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Homeless Young Adults: An Exploratory Study Examining Resiliency and Coping

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Homeless Young Adults: An Exploratory Study Examining Resiliency and Coping

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Homeless Young Adults: An Exploratory Study Examining Resiliency and Coping

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This dissertation study sought to explore the hidden resilience among a homeless young adult population (ages 18-24). The majority of research conducted on homeless young adults remains limited to examining their multiple challenges and risk factors. While the high rates of substance use issues, mental health problems and trauma implicit in their lives warrant attention, research on the unconventional resilience of this group may enable service providers to better understand their unique needs. Recently researchers have begun to address the strengths and unique personal capabilities of this population. This dissertation follows this trend and utilizes the *social estrangement model* as a conceptual framework to examine predictors of resilience. Variables were examined within the context of four domains implicit in the *social estrangement model* that represent the amount of estrangement that exists in the lives of homeless young adults.

The four domains explored within this conceptual framework included, institutional disaffiliation, psychological functioning, human capital and identification with the homeless culture.

Findings from this study revealed that homeless young adults' self-esteem and optimistic perspectives of the future predicted higher resiliency, while drug dependency predicted lower resiliency. Additionally, homeless young adults' coping served as a mediating variable between their levels of self-esteem and optimistic perspectives of the future with resiliency. Implications for professionals working with a homeless young adult population include developing and strengthening substance preventions programs tailored to uniquely address their resiliency needs. Additionally, social workers and other direct service providers may incorporate intervention strategies that focus on improving self-esteem and increasing young adults' optimistic perspectives of the future. Homeless young adults will benefit from working with professionals who have a better understanding of their lives on streets and the unique coping strategies and survival skills that enable them to persist in a dangerous environment. Recognizing the strengths and resilience that homeless young adults are capable of, and incorporating strength-based perspectives in work with this group may empower these young adults to make positive choices and increase the likelihood of transitioning out of homelessness.

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Chapter 1: Introduction

Study Background and Significance

With recent estimates indicating that the homeless young adult population in the United States ranges from 1.5 to almost 3 million (Hudson et al., 2010), and rising (Zerger, Strehiow, & Gundlapalli, 2008), systematic research is essential in serving the needs of these vulnerable youth. The state of these young adults with challenges begs the attention of academicians, clinicians, service providers, and policy makers in addressing the documented high numbers of mental health disorders, substance use, and incidences of traumatic histories oftentimes including physical and sexual abuse (Johnson, Rew, & Kouzekanani, 2006; Thompson, Bender, Windsor, Cook, & Williams, 2010). Although the multiple health and behavioral risks plaguing this group has spurred research in the areas of coping and resilience (Kidd & Carroll, 2007; Rew & Horner, 2003), practitioners and policy makers may benefit from additional research examining the distinct and inimitable role resilience plays among homeless young adults and how it may differ from other disenfranchised groups. While the research to date has contributed to some understanding of resilience among this population, the knowledge base requires additional analyses to examine the multiple factors that contribute to the complexity of resilience for this population, including its predictors and the variables that serve as mediators.

This dissertation study will utilize a conceptual framework, the *social estrangement model*, which was initially created to address the factors associated with longer durations of career homelessness, and was later used to explore factors that are

associated with adolescent homeless youth who run away from home (Piliavin, Sosin, Westerfelt, & Matsueda, 1993a; Thompson, 2004; Thompson, Jun, Bender, Ferguson, & Pollio, 2010). The four concepts - *institutional disaffiliation, psychological dysfunction, human capital, and identification with the homeless culture* will be utilized in this dissertation study as a way of organizing and testing the variables that are implicit in each of the four domains as they relate to homeless young adults. The estrangement model will be presented in order to examine variables related to resilience, as well as explore variables that mediate with resilience among homeless young adults. Moreover, the four domains will also serve as an organizing framework for the structure of how the relevant literature and corresponding theories will be explored. The results from this study may provide valuable evidence for practitioners and policy makers informing interventions and policies specific to the needs of this vulnerable group. By exploring this population's hidden strengths, homeless young adults' unique manifestation of resilience "provides us with a corrective lens – an awareness of the self-righting tendencies that move children [individuals] toward normal adult development under all but the most persistent adverse circumstances" (Werner & Smith, 1992, p. 202) . This concept of homeless young adults' "hidden resilience" and nontraditional strengths as self-righting tendencies that assist with a precarious environment on the streets has not been studied. Ungar's (2004d) conceptualization of "hidden resilience" emerges from high-risk youth populations and their pathways leading to resilience. "Hidden resilience" can be defined as the unconventional and, at times, negative behaviors that youth utilize to survive amidst adversity. It can be considered a nontraditional manifestation of resilience that may be "hidden" behind behaviors or individuals that may be thought of as deviant or troubled.

The rationale for exploring this concept and how it pertains to young adults on the streets is that it will allow scholars to study these youth's unconventional coping mechanisms with adverse life conditions. Moreover, homeless young adults will benefit from research that explores their unconventional manifestations of resilience in several ways. First, service providers will have a better understanding of the unique needs of young adults living on the streets increasing the likelihood of positive outcomes in both service delivery and therapeutic interventions. Second, homeless young adults who gain an understanding of their own strengths and resilience may be empowered to see themselves in a more positive perspective and be less likely to engage in dangerous or harmful behaviors (Bender, Thompson, McManus, Lantry, & Flynn, 2007). Third, utilizing aspects of a strengths –based perspective that emphasizes mutual support and establishing trusting relationships with professionals has been shown to be successful in engaging with these young adults who often have a difficult time relating or connecting to professionals (Karabanow & Clement, 2004; Kidd, 2003; Thompson, Bender, et al., 2010).

Background on Homeless Young Adults in the United States

Epidemiology. Although it is difficult to discern the exact numbers of homeless young adults in the United States, recent research estimates that there are between 1.6 to 2.8 million homeless young adults in the United States (Hudson et al., 2010). The McKinney-Vento Homeless Assistance Act (PL 100-77) defines a person as homeless if they do not have a regular or adequate nighttime residence. In the literature, homeless young adults are often described by the various ways in which they become homeless. Youth on the streets are described as runaways (youth who leave their home on their own

volition), throwaways (youth who are forced out of their home by their parent or guardian), street youth (youth living on the street without shelter), sheltered youth (youth living in shelters), and systems youth – sometimes called "doubly homeless" (youth who were removed from their home of origin and placed in foster homes and left home without consent from their new home placement) (Aviles & Helfrich, 2004; Thompson, McManus, Lantry, Windsor, & Flynn, 2006).

Reasons that young adults leave home are due to multiple risk factors including, family conflict, poverty, abuse or neglect, substance use issues, behavioral or psychological disorders, and long term placement care (Molino, McBride, & Kekwaletswe, 2007a). Homeless young adult often live in precarious settings, "couch surfing" (living in friends or acquaintances homes often sleeping on couches), sleeping in homeless shelters, and camping in outdoor areas and other public places. These youth meet their basic needs by immersing themselves in a "street economy" often panhandling, selling personal belongings, stealing, or dealing drugs to make money for food and basic necessities (Thompson, McManus, Lantry, et al., 2006).

Some studies report that the number of homeless young adults is comprised of an equal amount of males and females (Heinze, Toro, & Urberg, 2004; Molino, McBride, & Kekwaletswe, 2007b; Toro, Dworsky, & Fowler, 2007), while others report that the number of males may be higher (Cauce et al., 2000b; Hwang, 2001). A recent survey found that there were 64% males and 36% females among the homeless population (The 2008 Annual Homeless Assessment Report to Congress, 2009). Youth aging out of the foster care system are particularly at risk of becoming homeless (Zerger et al., 2008), with former foster youth making up a substantial percentage of this population. At least

25% of former foster care youth will reportedly experience homelessness at one time in their life (Homelessness, 2010).

The homeless young adult population today in the United States is diverse and includes young adults from various backgrounds and life circumstances, including racial and ethnic immigrants and sexual minorities. Studies report inconsistent findings regarding racial and ethnic youth, with some research showing that homeless young adults reflect the racial characteristics of their geographical background (Cauce et al., 2000a) and some suggest that ethnic minorities are overrepresented (Boesky, Toro, & Bukowski, 1997; McCaskill, Toro, & Wolfe, 1998; Toro et al., 2007; Zerger et al., 2008). A 2001 survey found that among the U.S. homeless population, 49% were African-American, 35% were Caucasian, 13% were Hispanic, 2% were Native American and 1% were Asian (Hunger and Homelessness Survey: A Status Report on Hunger and Homelessness in America's Cities A 27-City Survey, 2001). Similarly, one study of a national dataset of runaways, throwaways, or homeless youth found that a higher percentage of male African American and Hispanic males compared to other ethnic groups (Thompson, Kost, & Pollio, 2003). Although the role of ethnicity among homeless young adults remains understudied, differences in familial upbringing and cultural values have been shown to impact risky behaviors of this population. In a recent study, significant differences were found between Hispanic runaway youth and Anglo runaway youth in respect to adherence to familialism, depression symptoms, and drug use. (Slesnick, Vasquez, & Bittinger, 2002). This study found that Anglo youth reported more externalization and utilization of conflict to resolve disagreements and Hispanic youth reported more depressive symptoms (Slesnick et al., 2002).

The numbers of sexual-minority young adults is elusive. While surveys typically find that 10% of homeless young adults report being gay/lesbian/bisexual/transgendered or questioning (GLBTQ) (Zerger et al., 2008), other studies report that number is between 20 and 40%. This statistic is compared to the overall GLBTQ young adult population which is between 5 to 10% (Center for American Progress, 2010; Whitbeck, Chen, et al., 2004). Sexual minority youth on the streets often cite their sexual orientation and resulting stigma as a main reason for leaving their home (Kruks, 1991). Sexual minority young adults often leave home more often than heterosexual young adults, and demonstrate greater risk and have more negative outcomes than heterosexual homeless young adults (Zerger et al., 2008). One study found that gay and lesbian street youth experienced higher levels of victimization, substance use (except for marijuana), depression, and number of sexual partners than heterosexual street youth (Cochran, Stewart, Ginzler, & Cauce, 2002; Toro et al., 2007). Furthermore, gay street youth were found to be three to six times more likely than their non-gay counterparts to attempt suicide (Gibson, 1989; Kitts, 2005).

Policy Initiatives. Policy initiatives for this population are lacking and do not adequately meet the needs of this vulnerable group. The McKinney Vento Act (PL 100-77) is the only federal policy that addresses the problem of homelessness in the United States. The policy, originally created in 1987, established an Interagency Council on Homelessness. The original aim of this act was to channel public funds to the needs of the homeless, and provide federal dollars to those who are homeless with special needs or disabilities. This act has been reauthorized several times. In the most recent reauthorization in 2010, special consideration was given to educational needs of homeless

children and youth in providing guidelines regarding academic achievement, enrollment in school, dispute resolution, and providing local liaisons (The McKinney Vento Act at a glance, 2008). While city governments have begun to address the growing problem of homelessness by implementing programs that connect homeless adults to supportive housing programs, significant needs remain for this growing population of young adults (2010).

Homeless Young Adults. Overall, the homeless young adult population faces multiple structural and social barriers in our society, including a lack of adequate housing, substandard and/or nonexistent health care and precarious living conditions. They must overcome extraordinary health and behavioral challenges that include trauma and victimization, physical and sexual abuse, unsafe sexual behavior, substance use, and mental health problems (Hudson et al., 2010; Johnson, Rew, Fredland, & Bowman, 2010; Zerger et al., 2008). Often leaving home initially due to familial conflicts, turmoil, physical or sexual abuse occurring in their home of origin, homeless young adults experience high levels of stress and strain which predispose them to disproportionate rates of depression, post-traumatic stress symptoms, anxiety disorders, substance use issues, sexual problems, aggressive behaviors, and other mental health or behavioral issues (Cauce et al., 2000a; Thompson, Bender, et al., 2010).

The rising numbers and numerous health and behavioral risks experienced by this marginalized young adult population necessitate attention from academicians and researchers. Youth homelessness remains as an emergent social problem that is currently understudied (Aviles & Helfrich, 2004). Researchers must examine the high levels of chaos and dysfunction that encompass these young adults' lives in order to better

understand how they cope and survive in a precarious environment. Understanding and focusing on homeless young adults' unconventional strengths and resilience will allow professionals to better engage these youth in developing relationships that capitalize on their strengths rather than focus on their deficits. The establishment of positive relationships and acknowledgement of these youth's personal strengths may lead to more positive outcomes and potentially transitioning these young adults off the streets (Karabanow & Clement, 2004).

