol). This finding contradicts previous studies that have reported that males generally tend to use more substances on the street than females. In part this could be attributable to the fact that the majority of the females reported sexual abuse by family relatives as the main reason for leaving home. It has been argued that homeless youth with a history of sexual abuse frequently abuse drugs (Chen et al., 2004). Females were also found to engage more readily than males in some form of prostitution (survival sex), often suffer from gender-based violence such as being subjected to rape and coerced sex. The gender power dynamics and the harsh conditions on the street are more detrimental to females due to their subservient positions to men in African society (Elepe, 2002; Oduro, 2012; Wutoh et al., 2006). The results also showed that substance use increases with age,
suggesting that homelessness increases the susceptibility to substance use (Embleton et al., 2012; Hodgson et al., 2013; van Leeuwen et al., 2004). It is possible that as homeless youth grow older and stay longer on the street, they might become more entrenched in street culture which include among other things exposure to drugs and alcohol use (Bender et al., 2012). On the other hand, the longer they stay in these challenging conditions the more hopeless they may become and therefore seek ways to escape from reality. This in turn may reinforce the cycle of addiction from which escape seems slim without adequate support.

10.4 Cumulative effect of both health risk and mental health behaviours

The health risk behaviours by homeless youth in the study seem to center around survival and escapism from the challenges of living on the street (see figure 7). The everyday living conditions of street life was described in the study as harsh and simultaneously as liberating as being free from the conditions that contributed to them moving to the street. The juxtaposing of the harshness with the “freedom” that life on the street represents has generally been unexplored in the literature. The literature talks predominantly of the harsh conditions of street life (Tyler et al., 2007). However, joys and liberation of street life has been acknowledged elsewhere (Márquez, 2002; McCarthy & Hagan, 1992; Oduro, 2010).

While the homeless youth in the study seem to find meaning in their ability to find creative ways to survive, (e.g. escorting members of the blind community to functions where they would also receive a free meal) other survival enhancing strategies impact negatively on their health and well-being. In their need to survive, homeless youth engage in transactional sex either in exchange for food, protection or as a source of income evidenced in that about half the sample reported having engaged in some form of transactional sex. Similar findings have been reported by various other authors (Chettiar et al., 2010; Mandalazi, Banda & Umar, 2013; Valente & Auerswald, 2013). Female youth seem to be particularly vulnerable
Figure 7: Cumulative effect of both health risk and mental health behaviours
to sexual exploitation, harassment and gender based violence including rape by both young men living on the street and others. Young women reported to employ social support networks in particular, to manage these vulnerabilities. They either congregate in larger female groups especially at night time to ensure safe sleeping, free from harassment and theft or by forming sexual relations with dominant males in exchange for protection against harassment by other men. Thus, the unequal gender-power relationship within contexts of normative male dominance and aggression against females and female submissiveness, common in the African context (Oduro, 2010), is also played out in life on the street. These traditional gender roles are thus mutually reinforced by the context in which they live.

The general level of aggression that is required to survive the highly competitive street environment characterised by limited resources, seems normative. Studies have suggested that some amount of aggressiveness is necessary for survival, and considered “normal” (Coates & McKinze-Mohr, 2010; Kayembe et al., 2008; Lockhert, 2002; Nada & Suliman, 2010). What this adaptive behaviour does, is that it allows those who are physically strong to use their energy to harness their survival through engagement in violent activities such as fighting, physical and sexual abuse. With the passage of time, those who might have been victims of such violent behaviours will very likely become perpetuators of violence in later years. Unfortunately, female homeless youth are most often the victims of such aggressive behaviours and subject to sexual harassment and rape. Disempowerment, synonymous with a poor self-image and frustration, facilitates sexual aggression and related behaviours (Chant, 2000). Socialization within a dominant male culture authorizes male sexual aggression (Kalichman et al., 2005). Male peer group support for sexual aggression as a way to control women who demonstrate “improper” agency shed light on the subtleties and complexities of socialized male aggression.
Survival on the street also comes with its social and psychological challenges for which homeless youth might be unprepared. The results show that while some risky sexual behaviour are directed at survival, the youth also engage in substance use, which can be considered as a way to escape, thus employing an avoidance coping strategy. Substance use has been found to be strongly entrenched in street life culture and employed as a way to manage the multitude challenges they face. These avoidance coping behaviours are likely to be facilitated by the inability of homeless youth to access psychological and health care services and having inadequate knowledge and skills regarding appropriate coping strategies.

The youth sampled reported to have used various substances such as alcohol, marijuana and other drugs including glue. Emotional focused coping has been shown to contribute to substance use, depression and poor physical health (Dashola, Erdem & Slesnick, 2011; Votta & Manion, 2003). Paradoxically, substance use in turn, enhances psychological distress and contributes to depression and poor physical health (Nyamathi et al., 2012).

