THE RELATIONSHIP OF RESILIENCE WITH SOCIAL CONNECTEDNESS AND SELF-ESTEEM IN STREET INVOLVED YOUTH: A SECONDARY ANALYSIS

by
Karen Albert
BScN, McMaster University, 2010

A thesis,

presented to Ryerson University

in partial fulfillment of the

requirements for the degree of

Master of Nursing

in the Program of

Nursing

Toronto, Ontario, Canada, 2015

Author's Declaration

AUTHOR'S DECLARATION FOR ELECTRONIC SUBMISSION OF A THESIS

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I authorize Ryerson University to lend this thesis to other institutions or individuals for the purpose of scholarly research.

I further authorize Ryerson University to reproduce this thesis by photocopying or by other means, in total or in part, at the request of other institutions or individuals for the purpose of scholarly research.

I understand that my thesis may be made electronically available to the public.

THE RELATIONSHIP OF RESILIENCE WITH SOCIAL CONNECTEDNESS AND SELF-ESTEEM IN STREET INVOLVED YOUTH: A SECONDARY ANALYSIS

Abstract

Karen Albert

Master of Nursing Program

Ryerson University, Toronto, 2014

Resilience, the ability to bounce back in the face of adversity or trauma, plays a crucial role in street-involved youth's (SIY) capacity to overcome risks. Social connectedness and self-esteem have been identified as possible protective factors in the lives of SIY. A secondary analysis of 155 SIY was conducted to explore the relationship between social connectedness and self-esteem with resilience. Correlations of study variables with demographic characteristics and mental health descriptors were also examined. Results indicate that resilience is positively and significantly correlated with social connectedness and self-esteem. Additionally, those with higher levels of resilience, social connectedness and self-esteem had lower levels of depression, hopelessness, suicidality and substance misuse. Enhancing social connectedness and self-esteem may strengthen resilience, enabling youth to move forward despite the deleterious conditions associated with homelessness.

Keywords: street-involved youth, resilience, social connectedness, self-esteem.

Acknowledgements

I would like to recognize the nursing faculty at the Daphne Cockwell School of Nursing for this honoured opportunity. I am especially grateful to my supervisor, Dr. Elizabeth McCay, whose valuable assistance, encouragement, and support guided me throughout this process. I would like to thank my committee members, Dr. Jasna Schwind and Dr. Elaine Santa Mina for their dedication and thoughtful suggestions. I would also like to acknowledge all the youth who gave of their time and opened up their lives to make this work possible.

Foremost, I would like to thank my Saviour Jesus and my Heavenly Father for their goodness.

Dedication

Dedicated to:

My awesome parents, Martha and Lester

My amazing spouse, Jeremy

&

My adorable child, August

Table of Contents

List of Tables

List of Figures

Chapter I: Background

Homelessness among youth is a subject of great importance in the Canadian context. The most recent available data suggests that it continues to be a significant issue, with an estimated 150,000 youth living without a home (Public Health Agency of Canada, 2006). Street-involved youth (SIY), frequently referred to as street-youth/adolescents or homeless youth/adolescents, are characterized in the literature as youth who, due to various circumstances, no longer have a permanent residence, and whose lives are filled with multiple social and health challenges (Bender, Thompson, McManus, Lantry, & Flynn, 2007; Hughes et al., 2010).

SIY experience higher rates of mental health challenges compared to the general population and their housed counterparts (Boivin, Roy, Haley, & Galbaud du Fort, 2005). When key mental health descriptors are examined, the literature provides evidence that SIY have increased rates of depression, hopelessness, suicidality, self-harm behaviours and drug and alcohol misuse (Kidd & Shahar, 2008; McCay et al., 2010; Slesnick, Bartle-Haring, Dashora, Kang, & Aukward, 2008). These mental health challenges may play a prominent role in youth becoming homeless or may arise as a consequence of homelessness (Kidd & Shahar, 2008; McCay et. al, 2010; Rew, Taylor-Seehafer Thomas & Yockey, 2001).

Strengths in the Face of Adversity

Homelessness is described by the Canadian Homelessness Research Network (2012) as "generally negative, unpleasant, stressful and distressing," and it is associated with poor health, social and economic outcomes (Dorsen, 2010; Edidin, Ganim, Hunter, & Karnik, 2012). Youth who are identified as street-involved experience a diverse range of living conditions, including living without shelter, in emergency shelters or in a provisional shelter (Gaetz, Donaldson, Richter, & Gulliver, 2013; Kidd & Shahar, 2008). In spite of the adversity experienced by those who are homeless, many SIY are able to withstand some of the pressures associated with

homelessness. This ability to manage stress in the midst of challenging circumstances has been described as resilience (Bender, Thompson, McManus, Lantry, & Flynn, 2007; Kidd & Shahar, 2008; McCay et al., 2010).

Resilience.

Resilience is the ability to "display positive adaptation despite experiences of significant adversity or trauma" (Luthar & Cicchetti, 2000, p. 858). Research studies have demonstrated that resilience in the SIY is correlated with a number of positive outcomes including: decreased suicidality; reduction in self-harm behaviours; lower incidence of mental health challenges, such as depression, hopelessness, alcohol and other drug abuse; and a decrease in high-risk behaviours (McCay et al., 2010), all of which suggest that resilience may act to protect against the deleterious conditions of street-life. As such, gaining a deeper understanding of the conditions or factors that contribute to resilience in SIY is important in order to strengthen the capacity of these youth to move ahead toward healthy and independent lives.

Current research suggests that social connectedness and self-esteem may promote positive mental health outcomes, while protecting from negative outcomes, such as mental health challenges, in both the general and the homeless youth population (Fergus & Zimmerman, 2005; Kidd & Davidson, 2007; Kidd & Shahar, 2008; McCay et al., 2011; Resnick et al,. 1997). This research literature highlighting the relationship between social connectedness and self-esteem with positive mental health outcomes, suggests that these variables may also play an important role in strengthening resilience. Social connectedness and self-esteem were identified as the focus of the current study that seeks to understand those factors which contribute to resilience in vulnerable youth. In addition, these variables have been shown to be amenable to change,

suggesting that strategies to enhance social connectedness and self-esteem may prove beneficial in future intervention studies to strengthen resilience.

Social connectedness.

Social connectedness is the degree to which an individual feels connected to others and receives assurance from others in his/her social milieu (Lee, Draper, & Lee, 2001). It is well known that social networks play a key role in the lives of adolescents and young adults in the general population. Social connectedness, specifically, is vital to the healthy physical and mental development of adolescents (Resnick, Harris, & Blum, 1993; Yarcheski, Mahon, & Yarcheski, 2001). Relationships act as a social safety net for youth via multiple mechanisms. Both peer and adult relationships contribute to the physical, emotional and financial needs of youth (Barker, 2012). The degree to which adolescents feel connected contributes to their moral development. For example, research has demonstrated that youth who had a related adult as a close part of their social network were less likely to engage in sexually promiscuous behaviour or criminal activity (McCarthy & Hagan, 1992; Johnson, Whitbeck, & Hoyt, 2005). Regardless of this emerging research regarding the role of social networks and specifically social connectedness in positive youth development, the relationship between social connectedness and resilience in SIY is unknown.

Self-esteem.

Self-esteem is defined as "the individual's positive or negative attitude towards the self as a totality" (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995, p. 141). Self-esteem has also been shown to be a key factor in resilience in street-involved youth as it was found to protect against fearful attachment patterns and feelings of loneliness (Kidd & Shahar, 2008). It has been theorized that self-esteem may "serve as a foundation of resilience" (Kidd & Shahar, 2008, p.

170), however, the way in which self-esteem is related to resilience and how it mitigates the risks associated with street life is still relatively unknown.

Problem Statement

Resilience has been identified as a key concept that plays a significant role in decreasing the impact of mental health challenges in the lives of SIY (Kidd & Shahar, 2008; McCay et al, 2010), as well as improving increased adaptive capacity (Kolar, Erickson & Stewart, 2012). Despite the existing research concerning the central importance of resilience in SIY, minimal research has been undertaken to understand the underlying mechanisms and factors that enhance resilience in the lives of street-involved youth. Self-esteem and social connectedness have been identified as two possible factors that may contribute to enhancing resilience in SIY. However, the explicit relationship of these variables to resilience is still relatively unknown. Understanding the factors that contribute to the development of resilience is essential to the development of effective interventions to strengthen resilience in SIY that may ultimately improve the quality of life for these youth.

Statement of Purpose

The purpose of this secondary analysis is to assess the relationship of social connectedness and self-esteem with resilience in SIY. It is anticipated that researchers and service providers can use the findings from this study to help develop strategic interventions that focus on building social connectedness and self-esteem in SIY, thus increasing the capacity for resilience. This in turn may facilitate better mental health outcomes in the SIY, such as lower levels of depression, hopelessness, suicidality and substance misuse.

Chapter II: Literature Review

Literature Search

The topics of resilience, street-involved youth and mental health challenges are expansive within the literature. Whether searched separately or as a triad, there are numerous theoretical and empirical writings. The addition of the concepts of self-esteem and social connectedness also adds to the complexity of the literature review. To gain a comprehensive understanding of each topic, multiple searches were conducted using the following databases: CINAHL, MedLine, Proquest Nursing, PsychINFO, ERIC, Psychological, and Behavioural Sciences. Peer-reviewed articles were selected and were limited by year to 2000-2014, and to the English language. Seminal works prior to 2000 were also reviewed. This literature review consists of both theoretical and empirical literature.

Resilience: A Theoretical Review

Theoretical literature on resilience was retrieved using the key words of *resilience* (resilient, resiliency) and *theoretical* along with the variants of: *framework, models, concept analysis*, and *conceptual framework*. While the search was limited by year, a few pertinent articles and books published prior to 2000 were reviewed. This search was further limited to SIY and homeless youth, which revealed sparse theoretical literature. References from retrieved articles were reviewed for additional citations.

Theoretical underpinnings.

Resilience is commonly referred to as the ability to "bounce back" and has been shown to contribute to successful adaptation in the presence of adversity (Grabbe, Nguy & Higgins, 2012; Luthar, Cicchetti & Becker, 2000; Masten, 2001). It is interesting to note that resilience as a term has been borrowed from the domains of physics and material science, referring to an

object's ability to withstand tension or compression forces and ultimately resume its original shape.

Resilience is a difficult construct to define due to the ambiguity surrounding the standardization of its definition and the complexity of multiple constructs that comprise resilience as a whole (Shaikh & Kauppi, 2010). For example, it has been used interchangeably with the concepts of *positive adjustment, coping* and *competence*, which are related but distinct constructs of resilience (Fergus & Zimmerman, 2005). Despite multiple definitions of resilience, it is generally agreed that an individual is considered resilient if they have been exposed to risk and have been able to significantly overcome the negative effects associated with that risk (Fergus & Zimmerman, 2005).

Resilience as a concept has been applied to the study of children and adults, families, communities, institutions and policies. Resilience research did not arise from resilience-specific theories but evolved from other theoretical constructs and perspectives (Richardson, 2002). The concept of resilience has various definitions based on the framework from which the research is conducted (Windle, 2011). Resilience theory is heavily grounded in the psychological and sociological domains.

Resilience has garnered increasing attention and application in the research community. Prior to resilience research, vulnerable or marginalized populations were often regarded as abnormal or unhealthy. The majority of research with these populations adopted a deficit framework, focusing on problems experienced or problems caused by the participants under study (Ferguson & Islam, 2008; Ungar, 2004). The study of resilience in youth evolved from the work theorists who proposed a salutogenic model, in other words a health-centric model that focused predominantly on factors that promoted wellness and positive or strength-based

outcomes (Leipold & Greve, 2009). Early writings on resilience in youth emerged in the 1970s and 1980s with work done in developmental psychopathology. Researchers found that a significant portion of risk-exposed youth, (50% to 70%) were able to overcome adversity (Bernard, 1997 as cited in Richardson, 2002, p. 310).

In 1985, Garmezy studied children of mothers diagnosed with mental illness, and in 1977 Werner and Smith conducted a longitudinal study of Hawaiian children from infancy to midlife (Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003). Both studies found that even though children had problematic histories that predisposed them to risk and poor outcomes, some developed into well-adjusted individuals. Evolving from these findings were studies that examined the lives of children living in adverse conditions, including poverty, violence, exposure to diagnoses of chronic illness or significant tragedies (Cicchetti & Garmezy, 1993; Luthar, Cicchetti & Becker, 2000, Olsson et al., 2003).

Defining Resilience

In her extensive work regarding the development of resilience in children, Masten (2001) describes resilience as "ordinary magic", stating that resilience is a result of the "everyday magic of ordinary, normative human resources in the minds, brains, and bodies of children in their families and relationships and in their communities (p. 235). While resilience is considered ordinary and uncomplicated, the characterization of resilience has been remarkable and complicated due to multiple ways of viewing the construct. Specifically, resilience has been characterized as a personality attribute, a process and an outcome (Ahern, Ark, & Byers, 2008).

Resilience as a personality trait.

Resilience is often viewed as a composite of personal qualities or traits (Conner & Davidson, 2003: Garmezy, 1991; Rutter, 1987), whereby the individual adapts and becomes

resistant to stressors in his/her lives (Ahern et al., 2008, p. 32). This conceptualization of resilience has its roots in the construct of hardiness (Shaikh & Kauppi, 2010). Wagnild and Young (1993) defined resilience as "a personality characteristic that moderates the negative effect of stress and promotes adaptation" (p. 165).