The Importance of Resilience

For the purposes of this study, *resilience* will be defined as the ability to recover from adversity and finding balance and meaning among the chaos of distressful life events (Wagnild & Young, 1993). In recent decades, the study of risk and resilience has grown dramatically with clinicians and social scientists exploring people's innate tendencies to withstand and overcome adversity (Bonanno, 2004; Garmezy, 1993; Hunter & Chandler, 1999; Masten, Best, & Garmezy, 1990; Rutter, 1985, 1987, 1993; Walsh, 2006). The concept of resilience has also gained the attention of educators in the field of social work (Benard, 2004; Ungar, 2004d). Greene (2007) discusses how Saleebey (1997), proponent of the strength-based approach, suggests that social work curriculum include content on resilience-based practice as this is a natural progression for conceptualizing an individual's assets. In order to conceptualize the assets of a homeless young adult population, exploration of youth's potential strengths and their capacity for resilience is key when considering implications for professionals working with this population.

In this dissertation, resilience will be explored as a normative process in human development, rather than as a discrete personality trait. Masten (2001), a pioneer in risk and resiliency work, writes about the "ordinary magic" that emerges from individuals facing life's adversities. She identifies resilience as innate self-correcting tendencies and protective factors that rise from an individual and their environment often underscoring their ability to recover from life's challenges on the streets. Masten writes that some of the research on resilience is misleading and the "magic" of resilience is that it is a common phenomenon rather than a remarkable or rare one. This dissertation relies on the notion of ordinary magic and builds upon it by furthering that certain groups, including homeless young adults, may uniquely manifest resilience. The capacity for this distinctiveness in resilience warrants attention by professionals working with homeless young adults to understand how uniquely these youth may manifest qualities of resilience. Ungar (2004) suggests that this paradox can be understood by viewing resilience within certain populations as context specific. He discusses that young adults will "adapt in ways that are most effective, given the available resources"(Ungar, 2004d, p. 69). The notion that resilience may be manifested in an atypical manner, contextually dependent on limited resources, bridges a gap in understanding how homeless young adults are traditionally viewed. A more thorough exploration of this concept and how it uniquely manifests among homeless young adults will undoubtedly have implications for continued research on this understudied group.

Gaps in Our Knowledge

Currently, a malevolent view of homeless people permeates our society. This attitude of viewing homeless individuals through a lens of deviancy and maladaptivity not only exists in popular culture, but it also predominates the scholarly literature on these individuals. Today, a proliferation of research is written and published on the risk factors associated with being homeless; however, there is a considerable lack of work on the strengths and resilience of this group. While all academic attention to homeless young adults certainly adds value to understanding the dynamics and challenges facing this population, a precarious situation remains when the issue of homelessness is only viewed from one perspective. Addressing and acknowledging homeless young adults' strengths may help youth to increase their self-esteem and self-efficacy and develop a sense of optimism about the their future. Engaging in mutually respectful relationships with service providers who assist homeless young adults in establishing goals, exploring solutions, and problem-solving may allow homeless young adults to experience feelings of increased self-worth and a diminished sense of powerless and deviancy (Thompson, 2007b). Incorporating more strength-based approaches that emphasize homeless young adults' resiliency may assist in protecting them from the risks they experience on the streets and potentially alleviate some of the vulnerability they experience in adverse and dangerous environments. In their report for the 2007 National Symposium on Homelessness Research, Toro, Dworsky, and Fowler (2007) stated that a defined need exists to "move beyond the pervasive deficit orientation in much of the research toward more positive, resilience-based frameworks" (p. 22).

The literature will be enhanced from studies that not only examine resilience but also explore how this concept is manifested differently among this particular population. Understanding how resilience is evidenced for this group will allow for a more contextual view to emerge for these young adults. Homeless young adults live in precarious and dangerous environments with threats of violence, physical abuse, sexual abuse and criminal activity on almost a daily basis (Hudson et al., 2010; Johnson et al., 2010; Thompson, 2007a). In order to survive, these youth often choose to employ nontraditional behaviors and coping mechanisms to deal with the adversities of street life. A fundamental cornerstone of risk and resilience lies in the ability to deal with distressing life conditions "effectively" (Rutter, 1993). This study seeks to bridge the gap in the literature that academicians, clinicians and policy makers have in conceptualizing the notion "effectively." Developing an understanding that there are multiple pathways to resilience, including some that may be considered deviant and maladaptive is applied in this dissertation study.

Gaps in the knowledge base also exist around sample size and research methods. The majority of studies in the literature that explore the concept of resilience of homeless young adults utilize smaller samples and qualitative methods to analyze their data (Bender et al., 2007; Hyde, 2005; Kidd, 2003; Rew, 2002; Rew & Horner, 2003a; Williams, Lindsey, Kurtz, & Jarvis, 2001). While qualitative studies allow for rich, contextual themes to emerge, a dearth of rigorous, large scale quantitative studies exists. Results from studies with larger samples would be more reliable, more amenable to replication, control for threats to internal validity, and more able to be generalized to larger populations. The results from quantitative studies could eventually also be

analyzed in meta-analyses, allowing researchers to have a more accurate picture of the "research domain" of homeless young adults and resiliency. Results from meta-analyses could provide valuable information to service providers and professionals working with homeless young adults to confirm research findings from various studies, have a more accurate estimate of descriptive statistics, and potentially discover important mediating and moderating variables (Rosenthal & DiMatteo, 2001). Studies using more robust quantitative methods that examine mediating and/or moderating variables would also lend themselves to more applications that could distinguish homeless young adults into categories uncovering valuable information that could have implications for practice and service delivery.

Relevance to Social Work

The mounting problem of homelessness in the United States is a consequence of failed economic policies resulting in countless individuals in a variety of settings – facing a multitude of health and behavioral issues (Baum & Burnes, 1993; Blasi, 1990; Homelessness, 2010). The National Association of Social Workers (NASW) recommends that social workers be prepared to work with this population, as the services they need are growing on micro, mezzo, and macro levels (Homelessness, 2010). The alarming high rates of homeless young adults who struggle with mental health problems (26%) or substance use problems (38% for alcohol use issues and 26% for other drug use issues) demand social workers, mental health professionals, and service personnel address their multiple needs (Addiction, mental health, and homelessness, 2008; A status report on hunger and homelessness in America's cities: 2008, 2008). A focus on resiliency related issues would allow homeless young adults an opportunity to become competent and

resourceful older adults and increase their chances of overcoming health and behavioral challenges and transitioning out of homelessness.

By examining the emergent strengths and resilience of homeless young adults, our field can better understand how to work with these youth who struggle with numerous barriers and obstacles in their daily lives. It is noted in the literature that a strength-based perspective is more likely to be successful when working with homeless young adults (Fest, 2003; Thompson, 2007a) because acknowledging a youth's strengths and abilities has been shown to be useful in engaging these young adults in treatment (Thompson, Bender, et al., 2010). This dissertation study builds upon the assumption that embracing and validating the unique personal strengths of homeless young adults will allow for a more cooperative and mutually respectful relationship to emerge between practitioner and young adult to help them cope with a dangerous environment. This study will explore a conceptual framework, the *social estrangement model*, that recognizes risks and protective factors in order to examine how homeless young adults manifest resilience – providing implications for practice, policy, and further research.

Specific Aims of Study

The ultimate goal of this study is to understand what factors foster resiliency and how resilience is uniquely manifested in the lives of homeless young adults. Having knowledge of the variables that are implicit in the four domains of the *social estrangement model* that explain and predict resiliency will provide valuable information for service providers and professionals working with homeless young adults and assisting them with navigating life on the streets. Knowledge of the predictors of resilience will

allow for professionals to focus their work to accentuate the unique strengths and capabilities that can possibly help young adults transition off of the streets and deal with the multitude of health and behavioral problems they face. Additionally, acknowledgement of an individual's strengths may allow for a more mutually cooperative working relationship to emerge between the homeless young adult and the service worker. Following are the specific aims for this study.

Aim 1:

Describe the study sample.

The first specific aim of this study is to describe the study sample. It is important to have a clear picture of the young adults involved in this research project. Understanding the demographic characteristics, mental health diagnoses and substance use rates as well as length of time on the streets, how these youth entered homelessness, criminal history, history of trauma and/or abuse, and level of resilience is important to examine for this inimitable population.

Aim 2:

Evaluate the psychometric properties of scales used to measure variables in this study.

The second specific aim of this study is to describe the internal consistency of the measurement scales used in this dissertation study. Factor analyses of the Resilience Scale and the Coping Scale will also be conducted to determine any necessary item reduction.

Aim 3:

Evaluate the bivariate relationships between the domains of the estrangement model and resilience.

The third specific aim of this study is to examine the bivariate relationships between young adults' resilience (the dependent variable) and the four domains of the *social estrangement model*, which include the domains disaffiliation, psychological functioning, human capital, and integration into homeless culture.

Research Questions for Aim 3

1. What is the relationship between resilience and demographic variables?
2. What is the relationship between resilience and independent variables in each domain?
3. What is the relationship between coping and independent variables in each domain?
4. What is the relationship between resilience and coping?

Aim 4:

Determine the extent to which each domain of the estrangement model predicts resilience.

The fourth specific aim of this study is to determine what estrangement model factors foster resilience among homeless young adults. A series of simultaneous multiple regressions will be conducted to determine the predictors of resilience among homeless young adults.

Research Question for Aim 4

1. What is the multivariate regression model that best describes the significant predictors of resilience among homeless young adults?

Aim 5:

Evaluate how coping mediates the relationship between resilience and the domains of the estrangement model.

The fifth specific aim of this study is to determine if coping serves as a mediating variable in predicting resilience for homeless young adults.

Research Question for Aim 4

1. To what extent do scores on the Coping Scale mediate levels of resiliency?

Significance of the Study

Understanding the multiple barriers that homeless young adults face coupled with their rising numbers and growing service needs warrant exploration into how these young adults cope with the stresses and strains of street life. Exploring the lives of homeless young adults through a resilience lens may have significant implications for the field. One potential benefit of examining young adults' strengths and coping methods rests on the assumption that service providers using a resilience framework effectively engage clients in behavioral change. Therefore, research that focuses on youth's strengths and capabilities will ultimately provide clinical insight for professionals assisting homeless young adults in making desired changes in their lives. A second and related benefit is that assessing an individual's strengths and incorporating those strengths into treatment

planning may increase the possibility of long-term positive outcomes and potentially assist them with transitioning out of homelessness. The third benefit impacts policies and programs. More specifically, knowledge regarding the unique ways in which resilience may manifest among homeless young adults can be used to inform new policies and the structure of programs.

By utilizing quantitative methods, a comprehensive view of the strengths and unique manifestation of resilience of homeless young adults will be presented. Subsequently, a significant gap in the literature will be addressed that challenges the common conception of homelessness that pervades the research base. This dissertation will examine the construct of resilience from a viewpoint not currently seen in the literature on homeless young adults as an alternative to the traditional view of resilience. A more flexible perspective will be adopted in order to explore homeless young adults' manifestation of resilience and their strengths. The following chapter will review the relevant literature on resilience and homeless young adults.

Chapter 2: Theoretical Framework and Literature Review

Homeless Young Adults

The number of homeless young adults in the United States is staggering. Rates of homeless individuals vary with estimates showing that approximately 700,000 to 2.8 million young people experience runaway or experience homelessness each year in the United States (Colby, 2011). Homelessness among young adult populations represents a growing social problem with both national policy and public health consequences for the young adults themselves, and the society that precludes them. The McKinney-Vento Homeless Assistance Act (PL 100-77) (the singular federal legislative response to the social problem of homelessness) states that a person is homeless if they do not have a regular or adequate nighttime residence. This definition also includes individuals who share the housing of others or live in motels, hotels, camping grounds, emergency or transitional shelters or public or outdoor settings (National Coaltion for the Homeless, 2011). This definition of homeless young adults includes youth who are categorized as runaways, throwaways, street youth, sheltered youth and systems youth. For the purposes of this dissertation study, a homeless young adult will refer to a homeless person who is between 18 -24 years of age. This demographic subgroup of homeless young adults (ages 18-24) remains the most understudied of all age groups among the homeless population with the preponderance of academic focus on either homeless adolescents or homeless adults (Cauce et al., 2000a; McCaskill et al., 1998). For purposes of this dissertation, the McKinney-Vento definition of homelessness will be adopted.