An interesting observation was that risky behaviours on the street, whether for survival or escapism from challenges, do not occur in isolation but suggestions a bi-directional process. This implies that the engagement in risky behaviour as survival strategies in turn may determine the kind of coping mechanism adopted. For example, it was found that homeless youth who were engaged in transactional sex were also more likely to use substances such as alcohol and marijuana. They were also more likely to have reported having multiple sexual partners. Evidence of co-occurrence of problem behaviour had been reported in DRC, Ethiopia, Kenya and Egypt where street youth who had history of drug use engaged in sexual risk behaviour (Embleton et al., 2012; Habtamu & Adamu, 2013; Kayembe et al., 2008; Nada & Suliman, 2010; Tadesse et al., 2013). The consequences of these reciprocal risk behaviours affect both the mental and physical health of homeless youth. The destructive cycle of non-productive coping is thus a major cause of concern.
The study clearly shows that life on the street is harsh and challenging but also the engagement in risk behaviours impacts on the mental health of homeless youth. While not investigated specifically in this study, evidence suggests that street youth’s engagement in risk behaviours increases their vulnerability to unintended pregnancies and STIs including HIV (Anarfi, 1997; Burns et al., 2004). In particular, the study participants’ psychological functioning as measured by the SDQ shows that the majority of youth have been found to have poor mental health with higher scores pertaining to emotional and conduct problems, hyperactivity and troubled peer relationships (69%, 73.8%, 54% and 89% respectively). Other studies supported the notion that homeless youth have poor mental health (Cauce et al., 2001; Nyamathi et al., 2012; van Leeuwen et al., 2004). Emotional problems in the study were predicted by perceived stigma and discrimination, perceived resilience, substance use and exposure to violence. We also found that suicidal ideation, exposure to violence and perceived social support were found to contribute most to conduct problems in homeless youth. With regards to hyperactivity or inattention, significant predictors were self-stigma and experienced stigma. The best predictors of peer problems were perceived social support and exposure to violence. Three risk factors, namely self-stigma, experienced stigma, exposure to violence and suicidal ideation best predicted overall psychological well-being (total psychological difficulty score) in homeless youth. Given the literature, it is possible to indicate that stigmatization (whether self-stigma or perceived stigma by society) have a deleterious effect on homeless youth and reflects the extent to which stigma and discrimination of street youth directly impact the mental health of homeless youth. Discrimination and negative stereotypic attitudes by the public towards street youth influenced their mental health and contribute to higher levels of loneliness, social alienation and depression, also reported by others (Kidd, 2004; 2007). With respect to the impact of suicide, research has shown that homeless youth who have had a diagnosis of mental
disorders where twice more likely to experience suicidal ideation (Frederick et al. 2012; Swahn et al., 2012). Exposure to violence was also associated with psychological well-being, supporting previous studies that have indicated that direct exposure to violence may have a detrimental effect on the mental health of homeless youth (Bender, Ferguson et al., 2014; Whitbeck et al., 2007).

Altogether these findings show that homeless youth who exhibit problem behaviours use various kinds of substances and were also engaging in various risky sexual behaviours. However, accumulative effect of health compromising behaviour existed, as homeless youth who had suicidal ideation were more likely to be using drugs and were also involved in violent related behaviours. It should be noted that certain risk behaviours have a more severe psychological impact than others.

10.5 Resilience, behavioural and mental health problems

Resilience as a construct was examined in this study to explore its protective nature in relation to homeless youth’s behavioural and mental health problems. In order to achieve this objective, we validated the CD-RISC scale within the Ghanaian context as reported in chapter 7, and examined the relationship between perceived resilience and other mental health problems (see chapter 8) as well as on their total psychological difficulty measure, and its four domains (see chapter 9).

The validation of the factor structure of the CD-RISC yielded 18-items with a 3-factor structure which is different from the original five factors with 25 items (Connor & Davidson, 2003). This investigation adds to the already existing validation studies which have resulted in the identification of various factor structures (e.g. Burns & Anstey, 2010; Fu, Leoutsakos, & Underwood, 2014; Karairmak, 2010; Singh & Yu, 2010; Jung et al., 2012). The three factors identified in this study were labeled personal competence and tenacity, optimism, and achievement motivation. The personal competence and tenacity factor indicates that when
experiencing adversity, homeless youth draw on personal, as well as spiritual strength. Optimism indicates a person’s ability to simultaneously reflect on the positive side of events and utilize available personal and interpersonal resources. Achievement motivation reflects on individuals’ needs to meet realistic goals and to experience a sense of accomplishment, suggesting that resilient individuals usually have the desire to succeed, and therefore consider adversity as part of normal life (Martin, 2002). The findings of this validation process has shown that the original 25-item CD-RISC may be unstable but found a shorter version (18 items) of the instrument to have good psychometric properties, an indication that the shorter version could yield reliable scores within the Ghanaian context.

Resilience is understood to be derived from both the individual and the social context in which the person lives (Ungar, 2008; 2011). Ungar (2008) indicated that when individuals are exposed to adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity to individually and collectively negotiate access to these resources. Resilience is thus considered to be a socio-ecological construct that does not reside entirely in an individual, but a combination of both individual and socio-cultural factors (Theron & Malindi, 2010). In chapter 8, the results showed perceived resilience to be negatively related to suicidal ideation, substance abuse, violence. The results further showed negative relationships between having had sex (sexually active), having multiple sexual partners and engagement in survival sex and perceived resilience. Chapter 9 also showed that perceived resilience was negatively related to emotional problems (one of the 4 domains of the SDQ). These results imply that resilience served as a protective factor for health risk behaviours and behavioural problems, particularly suicidal ideation, emotional problems and having multiple sexual lifetime partners. This confirms findings in previous studies that have suggested that perceived resilience may buffer the adverse effects of risk factors on the health and well-
being of homeless youth (e.g. Cleverley & Kidd, 2011; Kidd & Shaher, 2008; Mistry, McCarthy, Yancey, Lu, & Patel, 2009; Nalkur, 2009; Rew et al., 2001). The study findings therefore provide support for the protective model of resilience in neutralizing the effects of risk, thus reducing the impact of negative outcome (Fargus & Zimmerman, 2005).