The conceptualization of resilience as a personality trait has often been viewed as restrictive, as it implies that resilience is a quality that is static and only inherent to some individuals and not others and thus cannot be learned (Luthar et al., 2000; Shaikh & Kauppi, 2010). This view of resilience also subtly suggests that a person may be resilient across all situations and domains in their lives and does not account for the fact that a person may appear resilient in one area of her/his life while being deficient in another (Fergus & Zimmerman, 2005; Luthar et al. , 2006;). A major critique against this definition of resilience is that it fosters a perspective that promotes blaming the victim for his/her inability to adapt (Shaikh & Kauppi, 2010).

Resilience as a process.

There has been an increased emphasis on conceptualizing resilience as a process (Luthar et al., 2006). Fergus and Zimmerman (2005) refer to resilience as a process that encompasses overcoming the negative effects associated with risk, successfully navigating traumatic experiences, and avoiding the undesirable trajectories. There is a shift in resilience research to move beyond identifying the factors associated with resilience to understanding the underlying processes responsible for the phenomenon. From this perspective, resilience is understood to be a dynamic concept and interactive process, changing with time and embedded in the struggles and circumstances that individuals encounter (Masten, 2001). The key features of resilience, as a process, are the presence of significant adversity and the achievement of positive adaptation.

One of the prevalent criticisms of *resilience as a process* in the literature is the lack of consensus over what constitutes significant adversity or risk and what constitutes positive or successful adaptation (Shaikh & Kauppi, 2010).

Resilience as an outcome.

Resilience is also defined as an outcome. Early resilience research focused on the absence of negative effects; hence, a person was considered resilient based on a deficit model with the focus on the non-development of problems (Masten, 2001; Earvolino-Ramirez, 2007; Rutter, 1987). The literature has grouped outcomes into two factions, those looking exclusively at positive outcomes and those looking at the factors associated with positive adaptation (Shaikh & Kauppi, 2010). The former defines resilience as a positive successful achievement that, for example, may include acts such as completing high school, staying sober, or any individual goal. The latter adopts a perspective whereby resilience is framed as the factors that contribute to the successful developmental trajectories. Thus, resilience can be considered an outcome unto itself, or as a protective factor that helps promote other successful developmental outcomes by protecting against risk.

The major criticism of these views is that there is no standardization of what constitutes a positive outcome or adaptation and that the criteria used as a measure of "positive" are normative and reflect a cultural view that may not be consistent with that of a marginalized population (Unger, 2004).

Resilience as a process and outcome.

Leipold and Greve (2009) put forward a hybrid construct of resilience, defining it by "the success (positive developmental outcomes) of the (coping) process involved (given the circumstances)" (Leipold & Greve, 2009, p. 41). Recent studies have demonstrated the

cumulative benefit of combining these two paradigms; thus, the research strives to measure positive outcomes derived through the resilience process (Leipold & Greve, 2009). Unger (2008) asserts that the multiple definitional viewpoints of resilience are not mutually exclusive. In fact, the literature has long identified the historical challenge in defining resilience as simply a process or outcome and has often amalgamated the two; for example, Masten, Best and Garmezy (1990) defined resilience as "the *process* of, capacity for, or *outcome* of successful adaptation despite challenging or threatening circumstances" [emphasis added] (p. 426).

Social Connectedness and Self-Esteem: A conceptual review

A review of relevant conceptual literature pertaining to social connectedness and self-esteem was undertaken. Literature was retrieved using the key words of *social connectedness* (and variant social support) and *self-esteem* respectively along with the terms *conceptual framework* and the variants of: framework, models, concept analysis, and theoretical framework. The parameters were narrowed by year (2000-present).

The concept of social connectedness.

The need to belong and connect is an essential human quality (Lee & Robins, 1995). Social connectedness has been defined as "an enduring and ubiquitous experience of the self in relation with the world" (Williams & Galliher, 2006, p. 856). Social connectedness in youth represents a sense of belonging, community and integration, which includes the sense of connection experienced by the youth and the extent to which they are supported by other members in their group (Barber & Schluterman, 2008). Connectedness is described as an intrinsic human motivation. The need to connect with others is first observed in infanthood, but plays a prominent role during adolescence (Lee & Robbins, 1995, p. 233). It provides both a sense of identity and a sense of place in society.

Social connectedness and social support are used interchangeably within the literature, and are important components of maintaining social networks (Ashida & Heaney, 2008). However, studies often incorrectly imply that the presence of social supports is the same as the sense of connectedness. While they both relate to how individuals interact, it is possible to have people in one's life, but still have an enduring sense of loneliness. Social support implies an interaction based on the provision of various services, including the tangible such as providing financial support, or intangible such as emotional support. Thus, a low score on a social support measure would indicate a lack of support from a specific source, whereas a low score on a social connectedness scale would imply a pervasive and greater inability to interact and connect with the social world (Lee & Robbins, 1995). However, they are still often used interchangeably within the literature. During this literature search it was important not to exclude sources that included social support, as some conceptualized it to mean the emotional closeness, which is congruent with social connectedness. The concept of connectedness was first developed to measure belongingness (Baumeister & Leary, 1995). Social connectedness differs from other social constructs as it holistically incorporates how individuals experience and engage with others in their environment and how they view themselves in relation to others (Lee & Robbins, 1995).

The concept of self-esteem.

Self-esteem has been conceptualized in numerous ways (Wild, Flisher, Bhana, & Lombard 2004). Rosenberg defines self-esteem as an individual having "self-respect" and a sense of worth. Conversely low self-esteem is understood as a deficiency where individuals with low self-esteem exhibit a lack of respect for themselves and view themselves as contemptible

(Roseberg, 1979). Global self-esteem is a subjective measure and refers to the overall positive feelings that individuals have towards themselves (Robins, Hendin & Trzesniewski, 2001).

According to Mruk (2006), self-esteem can refer to a sense of competence in one's capacity to accomplish or achieve goals, or the value and worth one ascribes to oneself. This suggests that self-esteem is cognitively and behaviourally based and is defined by how one thinks of oneself, and by what one is able to accomplish (Mruk, 2006).

Low self-esteem has shown a positive association with risky behaviour in youth (Ethier et al., 2006). For example, the literature has shown that SIY engage in risk-taking behaviour, such as drug use and survival sex (Edidin, Ganim, Hunter, & Karnik, 2012; Taylor-Seehafer et al., 2007; Wenzel et al, 2012). Self-esteem has also been recognized as a significant dimension of resilience in SIY (Kidd & Shahar, 2008) and fits within the resilience model as it has been shown to be a protective factor against adverse outcomes (Pierce & Shields, 1998). Elevated self-esteem is linked to a healthy view of self and mental stability (Kernis et al, 2005). Individuals with low self-esteem tend to perceive people and events through a lens of rejection and isolation; this in turn makes it difficult for that individual to respond well to stressors (Mruk, 2006). In contrast, individuals with high self-esteem display positive coping skills despite the presence of stressors, thus decreasing the impact of stressful events (Abela & Skitch, 2007) and contributing to an overall capacity to be resilient. Researchers have also found that high self-esteem acts as an impetus to persevere and overcome difficulty (Mruk, 2006). Addressing self-esteem in the lives of SIY is crucial, as this formative period of their lives can influence their level of self-esteem during adulthood (Abela & Skitch, 2007).

Summary of the Theoretical and Conceptual Review

In summary, resilience is not a static construct, but refers to the ability of bounce back from challenging circumstances. It is described as both a process and outcome that represents positive adaptation in the presence of adversity or risk (Masten, 2001). Social connectedness and self-esteem are two characteristics that have been associated with positive outcomes in youth who have experienced varying degrees of challenge in their lives. Social connectedness represents the degree of closeness individuals feel to others in their social world, and self-esteem is the worth ascribed to themselves; either intrinsically or because of their accomplishments. Both of these qualities may enhance positive outcomes in SIY lives, and their explicit connection to resilience will be evaluated in this work.

Empirical Review

Two separate searches were conducted for the empirical review. First a search on resilience in the SIY population was conducted using the key words resilience (and resiliency) and street-involved youth (homeless youth, street youth). A search of defining characteristics of SIY was also undertaken. A second search was conducted using the key words of resilience, social-connectedness and self-esteem. The abstracts were read and only relevant qualitative and quantitative articles were reviewed. The search was limited by year (2000 – present). The empirical review will begin with an overview of SIY, as well as the risk factors associated with these youth, followed by a discussion of resilience in SIY in conjunction with the protective role of social connectedness and self-esteem in relation to resilience in SIY.

Street-Involved Youth: An Overview

Street-involved youth is a broad term used to describe a heterogeneous group of adolescents and young adults. The term SIY is used to describe youth at various stages of

homelessness and may include those who utilize the services of shelters or group-homes, couch surf, and those who reside on the streets (Haldenby, Berman & Forchuk, 2007; Taylor-Seehafer et al., 2007). Thus, it is the term that has been adopted for this study. Kelly and Caputo (2007) define SIY as those "who spend considerable amounts of time on the street, who live in marginal or precarious situations and who participate extensively in street lifestyle practices" (p. 728). The increasing use of the term SIY over related terms such as homeless youth, more accurately captures a demographic of youth who don't exclusively live on the street, but are rather exposed to various aspects of "street culture" and who purposely engage and interact with the street environment (Elliott, 2013).

There are classifications of SIY: "absolutely homeless" and "relatively homeless" (The Canadian Housing and Mortgage Corporation [CHMC], 2006). The former refers to those who live outdoors or in abandoned buildings, while the latter refers to those living in inadequate or temporary housing. It is difficult to measure accurately the number of SIY, due to the transience of their lifestyle or a reluctance to disclose personal information. There is an increasing segment of those considered the "invisible homeless", who temporarily stay with family or friends (CMHC, 2006).

Resilience in Street-Involved Youth

As described in the theoretical review, resilience is frequently conceptualized in terms of risk environment and protective factors and is the perspective that has been adopted for the empirical review.

Risk environment associated with street-involved youth.

Risk is denoted as conditions that increase the probability of negative outcomes. In the lives of street youth, risk factors are those associated with being homeless including mental health challenges, physical health problems, societal stigma, history of abuse, or lack of resources

needed for optimum quality of life (McCay et al., 2011; Bender et al., 2007; Earvolino-Ramirez, 2007). For example, length of time on the streets has been found to be directly proportional to higher involvement in risk behaviours, such as criminal activity, high risk sexual practices and substance use; and the deterioration of mental health (Huntington, Buckner, & Bassuk, 2008; Hadland et al., 2012). The risks associated with SIY, such as increased vulnerability, harmful behaviour, substance abuse, criminal behaviour and engagement in survival sexual behaviour are likely to be amplified without the social resources that are required to help navigate these challenges (Heinze, Jozefowicz, & Toro, 2010; Lightfoot, Stein, Tevendale, & Preston, 2011; Bousman et al., 2005).

Protective factors associated with street-involved youth

Studies of resilience and its relationship to social connectedness and self-esteem are sparse within the literature. Resilience is mostly viewed as a process and as such there is a gap in the literature with regard to the relationship of resilience with social connectedness and self-esteem. For example, Dang (2014) recently conducted a cross-sectional study with the purpose of exploring social connectedness and self-esteem as predictors of resilience among homeless youth with histories of maltreatment. The sample included 150 homeless youth aged 14 to 21, with the study findings indicating that youth who reported higher levels of social connectedness and self-esteem were considered to be more resilient. However, resilience was conceptualized as a reduction in psychosocial distress, and the researchers did not utilize a resilience scale to directly capture the conceptual elements of resilience, such as an internalized sense of being able to withstand or cope with challenging situations. Kidd and Shahar (2008) conducted a quantitative study of 208 SIY in New York City and Toronto to understand risk and resilience factors in SIY. This study identified self-esteem as a key role in resilience in SIY. However,

resilience was not directly measured in this study, but rather was constructed as a hybrid of indicators. Individuals were considered to have high levels of resilience if they reported lower levels of loneliness, suicidal ideation and the sense of feeling trapped. An additional study was undertaken by Craig, McInroy, Austin, Smith and Engle (2012) to test the effectiveness of a school-based group to build resilience in sexual minority youth (i.e. those who identify as gay, lesbian, transgendered or bisexual). The study measured social connectedness and self-esteem; however, it did not directly measure resilience. Youth were identified as "resilient" if they achieved high scores on social connectedness, self-esteem and proactive coping.

On the other hand, McCay et al. (2010) conducted a mixed-method study of 70 SIY to analyze the relationship between mental health challenges and strength in this population and did include a measure of resilience. Findings showed that this group had both high levels of resilience and self-esteem, as well as a high level of mental health challenges. When analyzed, resilience and self-esteem were significantly and negatively correlated with the mental health challenges of depression, hopelessness and suicidal ideation. Rew et al. (2001) conducted a descriptive and exploratory correlational design study of 90 SIY and also included a measure resilience. The purpose of the study was to explore the association amongst resilience, risk and protective factors. This study showed that resilience, as measured by the Resilience Scale, was negatively and significantly correlated with loneliness, hopelessness, self-injury and social-connectedness. In addition, social connectedness was found to be negatively correlated with resilience, with youth who had higher levels of social connectedness also having lower levels of resilience. This latter finding appears to be paradoxical, since social connectedness has been repeatedly cited as a protective factor in SIY and youth in general. These authors attribute this

unexpected finding to the study limitations, which included the use of convenience sampling, as well as a small sample size.

It is evident from the preceding literature that social connectedness and self-esteem have emerged as two protective factors that appear to contribute to resilience (Fergus & Zimmerman, 2005; Kidd & Davidson, 2007; Kidd & Shahar, 2008; McCay et al., 2011; Resnick et al., 1997). Self-esteem and social connectedness act along a continuum, whereby high levels of self-esteem and social connectedness can be considered protective and low levels of self-esteem and social connectedness may be considered risk factors. It has been further suggested that positive emotions, such as those derived from having strong supportive connections and high self-esteem contribute to flexible thinking, problem solving, and as well help to regulate the physiological effects of stress, allowing the individual to make improved choices and better navigate adversity (Ong, Bergeman, Bisconti, & Wallace, 2006), characteristics reflective of resilience.