The empirical research on the homeless population in general presents a more negative appraisal of life on streets for this group of individuals. A clear and defined focus on the maladaptive lifestyle and psychopathology of this population pervades the literature for homeless adults and homeless young adults. Studies on this group range from systematic reviews on cognitive deficits, and their origins and manifestations, (Backer & Howard, 2007; Burra, Stergiopoulos, & Rourke, 2009; Spence, Stevens, & Parks, 2004), studies that examine the rising costs of health care and their experiences in systems in which they are disaffiliated (Hoch, Dewa, Hwang, & Goering, 2008; Hwang, Tolomiczenko, Kouyoumdjian, & Garner, 2005; Nickasch & Marnocha, 2009), to empirical studies that explore the needs of homeless adult veterans and their proclivity for suicidality as well as the substance use issues which are highly prevalent for this subgroup of the homeless population (Benda, 2005; Benda, Rodell, & Rodell, 2001).

Problems Facing Homeless Young Adults

Research indicates that the homeless young adult population is at risk for multiple health and behavioral problems. Living on the streets in precarious environments, homeless young adults are often challenged by a variety of public health issues, including AIDS/HIV, suicide, physical and sexual abuse, and other mental health problems (Thompson, 2007a). Homeless young adults report more high-risk sexual behaviors including sex at an early age, multiple sexual partners, prostitution and unprotected sex (Johnson et al., 2006; Zerger et al., 2008). Their risky lifestyle often puts these vulnerable youth in dangerous situations that leave them more likely to experience victimization on the streets. Additionally, the sexual behaviors and prostitution put these young adults at a higher risk for drug abuse problems, mental health disorders, suicide and other heath

problems (Bailey, Camlin, & Ennett, 1998). A day-to-day threat of victimization on the streets represents a significant risk factor for those youth who have histories of abuse or neglect. A study found that 47% of the homeless females surveyed indicated they had been sexually abused (Rew, Taylor-Seehafer, Thomas, & Yockey, 2001) with homeless young adults citing physical or sexual abuse as the main reason for leaving home (Toro et al., 2007). Overall, homeless young adults are more likely to experience abuse or neglect than those young adults who are housed and also more likely to be verbally or physically aggressive with their parents or guardians before they leave home (Toro & Goldstein, 2000; Wolfe, 1999). Homeless young adults report their challenges with victimization on the streets and indicate that 37% have been threatened by a weapon, 35% have been assaulted with a weapon, 37% have been sexually propositioned, and 21% have been sexually victimized (Thompson, 2007b; Tyler, Hoyt, Whitbeck, & Cauce, 2001b).

Rates of mental illness for this group are disproportionately high with 66% to 89% diagnosed with psychiatric disorders (Whitbeck, Johnson, & Hoyt, 2004) and these problems often co-occur with substance use problems (Zerger et al., 2008). A nationally representative mental health survey determined that homeless young adults were six times more likely to have a mental illness than youth who were not homeless (Whitbeck, Johnson, Hoyt, & Cauce, 2004). Additionally, leaving homes typically characterized as chaotic and dysfunctional, may lead homeless young adults to suffer from symptoms of post traumatic stress symptoms (Thompson, Maccio, Desselle, & Zittel Palamara, 2007; Whitbeck, Hoyt, Johnson, & Chen, 2007). Exposure to the stress and strain of street life in conjunction with physically or sexually abusive family homes environments predisposes these youth to additional experiences of trauma and trauma symptomology.

One study indicates that in a sample of runaway youth over 30% met diagnostic criteria for posttraumatic stress diorder (Tyler, Whitbeck, Hoyt, & Johnson, 2003). Overall, high rates of depression, suicidal ideation, post traumatic stress symptoms and suicide attempts are well documented in the literature (Bao, Whitbeck, & Hoyt, 2000a; Bender, Ferguson, Thompson, Komlo, & Pollio, 2010; Cauce et al., 2000a; Hudson et al., 2010; Kidd, 2006; Merscham, Van Leeuwen, & McGuire, 2009) and present numerous challenges to youth living with few resources and in precarious environments.

Substance use and abuse statistics are also high for this group of young people. In the National Comorbidity Survey (NCS), researchers found that 47% of homeless males met criteria for substance abuse while males who were not homeless had rates of 4%; moreover, homeless females were 17 times more likely to meet the criteria for substance abuse than their non-homeless counterparts (Whitbeck, Johnson, et al., 2004). Studies report overall rates to be estimated between 39 to 70% of homeless young adults abuse either use drugs or alcohol (Chen, Thrane, Whitbeck, & Johnson, 2006b; Martijn & Sharpe, 2006) with marijuana being reported as the drug of choice for this population (Gomez, Thompson, & Barczyk, 2010). The literature suggests that peer networks are highly influential with young adults' alcohol and drug use on the streets, impacting how much youth choose to use and/or abstain from their substance use (Gomez et al., 2010). Additionally, substance use among this population is also reinforced and valued as a social norm (Hawkins, Catalano, & Miller, 1992).

Extent of the Problem

According to Toro and colleagues (2007), young adults are most at risk for becoming homeless, yet research on this age group remains limited with more scholarly attention being focused on homeless adults and their mental health problems and substance use issues. A significant gap resides in exploring issues relevant to this population, particularly examining the strengths and unique resilience of this group.

A country in the midst of an economic downturn is the setting for this social problem that presents high costs for young adults who engage in dangerous and risky lifestyles, with no monetary resources to fund mental or physical health care. This results in society being required to fund these services. The mere financial costs alone merit additional research into the unique dynamics that relate to homeless young adults and their lifestyles. According to Forbes.com, the national problem of homelessness costs the United States over 10 billion dollars per year in public funds (Cutting The Cost of Homelessness in U.S., 2006). It is important to continue to examine and explore how these young adults cope with their unstable and often dangerous environments. Exploring the strengths and coping mechanisms of these youth from a social-environmental context will allow a more flexible definition of resilience to emerge – one that reflects the extraordinary and unconventional coping and resilience that is utilized to survive in a dangerous and tumultuous street setting.

This chapter will present the relevant literature and corresponding theoretical framework on resilience and homeless young adults. The theoretical frameworks and literature review will be presented in three major ways. This review will begin with a

discussion of the conceptual model, the *social estrangement model*, which will be used to organize and discuss the relevant literature on homeless young adults and resilience. The literature related to each of the four concepts (institutional disaffiliation, psychological functioning, human capital, and integration into homeless culture) will be presented. The second section of this review will present the construct of resilience. This section includes resiliency theory, challenges in defining and measuring resilience, as well as empirical articles that study the construct. The final section of this review will present stress and coping theory and the relevant literature, as it pertains to homeless young adults. Finally, a discussion is presented concerning how this dissertation will fill identified gaps in the knowledge base of resiliency-focused work with this population.

The Estrangement Model

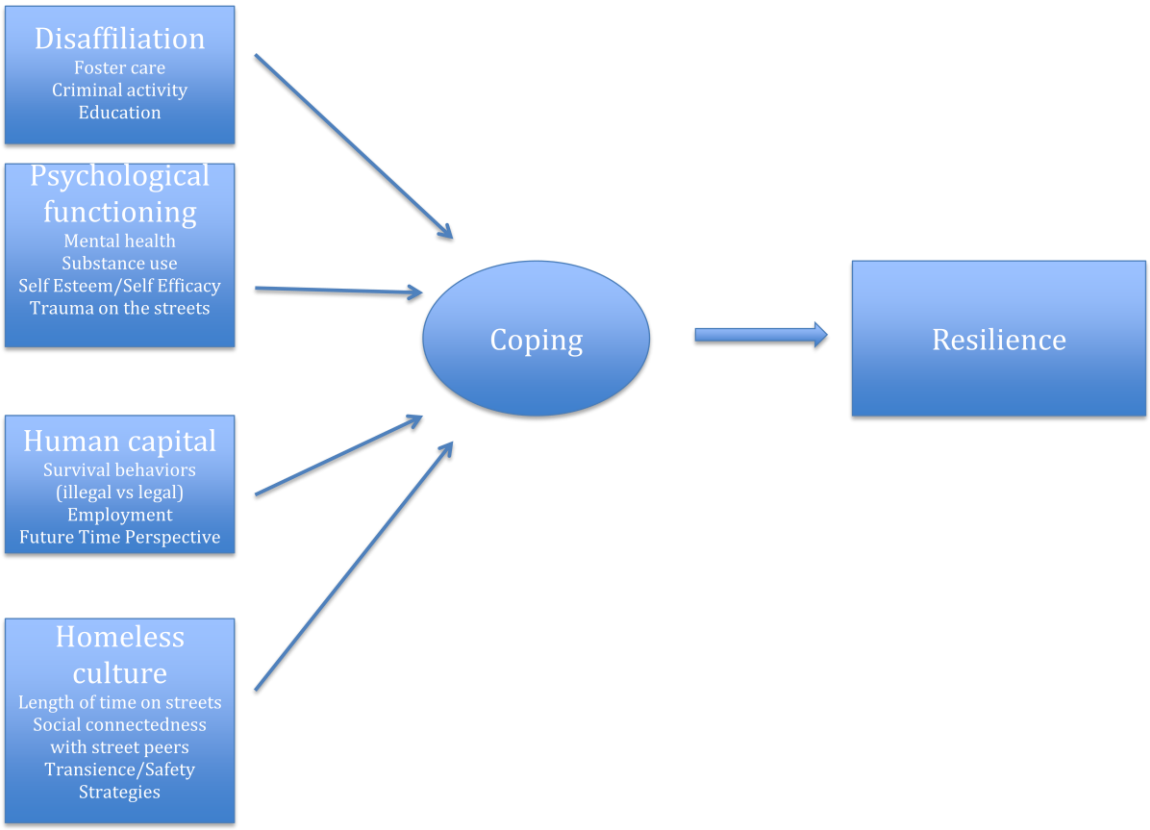
The conceptual model that will guide this dissertation study is the *social estrangement model* which was created to examine the duration of homeless careers (Piliavin et al., 1993a). This model originated in order to address the hypothesis of Piliavin and colleagues (1993) that homeless individuals with longer durations on the streets differed systematically from those homeless individuals who were homeless for shorter periods of time. Piliavin and colleagues built their model on the basis that the longer a person is homeless, the more estranged they become from conventional society. This model asserts that homelessness is the result of social estrangement from society and that this estrangement manifests in four different but interrelated ways. These four ways are represented in the four domains of Piliavin's model: institutional disaffiliation, psychological functioning, lack of human capital, and integration into a homeless culture. In general, *institutional disaffiliation* represents a weakening of ties to society in terms of

interpersonal relationships with family, society, the educational system, and increased criminal activity. *Psychological dysfunction* is construed as the high rates of mental health problems that exist among homeless young adults. *Human capital* is the ability to produce goods and services that are valued in our society. Finally, *identification with homeless culture* represents the idea that assimilation into the homeless culture is time spent on the streets and dependent on peer networks (Piliavin, Sosin, Westerfelt, & Matsueda, 1993b).

Thompson and Pollio (2006) used the interrelated concepts created by Piliavin and colleagues (1993) original estrangement model to explore factors that are associated with adolescent homeless youth who run away from home. The four concepts - *institutional disaffiliation, psychological dysfunction, human capital and identification with the homeless culture* - were considered with young adults who ran away more than once compared to those who stayed away from home for longer durations. Additional studies have also utilized this conceptual model in exploring addiction issues among homeless youth (Thompson, Jun, et al., 2010; Thompson, Rew, Barczyk, McCoy, & Mi-Sedhi, 2009). Findings from studies that have explored factors related to the estrangement model have suggested its predictive power. Specifically, disaffiliation predicted dependency and indicators of homeless culture predicted alcohol dependency in one study (Thompson et al., 2009). Moreover, in a separate study certain domains of the estrangement model were found to be predictive of alcohol and drug use (Thompson, Jun, et al., 2010). Identification with homeless culture was found to be associated with both alcohol and drug addiction and certain factors implicit in the psychological dysfunction domain were associated with alcohol use among homeless youth (Thompson, Jun, et al.,

2010). The utility of this model can be naturally bridged with this study population of homeless young adults in order to present how they manifest resilience. These domains represent categories of factors that are present in the lives of the homeless young adults that are examined in this study. This conceptual model represents the multiple and interacting factors that merge in the life of a homeless young adults potentially impacting their resilience (see Figure 1).

Figure 1. Estrangement Model



The utility of this conceptual model to capture factors present in the lives of young adults, allows variables to be organized in a framework that reflects their estrangement from society. Inherent in these four estrangement domains are variables that may be conceptualized as the young adults' risk and protective factors. Interestingly, the subjective nature of each of these factors inhibits a discrete categorization as either risk or protection for this population. For example, substance use in the general population may be typified as a risk factor; however, research states that homeless young adults often use substances as a coping mechanism to deal with distressing life events potentially making substance use a protective factor (Mallett, Rosenthal, & Keys, 2005). Drug and alcohol

use is often found to be a coping strategy that young adults use to deal with the trauma they have experienced in their home of origin or on the streets. The ambiguous nature of each of these characteristics adds to the complexity of how resilience is personified and manifested in the lives of this marginalized population.