10.6 Practical implications for interventions and practice
Using an ecological systemic framework, multilevel prevention interventions, with emphasis on personal, interpersonal and community based levels are needed. As suggested by Cleverley and Kidd (2011) such programmes should engage youth as early as possible when they become homeless to decrease the degree of deterioration in physical and mental health, as “prolonged periods of time on the street leads to have higher psychological distress and lower reported resiliency” (p. 1053). Resilience among homeless youth needs to be cultivated across individual, interpersonal and contextual levels and across different interventions aimed at supporting psychological resources, interpersonal relationships and access to supportive contexts and psychosocial and health services. While some distinction is made to the different levels of influence it should be noted that these levels are in dynamic interaction and reciprocal relationships exists between them.

First, at the individual level, there is a need for programmes aimed at building resilience in youth to cope better with the stressors of living on the streets by enhancing psychological resources of homes youth. As noted in the study the role of religion and cultural values and norms play an influential role in being able to cope with street life. In this regard religious leaders could play a more visible role and engage homeless youth in outreach initiatives to ensure better integration into religious networks. The greater involvement of community elders could be sought to strengthen cultural values and norms and foster close inter-generational relationships, likely to be absent in the lives of homeless youth.
Resilience building interventions could also entail access to psychological counselling to address mental health issues (such as depression and post traumatic events) and to develop better coping strategies to deal with past and current adversities. In addition, the psychological support would assist youth to better address problems without having to resort to self-defeating risky behaviours, such as violence related behavior, but to adopt healthier coping styles, such as social coping and problem solving strategies (Kidd, 2003).

It is therefore of the utmost importance for agencies and NGOs who provide psychosocial services to homeless youth to create easy access to clinical psychologists and other mental health professionals who can assess, support, and treat the varied mental health issues including conduct disorders and substance abuse as well as address self-defeating coping strategies to manage life on the street. This could be done in collaboration with the Government of Ghana through the Ministry of Gender, Children and Social Protection, whose duties include among others to promote the rights of women and children and to ensure their development in a coherent manner.

As the mental health system in Ghana is not well developed, it is important that providers of services are well trained in various psychotherapeutic approaches to enable them to be well equipped to deal with the multiplicity of problems experienced by homeless youth. A client-centered approach could be adopted through the development of trust when dealing with psycho-social problems, especially females, who might have been sexually abused or involved in some form of survival sex.

Secondly, at the interpersonal level there is a need to develop conflict resolution skills as a better understanding of how to resolve conflicts without necessarily engaging in violence-related behaviours such as fighting would be necessary to extend positive behaviour repertoire. Letting homeless adolescents understand the psychological effects of violence and violence-related behaviours would also help them to learn and appreciate the importance of
conflict resolutions skills. The fostering of health enhancing social networks that provide homeless youth with an alternative network for gaining social support to gangs which promote anti-social behavior, should be considered. The positive influence of role models, especially homeless youth who have been successful and had overcome the adverse conditions of street life, could provide advice and form support systems for those on the street especially in terms of how to deal with issues of drugs, and how to beat the odds of the street.

Finally, at the community and societal levels, there is a need for intervention programmes to address the social and contextual determinants that impact on the youth’s mental health status. Access to interventions and services are critical for homeless youth as they are vulnerable to engage in a range of risk behaviours directed at survival with detrimental consequences to their health and well-being as mentioned above. Health promotion interventions which address health risk behaviours, for example risky sexual behaviours, violence related behaviours and substance use and abuse are critical among this group as they are vulnerable to unintended pregnancies, STIs including HIV and AIDS, substance abuse disorders and other related conditions as alluded to above. The cumulative effects of multiple risk behaviours should be emphasizes especially among early entrants to the street before they become familiarized with the street sub-culture which is characterized by violence, abuse and risky sexual behaviours.

While knowledge is a prerequisite, this will not be adequate as knowledge is not always translated into health enhancing behaviours, but needs to be supported by skills development and social support for the practice of health enhancing behaviours. Developing of coping skills as referred to above is essential in addressing some of the risky behaviours youth engage in. For example youth could learn how to recognize risk contexts in which they could be tempted to use substances as an emotional coping mechanism and also facilitate help seeking from service providers. Indeed, there is evidence to show that improved coping skills
help young adults in the general population to perceive and react to stressors in less harmful ways (Garcia, 2010).

Help seeking behavior for health and mental problems are important to foster as an understanding of the need to seek help timeously is important. Knowledge of and access to services should be a key focus of interventions. Homeless youth’s ability to seek and access help for the various health and mental risk behaviour that they are predispose to, would reduce the burden of disease on their mental and psychical health. In this regard, a gendered approach to health promotion interventions are further required as transactional sex was mostly noted among females while males were more likely to be the perpetrators of violent related behaviours. Additionally, social stigma interventions as well as anti-stigma campaigns directed at youth living on the street are necessary to enhance their survival and likely integration into society.