It is also important to note that self-esteem and social connectedness have been identified as important resources that contribute to healthy coping, independent of resilience (Taylor & Stanton, 2007). For example, in a 2011 study of 474 SIY, Lightfoot et al. found that "developing self-esteem and sources of social support" were important as "adjuncts" and "precursors" to programs that teach youth about life skills (p. 886). In this study the framework used to define social support included cohesion and a sense of community, which is consistent with social connectedness and has thus been included in this review.

In the study of 208 SIY by Kidd and Shahar (2008), self-esteem emerged as a critical factor which decreased the risk of poor mental and physical health outcomes. Based on these findings, this study highlighted that self-esteem by itself was not only a critical aspect that promoted resilience, but that it had an important impact on reducing suicidality and feelings of

loneliness. Further, self-esteem was found to have strong negative correlation with mental health challenges in a SIY population (McCay et al., 2010). Accordingly, low self-esteem has been identified as a psychosocial problem present in the street-involved population (Nyamathi et al., 2005).

Social connectedness can be a protective factor in the lives of SIY. A lack of social connectedness with friends and family was cited by Rew et al., (2001) as a cause for some of the psychological issues associated with homelessness. SIY are typically disengaged from traditional social structures such as the home, school, or community youth services (Heinze, Jozefowicz, & Toro, 2010). These traditional settings often "provide strength building experiences and resources associated with development of positive personal and social assets in normative youth populations" (Heinze, et al., 2010, p. 1365).

Summary of Empirical Review

In the SIY population, the empirical literature has shown that resilience is higher than what might be reasonably expected in this vulnerable population (Fergus & Zimmerman, 2005; Kidd & Shahar, 2008). Resilience itself is not a protective factor, but is an indicator of how well one is able to overcome adversity. The research has shown that SIY with higher levels of resilience report less loneliness, depression, suicidality and are less likely to engage in high risk activity. A major limitation of the research is that resilience, specifically using a resilience scale, is rarely measured. Thus, there is a need for more studies that utilize a validated resilience measure.

Chapter III: Conceptual Framework

Resilience, as an overarching concept, is used to describe the capacity of the individual to achieve positive and normative development in the midst of challenges and stressors (Masten, 2001; Waller, 2001; Zimmerman & Arunkumar, 1994). The resilience framework offers a strengths-based perspective that provides an understanding of the assets and resources utilized by SIY to mitigate the risk of homelessness, street life and other challenges (Luthar, Sawyer, & Brown, 2006). While no explicit model or framework has been proposed by theorists to comprehensively address resilience in SIY, significant work has been done to explain possible mechanisms for resilience in the lives of adolescents.

It is important to note that resilience does not imply invulnerability to stress, but demonstrates the capacity of the individual to attenuate the negative consequences of stress.

The Study Framework: Resilience and Protective Factors in SIY

The framework used to guide the current study was based on the work by Olsson et al. (2003), who conducted a concept analysis of resilience within the adolescent context. The literature review supporting the concept analysis addressed two foci: (1) the examination of psychosocial factors in youth sub-populations experiencing a particular risk, and (2) an examination of the protective factors that facilitate resilience. In order to address the complexity of resilience, the current study framework encompassed both of these foci. Specifically, SIY were considered a sub-population experiencing the risk of homelessness. See Figure 1 (page 26) for a schematic representation of the current study framework.

Street-involved Youth: An At-Risk Population

Although the focus of the current study framework was not concerned with specific outcomes for at-risk youth, it clearly identified the importance of understanding and describing at-risk populations or, in other words, the risk environment. Homeless adolescents are

considered one of the most vulnerable populations (Dorsen, 2010). Youth are more susceptible to homelessness than adults, as they are less likely to have the financial security needed to procure permanent housing (Zerger, Strehlow & Gundlapalli, 2008). Reasons for youth homelessness may include running away due to unfavourable circumstances or being asked by a guardian to leave (Kurtz, Jarvis & Kurtz, 1991). Extensive literature cites a history of physical and sexual abuse, including parental neglect, as antecedents to homelessness (Haldenby et al., 2007; Kurtz et al., 1991; Thrane, Hoyt, Whitbeck, & Yoder, 2006).

The impact of homelessness upon youth goes beyond the lack of physical commodities, such as access to shelter, finances, food and adequate healthcare (Nyamathi, et al., 2005). The experience of homelessness for youth can also be understood to be a risk factor for increased mental health challenges, unsafe sexual practices, substance abuse and suicidal ideation (Bender, et al., 2007; Earvolino-Ramirez, 2007). Overall, SIY are more susceptible to depression than their housed counterparts (De Man, 2000), and it is estimated that 31-89% meet the diagnostic criteria for major depression (Erdem & Slesnick, 2010). Suicide and self-harm in SIY is estimated to be 10.3 times the national average (Kidd & Kral, 2002). The risk of suicide is high in this population (Whitbeck, Hoyt, & Bao, 2000), and suicide is cited as the main cause of death amongst SIY (Roy et al., 2004). Further, street-life and the absence of adequate help and resources may also exacerbate these mental health conditions, including feelings of loneliness (Rew, et al., 2001; Whitbeck, Johnson, Hoyt, & Cauce, 2004). When mental health issues arise in the context of abuse or trauma, street-life may be a viable option to escape real threats at home. Understandably, SIY are an at-risk population and typically experience exceedingly high levels of mental health challenge including, hopelessness, depression, suicidality and substance misuse.

Protective Factors in SIY

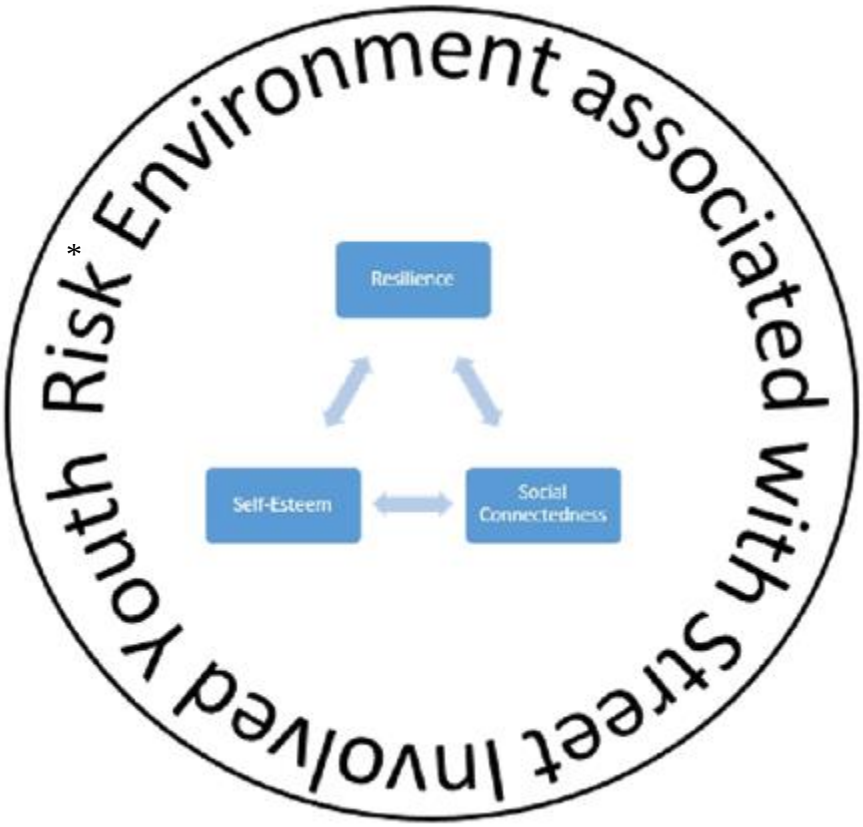
A key component of the current study framework was the emphasis on protective factors that promote resilience. Protective factors are conditions that may mitigate "the effects of individual vulnerabilities or environmental hazards so that the developmental trajectory is more positive than would be the case if the protective factor were not operational" (Masten, Best, & Garmezy, 1990, p. 426). Olsson et al, (2003) have put forward a multi-component protective-focused framework whereby resilience factors are described across three broad levels: the individual (e.g. self-esteem); the family and peer/ social network (e.g. social connectedness); and response at the larger societal-level (e.g. school or community-based programming). For the purpose of the current study, the focus of the theoretical framework was on individual (e.g. self-esteem) and peer/social level factors (social connectedness).

Social connectedness and self-esteem have emerged in the literature as two protective factors that appear to contribute to resilience (Fergus & Zimmerman, 2005; Kidd & Davidson, 2007; Kidd & Shahar, 2008; McCay et al., 2011; Resnick et al., 1997). Both self-esteem and social connectedness are along a continuum whereby, high levels of self-esteem and social connectedness can be considered protective, while low levels of self-esteem and social connectedness may be considered risk factors. It has been further suggested that positive emotions, such as those derived from having strong supportive connections and high self-esteem contribute to flexible thinking, problem solving, and as well help to regulate the physiological effects of stress, allowing the individual to make improved choices and better navigate adversity (Ong, Bergeman, Bisconti, & Wallace, 2006), characteristics reflective of resilience.

Self-esteem: For the purpose of this study framework, self-esteem is identified as an individual level protective factor. Self-esteem is defined as "the individual's positive or negative attitude towards the self as a totality" (Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995, p.

141). In 2008, Ferguson and Islam reported that SIY exhibit low self-esteem. However, in other studies it has been demonstrated that street-involved youth have higher than anticipated levels of self-esteem (Kidd & Shahar, 2008; Maccio & Schuler, 2012). In SIY, self-esteem has been found to be a protective factor against the risks associated with street life, such as: increased suicidality and self-harm; increased levels of depression, loneliness and hopelessness; as well as increased victimization, drug use and high-risk sexual activity (Kidd, 2008; McCay et al., 2010; Johnson, Whitbeck, & Hoyt, 2005; Maccio & Schuler, 2012).

Social Connectedness: For the purpose of this study framework social connectedness is identified as an individual level factor. Social connectedness is the degree to which an individual feels connected to others and receives assurance from others in his/her social milieu (Lee, Draper, & Lee, 2001). It is associated with the concept of social support, which centers on the social resources present in one's life, such as tangible aid, emotional support or advice. Social connectedness is the subjective experience of closeness with others (Ashida & Heaney, 2008). A pivotal study by Kidd and Davidson (2007) suggests that social networks may be critically important in building resilience in street-involved youth. Specifically, their qualitative study of 208 homeless youth describes that these networks can at times provide the "understanding, connection and support" (p. 228) needed for SIY to engage in healthy behaviours. Social connections may help SIY bolster their resilience by creating a network that provides emotional support and facilitates learning, locating resources, overcoming challenges and keeping oneself safe (Bender, Thompson, McManus, Lantry & Flynn, 2007).



*The Risk Environment is conceptualized as the conditions of homelessness, such as food insecurity, financial difficulty, lack of shelter, and higher incidences of mental health challenges.

Figure 1. Study Framework: Resilience and protective factors in Street-involved Youth

Research Questions

1. What is the relationship between social connectedness and resilience in SIY?
2. What is the relationship between self-esteem and resilience in SIY?
3. What is the relationship between the socio-demographic characteristics (demographics and mental health descriptors) of the study participants and the study variables, specifically; resilience, social connectedness and self-esteem?

Conceptual and Operational Definitions of Study Variables

The following presents conceptual and operational definitions of the variables utilized in this study.

Resilience.

Conceptual Definition: Resilience is defined as a "characteristic that moderates the negative effects of stress and promotes adaptation" (Wagnild & Young, 1993, p. 165). It is characterized by the "relative resistance to environmental risk" (Rutter, 2006, p. 1). It is a process whereby "stressors and change provide growth and increased resilience qualities or protective factors" (Richardson, 2002, p.319).

Operational Definition: The Resilience Scale (RS) (Wagnild & Young, 1993) was used to measure resilience. It is a 25 item self-report measure that uses a seven-point Likert scale.

Social-connectedness.

Conceptual Definition: Social-connectedness is defined as "an attribute of the self that reflects cognitions of enduring interpersonal closeness with the social world" (Lee et al., 2001, p. 310). It is related to the concept of social-support and belongingness (Rew et al., 2001, p. 35).

Operational Definition: The Social-Connectedness Scale-Revised (SCS-R) was used to measure social-connectedness (Lee et al., 2001). It is a 20 item self-report measure. Responses to the scale range from Strongly Agree to Strongly Disagree (1 to 6).

Self-esteem.

Conceptual Definition: Self-Esteem is defined as "the individual's positive or negative attitude towards the self as a totality" (Rosenberg, Schooler, Schoenbach & Rosenberg, 1995, p. 141). It encompasses the individual's feeling of self-worth (Rosenberg et al., 1995).

Operational Definition: The Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1979) was used to measure self-esteem. It is a 10 item self-report measure. Responses to the scale range from Strongly Agree to Strongly Disagree (0 to 3). Higher scores indicate higher levels of self-esteem.

Conceptual and Operational Definitions of Mental Health Descriptors

Hopelessness.

Conceptual definition: Hopelessness is defined as a person's negative perception about her/his future and involves the inability to pursue personal goals (Beck & Steer, 1988).

Operational Definition: The Beck Hopelessness Scale (BHS) (Beck, Weissman, Lester, & Trexler, 1974) was used to measure hopelessness. It is a 20 item scale comprising of "true or false" answers, which are assigned a value of 1 or 0. Scores range from 0 to 20 with higher scores indicating a greater degree of hopelessness.

Depression.

Conceptual definition: Depression is characterized by a prolonged episode of low mood that may be accompanied by periods of crying, suicidal ideation, guilt, self- doubt, pessimism as well as somatic complains such as changes in appetite, sleep and cognition, and increased suicidal ideation (Beck, Steer, & Carbin, 1988).