Also implicit in this model is how young adults cope with the stressors and strains of living on the streets. The fluidity of coping and resilience come into play by understanding how the young adults make meaning and appraise significant life events. Appraisals of events that are considered traumatic or distressing are believed to affect how the young adult copes with the stressor or strain, as exemplified by Lazarus and Folkman (1984) in their stress and coping theory. The homeless young adult may effectively experience, appraise, and create meaning from each life experience, including distressing or traumatic events. This appraisal may impact their resilience. For this reason, coping is hypothesized to be a mediating variable impacting the level of resilience. The literature related to the four domains of the *social estrangement model* will be presented in the following section.

Institutional Disaffiliation

Institutional disaffiliation in general can be thought of as tenuous ties to society in terms of weakening interpersonal relationships with family, social disaffiliation, educational detachment, and criminal activity that marginalize and stigmatizes young adults (Kidd, 2007; Toro et al., 2007). In originating this central concept of the estrangement model and work with skid-row men, Bahr and Caplow (1973) state that homeless individuals lack “the bonds that link settled persons to a network of

interconnected structures" (p.55). Bahr (1973) continues that disaffiliation may result from past traumatic experiences or the individual's own voluntary withdrawal from society. This weakening of social bonds is seen in homeless young adults who have a history of academic problems leading to higher dropout rates from school, including having to repeat a grade (Bao et al., 2000a; Thompson et al., 2003; Toro et al., 2007), family conflicts often stemming from situations of abuse or neglect (Whitbeck, Hoyt, Yoder, Cauce, & Paradise, 2001a), and other disruptions in pro-social relationships putting them at further risk for victimization on the streets (Molino et al., 2007b). This disruption in social or familial ties is also evidenced in the high rates of youth exiting the foster care system who experience homelessness (Courtney & Heuring, 2005).

The notion of disaffiliation and homelessness is based on the premise that it is the weak relationships with social structures rather than individual characteristics that explain the fundamental causes of homelessness (Main, 1998). Therefore, a young adult's inability to establish positive relationships and meaningful connections in school, family, or other social institutions may lead to homelessness. Bahr (1973) argued that the fundamental goal of working with homeless individuals was focusing on reconnecting them to society rather than treating their individual disabilities.

Family Disaffiliation. While, homeless young adults experience disaffiliation or social exclusion across several areas of their lives (housing, employment, familial, and societal) (Gaetz, 2004b), they often begin their life on the streets by severing ties with their family. They often run away from home due to familial sexual or physical abuse (Taylor-Seehafer, 2004). Moreover, the majority of homeless young adults experience some form of maltreatment (Tyler et al., 2003) causing youth to disaffiliate from families

based on family problems that are occurring in their home, prompting them to seek an alternative way of life. A recent study explored reasons why homeless young adults were homeless, and examined relationships among risk and protective factors to determine predictors of resilience (Rew et al., 2001). Findings for this study revealed that 51% of young adults left home because they were thrown out of their home. Thirty-seven percent of the young adults surveyed stated they left home because their parents disapproved of their alcohol and drug use and 31% stated they left home because of abuse and/or neglect issues (Rew et al.). Interestingly, the act of leaving home has been conceptualized as a manifestation of resilience due to the unsafe and unstable nature of a youth's home (Rew & Horner, 2003a). Related to the topic of family disaffiliation, life history interviews with 50 homeless young adults in Los Angeles revealed that young adults cited family stress as the main reason for leaving home and becoming homeless (Hyde, 2005). Fifty nine percent of young adults interviewed stated that physical abuse was the determining factor in leaving home and 50% reported the determining factor was intense familial conflict (Hyde, 2005).

Young adults with a history of foster care or those youth who have run away from a foster care home are more likely to be estranged and make up a large portion of the homeless young adult population (Lenz-Rashid, 2006). According to the California Department of Social Services, 65% of the estimated 4,355 emancipated youth in one fiscal year were homeless at the time of emancipation (Report on the survey of the housing needs of emanicapted foster/probation youth, 2002). A study on former foster youth transitioning into adulthood found that 14% of males and 10% of youth reported

being homeless at least once since they were discharged from care (Courtney, Piliavin, Grogan-Kaylor, & Nesmith, 2001).

Social Disaffiliation. Young adults on the streets face multiple challenges in establishing connections with social institutions. Homeless young adults perceptions of health care seeking provide insight into the overall attitudes these youth have regarding structural barriers and how homeless young adults distance themselves from traditional institutions. A study regarding health-care seeking behaviors of homeless youth revealed limited sites, hours of operation, priority conditions and long wait times, and social barriers, such as discrimination, law enforcement and societal barriers inhibited youth's access to health care (Hudson et al., 2010). Unmet needs and a sense of stigma were reported to inhibit connections with this traditional institution. The barriers experienced by homeless young adults provide tremendous insight into the attitudes that these youth face on a day-to-day basis. An interesting finding that emerged from this study was that homeless young adults stated that they were able to deal with street life and persist with the support and help of others. Supportive street peers were reported to help bridge the barriers with health care, as was help from homeless young adults who had been on the streets for longer durations (Hudson et al., 2010). This finding is important in that it provides insight into how homeless young adults experience disaffiliation from traditional institutions. More importantly, it exemplifies how homeless young adults attempt to reconcile this experience of disaffiliation.

An additional indicator of social institutional disaffiliation for homeless young adults is involvement in the criminal justice system (Hoyt, Ryan, & Cauce, 1999a). A weakening of an individual's bonds to societal norms contributes to a young adults'

involvement in crime. Oftentimes, this involvement in the criminal justice system is motivated by the young adults' basic needs for survival, including obtaining food, money, and shelter. Moreover, the longer the young adult is on the streets, potentially engaging in criminal activity, the more likely he or she will also be criminally victimized (Bender et al., 2010; Rohde, Noell, Ochs, & Seeley, 2001; Thompson, McManus, & Voss, 2006a). Overall, involvement in the criminal justice system and isolation from familial, social and educational institutions increases the stigma and strain that these young adults may experience in relation to their perception of disaffiliation. A qualitative study revealed that homeless youth with higher perceived stigma were more likely to have lower self-esteem, loneliness, feelings of hopelessness, and increased suicidality (Kidd, 2007). Moreover, perceived stigma emerged as a theme among homeless youth and their interactions with social institutions and accessing health care (Hudson et al., 2010).

Reducing the risks faced by young adults who are estranged from society is a challenging task. The contexts in which homeless young adults reside inherently disrupt their relationships with traditional familial and societal ties. The precarious life events which often precipitate a youth leaving home in conjunction with the factors that they deal with on a daily basis isolate these young adults and distance them from families, communities, and institutional organizations. Research indicates that the growing health risks associated with emotional distress, substance use, trauma, and victimization can be buffered by helping young adults focus on their individual strengths and the environmental protective factors that can help them navigate the precarious environment of street life (Garmezy, 1993; Rutter, 1993). Strategies aimed at improving health and

emotional distress, life skills training and providing therapeutic interventions, on-site social work resources that include solution-focused brief treatments, providing appropriate substance use services, and reducing victimization are techniques that may be considered within a context of development (Taylor-Seehafer, 2004). Focusing on young adults' strengths, reducing health risks and reconnecting young adults to society may impact young adults on the streets by providing alternatives to a deficit model of intervention that currently permeates the field.

Psychological Dysfunction

Psychological dysfunction can be construed as the disproportionate numbers of mental health problems that exist within this population. Research finds that homeless young adults are more likely to experience depression, posttraumatic stress disorder (PTSD) symptoms, and suicidal ideation than their non-homeless counterparts (Johnson, Whitbeck, & Hoyt, 2005; Thompson, Bender, et al., 2010). Because of the dangerous and risky lifestyle that homeless young adults lead, problems associated with trauma, mental health problems, and substance abuse present distinct challenges for these youth on a daily basis. Moreover, young adults' psychological dysfunction may impact their capacity to interact and participate in society, thus increasing their degree of estrangement. According to Tyler and colleagues (2003), the high rates of trauma and mental health symptoms among homeless youth result from a multitude of reasons including maltreatment experienced on the streets, absence of an unstable home and supportive adults, and their transient lifestyle.

Furthermore, studies show a relationship between mental health problems and substance use problems, which have been considered a psychological condition prolonging homelessness (Piliavin et al., 1993a). Addiction issues present challenges for young adults on the streets. Moreover, substance use and abuse issues increase the likelihood that young adults will remain homeless (Bender et al., 2007). Johnson and colleagues' (2005) study showed that 93% of homeless young adults who met criteria for a substance abuse disorder also met the criteria for at least one psychological disorder. Thompson, Rew, Barczyk, McCoy and Mi-Sedhi (2007) confirmed previous findings that a large percentage of homeless youth were drug dependent and poly-substance users.

Trauma and Victimization. In examining street victimization and trauma symptoms among homeless young adults, Stewart and colleagues (2004) found that physical and sexual victimization were substantial threats for homeless young adults. Findings revealed that victimization left youth vulnerable for more serious trauma disorders with over 80% of participants reporting at least one traumatic incident. In their study, males reported higher rates of physical victimization while females reported more instances of sexual victimization. Overall, findings from this study indicate the high numbers of young adults who experience trauma while navigating life on the streets. Resolving the impact and effects from victimization coupled with the day to day challenges of street life characterize a life that is full of obstacles and barriers.

Victimization and trauma become integral parts of the lives of homeless young adults often beginning in the home of origin even before they are homeless. Homeless young adults are often impelled onto the streets after being forced out of their homes by parents or to escape situations of abuse or neglect (Thompson, 2005). One study reports

that 75% of homeless young adults report some type of abuse or neglect in their home of origin prompting them to leave the home (Bender et al., 2010). Homeless young adults often identify parental conflict as a primary factor in their choice to leave home for the streets (Toro et al., 2007), with more significant familial abuse in the home leaving them more vulnerable to experiencing traumatic incidents on the streets (Thompson, 2007a).

The reported high rates of victimization once young adults are on the streets predispose homeless young adults to experience PTSD. A recent study revealed that homeless and runaway young adults were six times more likely than same aged peers to meet criteria for two or more mental health disorders (Whitbeck, Johnson, et al., 2004). A recent study found that rates of PTSD were five times greater for homeless adolescent females and 12 times greater for homeless adolescent males than adolescents who were not homeless (Whitbeck, Johnson, et al., 2004). In a study conducted at youth shelters in New York and Texas, 98% of young adults interviewed had elevated PTSD symptoms higher than epidemiological studies which show PTSD rates in young adults ranging from 6% to 10% (Thompson, 2005). Furthermore, while out on the streets, 83% of young adults state they were exposed to at least one form of physical or sexual victimization (Stewart et al., 2004) with 18% of homeless young adults experiencing trauma related symptoms (McManus & Thompson, 2008).

Other mental health problems are associated with trauma symptomatology and impact homeless young adults. A large-scale study with 428 homeless youth found that 35.5% of the young adults interviewed met lifetime criteria for PTSD, with twice as many female runaways (44.8%) as males (23.5%) having PTSD (Whitbeck et al., 2007). An interesting finding in this same study was that PTSD did not occur as the only mental

health problem for these young adults. Over 90% of the young adults interviewed who met criteria for PTSD also met criteria for either depression, conduct disorder, alcohol or drug abuse. Sixty-three percent of young adults who had PTSD in this study experienced physical abuse by parent or caretaker in their home of origin with males being more likely to report abuse than females. One half of the females in this study who had PTSD experienced sexual abuse while only 20.5% of the males experienced sexual abuse in their home of origin (Whitbeck et al., 2007). Psychological functioning is clearly impacted by the numerous challenges of street life.

In addition to the reality of victimization and violence that homeless young adults are predisposed to, some scholars have asserted that the day-to-day challenges associated with life on the streets may constitute psychological trauma in of itself (Goodman, Saxe, & Harvey, 1991). The loss of one's home, the unstable and unsafe conditions of shelter life, and the physical and sexual abuse experienced prior to leaving home can produce psychological symptoms in homeless young adults (Goodman et al., 1991). With nearly constant threats to safety and survival, homeless young adults must deal with challenges that present significant obstacles to survival. These impoverished conditions coupled with the threat of victimization or participation criminal activity leaves young adults vulnerable to trauma and its effects.

While living on the streets is dangerous for homeless adults, the developmental stage of young adults and their more susceptible nature often leaves them more vulnerable to trauma on the streets than their adult counterparts (Whitbeck et al., 2007). It is hypothesized that the turbulent context of their lives before they were homeless can lead them to engage in dangerous encounters on the streets (Gaetz, 2004b).