Finally, structural drivers of homelessness such as poverty need to be attended to. As the majority of participants indicated poverty as their main reason for coming to the street, it is therefore imperative for the government to increase social-economic programmes to help improve the standard of living among it citizens.

The development of parental skills through parenting programmes is necessary to assist in violence reduction programmes in the home as early parenting programmes might be effective in reducing violence in the home. This in turn might prevent youth moving away from home to the street. It should however be noted that monitoring and evaluation are an integral part of interventions. Evaluation research will be necessary to support the development of an intervention knowledge base for homeless youth, who challenge scientific evaluation research methodologies due to the transient nature of homelessness (Naranbhaim, Abdool Karim & Meyer-Weitz, 2011)
10.7 Contributions to Academic Knowledge

A crucial strength of this doctoral dissertation is the use of an exploratory mixed-method approach (i.e. combination of both qualitative and quantitative methods). This mixed methods approach utilized the strengths of both qualitative and quantitative methods and allowed for both inductive and deductive investigation of the topic under study (Creswell & Plano Clark, 2011). The qualitative phase offered an in-depth and contextualized understanding of resilience and its contributory factors among homeless youth whilst the following quantitative study examined the prevalence and the possible relationship between various health and well-being variables and resilience. Thus, these approaches have enhanced our understanding of factors that promote resilience, contribute to risk behaviours and mental health issues as well as gained insight into the protective nature of resilience for health and well-being of homeless youth.

The qualitative phase of this doctoral thesis makes two unique contributions to extend the literature in the field. First, this study extends the findings of a previous study conducted in Ghana by Mizen and Ofosu-Kusi (2010), which indicated that reciprocal friendship-asking, giving and receiving served as a protective factor for survival for homeless street children. In addition to this mechanism, this study has identified that strong religious beliefs, reliance on internalized cultural values and norms could serve as protective factors and build resilience among street youth which in turn enhance their survival. Mizen and Ofosu-Kusi (2010) clearly indicated that an interpersonal resource (strong friendship), could promote survival, but the study could not explicate the extent to which other intrapersonal and community based resources served as resources for survival. The findings of this doctoral study has to some extent delineated and explicated certain additional intrapersonal mechanisms that promote resilience such as strong religious beliefs, and adherence to internalized cultural values and norms as mentioned above.
The findings of the current study highlight the likely influence of role models, previous homeless youth who utilized opportunities and available services for personal development and ultimate success. While previous studies have acknowledged the importance of community-based organizations to provide for the basic physical needs and some skills training including life skills for street youth in Ghana evidence to promote coping and resilience (Oduro, 2012; Orme & Seipel, 2007), the positive outcomes of these services remained obscured. In the present study, the evidence of success stories seemed to have encouraged youth to emulate these role models and utilize the support services offered from community based NGO’s in the hope of similar positive outcomes. This implies that NGO’s could employ and possibly use previously successful street youth to inspire and encourage those who are presently on the street to engage and embrace the opportunities and services afforded to them by these organizations.

The validation of the resilience measure, to the knowledge of the researcher, is the first study of its kind to provide preliminary information on the suitability of the CD-RISC in Ghana. The findings suggest that a shorter version of the instrument is more appropriate for assessing resilience among a homeless population in Ghana, as it has acceptable psychometric properties.

Additionally, a literature search was unable to access any similar studies on the risk factors for poor psychological well-being of street youth within sub-Saharan Africa. The findings of this thesis thus provide an insight into the prevalence of such behavioural and psychological problems, and their associated factors with a relatively large sample of vulnerable youth in Accra, Ghana.
10.8 Limitations of the study

Cross-sectional nature of the quantitative phases of this doctoral study limits the interpretations of the findings, as data was collected from participants on only one occasion. Drawing conclusions about causality in the quantitative phase is not possible, and also we cannot determine whether themes identified in the qualitative phase are temporal or long lasting. However, some of the findings in this study were supported by other studies conducted among homeless youth elsewhere and in Ghana. Another limitation pertaining to the quantitative study relate to the small sample size and the non-probability sampling method used as this means that the findings cannot be generalized to all street children in Ghana. This is because the samples used in this study were limited to only street youth who lived entirely on the street. However, taking into consideration the transient nature of street youth, this sample size was found to be adequate. The self-report measures used in this study could have been subjected to social desirability bias especially with regards to undesirable behaviours such as reported on sexual risk behaviours, substance use, suicide related behaviour and violence-related behaviours. The researcher, however, believes that if there was any reporting bias, the direction would have been under reporting rather than over reporting of the use substance use and sexual behaviour especially for male participants. Some of the instruments, especially those measuring health risk behaviours were modified from the South African Youth Risk Behaviour Survey (Reddy et al., 2008). During modification and translation, it is possible, that the validity and reliability of these measures may have been compromised. Notwithstanding this, most of the measures yielded acceptable Cronbach’s alpha reliability coefficients of 0.70 and above. Finally, the study did not reveal any information about persons with whom homeless youth had sex. This information could have helped direct interventions to these individuals with whom homeless youth have had sex.
10.9 Recommendations for future research