Operational definition: The Beck Depression Inventory (BDI) (Beck, Steer, & Carbin, 1998) was used to measure depression. It is a self-report measure consisting 21 items with a four point Likert scale. The scores range from 0 to 63 with higher scores indicating a higher degree of depression.

Suicidality.

Conceptual Definition: Suicidality is marked by increased thoughts of wanting to die, which may also include active thoughts about wanting to end one's life (Joiner & Rudd, 1995).

Operational Definition: Suicidality was measured using the Depressive Symptom Index – Suicidality Subscale (DSI-SS) (Joiner, Pfaff & Acres, 2002). It is a four item self-report measure used to identify the severity and frequency of suicidal ideation. Higher scores indicate greater suicidality.

Substance Misuse.

Conceptual Definition: The consumption of illicit substances, including alcohol, which results in a dependence on such substance and subsequently impacts interpersonal relationships, societal obligations and health (Gibbs, 1983).

Operational Definition: Substance misuse was measured using the adolescent version of the Michigan Alcoholism Screening Test (MAST) (Snow, Thurber, & Hodgson, 2002). It is a 19 item self-report measure used to determine the participant's alcohol or drug use. A score greater than 4 on the MAST (Snow, Thurber & Hodgson, 2002) indicates that there is a serious level of alcohol and/or drug abuse.

Conceptual and Operational Definitions of Socio-Demographic Characteristics

Conceptual definition: In the current study demographics pertains to the characteristics of the study participants that were collected to enable comparison with other street-involved youth, as well as normative data.

Operational definition: Demographics were defined by age, length of time on the street, length of time in Canada, education, gender, housing status, living situation, relationship status and sexual orientation.

Chapter IV: Methods & Procedures

Design

The current study is a secondary analysis based on data collected within the context of a primary study entitled "*Enhancement of Transitional Housing Programmes for Street-involved Youth through the Application of Dialectical Behaviour Therapy (DBT) to Strengthen Resilience"* (McCay et al., 2014), to be hereafter referred to as the primary DBT study. This study was funded by Canadian Institutes of Health Research, Partnerships for Health System Improvement and the Mental Health Commission of Canada; and Elizabeth McCay, RN, PhD is the Principal Investigator. The goal of the primary DBT study was to implement and assess the effectiveness of a 12-week evidence-based DBT intervention in order to address the mental health needs of street-involved youth. Specifically DBT aimed to reduce emotional distress and maladaptive coping mechanisms while promoting positive relationships and overall functioning. The primary DBT study was a mixed method wait-list control design to assess the effectiveness of the study intervention. Data for the primary DBT study was obtained from participants in the immediate intervention group and wait-list delayed groups at the same time points: baseline, 12 weeks post-baseline (for intervention group equivalent to immediate post-treatment), 16 weeks post-baseline and 24 weeks post-baseline.

For the purpose of this secondary analysis, the cross-sectional DBT quantitative data gathered at Time 1 (baseline) was analyzed to assess the relationship between social connectedness and self-esteem with resilience in youth who are street-involved. A secondary analysis was undertaken, since the quantitative data set generated by the primary DBT study contains the necessary data to answer the research questions pertaining to the relationship between social connectedness and self-esteem with resilience. The data used was gathered from

Time 1, prior to the introduction of the intervention, as the sample at this time best represented the general SIY population. Accordingly, a descriptive correlational design was utilized in the current secondary study to assess the relationship between the study variables: specifically resilience to social connectedness and self-esteem, respectively.

Setting and Sample

Setting.

The data for the primary DBT Study was collected from youth either residing or accessing the services of a Toronto Ontario based agency serving street-involved youth or a community-based child and youth mental health centre which also provides services to street-involved youth in Calgary Alberta.

Sample.

The primary DBT study utilized a convenience sample of 155 participants. This sample size is appropriate since it is consistent with Norman and Streiner's (2000) suggestion of 5-10 subjects per independent variable under investigation.

The selection criteria for the primary DBT study are as follows: (1) between the ages of 16-24; (2) have previously lived on the street or in short-term residential facilities for at least a month; (3) capable of reading, speaking and comprehending English; and (4) able to provide informed consent. Case managers or front-line clinicians familiar with the youth informed potential participants about the study. If the youth were interested in the study, they were given the contact information for the study's research co-ordinator who then arranged to meet the youth to further explain the study and to obtain informed consent.

Since the current study was a secondary analysis, the inclusion and exclusion criteria of for this study are consistent with the primary study.

Ethical Considerations

Ethics approval was obtained for the primary DBT study by the Ryerson University Research Ethics Board and all other required research ethics board. The rights to self-determination, privacy, fair treatment, protection from discomfort and harm were upheld in the original study. The current study was committed to the continued protection of the right to autonomy and confidentiality. All data had been de-identified, results were coded, raw data was not altered and only the data required for the secondary analysis was sourced.

Data Collection

The data collection for the primary DBT study was collected between Fall 2010 and Spring 2014. Quantitative data from the DBT study was obtained from a range of self-report measures administered by an experienced graduate-level interviewer. A demographic questionnaire was also administered.

Study instruments

The following study instruments were selected from the primary DBT dataset to answer the research questions identified in this study.

The resilience scale (RS).

The RS (Wagnild & Young, 1993) is a self-report measure used to assess how an individual successfully copes with or adapts to stress. The scale measures resilience based on two factors, namely personal competence and acceptance of self and life (Ahern, Kiehl, Sole & Byers, 2006). It consists of 25-items with a 7-point Likert response format where 1 corresponds to disagree and 7 to agree. Reliability of the tool was reported in a SIY population with a reliability coefficient alpha of 0.91 (Rew et al., 2001). Scores ranges from 25 to 175, with higher scores reflecting higher levels of resilience.

The social connectedness scale (SCS).

The SCS (Lee et al., 2001) assesses belongingness in the domain of social connectedness and social assurance. This scale consists of 20 items, with half of the items being reverse scored. The measure consists of a 6-point Likert scale with responses including: strongly disagree, disagree, mildly disagree, mildly agree, agree, and strongly agree. The tool has been reported to have good validity and reliability in a sample of adolescence with a reliability coefficient alpha of 0.91 (Lee et. al., 2001). Scores range from 20 to 120, where higher values denote higher levels of social connectedness and a strong sense of belonging.

Rosenberg self-esteem scale (RSE).

The RSE (Rosenberg, 1979) is the most widely used measure of self-esteem and global self-worth. The scale consists of 10-items, with a 4 point Likert, ranging from strongly agree to strongly disagree. Five items on the scale are positively worded, while five are negatively worded. This scale has been used in a number of adolescent and young adult populations and it has been shown to have strong reliability and validity, with alpha co-efficients ranging from 0.77 to 0.88 (Craig et al., 2012). Scores range from 0-30, with scores below 15 suggesting low self-esteem.

Socio-demographic and clinical data questionnaire.

A demographic questionnaire was created for the primary DBT study. For this secondary analysis, data pertaining to age, length of time on the street, length of time in Canada, education, gender, housing status, living situation, relationship status and sexual orientation were utilized in the secondary analysis. These demographics were chosen as to gain a comprehensive understanding of SIY.

Beck hopelessness scale (BHS).

The BHS (Beck, Weissman, Lester, & Trexler, 1974) is a 20 item scale comprised of "true or false" answers, which are assigned a value of 1 or 0. The scale assesses perceived hopelessness and has been used in various populations, and has demonstrated good reliability with the SIY population (McCay et al., 2011; Rew et al., 2001). Scores range from 0 to 20 and higher scores indicate a greater degree of hopelessness.

Beck depression inventory (BDI).

This BDI (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) is a well-established psychometric measure used to assess the somatic and cognitive symptoms of depression in adults and adolescents over the age of 13. It is a self-report measure consisting 21 items with a four point Likert scale. The scores range from 0 to 63 and higher scores indicate a higher degree of depression. It has demonstrated good internal reliability in the adolescent population (Bennett el al., 1997).

The depressive symptom index – suicidality subscale (DSI-SS).

This DSI-SS (Joiner, Pfaff & Acres, 2002) is a four item self-report measure with a four point Likert scale. It is used to identify the severity and frequency of suicidal ideation. Higher scores indicate greater suicidality. This tool has good internal reliability and validity and has been used by 16-24 year olds (Joiner et al., 2002).

The adolescent version of the Michigan alcoholism screening test (MAST).

The adolescent MAST (Snow, Thurber, & Hodgins, 2002) is a 19 item self-reported measure. It consists of "yes" or "no" responses to statements regarding the participant's alcohol or drug use. This scale was modified from the adult MAST to reflect the experiences of adolescents. A score of four or more indicated substance misuse.

Data Analysis

The data were analyzed using SPSS statistical package Version 19 (IBM, 2010). The analysis consisted of a description of the sample; and an analysis of the research questions. Frequency distribution along with measures of central tendency and variance were used to characterize the sample on all variables of interest. The level of missing data amongst the study variables was below 5% in the total data set and any missing values were replaced using item mean substitution. The significance level was set at .01 to reduce the likelihood of type I error.

Test for reliability of measurement tools.

To determine the internal consistency of the RS, SCS, RSES, the Cronbach alpha coefficient was computed using SPSS. A value of 0.8 to 0.9 reflects the richness of each item of the scale pertaining to the construct under investigation, as well as the degree of relatedness across all the scale items (Burns & Grove, 2009, p.379).

Analysis of research question #1 & #2.

To identify the relationship between resilience and social connectedness and self-esteem respectively, Pearson correlation coefficients were calculated. This test was appropriate as variables are coded as interval or ratio measurements.

Analysis of research question #3.

The sample is described according to age, length of time on the street, length of time in Canada, education, gender, housing status, living situation, relationship status and sexual orientation. The data was analyzed using correlation, independent t-tests, and one way analysis of variance (ANOVA). A partial correlation was used to control for the possible confounding effect of gender in the study variables. Rationale for this will be covered in the results and discussion sections.

Chapter V: Results

The aim of this study was to assess the relationship between resilience and factors thought to contribute to resilience in SIY, specifically social connectedness and self-esteem. The results of this study are presented in four sections: 1) characteristics of the sample based on socio-demographics and mental health descriptors; 2) means and standard deviations of the psychosocial instruments used in this study to measure the study variables; 3) reliability of the study instruments, and 4) results pertaining to the research questions.

Characteristics of the Sample

Demographics.

This study sample was comprised of 155 youth from two sites located in Toronto and Calgary (see Table 1). Participants were equally distributed across the two sites with 55% (N=86) from the Toronto site and 45% (N=69) from Calgary. Approximately 50 % (N=75) of participants were male, with 44 from Toronto and 31 from Calgary. Accordingly, approximately 50% (N=77) were female with 39 from Toronto and 38 from Calgary. Ages of participants ranged from sixteen to twenty-five with the mean age being 20.88 years. The cultural background of the participants was diverse. Their average length of time living in Canada was 18.01 years. The mean length of time spent on the street was 170.57 weeks, which is equivalent to 3.28 years. Participants' responses ranged from 2 weeks to 624 weeks.

Data pertaining to where participants lived, as well as with whom participants lived were collected. Approximately 37% (N=57) lived in shelters; 29% (N=45) reported living in transitional housing; 13% (N=20) identified themselves as living with either friends or family; and 21% (N=33) had other housing arrangements, which included living in their own place, on the street or with other SIY. By far, the majority of participants (94%) identified that they were single and not currently in a relationship.

The sexual orientation of the participants was a key demographic. The majority indicated that they were straight (71%), while approximately 25% indicated that they were gay or bisexual, with the remainder of the sample indicating unsure or other.

Overall, participants reported attending school for approximately eleven years. Almost three quarters of the sample responded that they were not currently in school. Detailed demographics can be found in Table 1.

Mental health descriptors.

Mental health descriptor (MHDs) were also included to further characterize the sample. These mental health descriptors include: 1) hopelessness, as measured by the Beck Hopelessness Scale (BHS); 2) depression, as measured by the Beck Depression Inventory (BDI); 3) suicidality, as measured by the Depressive Symptom Index: Suicidality Subscale (DSI-SS); and 4) substance misuse, as measured by the modified adolescent version of the Michigan Alcoholism Screening Test (MAST). The mean, range and standard deviation of the MHDs have been summarized below (see Table 2), with higher scores indicating higher levels of hopelessness, depression, suicidality and substance misuse. The internal reliability of the MHD's will be reported in the following section.

Means and Standard Deviations of the Study Variables

The mean score and standard deviation of the study measures utilized in this study are reported in Table 3. Higher scores on the RS, SCS, and RSE scale indicate higher levels of resilience, social connectedness and self-esteem, respectively.