Sexual victimization is also a constant threat for homeless young adults. Youth living on the streets are more likely to be sexually victimized than young adults not living on the streets and often this victimization can occur multiple times (Stewart et al., 2004). Females who run away from home at an earlier age are more at risk for sexual assault from a stranger (Tyler, Whitbeck, Hoyt, & Cauce, 2004). In a recent study, 37% of females and 11% of males experienced sexual victimization while on the streets (Tyler et al., 2004) while another study revealed 50% of homeless females and 10% of homeless males experienced a sexual assault (Buhrich, Hodder, & Teesson, 2000). Moreover, victimized homeless adolescents who experience sexual abuse were shown to higher rates of depression, low levels of self-esteem, substance use problems, and destructive behaviors (Johnson et al., 2006).

Depression and Suicidality. Depression and risk for suicide are two components of psychological functioning in which homeless youth deal with at extraordinary rates, higher than the homeless adult population (Rohde et al., 2001). A recent study found that 73% of homeless young adults reported experiencing their first episode of depression before they left home for good, and 15% reported that their first episode of depression occurred once they were on the streets or within the same year of leaving their home (Rohde et al., 2001). This finding indicates the analogous prevalence of depression experienced either in the home of origin or experienced once a young adult is thrust into life on the streets. The impact on psychological functioning is paramount with high rates of mental health problems before and after youth enters into a homeless environment. Moreover, young adults with high levels of depression, anxiety, dissociation and those

who experienced less communication and or family conflict also have been shown to have higher rates of PTSD (Thompson, 2005).

Generally speaking, harmful self-injurious behaviors including cutting or carving on the skin and other self-mutilating behaviors often accompany diagnoses of depression (Andover, Pepper, Ryabchenko, Orrico, & Gibb, 2005). Homeless young adults who were diagnosed with depression reported that utilizing self-injurious behaviors habits often helped them to regulate their emotions and deal with stressors or strains in their life (Tyler et al., 2003). This finding illustrates one maladaptive mechanism that homeless young adults may employ in order to cope with the dangerous lives they lead on the streets.

While living on the streets, homeless young adults also have a higher likelihood of suicidal behaviors (Kidd, 2006). A recent study found that family violence, being thrown out of their home, poor physical health, and having suicidal friends had strong relationships with suicide, with parental neglect showing a strong association with attempted suicide (Kidd). The most interesting finding that emerged from this study was that a reduction in reported suicidal behavior was reported following a young adult leaving home. This finding indicates that while street life may be unpredictable and unsafe, it may be less distressing than their negative home environment.

Substance Use. Homeless young adults are widely reported to be substance users and abusers, with these addiction issues often prolonging their homelessness (Piliavin et al., 1993a). While substance use issues represent a health and behavioral challenge, some homeless young adults report that their substance and drug use often relieves stress,

anxiety and fear associated with life on the streets, and that using substances helps them to maintain their relationships with their peers on the streets (Mallett et al., 2005). Some research has also found that disruptive or chaotic family relationships may predispose homeless youth to utilizing maladaptive coping mechanisms including substance use to cope with problems (Taylor-Seehafer, Jacobvitz, & Steiker, 2008). In addition to easing the effects of stress and strain on the streets, the use of alcohol and drugs on the street was also found to be highly influenced by a young person's street peers and their social networks. In a recent study, social networks and economic resource variables were found to predict drug use among homeless youth. Findings from this study indicate that street peers play a significant role in determining both alcohol and drug use for young adults living on the streets (Thompson, Barczyk, Gomez, Dreyer, & Popham, 2010). Interestingly, exploring peer networks can provide insight into how social networks can be both contributory to higher substance use yet also provide emotional support.

Related to the importance of discerning the extent of substance use issues on psychological dysfunction, Bender and colleagues (2010) found that substance use significantly predicted trauma diagnoses among homeless youth. In their study, those who reported alcohol abuse were three times more likely to have experienced trauma. Additionally, young adults who had substance abuse or dependence were five times more likely to be in the PTSD group, and young adults who were more transient were also more likely to be in the PTSD group (Bender et al.).

The literature on psychological dysfunction suggest that the impact of distressing events can greatly impact a person's life and their ability to cope with future stressors and strains. Homeless young adults exposed to trauma on the streets can sustain interruptions

in their emotional development, inhibit their ability to relate to peers and make plans for their future (Thompson, 2007b). Recovering from a trauma and other challenges related to psychological dysfunction can be based on one's ability to utilize social supports, rebuild their sense of control and the influence of the community in which they reside (Herman, 1997).

Human Capital

Human capital is defined as the ability and knowledge to produce goods and services that are highly valued in our society and viewed as a mechanism for bettering the community (Bullock, Stallybrass, & Trombley, 1998). Originating from the field of economics as a way of describing differences in worker productivity and development (Becker, 1962), human capital is now utilized by researchers in the social sciences to explore factors related to employment (Lundgren, Schilling, Ferguson, Davis, & Amodeo, 2003). Relating the topic of human capital to homeless young adults, a lack of investment in attaining human capital was hypothesized to prolong homelessness in Piliavin's original framework (1993). Thompson and Pollio (2006) describe examples of human capital as access to employment and education. Thus, human capital for homeless young adults is quite different than non-homeless young adults and often becomes a means of developing unconventional skills to survive on the streets and earn money. These survival strategies often represent a way of participating in an economy of homelessness in which criminal activity becomes necessary to obtain food and/or resources. Oftentimes, the survival strategies consist of legal and illegal behaviors, and those monitored by city regulations (Thompson et al., 2009). Positive means of obtaining

human capital could include maintaining a source of employment, including part-time or temporary work, or selling self-made items.

Finding sustainable employment is difficult for young adults living on the streets. With little to no job skills, low levels of education, health risks, and unstable housing, homeless young adults encounter several barriers to making money (O'Grady & Gaetz, 2004). Despite the numerous challenges facing young adults on the streets, homeless young people often utilize unconventional skills in order to make a living in a dangerous and often distressing environment (Ferguson, Bender, Thompson, Xie, & Pollio, 2011; Lippman, Barczyk, & Thompson, 2011). In addition to utilizing their nontraditional strengths, young adults on the streets often adopt optimistic perspectives of the future in which assist them with surviving life on the streets and potentially adopting healthier choices (Rew, Fouladi, & Yockey, 2002).

Exploring both the conventional and unconventional means of sustaining human capital, a study by O'Grady and Gaetz (2004) found that 31% of homeless males were employed, 27% of homeless females were employed and 15% relied on social welfare assistance. Findings from this study suggest that some homeless young adults may take on traditional money making strategies in addition to flexible and diverse strategies that sometimes fall outside of the boundaries of a formal labor market. The informal resources utilized by some homeless young adults were investigated in order to determine how youth gained economic resources in a street economy (Bender et al., 2007). Several focus groups were conducted with 60 homeless young adults and yielded revealing findings about youth's unique problem-solving skills to locate food, resources, and places to stay. Utilizing societal resources including panhandling and utilizing charitable strangers were

reported as means of getting resources and improving human capital (Bender et al., 2007). Findings from this study continue to support the need for service workers to understand the unique ways in which homeless young adults generate human capital. A unique sense of optimism and creativity differentiate them from non-street living youth in supporting themselves on the streets.

Related to young adults utilizing unique skills to generate human capital, some homeless young adults turn to illegal activities to survive on the streets. Researchers conducted a qualitative study that explored the experiences of young males who participated in sex work, or hustling, as a means of obtaining economic resources on the streets (Lankenau, Clatts, Welle, Goldsamt, & Gwadz, 2005). In their study, researchers utilized the concepts of "street capital" and "street competencies" to describe how the young males they interviewed accumulated skills and survival strategies to survive on the streets. Findings from this study revealed that young males gathered "street capital" (knowledge gained from experience on the streets through their various life situations) that segued into careers as sex workers in order to survive within a street economy. Young adults stated that in spite of their illegal avenues in making money, clients and older homeless peers often filled supportive roles, offering both emotional and financial assistance. Interestingly, Lankenau and colleagues refer to young adults' street competencies as a unique manifestation of resilience, and how this concept is different for homeless young adults.

> "As these narratives indicate, finding shelter on the streets, exchanging sex in a safe manner, avoiding arrest, building relationships with clients, and securing untainted drugs and injection paraphernalia represent competencies that indicated resilience with this group of young men" (Lankenau et al., p. 17).

Young adults living on the streets often employ a variety of unconventional survival strategies that reflect their unique ability to cope with the challenges associated with being homeless. As stated above, survival strategies can include both illegal and legal methods of money making in which young adults engage in order to meet their basic needs. Illegal behaviors may include prostitution, stealing and drug dealing, while legal behaviors may include selling personal items and donating blood or plasma (Lippman et al., 2011). Homeless young adults may use these strategies as their only means for income or they may use one of these survival strategies for supplementation (Ferguson et al., 2011). Ferguson and colleagues found that 31% of homeless young adults relied only on survival behaviors, 28% of homeless young adults had some form of employment, and 22% of homeless young adults utilized a combination of both survival skills and employment in order to meet their needs. In one study of homeless young adults, 75.1% utilized panhandling as a survival skill, 54.1% were employed part-time or temporarily, 49.7% borrowed money from friends, 36.8% borrowed money from relatives, 20% gambled and 34.1% sold drugs in order to gain money or resources on the streets (Lippman et al.).

Nonconventional means of moneymaking and survival become more normative in the non-traditional environment in which homeless young adults reside. Attention to these behaviors and the implications that arise regarding their needs are important when considering how these homeless young adults survive and their personal strengths.

Identification with Homeless Culture

Identification with homeless culture is the notion that in order to survive life on the streets one must assimilate into the homeless culture, depend on peer networks and gain knowledge of how best to utilize survival skills to acculturate (Piliavin et al., 1993). Homeless young adults integrate into a culture of homelessness for support, companionship, and survival in a turbulent environment. While the literature views this population and its culture through a predominately negative lens, recent research has shown that homeless youth can be extremely resourceful in integrating into a culture of homelessness. Establishing and locating resources has been found to be a strength among the homeless young adult population. A secondary analysis revealed that homeless adolescents were knowledgeable of their environment and this allowed them to be safer and meet their basic needs on the streets. This coupled with their ability to establish a community of street peers left them with a sense of personal fulfillment and helped them to consider improving their lives (Rew & Horner, 2003a).

The longer duration that a homeless young adult spends living on the streets increases their knowledge of street life and their social identification with other homeless young adults increases the likelihood of a longer homeless career. A recent study examined how newly homeless young adults may differ from more chronically homeless young people (Milburn et al., 2009). Time spent on the streets impacted the number of protective factors displayed by the youth in the study. Over half (51%) of all homeless young adults surveyed scored high on four of five protective factors (school, employment, positive friends, and survival skills) and low on six of the six risk factors (emotional distress, unprotected sex, smoking, alcohol use, drug use and hard drug use).

The findings of this study are important about the length of time spent on the streets with more newly homeless young adults doing relatively well, displaying more protective factors than risk factors (Milburn et al., 2009) than those who had been on the street longer.

In addition to time spent on the streets, transience is a factor that impacts a person's experience of homelessness. Among homeless young adults in the U.S., moving from city to city has been shown to be a shared experience (Bender et al., 2007). While transience is a factor in homeless culture that increases a youth's chances of remaining homeless and has been shown to increase a young person's likelihood of trauma exposure, PTSD and depression (Bender et al., 2010; Davey-Rothwell, German, & Latkin, 2008), establishing a community of peers in different locations has been shown to be helpful in navigating a stressful environment (Kidd, 2003). Moreover, a community of street youth has been reported to be helpful in learning the "rules of the street" (Kidd, p. 245) along with providing emotional and financial support.

Creating a street family and staying connected with other young adults is important for youth who often feel marginalized and cut off from most of society. Connectedness and social support have been found to buffer the risk-laden environment that young adults encounter on the streets (Rew & Horner, 2003a). Moreover, street peers were cited as sources of support, mentoring, and information in navigating life on the streets in a recent study (Bao, Whitbeck, & Hoyt, 2000b). This finding indicates the importance of exploring peers as influential networks as young people acculturate to the street and homelessness. Specifically, it is vital to understand that homeless young adults may adopt similar values of street peers and integrate like habits regarding alcohol and

substance use. Among homeless young adults, association with "deviant" peers has been shown to increase the amount and duration of drug and alcohol use (Rice, Milburn, Rotheram-Borus, Mallett, & Rosenthal, 2005b). Piliavin and colleagues (1993) suggest that the homeless young adults' values, peer associations and cultural lifestyles merge in their assimilation into a homeless culture effectively making meaning of their life on the streets. While this assimilation is helpful for young adults to conform to life on the streets, integration into a homeless culture may make reentering mainstream society more difficult.