A number of avenues for future research emerged from this study:

a. This doctoral thesis provided information about the possible relationship between substance use (drugs and alcohol use) and sexual risk behaviours such as having unprotected sex, exchanging sex for money, food or a place to sleep. It would be important for future studies to examine these dynamic relationships more clearly with emphasis on their impact on HIV and mortality risks for homeless youth. Examining these variables longitudinally would also prove informative in establishing the directionality of the interrelationships between variables.

b. This study has shown that substance use has an influence on sexual risk behaviours and psychological well-being. Few studies have been conducted among street youth, addicted to inhalants, and how these affect their physical and mental health outcomes. Knowledge of the effects of the specific inhalants on their health and well-being would inform prevention interventions.

c. Future studies are needed to explore, in more detail, than examined in this doctoral thesis, how homeless youth cope with the risks of living on the street. The study revealed that some of the participants have experienced sexual and physical abuse, and a better understanding of the coping strategies employed by homeless youth, may help develop appropriate programmes that would support and promote the development of more constructive coping methods. For example, disengagement coping strategies such as social withdrawal, problem and emotional avoidance have been found to be positively related to depressive symptoms, suicidal ideation and self-harm, whilst problem-focused coping which involves taking steps to eliminate the source of stress and has an inverse relationship with these psychological problems (Votta & Manion, 2004; Dashola, Erdem
& Slensnick, 2011). With exception of studies conducted in developed countries such as Canada and the United States of America (Kidd & Carroll, 2007; Votta & Farrell, 2009; Nyamath et al., 2012), sparse literature exist on the relationship between coping strategies and behavioural and mental health problems in the African context.

d. In this doctoral study, only psychological symptoms were measured, and therefore the prevalence of specific mental disorders such as depression and Post-traumatic Stress Disorder (PTSD) and others were not assessed. There is a need for future studies to examine the prevalence of specific disorders among this vulnerable population.

e. The results of this study could be investigated further by paying critical attention to the different forms of stigma experienced by homeless youth, and how they interact with the various social and street contextual variables, as well as how youth adapt to stigma over time. A better understanding could then inform future anti-stigma campaigns among the general public and among street youth to address self-stigma.

f. Some of the measures, especially those used to measure health risk behaviours, were modified from the South African Youth Risk Behaviour Survey (Reddy et al., 2008). During modification and translation, it is possible, that the validity and reliability of these measures may have compromised as mentioned above Future studies is therefore suggested to explore the use of culturally appropriate and well standardised questionnaires to measure specific behaviours such as violence, suicide behaviour (including attempted suicide), and substance use and abuse among homeless populations.

g. The concept of resilience has to be re-examined due to its complexity. Whilst some researchers have indicated that resilient individual possesses some attributes that enable them to thrive in spite of adversity in a particular social setting, others argue that resilience is derived from both individual and the social context in which the person lives.
These conceptual definitions and interpretations of what constitute resilience warrants further examination as some enabling factors for individuals at risk for mental health problems in a particular setting may not be an enabling factor in another setting. Perhaps it would be interesting and beneficial if researchers with interest in the development of resilience can engage in dialogue and debate on the nuanced nature of resilience.

h. Lastly, the importance of monitoring and evaluation of interventions for homeless youth cannot be emphasized enough as the stark absence of evidence based interventions for homeless youth call for the attention of well implemented interventions subjected to careful monitoring and evaluation.

10.10 Conclusion

This doctoral thesis has investigated: 1) factors fostering resilience among homeless youth, 2) the experiences of how homeless youth describe their health and well-being, 3) the validation of the factor structure of Connor-Davidson Resilience Scale (CD-RISC), 4) the prevalence of health risk behaviours and psychological well-being, and 5) the relationship between resilience and health risk behaviours among homeless youth from Ghana, using a mixed methodological approach. The qualitative approach was used to explore resilience promoting factors and how homeless youth describe the behavioural and emotional impact of homelessness on their life, whilst the quantitative approach measured the prevalence of health risk behaviour, the prevalence of mental health problems and validated the CD-RISC and the protective role of resilience in behavioural and mental health problems. Personal, intrapersonal and community-based resources were identified as socio-ecological factors that enhance resilience among homeless youth. Participants also exhibited behavioural and mental health problems. The majority of the participants showed moderate to severe psychological symptoms and those who experienced suicidal ideation were using drugs and involved in
violent related behaviours. Overall psychological well-being was predicted by experiencing stigma, self-stigma, suicidal ideation and exposure to violence. These findings suggest that although resilient, homeless youth are susceptible to various mental health problems. Using an ecological systemic framework, multilevel prevention interventions are needed. First, at the individual level, there is a need for programmes aimed at building resilience in youth to cope better with the stressors of living on the streets by enhancing psychological resources of homes youth, for example, through access to psychological counselling to address mental health issues (such as depression and post traumatic events) and to develop better coping strategies to deal with past and current adversities. Secondly, at the interpersonal level there is a need to develop health enhancing social networks that provide homeless youth with alternative networks for gaining social support rather than support from deviant youth groups who promote anti-social behavior. Lastly, at the community and societal levels there is a need for programmes to address the social determinants of their poor mental health. In this regard, violence and harm reduction programmes, including early parenting programmes to reduce exposure to violence in the home, as well as anti-stigma campaigns are needed. The structural drivers of homeless youth such as poverty cannot be ignored as similarly the need for parental programmes to develop parenting skills could also impact on the number of youth who leave home due to abuse and neglect for life on the street.
REFERENCES


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APPENDIX 1: ETHICAL CLEARANCE TO CONDUCT THE STUDY

UNIVERSITY OF
KWAZULU-NATAL

9 November 2012

Mr Kwaku Oppong Asante 2125962350
School of Applied Human Sciences – Psychology
Howard College Campus

Dear Mr Asante

Protocol reference number: HSS/1144/011D
Project title: Health and Well-being of Homeless Youth in Ghana

I wish to inform you that your application has been granted Full Approval through an expedited review process.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the school/department for a period of 5 years.