Table 1
Demographic Characteristics of Study Participants (N=155)

Demographic Variables	Mean	Standard Deviation
1. Age (years)	20.88	2.35
2. Length of time on street (weeks)	170.57	147.43
3. Length of time in Canada (years)	18.01	6.06
4. Length of education (years)	10.68	2.18
	N	%
5. Study Site		
Toronto	86	55.5
Calgary	69	44.5
6. Gender*		
Male	75	48.4
Female	77	49.7
Other	2	1.3
7. Current Living Situation		
Shelter	57	36.8
Transitional Housing	45	29.0
Family or Friend's Home	20	12.9
Other	33	21.3
8. Living Arrangement*		
Alone	27	17.4
Family or Friends	34	21.9
Other street-involved individuals	64	41.3
Other	27	17.4
9. Relationship status*		
Single	146	94.2
Married	0	0
Divorced	0	0
Common Law	8	5.2
10. Sexual Orientation		
Straight	110	71.0
Gay	15	9.7
Bisexual	23	14.8
Unsure/Other	7	4.5
11. School Attendance*		
Yes	40	25.8
No	114	73.5

* Totals do not add up to 155 due to missing values

Table 2
Mental Health Descriptors of Study Participants (N=155)

Mental Health Descriptors	Mean	Range		Standard Deviation
		Min	Max	
1. Hopelessness (BHS)	7.40	0.00	20.00	5.95
2. Depression (BDI)	24.51	0.00	53.00	12.75
3. Suicidality (DSI-SS)	1.84	0.00	10.00	2.33
4. Substance misuse (MAST)	7.21	0.00	18.00	5.17

Table 3
Means and Standard Deviations of the Study Variables

Study Variable	Mean	Range		Standard Deviation
		Min	Max	
Resilience Scale (RS)	121.82	57.00	175.00	26.32
Social Connectedness (SCS-Rev)	69.74	20.00	120.00	19.53
Self-Esteem (RSE)	26.50	10.00	40.00	6.93

Reliability of the Study Instruments

The reliability of the study instruments was determined by calculating the Cronbach alpha for each of the study measures used in this study. The measures used to capture the primary study variables of resilience (RS), social connectedness (SCS) and self-esteem (RSE), had high Cronbach alpha scores of 0.925, 0.923 and 0.913, respectively. The scales used to measure the mental health descriptors also demonstrated good internal consistency. The BHS, BDI, DSI-SS and MAST had Cronbach alpha values 0.92, 0.93, 0.90 and 0.83, respectively.

Addressing the Research Questions

This study's results address the research questions, specifically; the relationship between (1) social connectedness and resilience in SIY; (2) self-esteem and resilience in SIY; and (3) the

socio-demographic characteristics and mental health descriptors of SIY that are associated with resilience, social connectedness and self-esteem.

The relationship of resilience to social connectedness and self-esteem.

Resilience was significantly positively correlated with social connectedness and self-esteem ($p<0.01$). Specifically, as social connectedness and self-esteem increased, resilience also increased (see Table 4).

Table 4
Pearson Correlation of Resilience with Social Connectedness and Self-Esteem

	Resilience Scale	Social Connectedness Scale	Rosenberg Self-Esteem Scale
Resilience Scale	1	.634**	.729**

** Correlation is significant at the 0.01 level (2-tailed).

The relationship between study variables and demographic characteristics.

Correlations were calculated to assess the relationship between the study variables of resilience, social connectedness and self-esteem with the demographic characteristics. There were no significant correlation between the study variables and age, years of education, length of time in Canada, as well as length of time on the streets (see Table 5).

Table 5
Pearson Correlation between Study Variables and Continuous Demographic Variables

	Age (years)	Education (years)	Length of time in Canada (years)	Length of time on streets (weeks)
Resilience Scale	.114	.073	-.162	.146
Social Connectedness Scale	.130	-.047	-.035	.195
Rosenberg Self-Esteem Scale	.105	.054	-.081	.144

Correlation was set at 0.01 level (2-tailed).

Independent t-tests were used to assess the relationship between resilience, social connectedness and self-esteem with study site, relationship status, and school attendance, and no significant differences were found (see Table 6), except for gender.

Significant gender differences were found for resilience, social connectedness, and self-esteem (see Table 7). A partial correlation was conducted to control for a possible confounding effects of gender (see Table 8) on the relationship between resilience, social connectedness and self-esteem. As indicated in Table 8 the pattern of correlation between the study variables remained the same (see Table 4) after controlling for gender.

ANOVAs (see Table 9) were conducted to analyze the relationship between the study variables and current living situation, current living arrangement, and sexual orientation No differences with regard to living situation, current living arrangement, and sexual orientation were found between the study variables of resilience, social connectedness and self-esteem.

Table 6
Compilation of T-Test of study variables with study site, relationship status and school attendance

	T	Df	P
		Resilience	
Study Site	1.99	112.17*	0.05
Relationship Status	0.65	152.00	0.51
School Attendance	1.10	152.00	0.28
		Social Connectedness	
Study Site	1.46	153.00	0.15
Relationship Status	0.08	152.00	0.94
School Attendance	0.51	152.00	0.61
		Self-Esteem	
Study Site	0.84	153.00	0.40
Relationship Status	0.48	152.00	0.63
School Attendance	0.44	55.65*	0.66

* Unequal variance was not assumed

Table 7
T-test for differences in study variables by Gender (N=152)*

	Male N=75		*Female N=77*			
	Mean	**SD**	**Mean**	**SD**	**T(df)**	**P**
Resilience Scale	128.14	23.50	116.00	27.98	2.90(150.00)	0.004
Social Connectedness Scale	74.91	19.91	64.67	18.30	3.31(150.00)	0.001
Rosenberg Self-Esteem Scale	28.57	6.48	24.55	6.93	3.69(150.00)	0.000

* Sample size did not include the participants who reported "other" or missing

Table 8
Partial Correlation of Resilience, Social Connectedness and Self-Esteem controlling for gender

	Resilience Scale	Social Connectedness Scale	Rosenberg Self-Esteem Scale
Resilience Scale	1	.620**	.715**

** Correlation is significant at the 0.01 level (2-tailed).

The relationship between study variables and mental health descriptors.

Resilience, social connectedness and self-esteem were each statistically negatively correlated with the mental health descriptors of hopelessness, depression, suicidality and substance misuse (see Table 10). Increased levels of resilience, social connectedness and self-esteem were significantly associated with decreased levels of hopelessness, depression, suicidality and alcohol and substance abuse. Given the strong correlation between the MHD and study variables, a partial correlation controlling for gender on the MHD was conducted (Table 11) to control for the possible confounding effects of gender on the relationship between the mental health

descriptors and the study variables. As evident in Table 10, the pattern of correlation remained unchanged after controlling for the effects of gender. Additional t-tests were conducted to determine differences in mental health descriptors by gender (Table 12), with female participants' scores being significantly higher than male participants' scores on measures of hopelessness and depression. This will be discussed in the following section.

Table 9

Compilation of ANOVA of study variables with current living situation, current living arrangement, sexual orientation and school involvement

	Df	F	p
		Resilience	
Current Living Situation	3,151	1.71	0.17
Current Living Arrangement	3,148	0.67	0.98
Sexual Orientation	3,151	0.96	0.41
		Social Connectedness	
Current Living Situation	3,151	1.45	0.23
Current Living Arrangement	3,148	0.55	0.65
Sexual Orientation	3,151	1.43	0.24
		Self-Esteem	
Current Living Situation	3,151	2.84	0.04
Current Living Arrangement	3,148	1.48	0.22
Sexual Orientation	3,151	0.49	0.69

* Sample size did not include the missing values

Table 10
Pearson Correlation between Study Variables and Mental Health Descriptors

	Resilience Scale	Social Connectedness Scale	Rosenberg Self-Esteem Scale
1. Hopelessness (BHS)	-0.70**	-0.60**	-0.79**
2. Depression (BDI)	-0.69**	-0.63**	-0.79**
3. Suicidality (DSI-SS)	-0.52**	-0.50**	-0.52**
4. Substance Misuse (MAST)	-0.18	-0.23**	-0.25**

** Correlation is significant at the 0.01 level (2-tailed).

Table 11
Partial Correlation between Study Variables and Mental Health Descriptors controlling for gender

	Resilience Scale	Social Connectedness Scale	Rosenberg Self-Esteem Scale
1. Hopelessness (BHS)	-0.69**	-0.59**	-0.78**
2. Depression (BDI)	-0.67**	-0.62**	-0.75**
3. Suicidality (DSI-SS)	-0.52**	-0.50**	-0.52**
4. Substance Misuse (MAST)	-0.20	-0.25**	-0.28**

** Correlation is significant at the 0.01 level (2-tailed).

Table 12
T-test for differences in mental health descriptors by Gender (N=152)*

	Male N=75		*Female N=77*			
	Mean	**SD**	**Mean**	**SD**	**T(df)**	**P**
Hopelessness (BHS)	5.61	5.10	9.03	6.35	-3.66(144.82)	0.00
Depression(BDI)	19.09	11.91	29.64	11.62	-5.52(150)	0.00
Suicidality (DSI-SS)	1.55	2.32	2.12	2.36	-1.50(150)	0.14
Substance Misuse (MAST)	7.33	5.19	7.27	5.21	0.072(150)	0.94

* Sample size did not include the participants who reported “other” or missing

Chapter VI: Discussion

This discussion of the findings situates the characteristics of the sample (i.e. socio-demographics and mental health descriptors) within the context of the current literature. As well, the discussion will focus on the study findings, specifically the role of resilience in the lives of SIY, and the contribution of social connectedness and self-esteem as protective factors to support resilience for this population; followed by the limitations of this study.

Characteristics of the sample

Demographics.

The characteristics of this sample are consistent with those found in other studies involving street-involved youth. The mean age of participants in this study was slightly higher than other studies which may be attributed to the fact that the inclusion criteria for age in the current study was 16 to 24, while other studies (Cauce et al., 2000; Dang, 2014; Rew et al, 2001) targeted younger groups (e.g. 14 to 22). The length of time in Canada was consistent with the literature (McCay et al., 2011). Length of education was also consistent with other studies (Cauce at al., 2000; Evenson & Barr, 2009; McCay et al., 2011; Rachlis, Wood, Zhang, Montner, & Kerr, 2009), with 75% not currently attending any educational programs

Gender was distributed almost equally in the current study, which is not consistent with other studies in the literature. Most studies cited in the literature include a higher proportion of males compared to females (e.g. between 60-75% males), which is characteristic of the SIY population (Cauce et al., 2000, McCay et al, 2010; McCay et al, 2011; Rew et al., 2001). The gender distribution in the current study may be attributable to two phenomena. First, the sample was comprised of a number of SIY who were transitioning into stable housing, and research has

shown that samples with higher levels of sheltered youth are comprised of more females than males compared to street-based samples, which generally have an increased number of males (Cauce et al., 2000; Toro, Urberg, & Heinze, 2004). Next, the primary DBT study offered a therapeutic intervention, which may have drawn the attention of more females than males, resulting in higher levels of females in this sample compared to the general SIY population. Further, women are more likely to utilize services, and are generally known to seek help more readily than men (Linton and Shafer, 2014). As such, an increased number of young women may have sought out the DBT intervention.

Approximately one-third of the sample reported living in shelters, which is significantly lower than other samples (Rew et al., 2001). This may be attributed to the fact that the majority of youth participants were in transitional housing (29%) or other living situations, which included living in their own housing, or sharing with a partner or others (34%). The overwhelming majority of the sample was single, with the remainder in common-law relationships. There were no participants who identified that they were married, divorced or widowed, which is consistent with other studies (McCay et al., 2011). Sexual orientation was also consistent with the literature, where approximately one third of the participants indicated that they were either gay, bisexual, or unsure (Rew et al., 2001).

Mental health descriptors.

Mental health challenges are pervasive to the experience of SIY (Kidd and Shahar, 2008; McCay et al., 2010). In keeping with this observation, youth in the current study had higher levels of hopelessness and depression than the general adolescent population, which is consistent with the literature (Brausch & Muehlenkam, 2007). The level of depression and hopelessness was consistent with the findings of McCay et al., (2011). Further, approximately 42% of the

sample had a suicidality score greater than 1, indicating serious suicidal ideation (Joiner et al., 2002). It has been estimated that suicidality in SIY ranges from 20% to 42% (Frederick, Kirst, & Erickson, 2012; Kidd, 2006; McCarthy & Hagan, 1992). The sample of youth participants in the current study had a mean suicidality score of 1.84, which is significantly higher than the mean of the general adolescent population of 0.79 (Joiner et al., 2002), emphasizing the seriousness of suicidality in this sample. In addition, there was a relatively high level of substance misuse. This finding is consistent with studies that also show a high rate of substance use amongst SIY. For example, Baer, Ginzler and Peterson (2003) found that 69% of SIY in Seattle engaged in substance misuse (Baer et al., 2003), as measured using DSM-IV criteria. Within the general adolescent population a substance misuse level of less than 4% has been reported (Palmer et al, 2009).

Resilience, Social Connectedness, and Self-esteem

Resilience levels observed in this sample of SIY were relatively high with a mean resilience of 121.8, which was higher than 111.98 as measured by Rew et al. (2001), but lower than the mean of 130.27 measured by McCay et al., (2010). The SIY under investigation in the current study had more stable housing than the SIY in Rew et al. (2001), which may explain the higher levels of resilience obtained in this study. Although, the McCay et al. (2010) sample shared similar characteristics with the current study, the average length of time spent by youth on the street in the McCay sample was just over 1 year (15 months) as compared to the 3 years reported in the current sample. Youth who spend longer time on the streets have lower levels of resilience and experience more psychological distress (Cleverley & Kidd, 2011; Lee, Liang, Rotheram-Borus, & Milburn, 2011). The findings in this study corroborate other qualitative and quantitative research involving SIY , a few of which utilize resilience scales, such as the Conner-

Davidson resilience scale (Bender et al., 2007; Cleverley & Kidd, 2011); indicating that resilience in marginalized youth populations is relatively high, but is still lower than the general population. Overall, the relatively higher levels of resilience in SIY may indicate that youth have sufficiently high levels of resilience to negotiate the challenging life circumstances that frequently precede the entry into homelessness (Foster & Spencer, 2011).

The mean social connectedness in the current study was 69.74 which is somewhat lower than the mean of 78.68 reported by McCay et al.'s (2011) treatment group sample, and significantly lower than a group of 100 college students (aged 18-24) who had a mean of 89.84 (Lee et al., 2001). Furthermore, the mean level of self-esteem in this sample was 26.50, which is lower than the mean level of self-esteem obtained for a housed group of 174 grade 12 students (Chubb, Fertman, & Ross, 1996). In addition, the mean level of self-esteem in the current study is congruent with the literature (McCay et al., 2011). Overall, the findings pertaining to self-esteem and social connectedness in SIY suggest that SIY possess significantly lower levels of self-esteem and social connectedness, which most likely is related to the immense challenges encountered in their lives as homeless youth (Kidd & Shahar, 2008; McCay & Aiello; 2013; Rew et al., 2001).