Keeping safe on the streets is also an important skill that becomes essential when acculturating into a homeless setting. Adopting safety strategies reflects a level of resilience that is reflective of a young adults' street capital (Lankenau et al., 2005). Safety strategies also can be separated into legal and illegal behaviors. For example, legal strategies may include always having a trusted companion or distancing oneself from certain people or places, while illegal strategies may include carrying a weapon. In a study with 182 homeless young adults, 76.8% of young adults reported staying away from certain places was a skill used to stay safe. Other young adults stated that they avoided certain people (70.3%), always had trusted companion (68.6%), traveled with a dog (11.9%), slept during the day and stayed awake at night (14.1%), or carried a weapon (63.2%) (Lippman et al., 2011). Qualitative results from this same study revealed that valued peer relationships, adopting safety habits while using substances, and having to take care of and nurture a pet were reported as being key to surviving and staying safe in a turbulent and risk-laden environment (Lippman et al.).

Understanding homeless young adults from a more contextual perspective provides insight into how their lives and how they view themselves in their environment. Personal autonomy and independence emerged as themes among young adults who felt that living on the streets allowed them to become responsible for themselves in facing the challenges of street life (Thompson, McManus, Lantry, et al., 2006). Young adults reported that they often utilized services in cities across the country and were able to navigate the local services in order to find food. They emphasized their freedom in traveling and acceptance in establishing connections with other street peers and street culture. Additionally, young adults also discussed the importance of establishing relationships with others in order to stay safe while surviving on the streets (Thompson, McManus, Lantry, et al., 2006).

For these young adults on the streets, being aware of the context of their environment and the influence of their social network may be important to understand the impact of their integration into a homeless culture. The awareness of the potential benefits and strengths that reside in the midst of their environment and social network may help these young adults to see their unique strengths and capabilities.

Therefore, understanding homeless young adults by means of their disaffiliation, current psychological functioning, human capital sources, and integration into a homeless culture allows for conceptualization of risk and protective factors that relate to resilience. Examining young adults through the lens of the estrangement model will provide insight into their complicated and multi-faceted lives. This dissertation study will utilize this organizing model to reflect the diversity and unique capabilities that homeless young adults utilize in order to survive in a dangerous and challenging setting. Examining the

predictors of resilience and how coping may or may not mediate this process will generate implications for how to better work with this marginalized group to recognize their strengths and resilience.

Risk and Resiliency Theory

Social work's roots lie in its commitment to the strengths perspective and its historical ties that are grounded in ecological and developmental theories (Bronfenbrenner, 1979; Erikson, 1968; Germain & Gitterman, 1986; Saleeby, 1993; Von Bertalanffy, 1968). Similarly, the initial movement to study risk and resiliency grew from the same theoretical foundation (Luthar, Cicchetti, & Becker, 2000; Masten et al., 1990; Rutter, 1985).

Guiding the formation of risk and resiliency theory, ecological systems theory is a perspective of viewing a child within the context of their environment. The foundation of ecological theory is based on examining a person within five systems of interconnected relationships that impact a person's life (Bronfenbrenner, 1979). The main assumption of ecological theory is that exploring a person's growth and development in the context of their micro, meso, exo, macro or chronosystem results in a more thorough assessment of the negotiations that take place between person and the demands of their environment. Implications from this exploration may range from observations regarding a child's progress in school and the physiological impact of a person's age over time, to more societal issues that may impact the individual. Each system level contains certain challenges, values, and norms that the individual must address. This encompassing and generalized understanding of human development is important among theorists in risk

and resiliency who study how individuals cope with challenges and the risk and protective factors which emerge at different stages in life.

A second contributing theoretical perspective to the risk and resiliency theory is the psychosocial development perspective. This school of thought views human development as a process between an individual and society's expectations and demands. Six concepts make up this theory including, (1) stages of development, (2) developmental tasks, (3) psychosocial crisis, (4) a process for resolving the crisis, (5) a network of significant relationships, and (6) coping (Newman & Newman, 1995). The main assumption of this theory is that there are enumerated stages of development that a person moves through during their lives (Erikson, 1968; Freud & Dalma, 1968) incorporating gains from each stage. Additionally, a basic concept of the theory is that each stage of development has certain inherent tasks and conflicts (psychosocial crisis) that are specific to the stage in which they are experienced. A positive resolution of a psychosocial crisis results in adaptive ego qualities that help a person move on successfully to the next stage (Erikson, 1978). A component of the psychosocial perspective that ties it to risk and resiliency theory is that it focuses on positive adaptive ego qualities that facilitate healthy development. Ego qualities are the result of positively resolving a psychosocial crisis during each stage of development. Moreover, these ego qualities serve as strengths, which help an individual continue to move on to the next stage of development. Thus, this theory offers a conceptual framework for exploring a person and their interactions with society at each developmental life stage.

A third contributing theoretical perspective to risk and resiliency theory is systems theory, which asserts that all systems (persons, families, communities) are

comprised of interdependent elements that share common goals, functions, and identities (Newman & Newman, 1995). Individuals are conceived as being either *open or closed systems* that may (or may not) change and adapt in order to sustain their existence in a certain environment (Von Bertalanffy, 1968). The main assumption of systems theory, according to Von Bertalanffy, is that it views a person, family, community, etc., from a more holistic view of complex and interacting parts. Human behavior is not seen as causal but the result of complex relationships of the person and their environment as an interrelated whole. Secondary assumptions of this theory are that systems will have boundaries and that they aim to remain stable in the midst of change (Andreae, 1996). The perspective of viewing an individual within this conceptualization allows for a full and individualized assessment of a person in the context of their environment, acknowledging their boundaries and tolerance to change over the life cycle. This theory contributes to how risk and resilience theorists conceive of a person in the unique nature of their environment in order to understand their strengths and capabilities.

A fourth perspective that is relevant to risk and resiliency theory is the strengths perspective. This perspective became the roots of social work and social work practice, and allows a more clear focus on the positive attributes and capacities of clients rather than their problems or deficits (Saleeby, 1997). The ability to focus on the strengths of individuals in spite of existing challenges, allows for mobilization of goals and may facilitate the instillation of hope in the future for those who may have not considered change an option. Integral to the construct of resilience and its manifestations in people's lives, Saleebey states that strengths are, "what people have learned about themselves, others and their world, … personal qualities, traits, and virtues that people possess…what

people know about the world around them, …the talents that people have, …culture and personal stories and lore…pride …and community" (pp. 51-52). Scholars have endorsed this contribution to the field and propose that the benefits of examining the strengths of individuals have many advantages. Kisthardt (1997) and Weick (1989) believe that by exploring one's strengths we allow for the mobilization of a person's innate abilities and their capacity for growth and change while value is added that someone else is invested in their ability to overcome life's adversities (Saleeby, 1997).

A final theoretical contribution to the understanding of resilience is coping theory (Lazarus, 1966). Understanding the dynamics of how a person copes with adversity can improve understanding of how resilience is manifested. Moreover, distinguishing between coping processes (adaptive versus maladaptive) has been thought of being dependent on the context and life stage of the individual when the adverse condition occurs (Lazarus, 1993). Lazurus (1966) defined coping as the cognitive and behavioral efforts that are used to manage the external (or internal) demands of life that are considered challenging. Additionally, this management of psychological stress can be manifested in various manners, utilizing different mechanisms. While stress and coping theory will be discussed more explicitly in the next section of this chapter, an important aspect of this theory is that coping may be capable of mediating certain emotional outcomes (Folkman & Lazarus, 1988). In other words, Lazarus found that the process of coping served as the mechanism that was able to change a person's emotional state. This can be linked to how resiliency theory is conceptualized for individuals dealing with difficult life conditions.

Therefore, in conceptualizing risk and resiliency theory, it is important to note that this theoretical perspective is actually an integrative theoretical framework combining diverse concepts from distinct areas of knowledge and discipline. Each area of knowledge builds on another to guide empirical research in better understanding human behavior related to resilience and risk (Greene, 2007). Theories that have guided the formation of this theoretical framework include: psychodynamic, existential, cognitive, systems, ecological, social constructivism, narrative and solution-focused approaches (Bandura, 1982; Bronfenbrenner, 1979; Erikson, 1968; Freud & Dalma, 1968; Greene, 2007; Maslow, 1968; McMillen, 1999; Von Bertalanffy, 1968). Each of these independent schools of thought converges to create a framework that encompasses how scholars think about a risk and resilience perspective when studying individuals coping with adversity.

In uncovering the tenants of this theoretical perspective, it is important to understand that the framework's roots do not lie in the foreground of academia but in the lived experience individuals who thrived in spite of high-risk life situations (Richardson, 2002). Furthermore, roots of risk and resiliency work initially grew from Werner's (1993) seminal study in resiliency that examined longitudinally almost 700 children (the entire birth cohort) in Kauai, Hawaii in 1955. This study provided implications for how risk and protective factors impact individuals. Werner's 40 year longitudinal study showed that two-thirds of youth exposed to risk factors including poverty, family stress and strain, and parental psychopathology experienced learning problems, mental health, and delinquency issues by age 18. Interestingly, one-third of the youth studied who experienced 4 or more of risk factors had positive outcomes in development (Werner,

1995). Werner's work with the Hawaiian longitudinal study allowed for more exploration of the factors which impact individuals and how they are either help or hinder one's potential for growth and development.

Risk and Protective Factors

In outlining how resiliency theory is conceptualized, it is imperative that risk factors and protective factors be outlined, as they are integral to the theory bridging an individual's ability to survive and potentially overcome life's difficulties. Keyes (2004) defines *risk factors* as "the causes of undesirable, non-normative developmental outcomes" (p. 223). These risk factors thereby generate negative outcomes that increase the potentiality for maladaptive development. Keyes (2004) describes that resilience is characterized by averting a risk factor. This view of averting risk factors and an individual's proclivity to avoid persistent and negative events in their environment is seen in the literature on risk and resiliency theory (Folkman, Lazarus, Gruen, & DeLongis, 1986).

Social scientists studying human development have continued to focus on protective factors, or developmental assets (Richards, 2002). In their research on the concept of resilience, variables are identified that appear to buffer stress and subsequently moderate the emergent relationships between the assumed risk and negative outcomes (Keyes, 2004). *Protective factors* have been identified in the literature at the individual, family and community levels (Werner, 1995), attributing resilience to such qualities as high intelligence levels, self-efficacy, high family cohesion, social support, higher socioeconomic status, supportive community programs and high quality schools (Keyes,

2004) and have influenced individuals dealing with violent and traumatic experiences over time (Werner & Smith, 2001). Scholars have recently begun to focus more on protective factors and how these can facilitate positive adaptation following traumatic events (Madsen & Abell, 2010), and how individuals utilize cognitive and behavioral mechanisms to minimize stress (Lazarus, 1966).

In their confirmative study to better understand how professionals reinforced the theoretical assumption of resiliency theory as it is characterized in the literature, Greene, Galambos, and Lee (2003) concluded that there was general agreement regarding the concept of resilience. Professionals concurred that internal and external factors were integral to the dynamic process of resilience and that the realization of the impact of resilience is imbedded in understanding the diversity of individuals.

> Practitioners' knowledge base needs to go beyond the external reading of information and get beneath the surface to actually learn about the nuances of different groups. Such nuances may contribute to people's behavioral responses in different situations. Understanding another group's culture requires thinking "outside the box" and, perhaps, outside the social worker's comfort zone (p. 85).

When considering risk and resiliency theory, it is vital to outline how an individual's personal strengths relate to one's capacity to display resilience. Benard (2004) describes the construct of resilience as a culmination of social competence, problem-solving skills, autonomy, and sense of purpose. Within each of these domains lie qualities that help to embody resilience as it manifests in individuals during time of stress and strain. The dynamic nature of a person's strengths is characteristic of how this theory contends resilience is a fluid and contextual process rather than a fixed trait (Benard, 2004).

Although the majority of the literature mainly points to this notion implying that positive growth is socially acceptable, it must be stated that not all individuals are able to sidestep risk; however, they may still be characterized as resilient (Ungar, 2008). Until recently, maladaptive and negative manifestations were not considered resilient; however, this dissertation will utilize a more contextually dependent definition of risk in its discussion of resiliency – one that reflects a more constructivist fit between risk and resilience and how this applies to the vulnerable, risk-laden population of homeless young adults. Luthar (1999) describes this more subjective perspective of resilience as the, "innumerable ways in which potentially powerful risk and protective factors do not operate in directions that may be intuitively anticipated, but often reflect complicated, conditional and even counterintuitive trends" (p. 3)

Resiliency theory will inform this study by highlighting the personal strengths and survival skills that homeless young adults utilize on the streets. A unique ability to overcome adversity is often displayed among this population. The unconventionality and hidden resilience that emerges from homeless young adults will be explored in order to highlight how these youth survive in a dangerous environment. Protective factors will be explored to understand the nontraditional manifestation of resilience that homeless young adults utilize while overcoming challenges and obstacles that are a part of their daily lives on the streets. Resiliency theory allows for a strengths-based perspective to emerge regarding homeless young adults' coping skills and provides a framework for professionals who work with this population.