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

Yours faithfully

[Signature]

Professor Steven Collings (Chair)

cc Supervisor Professor Anna Meyer-Weitz
cc Professor Inge Petersen
cc Academic leader Professor JH Bultendach
cc School Admin. Mr Mondli Ngubane

Professor S Collings (Chair)
Humanities & Social Sc Research Ethics Committee
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Founding Campuses: [Blank]

UNIVERSITY OF
KWAZULU-NATAL

INYUVESI
YAKWAZULU-NATALI

INSPeRING GREATNESS
Health and Well-being of Homeless Youth in Ghana

Good Morning, /afternoon/evening, my name is Kwaku Oppong Asante. I am a a PhD student at the University of KwaZulu-Natal, 4041, Durban, South Africa. I am conducting a study on homeless youth. The purpose of the research is to examine the health and well-being of homeless youth in the Greater Accra Region in Ghana. I would like to speak to you only if you agree to speak to me.

This discussion will take 60 minutes. I will ask you to talk about the following: the information on your experiences of how you live on the streets, your reasons and the circumstances which led you to live by yourself, how you cope and survival, your ideas as to what home is to you and how you see life and your future dreams. Lastly I would like you to share with me how living on the streets has influenced your lifestyle and behaviour.

All information that you give will be kept confidential and be used for research purposes alone and raw data will be destroyed as soon as the study is completely over. Also, we will not use your actual name or designation in reporting the findings of the study so that no one will be able to link your information to you personally.

You will not be given any monetary payments for participating in the study. Your participation in this study is voluntary and you have the right not talk to us if you do not want to. If you agree to take part in the study, we will ask you to sign a form as an indication that we did not force you to participate in the study. Please note that you will not be at any disadvantage if you choose not to participate in the study. You may also refuse to answer particular questions if you don’t feel comfortable answering them. You may also end the discussion at any time if you feel uncomfortable with the interview. I will also need your permission to use audio-tape recorders to capture our discussion.

Should you have any further questions you may call me in the School of Applied Human Sciences, Discipline Psychology at the University of KwaZulu-Natal on +27 (0) 31 2607618. If you have any questions about your rights as a participant please contact Phumelele Ximba in the research office at the University of KwaZulu-Natal on +27 (0) 31-2603587 or email: ximbap@ukzn.ac.za.

Thanking you

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PARTICIPANT’S DECLARATION

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

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

________________________  ______________________
Signature of participant                      Date

________________________  ______________________
Signature of researcher                      Date
Discipline of Psychology  
School of Applied Human Sciences  
College of Humanities  
University of KwaZulu-Natal

Dear Youth,

My name is Kwaku Oppong Asante, a PhD student at the University of KwaZulu-Natal, Durban, South Africa conducting a study as part of my final research thesis. The purpose of the study is to study the health and well-being of homeless youth in the Greater Accra Region in Ghana. Therefore, my research sample consists of homeless youth and young adults living around the Central Business District of Accra. Insight gained from this study will extend the existing body of knowledge around mental health and well-being of homeless youth in an African context. This study will furthermore provide guidelines for policy development and mental health promotion interventions among homeless youth.

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

Your participation will be highly appreciated and it will not take more than 40 minutes to complete. Please feel free to contact either me or my supervisor for any further clarification regarding this study.

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

Yours sincerely,

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APPENDIX 2.2: CONSENT FORM FOR INDIVIDUAL PARTICIPANTS (SURVEY)
PARTICIPANT’S DECLARATION

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

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

________________________  ______________________
Signature of participant  Date

________________________  ______________________
Signature of researcher  Date
APPENDIX 3: INTERVIEW SCHEDULE

A. Demographics
   A1. How old are you?
   A2. Which region do you come from?
   A3. Which ethnic group do you belong to?
   A4. What is your current level of education? Are you still going to school?
   A5. What is your religion?

B. Experiences of Street Youth
   B1. How long have you been living on the street?
   B2. How did you come to live on the street?
       [Probe: Relationship with parents, their occupation status, and whether they are still alive]
   B3. What is life like on the street?
       [Probe: Difficulties with regards to shelter, food, getting clothes, stigma]
   B4. Please describe what you will do in a typical day?
   B5. How do you think society (individuals, community) see you people living on the street? [Why do you think so?]
   B6. Do you believe that things could change for the better?
       [How can this come about?]
   B7. What role does religion play in your life as a young person living on the street?
   B8. Do you receive help (e.g. food, money, clothing, etc.) from other people?

C. Experiences of Coping and Survival
   C1. What would you say are the main challenges for you growing up on the street?
   C2. How do you survive on the street?
       [Probe: What or who helps you, to cope with the bad things that happen to you?]
   C3. What do other people do to cope with the bad things that happen to them?
C4. Do you live like a family here? How?  
[Probe: do you share things with friends? Why? Why not?]