Correlation amongst Study Variables

The study results indicate that resilience was significantly correlated with social connectedness; specifically those who demonstrated higher levels of resilience also demonstrated higher levels of social connectedness. This finding is inconsistent with Rew et al. (2001), who found that resilience was negatively correlated to social connectedness. It was suggested that youth who considered themselves resilient were more likely to be independent and as such were not close with others, resulting in lower levels of social connectedness. While social

connectedness has been documented as a factor that promotes constructive coping in housed adolescents (Resnick et al., 1997), SIY may withdraw from pursuing relationships due to fears of being rejected, exploited, or abused (Hunter & Chandler, 1999; Rew et al., 2001). Some SIY have reported that independence and wariness of others are necessary perspectives to hold on to, since these attitudes supported a life of self-sufficiency when others could not be relied upon (Kidd & Shahar, 2008; Kolar et al., 2012). In a 2012 study of 10 SIY by Kolar et al., independence and social distancing were identified as a "double-edged sword" (p. 749). Social connections can have both a positive and negative effect on SIY. For example, study findings indicated that SIY youth who were friends with youth who committed suicide were more likely to attempt suicide themselves (Kidd & Shahar, 2008). Similarly, Kidd and Davidson (2007) found that youth who associated with individuals who took drugs or practiced survival sex were more likely to engage in those same activities. The positive correlation between social connectedness and resilience in the current study may be attributed to the stability and positive relationships offered by programs at the Toronto and Calgary-based agencies where the youth in this study lived. These agencies provide services to SIY and the connections developed within these programs may have served as an example of positive social connectedness. Also, less than one fifth of the sample indicated that they lived alone, thus this sample inherently had social networks which may have resulted in higher reported levels of connectedness.

The current study also revealed a strong positive correlation between resilience and self-esteem. It is noteworthy that self-esteem has been singled out in resilience-based research as a key protective factor in the lives of SIY (Kidd & Shahar, 2008; Dang 2014). The exact nature of self-esteem's role in the lives of SIY is complicated and difficult to fully appreciate. As discussed in the conceptual literature review, resilience is often conceptualized in terms of other

psychometric indices, such as low psychological distress, good adaptation or coping skills, decreased levels of deviant behaviour or achieving specific goals. In addition, resilience is frequently not explicitly measured. While it has come to be accepted that self-esteem is a critical component of resilience, very few studies actually quantify this relationship; neither measuring self-esteem nor resilience directly. While, it was not the scope of this study, the correlation between social connectedness and self-esteem was significant and positive which suggests that the two concepts may be theoretically related.

The Relationship of the Study Variables to the Sample Characteristics

No significant correlation was found between the study variables, namely resilience, social connectedness and self-esteem, and the demographics variables, with the exception of gender, which will be discussed in more detail in the next section. However, significant correlations between the study variables and the mental health descriptors were discovered.

Youth participants in this study who reported higher levels of resilience also reported significantly lower levels of hopelessness, depression, and suicidal ideation. Interestingly, SIY with higher levels of social connectedness and self-esteem also reported significantly lower feelings of hopelessness, depression and suicidal ideation. These results suggest that social connectedness and self-esteem may act as protective factors to temper some of the mental health challenges associated with homelessness in youth. The literature supports these findings, as resilience, social connectedness and self-esteem have been found to have a negative correlation with some of the mental health descriptors, namely hopelessness, depression, suicidality and substance misuse (Cleverley & Kidd, 2011; Dang 2014; McCay et al, 2010; Rew et al., 2011).

On the other hand, substance misuse was one mental health descriptor where there was not a statistically significant relationship with resilience. However it is important to note that a

significant relationship emerged when the significance was set to 0.05. This former finding was unexpected and may be attributable to the pervasive substance misuse issues in this population (Milburn et al., 2012; Tyler, 2008), rendering it difficult to find a stronger correlation in the sample. However, social connectedness and self-esteem did demonstrate a significant negative correlation with substance misuse, indicating that as social connectedness and self-esteem increased, substance misuse decreased. This finding suggests that addressing social connectedness and self-esteem may be a fundamental step in helping SIY make better decisions regarding substance misuse and thus may bolster resilience.

It is important to note that in the literature self-esteem stands out as the variable that appears to have a significant impact on the mental health descriptors. Dang (2014) found that self-esteem was "above and beyond" the most significant variable to impact psychological distress (p. 216). Kidd and Shahar (2008) also found that self-esteem was a protective factor against mental health concerns in SIY. Self-esteem speaks to one's appraisal of his or her value and worth (Rosenberg et al., 1995). It is easy to extend the concept that those who have a higher sense of value and self-worth are less likely to engage in deleterious activities such as substance misuse.

The role of gender.

As noted above, gender had a significant impact on the study variables (resilience, social connectedness and self-esteem) and some of the mental health descriptors. Young women in the sample were found to be significantly less resilient, as well as having significantly lower levels of social connectedness and self-esteem compared to the young men. Further, the young women in the study also demonstrated significantly higher levels of hopelessness and depression. Gender has been cited as factor that contributes to resilience in the general adolescent

population, as it shapes the types of challenges they encounter, as well as frames the ways in which they choose to cope (Boyden & Mann, 2005). In a study on post-traumatic stress in homeless youth, it was found that females had more complicated experiences of trauma, which included both physical and sexual assault; as well as the victimization and stigma that was associated with being homeless (Gwadz, Nish, Leonard, & Strauss, 2007). It is noteworthy that the gender difference documented in the current study across resilience, social connectedness and resilience, has not been reported in other studies of SIY with similar characteristics (Rew et al, 2001; McCay et al., 2010); indicating that this is an important finding that requires further study in the future. The direction and significance of the correlation between the study variables and the mental health descriptors remained unchanged when gender was controlled. However, the difference in means between males and females reporting hopelessness and depression is significant. The literature supports this, where females have higher levels of hopelessness and depression (Nolen-Hoeksema & Girgus, 1994). Females have a higher incidence of depression, with longer duration, higher chronicity and younger onset (Essau, Lewinsohn, Seeley, & Sasagawa, 2010). Females are also more likely to demonstrate higher levels of hopelessness during adolescence (Markward & Yegidis, 2010). A 2001 study by Rew, Taylor-Seehafer and Fitzgerald found that there was no significant difference in overall substance misuse between genders in a sample of homeless adolescents, and while not significant, females had higher suicidal ideation; this was consistent with this study's findings. Similar findings were found by Cauce et al. (2000) in their sample of 384 homeless youth in Seattle, where substance use was virtually the same between males and females, and females reported higher levels of suicidal attempts.

Controlling for the effect of gender.

Although gender had the potential to be a confounding factor in the relationship between resilience, social connectedness and self-esteem, all of the correlations remained significant when gender was controlled. Similarly, when gender was controlled, the negative significant relationship between the mental health descriptors and the study variables remained.

Theoretical Discussion

These findings are consistent with the study's theoretical framework. Resilience is a theoretical concept that captures the capacity of youth to problem-solve and regulate emotions in the midst of adversity. In keeping with the framework based on Olsson et al., (2003), the results showed that social connectedness and self-esteem act as protective factors which may bolster resilience within the SIY population. Unlike previous studies to-date, the use of standardized questionnaires to measure resilience, social connectedness and self-esteem in this study has contributed to the validation of this theoretical proposition in the SIY population.

Resilience is integral to the understanding of SIY experiences. Risk is prevalent in the lives of homeless youth who are living without shelter or in precarious housing, while being exposed to the elements, experiencing financial difficulties and experiencing high levels of mental health challenges. The difficult circumstances of these youth may well explain why social connectedness and self-esteem are lower in the SIY population compared to the general adolescent population. However, it is striking that SIY have relatively high levels of resilience, which may be reflective of youth's determination to move toward a better life. Even though the youth in the current study had lower levels of social connectedness and self-esteem, these factors may well serve as protective factors in the lives of SIY.

Summary

Resilience in this study has been conceptualized as process of bouncing back and has been measured using the Resilience Scale. Overall, these findings highlight the relationship between resilience with social-connectedness and self-esteem. It seems likely that social connectedness and self-esteem are protective factors that support resilience in the lives of SIY. As such, understanding the relationship of resilience to social connectedness and self-esteem may provide direction regarding the development of interventions to increase social connectedness and self-esteem, thus bolstering resilience in the SIY. Specifically, social connectedness and self-esteem may act to enhance resilience and thus support the capacity of SIY to cope with the risks associated with being street-involved. Through enhancing social connectedness and self-esteem in the SIY population, it may be possible to build the individual's capacity to be resilient. This is critical since increased capacity for resilience amongst SIY suggests that these youth can better manage the deleterious effects associated with homelessness and ultimately achieve a better quality of life.

Limitations

This study has several limitations. The main limitation of this study was that it was a secondary analysis. A secondary analysis can be used to support existing research or develop new knowledge without the need for additional participants; however, being removed from the participant selection and study design may introduce potential bias. The author of this study worked closely with the lead researcher of the original DBT study to reduce this bias and authenticate the nature of the data. For example, when participant responses were missing, the original paper copy could be retrieved and verified against the electronic SPSS database. In addition to this, as discussed above, the primary study utilized a convenience sample. Due to the

non-random selection of participants, a selection bias may be present. While participants were recruited from two geographical areas, those selected were associated with transitional and drop-in services and as such it may be difficult to generalize these findings across the SIY spectrum, especially in populations that are less stably housed. Thus SIY who do not utilize drop-in services may have different levels of social connectedness and self-esteem. It is important to note the DBT study recruited participants to partake in a DBT intervention. Thus it is likely that the participants who chose to be in the study were already help-seeking and had a greater motivation to build their resilience, and thus were more engaged in the process. Qualitative data would have enhanced the findings, as they could have provided a deeper understanding of resilience, social connectedness and self-esteem in the population.

Chapter VII: Implications

Homelessness in youth is a complex issue with multiple socio-economic implications. Researchers have studied the factors that contribute to homelessness in this population, explored resources to help SIY exit the streets, and examined the barriers and challenges experienced by these youth. Contemporary research has recognized the value of acknowledging the strengths of SIY and how these strengths enable SIY to navigate their lives. Resilience has always been considered a strength, but the unexpectedly high levels of resilience in SIY has made it a key factor for thorough examination. A deeper understanding of resilience will not change the systemic socio-cultural issues that cause or perpetuate homelessness in youth, but it will enable youth to develop tangible skills that will help to prepare them for life. It is important to note that recent studies have shown that the recidivism rate in housed youth who were formally homeless is high (Baker, McKay, Lynn, Schlange & Auville, 2003; Kidd, 2014). One quarter of homeless youth who transition off the streets will find themselves back on the street within a year (Kidd, 2014). This point serves to challenge the perception that homelessness in youth can be "fixed" by merely providing housing. Resilience can be utilized to help promote positive outcomes in the SIY.

Implications for Research

The results of this investigation have reinforced that resilience in the SIY population is relatively high. In addition, self-esteem and social connectedness were found to be significantly and positively associated with resilience in SIY; suggesting that these variables act as protective factors. These protective factors may enhance the capacity for resilience, enabling youth to cope with some of the challenges associated with street life for SIY. In spite of these positive findings, the causal relationship between resilience with social connectedness and self-esteem is

still unknown. There is an opportunity for further theoretical testing that can be used to predict the relationship amongst the variables, as well as testing resilience models through multivariate analysis. Research is needed to address the complexity and causal patterns of the relationships amongst these variables over time. Of utmost concern is the lower levels of resilience and increased level of mental health challenges in young women observed in the current study. Research chronicling their unique challenges may be needed to tailor interventions that account for differences in gendered experiences. To-date, resilience has been primarily studied from the perspective of the researcher. Further research is required to ascertain how resilience is perceived by this population. Qualitative studies that explore the meaning of resilience in SIY would be useful in gaining an understanding of the unique strengths SIY possess that contribute to resilience. Participatory action research initiatives may be beneficial in helping SIY identify resources that can help them build mastery in resilience. It is also necessary to conduct research on the use of evidence informed interventions tailored to this population. The use of treatment and comparison groups will allow researchers to assess the effectiveness of specific interventions geared towards SIY. Specifically, interventions that build resilience, encourage relationships, and promote self-esteem in the SIY have been cited as important (McCay & Aiello, 2013; Kidd & Davidson, 2007; Johnson, Whitbeck, & Hoyt, 2005). One such intervention that shows promise is the use of DBT, which is the focus of the primary study upon which the data from this secondary analysis was sourced. DBT is a therapeutic intervention that helps participants develop emotional regulation through teaching specific skills (Linehan, 2000).

This study included SIY who were more stably housed and were partaking in programs offered by service agencies. Future research should capture the views of participants who may be living in more precarious situations, such as living exclusively on the street. While

admittedly this segment may be more difficult to engage, it is for this reason that their representation is critical. Additional research should also be undertaken to examine the role of resilience, social connectedness and self-esteem's role in mitigating other challenges experienced by these youth such as, high levels of risky sexual behaviours or criminal activity. It would also be beneficial to explore the relationship between the study variables and other positive outcomes such as, graduating from an educational program, service utilization or employment. This line of inquiry would enable researchers to understand resilience as a factor that both protects against stressors but also works to promote successful outcomes.