The Construct of Resilience: Challenges with Defining and Measuring Resilience

At the core of this dissertation lies the elusive concept of resilience, with distinct challenges in its definition, quantification and measurement. In fact, the mere task of defining this construct has become a focus of studies that attempt to shift how individuals are viewed in the context of adversity –from a pathological perspective to one that takes into account a person's inner strengths. The construct of resilience has been discussed in various ways in the literature, although fundamentally the concept remains constant, with a focus on recovery from adverse life events. The nuances in defining this construct merely contribute to its complexity in how it is understood, measured and therefore researched.

Masten (2001) defines resilience as the ability to have a good outcome despite threats to a person's development, with resilience functioning as the natural result of a person's adaptational system. Rutter (1987) defines the construct as a person's response to stress or strain in the midst of both risk and protective factors. He suggests that when this inimitable balance between these risk and protective factors is more manageable, individuals are better able to cope with adversity. Masten, Best, and Garmezy (1990) define this concept as, "the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (p. 426). More constructivist definitions characterize resilience as the ability to display courage and adaptability in the midst of change and unfortunate life events (Wagnild & Young, 1990, 1993), and define it as a concept that is not static but can be characterized as occurring on a continuum of adaptation (Hunter & Chandler, 1999; Tusaie & Dyer, 2004).

Other scholars describe this construct as a dynamic process or phenomenon that emerges from the midst of adversity with positive adaptation emerging in the lives of individuals (Luthar, 2003; Rutter, 1987). While the literature yields a number of broad definitions, for the purpose of this dissertation study and the unique population under study, resilience will be used to describe people who "display courage and adaptability in the wake of life's misfortunes," (Wagnild & Young, 1993, p. 166).

Conceptualization of Resilience

As scholars contest the "true" and scientific meaning of resilience, the concept and its manifestations have been studied extensively. Historically, the study of risk and resiliency as its own distinct body of knowledge began in the 1970s with Norman Garmezy's pioneering work with the creation of Project Competence (Garmezy & Devine, 1984). This initial search for a better understanding of adversity and competence led to exploring the children of mentally ill parents for their risk for psychopathology. Through this groundbreaking work, Garmezy discovered that a portion of the children he studied demonstrated positive development in spite of their risk of developing a mental disorder due to their parents mental health problems (Tusaie & Dyer, 2004). Through this exploration, Garmezy's research informed countless other scholars who began to search for meaning and insight into why certain youth were developing more "normally" despite significant and fundamental adverse life conditions. Emerging from Project Competence (Garmezy & Devine, 1984), the study of risk and resiliency was born and grew into its own body of knowledge, and researchers began to address stress resistance, competence and protective factors (Garmezy, Masten, & Tellegen, 1984).

Resilience as a function of human adaptability has been studied mainly in two bodies of knowledge: the psychological coping literature (Clauss-Ehlers, 2008; Diehl & Hay, 2010; Jaser & White, 2011; Jenkins, 2008; Luthar & Sexton, 2007; Masten & Wright, 2010; Morano, 2010; Wilks, Little, Gough, & Spurlock, 2011) and in the nursing literature (Johnson et al., 2006; Rew & Horner, 2003a, 2003b; Rew et al., 2001; Yi-Frazier et al., 2010; Zander, Hutton, & King, 2010) regarding the physiological manifestations related to overcoming stress (Heller, Larrieu, D'Imperio, & Boris, 1999). Both bodies of literature have discussed the dynamic and fluid process that can encompass what researchers have labeled resilient behavior. Studies have examined resilience as it relates to trauma (Berson & Baggerly, 2009), mental health(Fraser & Pakenham, 2009; Jonker & Greeff, 2009), homelessness (Bender et al., 2007; Reed-Victor & Stronge, 2002; Unger et al., 1998b), abuse and neglect (Humphreys, 2003; McGloin & Widom, 2002; Walsh, Dawson, & Mattingly, 2010) juvenile delinquency (Thompkins & Schwartz, 2009; Van Brunt, 2010), and substance use (Thompson et al., 2009).

Measurement of Resilience

The quantification and measurement of resilience in scientific studies has been a point of contention in the risk and resiliency literature (Waaktarr & Torgensen,2009). Waaktarr and Torgensen (2009) state that the ambiguous nature of the resilience construct coupled with a lack of guidelines or standards for research methodology has created obstacles in comparing results across studies and generalizing findings. Additionally, questions arise regarding an operationalization of resilience as either a personal trait or process (Luthar et al., 2000). Conceptualizing resilience as a personality

trait reflects general innate characteristics of a person in comparison to a dynamic developmental process that unfolds in the face of adversity over time. A clear distinction in this difference is that a process oriented conceptualization of resilience occurs in the presence of adverse life conditions, while resilience as a personality trait is limited by an inherited level of resilience (Luthar et al., 2000; Wagnild, 2009b). Moreover, defining clear and operational distinctions between protective and vulnerability factors also presents issues, particularly with certain at-risk populations who may utilize nontraditional or maladaptive mechanisms in order to help them navigate dangerous and challenging settings (Luthar, Sawyer, & Brown, 2006). Luthar, Cicchetti, and Becker (2000) assert that additional clarity and consistency must rise from the literature of resilience while also understanding the importance of the multidimensionality of resilience and the fluid nature of the construct.

A variety of measures exist that assess a young person's level of resilience. Ahern and colleagues (2006) reviewed several resilience assessment tools that were utilized on an adolescent population, including the Baruth Protective Factors Inventory (BPFI) (Baruth & Caroll, 2002), the Connor-Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003), Resilience Scale for Adults (RSA) (Friborg, Hjemdal, Rosenvinge, & Martinussen, 2003), Adolescent Resilience Scale (ARS) (Oshio, Kaneko, Nagamine, & Nakaya, 2003), the Brief-Resilient Coping Scale (BRCS) (Sinclair & Wallston, 2004), and the Resilience Scale (RS) (Wagnild & Young, 1993). The six resilience instruments that were identified in EBSCO databases measure the construct in a several different ways.

- The BPFI is a 16-item measure that utilizes a Likert scale and measures resilience by assessing four protective factors: adaptable personality, supportive environments, fewer stressors, and compensating experiences.
- The CD-RISC is a measure that contains 25 items, and assesses resilience on a 5 point Likert scale. This scale was created with the intention of using it as a measure to quantify the progress in clinical populations in response to pharmacologic treatment. Items on the scale reflect 25 different reflections of resilience including, a persons ability to adapt to change, close and secure relationships, achievement of goals, sense of purpose, and pride in achievements (Connor & Davidson, 2003).
- The RSA measures the protective resources that help to promote adult resilience and it contains five factors that include personal competence (level of self-esteem, self-efficacy, realistic orientation to life), social competence (social adeptness, cheerful mood, communication skills), family coherence (family conflict), social support (access to external support), and personal structure (the ability to plan, organize, and maintain daily routines) (Friborg et al., 2003).
- The ARS was created for Japanese youth and is a 21-item scale that includes three factors including novelty seeking, emotional regulation, and positive future orientation.
- The BRCS is a 4 item scale and measures tendencies to cope with stress in an adaptive manner. This scale demonstrated predictable correlations with

other measurement scales that assessed personal coping skills, pain coping behaviors, and psychological well-being (Sinclair & Wallston, 2004).

Consequently, the multitude of ways that resilience is conceptualized reflects the numerous challenges in defining and measuring this construct. The question of how to adequately measure resilience has significant implications for how scholars and other professionals interpret and subsequently intervene with those recovering from stressful life events. The Resilience Scale was determined to be the most appropriate instrument of the six acknowledged to use to study resilience in a youth population (Ahern et al., 2006). The Scandinavian study (Waaktaar & Torgensen, 2010) that compared the Resilience Scale (Wagnild & Young, 1993) to assessment scales that explored more general personality characteristics, reflects the considerable differences that exist in how resilience is defined and the complex nature of the construct.

Resilience in Homeless Young Adults

Adding to the complexity, the distinctiveness of the homeless young adult population presents additional challenges to how resilience is conceptualized. The differences emerge once we explore how these concepts are measured and manifested. A more non-traditional model of resilience may be needed to highlight how this group "bounces back" from adversity. Until recently, scholars and professionals working to understand risk and resilience have conceptualized resilience as a way of coping that is valued by other professionals (i.e., mental health professionals, teachers, law enforcement officers) (Ungar, 2004d). The traditional notions of resilience are challenged when exploring populations that are deviant or delinquent who may employ maladaptive

coping mechanisms to survive. Homeless young adults are characterized by the numerous risk factors which may make them more likely to engage in drug or alcohol abuse (Hawkins et al., 1992), and other coping strategies that may be characterized as negative or antisocial (Whitbeck & Hoyt, 1999). A growing number of research studies are now beginning to focus on a more contextually sensitive understanding of resilience – rather than labeling individuals' coping styles as dysfunctional or maladaptive (Canvin, Marttila, Burstrom, & Whitehead, 2009; Ungar, 2004c).

Homeless young adults display resilience in a distinctly different manner than their non-street living counterparts. Living in a dangerous environment with multiple challenges and limited resources results in young adults adopting coping strategies and personal strengths that are unconventional. For example, in order to survive on the streets homeless young adults may carry a weapon, engage in legal or illegal strategies to make money and resources, or participate in activities that are outside of conventional norms (Lippman et al., 2011). They may utilize atypical survival strategies to cope with a lack of economic resources, such as panhandling, survival sex/prostitution, drug dealing, or theft (Kipke, Unger, O'Connor, Palmer, & Lafrance, 1997). Additionally, homeless young adults' high rates of alcohol and drug use, while typically considered maladaptive, have been described by these young people as useful for coping with distressing or traumatic events and easing anxiety (Kidd, 2003). While these manifestations of resilience may be considered atypical or even maladaptive, it is important to understand that this may be what resilience looks like for homeless young adults. This "street resilience" (p. 12) offers a stark contrast to conceptualizations of resilience that emphasize traditional pro-social manifestations (Whitbeck, 2009).

The social and contextual processes of street life influence this alternative view of resilience. By understanding homeless young adults within their unsafe and unstable environmental context, our view of resilience may broaden. Navigating the streets safely and meeting basic survival needs requires young adults to become savvy to their homeless culture, self-sufficient, and knowledgeable of the resources and services that may assist them on the streets. A more non-traditional conceptualization of resilience may be seen as a process in which resilience is "the result of negotiations between individuals and their environment to maintain a self-definition as healthy," (Ungar, 2004c, p. 24). Self-definitions of health among this population may include circumstances that would typically be considered maladaptive and problematic. For example, fewer episodes of depression or physical altercations with the authorities may be a self-definition of resilience. Conceptualizing resilience as more of an interactive negotiation between person and environment supports the view that resilience may be atypical (even maladaptive) for certain at-risk populations.

This nontraditional expression of resilience, homeless young adults' *hidden resilience,* emerges from the culturally indigenous values and opportunities that are present in the lives of the individual (Ungar, 2004d). In studying these non-traditional strengths that make up these young adults' hidden resilience, it is important to explore the capabilities and coping mechanisms of this population. Strengths of homeless young adults are rarely highlighted in the literature, with an emphasis instead on the pathology and maladaptive nature of this population (Rew & Horner, 2003a). In their study on the personal strengths of homeless young adults, Rew and Horner (2003) identified strengths that help protect these youth and permit them to consider a more healthy future. One

qualitative study showed that the positive characteristics of resources and self-improvement emerge to assist homeless young adults to find a better way of life, allowing them to enhance their intrinsic motivation and allow for a sense of personal fulfillment (Ungar, 2004b). Other studies have focused on the strengths of these young adults and how they capitalize on these strengths to survive on the streets (Bender, Thompson, McManus, Lantry, & Flynn, 2007; Kidd & Davidson, 2007; Rew & Horner, 2003; Rew, Taylor-Seehafer, Thomas, & Yockey, 2001).