C5. How do you relate to your friends and other people living in this environment with you?]

D. Meaning and understanding of Home

D1. Can you tell me how life at home was like before you came to live here?

D2. How would you describe home?

D3. What does living on the street mean to you?

D4. Can you call where you stay now as home?  

D5. What is life like at the shelter? [Only for those living in the drop-in centers]  
[Probe: Prefer shelter to home and why?]

D6. Do you prefer the shelter to your original home?  
[If yes, what conditions make it so? If no, why not? ]

E. Perception and Conceptualization of Health and Well-being

E1. How is your health?  
[Probe: if good, why? or bad why?]

E2. What do you do to keep healthy, mentally, physically, emotionally, spiritually?

E3. What do others you know do, to keep healthy, mentally, physically, emotionally, spiritually?

E4. What does being healthy mean to you and your friends living on the street?

E5. Have you ever been sick since living on the street?  
[Probe: what were you sick from? What was wrong with you? What might have been the cause? ]

E6. How did you get treatment for the sickness?  
[Probe: From where? Hospitals? Pharmacy shops? Where did you get the drugs?  
[Probe further for sources]

E7. How do you feel now?
E8. Do you sometimes feel lonely?
[Probe: why? How do you relate to other people on the street?]

E9. Do you sometimes feel sad?
[How often? What causes the sadness? How do you come out of the sadness?]

E10. Do you think children can grow up well here?
[How and why?]

F. Future Aspirations

F1. What are your dreams for the future?
[Probe: what career, why that?]

F2. How are you presently working to achieve your dreams?

F3. What do you think you need right now to achieve your dreams?

F4. What does it mean to you when others succeed?

F5. Who is a successful person? Name five successful person you know?
[What have you learnt from these people?]

F6. Are there any stories you can tell of people who were in difficult circumstance (living on the street) but are successful in life now?
### APPENDIX 4: QUANTITATIVE RESEARCH QUESTIONNAIRE

**SECTION 1: DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS**

1. **Gender**
   - Male: 1
   - Female: 2

2. **What is your religion?**
   - Christian: 1
   - Moslem: 2
   - Other: 3

3. **How old are you? (In years)**
   
4. **How many years have you been living on the street**
   - Less than 1 year: 1
   - 1–2 years: 2
   - 3–5 years: 3
   - 5 years or more: 4

5. **What is your highest level of education [Please Tick (√) one]**
   - No formal education: 1
   - Class 1-6: 2
   - JHS: 3

6. **What is the main reason why you left home [please tick (√) only one]**
   - Family poverty: 1
   - Dysfunctional problems: 2
   - Maltreatment: Sexually abused: 3
   - Maltreatment: Physical abused: 4
   - Divorce: 5
   - Other Reason: 6

7. **Where were you born?**
   - On the street: 1
   - Off the street: 2

8. **Whom are you living with now?**
   - Mother on the street: 1
   - Father on the street: 2
   - Bother/Sister on the street: 3
   - Other people: 4

9. **Are you in contact with any family member?**
   - Yes [ ]
   - No [ ]
   
   **If YES, Who is this person?**
   - Mother: 1
Can you ask this person for help if you need it?  

Yes  ___  No  ___  

9. From which region do you come from?

<table>
<thead>
<tr>
<th>Region</th>
<th>Accra</th>
<th>Brong-Ahafo Region</th>
<th>Central Region</th>
<th>Ashanti Region</th>
<th>Volta Region</th>
<th>Northern Region</th>
<th>Eastern Region</th>
<th>Upper-East Region</th>
<th>Western Region</th>
<th>Upper-West Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Region</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>7</td>
<td>3</td>
<td>8</td>
<td>4</td>
<td>9</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Central Region</td>
<td>2</td>
<td></td>
<td>3</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volta Region</td>
<td>3</td>
<td></td>
<td>4</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Region</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Region</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**SECTION 2: MSPSS**

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

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

**SECTION 3: SDQ**
Instructions:
Please answer the following statements by circling the appropriate number on the 0 to 2 point scale on how things have been for you over the past six months. It would help us if you answer all items as best as you can even if you are not absolutely certain or the items seem daft.

0 = Not true;
1 = Somewhat true;
2 = Certainly true

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I try to be nice to other people. I care about their feelings</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>I feel uneasy a lot, I cannot stay still for long</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>I get a lot of headaches, stomach-aches or sickness</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>I usually share with others (food, games, pens etc.)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>I get very angry and often lose my temper</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>I am usually on my own. I generally play alone or keep to myself</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>I usually do as I am told</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>I worry a lot</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>I am helpful if someone is hurt, upset or feeling ill</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>I am constantly fidgeting or squirming</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>I have one good friend or more</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>I fight a lot. I can make other people do what I want</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>I am often unhappy, down-hearted or tearful</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>Other people my age generally like me</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>I am easily disturbed, I find it difficult to concentrate</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>I am nervous in new situations. I easily lose confidence</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>I am kind to younger children</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>I am often accused of lying or cheating</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>Other children or young people pick on me or bully me</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>I often volunteer to help others (friends, the blind , older people)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>I think before I do things</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>22</td>
<td>I take things that are not mine from friends, and other people</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>If I am doing something, I can keep my mind on it</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>24</td>
<td>I have many fears, I am easily scared</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>25</td>
<td>I finish the work I'm doing. My attention is good</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
## SECTION 4: CD-RISC