Implications for Policy

It cannot be denied that policy needs to target the root causes of homelessness, poverty and mental health stigma in SIY. Affordability of housing, food security and financial stability in SIY are all components of larger contextual policies that may ultimately promote positive outcomes in the lives of SIY. However, youth may not be able to fully access these programs if not afforded adequate intervention to address the high levels of mental health challenges within this population. Supportive housing agencies can act as hubs through which SIY can have direct access to therapeutic interventions that help promote social skills and emotional competencies, such as self-awareness, self-esteem and coping. To support the implementation of such programs, frontline clinicians need to be trained in programs such as DBT, which acknowledges both the risk to which SIY are exposed and the simultaneous strengths they possess.

Implications for Practice

Findings from this study indicate that resilience has the potential to shield against depression, hopelessness, suicidality and substance misuse in the SIY population. The positive correlation of self-esteem and social connectedness with resilience found in the current study

suggests that the creation of targeted programs to promote self-esteem and social connectedness may be particularly beneficial in helping SIY acquire skills to overcome some of the hardships associated with being homeless.

As noted above, the purpose of the primary study was to implement and evaluate DBT in SIY. Additional behavioural interventions, which teach SIY problem-solving while promoting self-determination, may also be beneficial for these youth. The ability to self-regulate, or the ability to control or regulate thoughts, emotions and actions, has been shown to be fundamental in the holistic development of youth (Baumeister & Vohs, 2007) and also underpins the idea of emotional regulation. Programs with a mindfulness component can help SIY deal with stressors, providing them with techniques to focus on the present and supporting rational decision making when faced with difficult or challenging situations, which is central to DBT. Likewise, there is also a need to re-examine how mental health and community workers facilitate positive engagement in programs and services. There is benefit in providing safe meeting spaces for SIY as this will promote more social relationships, which may result in higher levels of social connectedness and self-esteem, potentially resulting in subsequently higher levels of resilience. The use of peer-support youth workers can also be beneficial in developing social connectedness. For example, having the opportunity to meet and interact with peers who have faced and overcome similar difficulties may also promote self-esteem and resilience in this population.

For the purpose of developing programs to build resilience for this young vulnerable population, it is also important to acknowledge and recognize the impact of the differences in resilience and protective factors between the genders. Ultimately, it may be necessary to create programming tailored to the unique needs of each gender in order to fully address the challenging circumstances surrounding street involved males and females.

Implications for interprofessional practice and nursing.

Interprofessional teams consisting of nurses, social workers, child and youth workers , doctors and therapists, to name a few, need to work in concert to help support SIY. It can be seen from the above discussion that this study has important implications for interprofessional teams and for nurses with regards to research, practice and policy. In addition to the suggestions above, each member of the interprofessional team can play a pivotal role in providing education to the students in their profession, the public and SIY. Nurses, who utilize a holistic lens, can continue to act as advocates for this population, bringing an awareness of the conditions they face. More importantly, nurses and all members of the interprofessional team can help reduce the stigma associated with homelessness by creating forums to highlight the strengths of SIY. Too often, the negative helpless image associated with SIY acts as a barrier to perpetuate discrimination. A strength-based perspective can be leveraged to help SIY work alongside researchers, practitioners and policy makers in creating solutions for youth homelessness.

Conclusion

The juxtaposition of risk and strengths in the lives of SIY compounds the complexities experienced by this group. The resilience framework offers a paradigm that moves the prominent discourse away from a deficit-centric model to one that respects and acknowledges the ability for these youth to thrive and bounce back in spite of the adversity experienced while living on the streets. The knowledge gained in this study has contributed to the understanding that the correlates of resilience are multi-pronged. Further, interventions that focus on building positive social connections and self-esteem are likely to promote resilience. Ultimately, enhancing protective factors such as social connectedness and self-esteem in SIY may strengthen resilience, helping SIY to live better lives.

References

Abela, J. R., & Skitch, S. A. (2007). Dysfunctional attitudes, self-esteem, and hassles: Cognitive vulnerability to depression in children of affectively ill parents. *Behaviour Research and Therapy*, *45*(6), 1127-1140.

Ahern, N. R., Ark, P., & Byers, J. (2008). Resilience and coping strategies in adolescents–additional content. *Paediatric Care*, *20*(10), S1-S8.

Ahern, N. R., Kiehl, E. M., Lou Sole, M., & Byers, J. (2006). A review of instruments measuring resilience. *Issues in comprehensive Pediatric nursing*, *29*(2), 103-125.

Anthony, E. K., Alter, C. F., & Jenson, J. M. (2009). Development of a risk and resilience-based out-of-school time program for children and youths. *Social Work*, *54*(1), 45-55.

Ashida, S., & Heaney, C. A. (2008). Differential associations of social support and social connectedness with structural features of social networks and the health status of older adults. *Journal of Aging and Health*, *20*(7), 872-893.

Baer, J. S., Ginzler, J. A., & Peterson, P. L. (2003). DSM-IV alcohol and substance abuse and dependence in homeless youth. *Journal of Studies on Alcohol and Drugs*, *64*(1), 5.

Baker, A. J., McKay, M. M., Lynn, C. J., Schlange, H., & Auville, A. (2003). Recidivism at a shelter for adolescents: First-time versus repeat runaways. *Social Work Research*, *27*(2), 84-93.

Barber, B. K., & Schluterman, J. M. (2008). Connectedness in the lives of children and Adolescents: A Call for Greater Conceptual Clarity. *Journal of Adolescent Health*, *43*(3), 209-216.

Barker, J. D. (2012). Social capital, homeless young people and the family. *Journal of youth studies*, *15*(6), 730-743.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological bulletin*, *117*(3), 497-529.

Baumeister, R. F., & Vohs, K. D. (2007). Self-Regulation, ego depletion, and motivation. *Social and Personality Psychology Compass*, *1*(1), 115-128.

Beck, A. T., & Steer, R. A. (1988). Beck hopelessness scale. *The Psychological Corporation, San Antonio*.

Beck, A. T., Steer, R. A., & Carbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical psychology review*, *8*(1), 77-100.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. K. (1961). An inventory for measuring depression. *Archives of general psychiatry*, *4*(6), 561-571.

Beck, A. T., Weissman, A., Lester, D., & Trexler, L. *(*1974*).* The measurement of pessimism: The hopelessness scale. Journal of Consulting and Clinical Psychology, 41*(*6*),* 861–865.

Bender, K., Thompson, S. J., McManus, H., Lantry, J., & Flynn, P. M. (2007, February). Capacity for survival: Exploring strengths of homeless street youth. In *Child and Youth Care Forum* (Vol. 36, No. 1, pp. 25-42). Kluwer Academic Publishers-Plenum Publishers.

Bennett, D. S., Ambrosini, P. J., Bianchi, M., Barnett, D., Metz, C., & Rabinovich, H. (1997). Relationship of Beck Depression Inventory factors to depression among adolescents. *Journal of Affective Disorders*, *45*(3), 127-134.

Boivin, J. F., Roy, É., Haley, N., & Galbaud du Fort, G. (2005). The health of street youth: a Canadian perspective. *Canadian Journal of Public Health/Revue Canadienne de Santé Publique*, 432-437.

Bousman, C. A., Blumberg, E. J., Shillington, A. M., Hovell, M. F., Ji, M., Lehman, S., & Clapp, J. (2005). Predictors of substance use among homeless youth in San Diego. *Addictive Behaviors*, *30*, 1100–1110.

Boyden, J., & Mann, G. (2005). Children's risk, resilience, and coping in extreme situations. *Handbook for working with children and youth: Pathways to resilience across cultures and contexts*, 3-26.

Brausch, A. M., & Muehlenkamp, J. J. (2007). Body image and suicidal ideation in adolescents. *Body Image*, *4*(2), 207-212.

Burns, N., & Grove, S. K. (2009). The practice of nursing research: Appraisal, synthesis, and generation of evidence. St Louis^ eMO MO: Saunders Elsevier.

Cauce, A. M., Paradise, M., Ginzler, J. A., Embry, L., Morgan, C. J., Lohr, Y., & Theofelis, J. (2000). The Characteristics and Mental Health of Homeless Adolescents Age and Gender Differences. *Journal of Emotional and Behavioral Disorders*, *8*(4), 230-239.

Chubb, N. H., Fertman, C. I., & Ross, J. L. (1996). Adolescent self-esteem and locus of control: a longitudinal study of gender and age differences. *Adolescence*, *32*(125), 113-129.

Cicchetti, D., & Garmezy, N. (1993). Prospects and promises in the study of resilience. *Development and psychopathology*, *5*(04), 497-502.

Cleverley, K., & Kidd, S. A. (2011). Resilience and suicidality among homeless youth. *Journal of adolescence*, *34*(5), 1049-1054.

Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and anxiety*, *18*(2), 76-82.

Craig, S. L., McInroy, L., Austin, A., Smith, M., & Engle, B. (2012). Promoting self-efficacy and self-esteem for multiethnic sexual minority youth: An evidence-informed intervention. *Journal of Social Service Research*, *38*(5), 688-698.

Dang, M. T. (2014). Social Connectedness and Self-Esteem: Predictors of Resilience in Mental Health among Maltreated Homeless Youth. *Issues in mental health nursing*, *35*(3), 212-219.

De Man, A. F. (2000). Predictors of adolescent running away behavior. *Social Behavior and Personality: an international journal*, *28*(3), 261-267.

Dorsen, C. (2010). Vulnerability in homeless adolescents: concept analysis. *Journal of advanced nursing*, *66*(12), 2819-2827.

Earvolino-Ramirez, M. (2007, April). Resilience: A concept analysis. In *Nursing Forum* (Vol. 42, No. 2, pp. 73-82). Blackwell Publishing Inc.

Edidin, J. P., Ganim, Z., Hunter, S. J., & Karnik, N. S. (2012). The mental and physical health of homeless youth: a literature review. *Child Psychiatry & Human Development*, *43*(3), 354-375.

Erdem, G., & Slesnick, N. (2010). That which does not kill you makes you stronger: Runaway youth's resilience to depression in the family context. *American Journal of Orthopsychiatry*, *80*(2), 195.

Elliott, A. S., & Adolescent Health Committee. (2013). Meeting the health care needs of street-involved youth. *Paediatrics & child health*, *18*(6), 317.

Essau, C. A., Lewinsohn, P. M., Seeley, J. R., & Sasagawa, S. (2010). Gender differences in the developmental course of depression. *Journal of affective disorders*, *127*(1), 185-190.

Ethier, K. A., Kershaw, T. S., Lewis, J. B., Milan, S., Niccolai, L. M., & Ickovics, J. R. (2006). Self-esteem, emotional distress and sexual behavior among adolescent females: Inter-relationships and temporal effects. *Journal of Adolescent health*, *38*(3), 268-274.

Evenson, J., & Barr, C. (2009). Youth homelessness in Canada: The road to solutions. *Toronto: Raise the Roof Foundation*.

Fergus, S., & Zimmerman, M. A. (2005). Adolescent resilience: A framework for understanding healthy development in the face of risk. *Annu. Rev. Public Health*, *26*, 399-419.

Ferguson, K. M., & Islam, N. (2008). Conceptualizing outcomes with street-living young adults grounded theory approach to evaluating the social enterprise intervention. *Qualitative Social Work*, *7*(2), 217-237.

Foster, K. R., & Spencer, D. (2011). At risk of what? Possibilities over probabilities in the study of young lives. *Journal of youth studies*, *14*(1), 125-143.

Frederick, T. J., Kirst, M., & Erickson, P. G. (2012). Suicide attempts and suicidal ideation among street-involved youth in Toronto. *Advances in Mental Health*, *11*(1), 8-17.

Gaetz, S., Donaldson, J., Richter, T., & Gulliver, T. (2013). The State of Homelessness in Canada 2013. Canadian Homelessness Research Network Press

Garmezy, N. (1991). Resilience in children's adaptation to negative life events and stressed environments. *Pediatric annals*, *20*(9), 459-60.

Garmezy, N., Masten, A. S., & Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychopathology. *Child development*, 97-111.

Gibbs, L.E. Validity and reliability of the Michigan Alcoholism Screening Test: A review. *Drug Alcohol Depend.* 1983;12:279–285.

Grabbe, L., Nguy, S. T., & Higgins, M. K. (2012). Spirituality development for homeless youth: A mindfulness meditation feasibility pilot. *Journal of Child and Family Studies*, *21*(6), 925-937.

Gwadz, M. V., Nish, D., Leonard, N. R., & Strauss, S. M. (2007). Gender differences in traumatic events and rates of post-traumatic stress disorder among homeless youth. *Journal of Adolescence*, *30*(1), 117-129.

Hadland, S. E., Marshall, B. D., Kerr, T., Qi, J., Montaner, J. S., & Wood, E. (2012). Suicide and history of childhood trauma among street youth. *Journal of affective disorders*, *136*(3), 377-380.

Haldenby, A. M., Berman, H., & Forchuk, C. (2007). Homelessness and health in adolescents. *Qualitative Health Research*, *17*(9), 1232-1244.

Heinze, H. J., Jozefowicz, D. M. H., & Toro, P. A. (2010). Taking the youth perspective: Assessment of program characteristics that promote positive development in homeless and at-risk youth. *Children and Youth Services Review*, *32*(10), 1365-1372.

Hodgson, K. J., Shelton, K. H., van den Bree, M. B., & Los, F. J. (2013). Psychopathology in young people experiencing homelessness: a systematic review. *American journal of public health*, *103*(6), e24-e37.

Hughes, J. R., Clark, S. E., Wood, W., Cakmak, S., Cox, A., MacInnis, M., ... & Broom, B. (2010). Youth homelessness: The relationships among mental health, hope, and service satisfaction. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, *19*(4), 274.

Hunter, A. J., & Chandler, G. E. (1999). Adolescent resilience. *Image: The Journal of Nursing Scholarship*, *31*(3), 243-247.

Huntington, N., Buckner, J. C., & Bassuk, E. L. (2008). Adaptation in Homeless Children An Empirical Examination Using Cluster Analysis. *American Behavioral Scientist*, *51*(6), 737-755.

I.B.M. Corporation (2010). IBM SPSS Statistics for Windows, version 19.0. Armonk, NY: IBM Corporation.

Johnson, K. D., Whitbeck, L. B., & Hoyt, D. R. (2005). Predictors of social network composition among homeless and runaway adolescents. *Journal of adolescence*, *28*(2), 231-248.

Joiner Jr, T. E., Pfaff, J. J., & Acres, J. G. (2002). A brief screening tool for suicidal symptoms in adolescents and young adults in general health settings: reliability and validity data from the Australian National General Practice Youth Suicide Prevention Project. *Behaviour research and therapy*, *40*(4), 471-481.

Joiner, T. E., & Rudd, M. D. (1995). Negative attributional style for interpersonal events and the occurrence of severe interpersonal disruptions as predictors of self-reported suicidal ideation. *Suicide and Life-Threatening Behavior*, *25*(2), 297-304.

Kelly, K., & Caputo, T. (2007). Health and street/homeless youth. *Journal of health psychology*, *12*(5), 726-736.

Kidd, S. A. (2006). Factors Precipitating Suicidality among Homeless Youth A Quantitative Follow-Up. *Youth & Society*, *37*(4), 393-422.

Kidd, S. (2014). Exiting the streets: homeless youth need more than just housing. CAMH blog. Retrieved from http://camhblog.com/2014/09/04/exiting-the-streets-homeless-youth-need-more-than-just-housing.

Kidd, S. A., & Davidson, L. (2007). "You have to adapt because you have no other choice": The stories of strength and resilience of 208 homeless youth in New York City and Toronto. *Journal of Community Psychology*, *35*(2), 219-238.

Kidd, S. A., & Kral, M. J. (2002). Suicide and prostitution among street youth: a qualitative analysis. *Adolescence*.

Kidd, S., & Shahar, G. (2008). Resilience in homeless youth: the key role of self-esteem. *American journal of orthopsychiatry*, *78*(2), 163-172.

Kolar, K., Erickson, P. G., & Stewart, D. (2012). Coping strategies of street-involved youth: exploring contexts of resilience. *Journal of youth studies*, *15*(6), 744-760.

Kurtz, P. D., Jarvis, S. V., & Kurtz, G. L. (1991). Problems of homeless youths: Empirical findings and human services issues. *Social Work*, *36*(4), 309-314.

Landow, R. W., & Glenwick, D. S. (1999). Stress and coping in homeless children. *Journal of Social Distress and the Homeless*, *8*(2), 79-93.

Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The Social Connectedness and the Social Assurance scales. *Journal of Counseling Psychology*, *42*(2), 232-241.

Lee, R. M., Draper, M., & Lee, S. (2001). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. *Journal of Counseling Psychology*, *48*(3), 310.

Lee, S. J., Liang, L. J., Rotheram-Borus, M. J., & Milburn, N. G. (2011). Resiliency and survival skills among newly homeless adolescents: Implications for future interventions. *Vulnerable children and youth studies*, *6*(4), 301-308.

Leipold, B., & Greve, W. (2009). Resilience: A conceptual bridge between coping and development. *European Psychologist*, *14*(1), 40.

Lightfoot, M., Stein, J. A., Tevendale, H., & Preston, K. (2011). Protective factors associated with fewer multiple problem behaviors among homeless/runaway youth. *Journal of Clinical Child & Adolescent Psychology*, *40*(6), 878-889.

Linehan, M. M. (2000). Commentary on innovations in dialectical behavior therapy. *Cognitive and Behavioral Practice*, *7*(4), 478-481.

Linton, K. F., & Shafer, M. S. (2014). Factors Associated with the Health Service Utilization of Unsheltered, Chronically Homeless Adults. *Social work in public health*, *29*(1), 73-80.

Luthar, S. S., & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and psychopathology*, *12*(04), 857-885.

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child development*, *71*(3), 543-562.

Luthar, S. S., Sawyer, J. A., & Brown, P. J. (2006). Conceptual issues in studies of resilience. *Annals of the New York Academy of Sciences*, *1094*(1), 105-115.

Maccio, E. M., & Schuler, J. T. (2012). Substance use, self-esteem, and self-efficacy among homeless and runaway youth in New Orleans. *Child and Adolescent Social Work Journal*, *29*(2), 123-136.

Markward, M., & Yegidis, B. (2010). *Evidence-Based Practice in Social Work: Evidence-Based Practice with Women: Toward Effective Social Work Practice with Low-Income Women*. SAGE Publications.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American psychologist*, *56*(3), 227.

Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and psychopathology*, *2*(04), 425-444.

McCarthy, B., & Hagan, J. (1992). Surviving on the Street: The Experiences of Homeless Youth. *Journal of Adolescent Research*, *7*(4), 412-430.

McCay, E., & Aiello, A. (2013). The Need for Early Mental Health Intervention to Strengthen Resilience in Street-involved Youth. *Youth Homelessness in Canada: Implications for Policy and Practice*, 229-242.

McCay, E., Carter, C., Aiello, C., McMain, S., Quesnel, S.,…& Cooper, L. (to be submitted – 2014) Dialectical Behavior Therapy as a catalyst for change in street-involved youth: A mixed method study. Children & Youth Services Review.

McCay, E., Langley, J., Beanlands, H., Cooper, L., Mudachi, N., Harris, A., ... & Miner, S. (2010). Mental health challenges and strengths of street-involved youth: The need for a multi-determined approach. *CJNR (Canadian Journal of Nursing Research)*, *42*(3), 30-49.

McCay, E., Quesnel, S., Langley, J., Beanlands, H., Cooper, L., Blidner, R., ... & Bach, K. (2011). A Relationship-Based Intervention to Improve Social Connectedness in Street-Involved Youth: A Pilot Study. *Journal of Child and Adolescent Psychiatric Nursing*, *24*(4), 208-215.

Milburn, N. G., Iribarren, F. J., Rice, E., Lightfoot, M., Solorio, R., Rotheram-Borus, M. J., ... & Duan, N. (2012). A family intervention to reduce sexual risk behavior, substance use, and delinquency among newly homeless youth. *Journal of Adolescent Health*, *50*(4), 358-364.

Mruk, C. J. (2006). Self-esteem research, theory, and practice: Toward a positive psychology of self-esteem. Springer Publishing Company.

Nolen-Hoeksema, S., & Girgus, J. S. (1994). The emergence of gender differences in depression during adolescence. *Psychological bulletin*, *115*(3), 424.

Nyamathi, A. M., Christiani, A., Windokun, F., Jones, T., Strehlow, A., & Shoptaw, S. (2005). Hepatitis C virus infection, substance use and mental illness among homeless youth: a review. *Aids*, *19*, S34-S40.

Olsson, C. A., Bond, L., Burns, J. M., Vella-Brodrick, D. A., & Sawyer, S. M. (2003). Adolescent resilience: A concept analysis. *Journal of adolescence*, *26*(1), 1-11.

Ong, A. D., Bergeman, C. S., Bisconti, T. L., & Wallace, K. A. (2006). The contours of resilience and the complexity of emotions in later life. *Journal of Personality and Social Psychology*, *91*(4), 730-749.

Palmer, R. H. C., Young, S. E., Hopfer, C. J., Corley, R. P., Stallings, M. C., Crowley, T. J., & Hewitt, J. K. (2009). Developmental epidemiology of drug use and abuse in adolescence and young adulthood: Evidence of generalized risk. *Drug and alcohol dependence*, *102*(1), 78-87.

Pierce, L. H., & Shields, N. (1998). The Be A Star community-based after-school program: Developing resiliency factors in high-risk preadolescent youth. *Journal of Community Psychology*, *26*(2), 175-183.

Public Health Agency of Canada (2006). *Street Youth in Canada Findings from Enhanced Surveillance of Canadian Street Youth 1999–2003*. Retrieved from: http://www.phac-aspc.gc.ca/std-mts/reports_06/pdf/street_youth_e.pdf.

Rachlis, B. S., Wood, E., Zhang, R., Montaner, J. S., & Kerr, T. (2009). High rates of homelessness among a cohort of street-involved youth. *Health & place*, *15*(1), 10-17.

Resnick, M. D., Harris, L. J., & Blum, R. W. (1993). The impact of caring and connectedness on adolescent health and well-being. *Journal of Paediatrics and Child Health*, *29*(s1), S3-S9.

Resnick M. D., Harris, L. J., & Blum, R. W., (1993). The impact of caring and connectedness on adolescent health and well-being. *Journal of Paediatrics and Child Health, 29* (Suppl. 1), S3-S9.

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., ... & Udry, J. R. (1997). Protecting adolescents from harm: findings from the National Longitudinal Study on Adolescent Health. *Jama*, *278*(10), 823-832.

Rew, L., Taylor-Seehafer, M., Thomas, N. Y., & Yockey, R. D. (2001). Correlates of resilience in homeless adolescents. *Journal of Nursing Scholarship*, *33*(1), 33-40.

Rew, L., Taylor-Seehafer, M., & Fitzgerald, L.M., (2001). Sexual abuse, alcohol and other drug use, and suicidal behaviors in homeless adolescents. *Issues in comprehensive pediatric nursing*, *24*(4), 225-240.

Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of clinical psychology*, *58*(3), 307-321.

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and social psychology bulletin*, *27*(2), 151-161.

Rosenberg, M. Conceiving the self, 1979. New York: *Basic Books.*

Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review*, 141-156.

Roy, É., Haley, N., Leclerc, P., Sochanski, B., Boudreau, J. F., & Boivin, J. F. (2004). Mortality in a cohort of street youth in Montreal. *Jama*, *292*(5), 569-574.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American journal of orthopsychiatry*, *57*(3), 316.

Rutter, M. (2006). Implications of resilience concepts for scientific understanding. *Annals of the New York Academy of Sciences*, *1094*(1), 1-12.

Shaikh, A., & Kauppi, C. (2010). Deconstructing resilience: myriad conceptualizations and interpretations. *International Journal of Arts and Sciences*, *3*(15), 155-176.

Slesnick, N., Bartle-Haring, S., Dashora, P., Kang, M. J., & Aukward, E. (2008). Predictors of homelessness among street living youth. *Journal of youth and adolescence*, *37*(4), 465-474.

Snow, M., Thurber, S., & Hodgins, J. M. *(*2002*).* An adolescent version of the Michigan Alcoholism Screening Test. Adolescence, 37*(*148*)*, 835–840.

Streiner, D. L., & Norman, G. R. (2000). Simple regression and correlation. Biostatistics: the bare essentials. Norman GR, Streiner DL, editors. London, ON: BC Decker, 118-126.

Taylor, S. E., & Stanton, A. L. (2007). Coping resources, coping processes, and mental health. *Annu. Rev. Clin. Psychol.*, *3*, 377-401.

Taylor-Seehafer, M., Johnson, R., Rew, L., Fouladi, R.T., Land, L., & Abel, E. (2007). Attachment and sexual health behaviors in homeless youth. *Journal for Specialists in Pediatric Nursing*, *12*(1), 37-48.

Thrane, L. E., Hoyt, D. R., Whitbeck, L. B., & Yoder, K. A. (2006). Impact of family abuse on running away, deviance, and street victimization among homeless rural and urban youth. *Child abuse & neglect*, *30*(10), 1117-1128.

Toro, P. A., Urberg, K. A., & Heinze, H. J. (2004). Antisocial behavior and affiliation with deviant peers. *Journal of Clinical Child and Adolescent Psychology*, *33*(2), 336-346.

Tyler, K. A. (2008). Social network characteristics and risky sexual and drug related behaviors among homeless young adults. *Social Science Research*, *37*(2), 673-685.

Ungar, M. (2004). A constructionist discourse on resilience multiple contexts, multiple realities among at-risk children and youth. *Youth & society*, *35*(3), 341-365.

Wagnild, G. M., & Young, H. M. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of nursing measurement*.

Waller, M. A. (2001). Resilience in ecosystemic context: Evolution of the concept. *American Journal of Orthopsychiatry*, *71*(3), 290.

Wenzel, S., Holloway, I., Golinelli, D., Ewing, B., Bowman, R., & Tucker, J. (2012). Social networks of homeless youth in emerging adulthood. *Journal of youth and adolescence*, *41*(5), 561-571.

Whitbeck, L. B., Hoyt, D. R., & Bao, W. N. (2000). Depressive symptoms and co-occurring depressive symptoms, substance abuse, and conduct problems among runaway and homeless adolescents. *Child development*, *71*(3), 721-732.

Whitbeck, L. B., Johnson, K. D., Hoyt, D. R., & Cauce, A. M. (2004). Mental disorder and comorbidity among runaway and homeless adolescents. *Journal of Adolescent Health*, *35*(2), 132-140.

Wild, L. G., Flisher, A. J., Bhana, A., & Lombard, C. (2004). Associations among adolescent risk behaviours and self-esteem in six domains. *Journal of Child Psychology and Psychiatry*, *45*(8), 1454-1467.

Williams, K. L., & Galliher, R. V. (2006). Predicting depression and self-esteem from social connectedness, support, and competence. *Journal of Social and Clinical Psychology*, *25*(8), 855-874.

Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology*, *21*(02), 152-169.

Yarcheski, A., Mahon, N. E., & Yarcheski, T. J. (2001). Social support and well-being in early adolescents: The role of mediating variables. *Clinical Nursing Research*, *10*(2), 163-181.

Zerger, S., Strehlow, A. J., & Gundlapalli, A. V. (2008). Homeless young adults and behavioral health an overview. *American behavioral scientist*, *51*(6), 824-841.

Zimmerman, M. A., & Arunkumar, R. (1994). Resiliency research: Implications for schools and policy. *Social Policy Report*, *8*(4), 1-18.