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

<table>
<thead>
<tr>
<th></th>
<th>Not true at all</th>
<th>Rarely true</th>
<th>Sometimes true</th>
<th>Often true</th>
<th>True all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I am able to adapt to change</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I have close and secure relationships</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Sometimes fate or God can help</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I can deal with whatever comes</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Past success gives me confidence for new challenges</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I see the humorous side of things</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Coping with stress strengthens me</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I tend to easily overcome difficulties times or illness</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I think things happen for a reason</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I give my best effort no matter what</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>I can achieve my goals/ambitions</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>When things look hopeless, I don’t give up</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>I know where to turn for help</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>When I am under pressure, I focus and think clearly</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>I prefer to take the lead in problem solving</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I am not easily discouraged by failure</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I think of myself as strong person</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I make unpopular or difficult decisions</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>I can handle uncomfortable feelings</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>I have to act on my intuition</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I have a strong sense of purpose</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>I feel I am in control of my life</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>I like challenges</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>I work towards achieving my goals</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>I take pride in my achievements</td>
<td>0 1 2 3 4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Instructions:**
Please rate the extent to which you agree/disagree with the following statements by circling the appropriate number on the 1 to 4 point scale provided.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I have been hurt by how people have reacted to me for living on the street.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>I feel that I am not as good as others because I am homeless.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>I feel guilty and ashamed because I am homeless</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>People seem afraid of me because I am homeless</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>Some people act as though it is my fault that I am living on the street.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>People who live on the street are treated like outcasts</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>Knowing that you are homeless, people look for things wrong about you</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>I have been insulted by strangers because I live on the street.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>Most people think that people living on the street are disgusting</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>People who live on the street cannot get jobs because they don’t have home</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>I struggle with the views of others about people who live on the street</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>Homeless people are harassed by the police because they are homeless</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
SECTION 6: BEHAVIOURS RELATED TO MENTAL HEALTH

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

Suicidal Ideation

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

Smoking

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

7. How often do you use cigarette?
   Never 1  
   Sometimes 2  
   Everyday 3

8. How did you react when you friends told you to follow them to smoke?
   Walk way 1  
   Refusing to smoke when offered 2  
   Refusing and persuading them to stop 3  
   Pretending to join and later leave 4  
   Joining them and smoke 5

9. How old were you when you start smoking cigarette? (In years)  
   10  

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

Alcohol Use

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

13. How often do you drink alcohol in a month?
   Never 1  
   Sometimes 2  
   Everyday 3

14. Age of first drinking  

Illegal drugs

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15. Have you ever used “wee” (marijuana)  

Yes  |  No

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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>1</td>
</tr>
<tr>
<td>Sometimes</td>
<td>2</td>
</tr>
<tr>
<td>Everyday</td>
<td>3</td>
</tr>
</tbody>
</table>

17. At what age did you start smoking ‘wee’?

18. Where did you learn it?  

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>1</td>
<td>On the street</td>
<td>2</td>
</tr>
</tbody>
</table>

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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>From friends</td>
<td>1</td>
</tr>
<tr>
<td>Buy it</td>
<td>2</td>
</tr>
<tr>
<td>From other people</td>
<td>3</td>
</tr>
</tbody>
</table>

20. How easy is it to get “wee”?  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to get</td>
<td>1</td>
</tr>
<tr>
<td>Difficult to get</td>
<td>2</td>
</tr>
</tbody>
</table>

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

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>“Glue” (gbamagbama)</td>
</tr>
<tr>
<td>Cocaine</td>
</tr>
<tr>
<td>Heroin</td>
</tr>
<tr>
<td>Cracks</td>
</tr>
</tbody>
</table>

Sexual Behaviours  

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Have you had sex in the last one month?</td>
<td>Yes</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>21 Did you use a condom?</td>
<td>Yes</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>22 Do you have more than two (2) sexual partners?</td>
<td>Yes</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>23 Have you had sex with someone in exchange for food, money, and clothes or even where to sleep?</td>
<td>Yes</td>
<td>1</td>
<td>No</td>
</tr>
</tbody>
</table>

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

25. Where did it happen?  

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>1</td>
<td>On the street</td>
<td>2</td>
</tr>
</tbody>
</table>
**SECTION 7: BEHAVIOURS RELATED TO INJURY AND TRAUMA**

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

**Assault**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Yes</th>
<th>1</th>
<th>No</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Have you ever been bullied?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Have you ever bullied someone?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Have you beaten someone?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>How often have you been beaten up?</th>
<th>Never</th>
<th>Sometimes</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>How often have you been robbed?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>How often have you been assaulted with a weapon?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>How often have you been threatened with a weapon?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Coerced Sex**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Yes</th>
<th>1</th>
<th>No</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Have you ever been forced to have sex with someone?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Have you forced someone to have sex before?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Do you know someone who had been raped?</td>
<td></td>
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</tr>
</tbody>
</table>

**Fighting**

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

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Have you ever been injured in a fight?</th>
<th>Yes</th>
<th>1</th>
<th>No</th>
<th>0</th>
</tr>
</thead>
</table>

*Thank you for your participation*