Ungar states that it is important to discuss resilience in at-risk youth from a perspective that is a "non-pathologzing discourse" (Ungar, 2004d, p. 6). This view presents an alternative way in which to view problem behaviors of young adults who are marginalized, allowing their maladaptive behavior to be viewed in a context that resembles the strength-based perspective garnered from the historical roots of social work. According to Ungar (2004), a number of authors have challenged the ideas of adaptivity by stating that in specific contexts, maladaptive and negative behaviors may be signs of positive coping and healthy behavior. In a research study on delinquent youth, Ungar and Teram (2000) found that young adults who were labeled as vulnerable were shown to have positive qualities including self-esteem, competence, meaningful involvement with the community, and attachment to peers. This perspective, which helps to reflect the diversity inherent in an individual's life experience, will help to provide a means to explore homeless young adults in this dissertation study and the unique manifestation of resilience among this group.

Resiliency and Strengths-Based Related Studies

An alternative interpretation of resilience for adolescents has been explored, with researchers posing the following question: is resilience always manifested with positive behaviors or can it be exemplified in non-traditional ways and have atypical outcomes (Hunter & Chandler, 1999)? Fifty-one young adults from an inner city school in New England were interviewed and the findings challenged how resilience is typically conceptualized in the literature. Despite the adolescents' turbulent and traumatic environments, these young adults stated they were resilient because they isolated themselves from those they could not trust and insulated themselves from emotional pain. These findings support the notion that resilience may not always manifest in a traditional manner, and at times may even seem to be negative yet still help youth survive in their precarious and risk-filled environment.

For homeless young adults living on the streets, social networks play a pivotal role in how these youth manifest resilience and display their strengths and capabilities. The concept of resilience and how it relates to social capital for young adults was explored to determine how young people's social networks can provide a protective factor in helping young adults deal with the disadvantages and adversity of living in a low-income public housing unit (Bottrell, 2009). This study examined resilience and found those young adults' peer groups helped to build strengths and challenged the typical deviant view of youth's social network. Related to the influence of peers groups on the development of an individual's strengths, another study explored the strengths of homeless children as identified by their mothers; findings revealed that protective factors buffer harsh life experiences on the streets (Israel & Jozefowicz-Simbeni, 2009). In the

midst of reports of emotional and behavioral problems, children's strengths were described as relational, associated with leadership, intellect and academic orientation, and physical attributes that included health and kinesthetic ability. This study underscores the importance of studies that highlight young adults' coping, resilience, and strengths, as well as the importance of a persons' social environment (Israel & Jozefowicz-Simbeni).

A different perspective on the influence of social connectedness and its impact on resilience emerged in a study that explored the predictors of resilience among homeless youth. Findings revealing that there was a significant and inverse relationship between resilience and social connectedness (Rew et al., 2001), supporting the notion that homeless young adults may see themselves as resilient when they are isolated from the more typical social support systems and rely solely on themselves. This finding, counter to those discussed previously, provide insight into the relative influence street peers/social networks have on homeless young adults. These contradicting notions shed light on the importance of evaluating and assessing a young person's social network and external influences on the impact they have on the young person's life.

Overall, youth who survive in adverse conditions have the ability to display extraordinary strengths and resilience. McGloin and Widom (2001) found that females with a history of abuse and neglect were more likely to demonstrate resilience across multiple domains including employment, homelessness, education, social activity, psychiatric disorder, substance abuse, and criminal activity than male counterparts. Additionally, findings from this study showed that 22% of abused and neglected individuals in this study met the authors' criteria for resilience. This finding demonstrates the capacity to manifest resilience in multiple areas in spite of a history of maltreatment

(McGloin & Widom, 2002). The protective factors which promoted resilience for homeless young adults after they experienced significant trauma on the streets was examined to determine how these young adults differed from their high-risk exposed street friends (Williams et al., 2001). Several themes emerged as protective factors that homeless young adults displayed, including a determination to persevere towards attaining goals, finding meaning and purpose in life that involved a spiritual connection, sense of hope and optimism, the ability to self-care in positive ways and a readiness to accept help from others.

The former studies highlight the areas of study that are currently being explored with regards to resilience and strengths of homeless young adults and other vulnerable populations. A shift from a maladaptive lens allows for researchers to examine the strengths of young adults who live on the fringe of society. This more positive perspective challenges commonly held beliefs of homeless populations and makes room for research and practice that embraces the resiliency of these unique individuals.

Stress and Coping Theory

As the nexus between the trauma homeless young adults experience on the streets and the distressing experiences they encounter before they leave their home is understood, it is important is to consider a theory that sheds light on the intrinsic coping process. The cognitive theory of stress and coping (Lazurus and Folkman, 1984) is relationally based, with stress and strain depending on "a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Folkman, 1984, p. 840). This

differentiates this theory from other theories in which the stressor is often identified as a distinct object or quality. Stress and coping theory supports the notion that a stressor or strain is a perceived relationship between the person and the environment in which they live (Folkman, 1984). This theory reinforces that a *resilient* frame of mind may reside more in the socially constructed negotiations in the mind of the homeless young adults rather than in the objective world of an observer.

This theory of coping allows for a relationship that is interactive, iterative, and contextual (Lazurus, 1993), which parallels Ungar's views of resilience as a contextual construct rather than a static quality. This framework is seen and understood as a process-oriented framework that allows for some fluidity in which the person and their environment are constantly and dynamically effecting each other in their attempts to cope with the stresses and strains that they are experiencing (Lazurus & Folkman, 1984). In outlining this theoretical framework to explore how homeless young adults cope with their precarious environments, it is important to understand that appraisals of experiences have profound effects on how the said experiences are comprehended and overcome—particularly if the life events are distressing or traumatic in nature. Cognitive appraisals are based on the meanings that are prescribed to the life events and significantly influence how they are interpreted and experienced (Averill, 1973). According to Folkman (1984), appraisals are composed of two processes: the primary appraisal and the secondary appraisal. In the primary appraisal, an individual will evaluate the perceived stressor and its relationship to the person's well-being, and in the secondary appraisal an individual contemplates their options and resources (Vickberg, Bovbjerg, DuHamel, Currie, & Redd, 2000). The process of appraisal allows a person to judge whether the situation

(stressor or strain) will either challenge or harm them and thus allows them to consider their options.

Functions of coping. Coping is seen in the literature as having two main functions for adaptability for human beings. Folkman (1984) states that individuals utilize coping skills to regulate their emotions and also manage the problems that are causing the stress. Lazurus (1993) suggests that problem-focused coping often occurs when "something can be done," while emotion-focused coping happens when "nothing can be done" (p. 9). Differentiating which type of coping predominates is highly contextual and dependent on how the individual evaluates the life situation, and the environment and resources that are available. Folkman, Lazaurs, Pimley, and Novacek (1987) suggest that this coping process is not stagnate but changes over time as we develop. Inherent changes occur with how individuals cope as they grow and age over the years, with younger people often utilizing more active, problem-focused coping including confrontive coping, social support usage, and also believing their life situations are more changeable than an older cohort (Folkman, Lazaurs, Pimley, & Novacek, 1987). The notion that coping strategies change as people grow older supports some of the impulsive and maladaptive coping mechanisms employed by homeless young adults as they appraise the multiple stressful encounters with life on the streets.

Homeless young adults living on the streets negotiate dangerous challenges daily. These youth also often deal with trauma and strain from their families of origin – oftentimes these childhood traumas have precipitated their leaving home. Some stress and coping theorists believe that a key part of the process of moving past some of these encounters is to make meaning out of the adverse life situations that often involve trauma

or loss. Park and Folkman (1997) suggest that oftentimes problems are not able to be "solved" and therefore may be ameliorated by controlling the meaning of the circumstance. This process of working through (Epstein, 1993), or "meaning making," will be successful when stressful circumstances, or distressful experiences, are reconciled with the individual's integrated sense of their own personal global meaning. Park and Folkman (1997) suggest that one's global meaning results after lifelong experiences that become integrated through development and life circumstances. Park and Folkman continue that one's global meaning is basically a person's fundamental outlook on life – it is the basis on how one views life in general with personal values, goals, and beliefs. In a study on breast cancer survivors, the authors found defined global meaning as the belief that one's life has order and purpose and this in turn was found to moderate intrusive thoughts and psychological distress (Agaibi & Wilson, 2005). Homeless young adults often employ their sense of global meaning onto the adverse life events that impede their lives.

Coping Related Studies

Recently, a shift from focusing on risk to adopting a strengths perspective that includes coping and resilience has been explored among homeless young adults and other populations of at-risk youth (Bender et al., 2007; Kidd & Carroll, 2007b; Liebenberg & Ungar, 2009; Rew & Horner, 2003a; Ungar, 2004d). More studies have begun to explore the protective factors and coping mechanism that could be targeted for strengthening in future interventions. Working with young adults in order to empower them so that they adopt more adaptive coping mechanisms can be tied to improving the outlook for this vulnerable population. A recent qualitative study found that young adults cited their own

resources and personal power as being crucial to how they coped with successfully transitioning out of homelessness (Lindsey, Kurtz, Jarvis, Williams, & Nackerud, 2000). Young adults in this study stated that their ability to learn from difficult experiences, take responsibility for their actions and distinguish between positive and negative influences was important in coping with transitioning into adulthood (Lindsey et al., 2000). An interesting finding in this study was that participants in the study reported that learning through difficult experiences was the only way they had gained insight into "hard lessons." This research finding reinforces the notion that a homeless young adult's coping strategies may not always have a pro-social pathway.

In exploring the coping strategies that are related to suicidal ideation, a study examining problem-focused and avoidant coping mechanisms utilized by homeless young adults was conducted (Kidd & Carroll, 2007b). An important finding in this study was that feeling more optimistic about the future was found to be a negative predictor of increased suicidal ideation. Feeling better about the future was the only significant main effect regarding predicting young adults' street suicide attempts (Kidd & Carroll, 2007b). This is important when considering how homeless young adults view the future and their sense of optimism related to how they cope with adversity and deal with the trauma that they experience on a daily basis.

Considering the importance of a young person's street family on homeless young adults, a study was conducted to expand on the limited knowledge base of coping literature on this population (Kidd, 2003). In a qualitative study of 80 street young adults, Kidd found that social support experiences with friends, or their street peers were integral to their coping with life on the street. Participants described that their personal strengths

and a belief in themselves was central to their ability to cope with the distressing aspects of being homeless (Kidd). Young adults also revealed that a belief that life would get better in the future was an integral coping mechanism.

The literature on coping for homeless youth in general suggests that the mechanisms in which homeless young adults engage in are quite different than those for young adults not living on the streets. Young adults reported hanging out with friends, smoking marijuana, and drinking alcohol were coping strategies commonly used (Kidd, 2003). Using drugs and alcohol as well as possessing a unique ability to locate resources serve as effective strategies to cope with problems encountered on the streets by these young adults. Learning the "hard lessons" and adopting an optimistic perspective also allows young adults to gain insight into the obstacles and barriers they face living in a marginalized sub-culture.

Shortcomings in the Literature

The literature on resilience, personal strengths, and coping mechanisms among homeless young adults is limited. While recent studies have begun to address the risk and protective factors associated with life on the streets for America's young adults, a problem-centered focus predominates. The high rates of depression, posttraumatic stress disorder symptomology, suicidality, and substance use issues that plague this population have dominated the research agendas of many researchers and scholars in the knowledge base. The numerous health and behavioral challenges that serve as barriers for this population have been the focus of study. While examining the number of problems that homeless young adults face is important, it is also becoming evident that so is understanding how these youth persevere and display coping skills in a dangerous

environment. In an effort to understand the personal strengths and unique resiliency of homeless young adults, this dissertation study seeks to explore the possibilities of how resilience is manifested. Important recommendations can be made for service providers working with these youth to better engage them and emphasize strengths that may improve their self-esteem and self-efficacy, plan for life goals, adopt a more optimistic sense of the future and potentially transition out of homelessness. Only in recent years have scholars begun to research the strengths and survival skills of this vulnerable population. A continued focus on the aberrant nature of the homeless will only add to a negative stereotype that pervades the literature and practice field, inhibiting clinicians and service workers from recognizing homeless young adults' extraordinary resilience that may help with the multiple challenges homeless adults face in unstable environments.

The single study that examines predictors of resilience among homeless young adults used a small sample (n=59) (Rew et al., 2001) to explore the relationships among resilience, connectedness, and additional risk factors. Rew and colleagues' study explored how resilience often acts as a moderating process during a time of stress and strain. This dissertation study, which utilizes a larger study sample, may be more rigorous than previous work done on this population by not only examining predictors but also exploring a potential mediator, coping. Additionally, this dissertation study utilizes a measurement scale that has been previously been used and shown to be both valid and reliable with a homeless young adult population to reflect various levels of resilience. The further evaluation of this scale's psychometric properties in this dissertation study will also add to the knowledge base regarding the use of this scale with a homeless young adult population.

Closing the Gaps

This dissertation will present a picture of how resilience is manifested among one group of highly transient homeless young adults. Utilizing quantitative research methods, the author will present an analysis that highlights predictors of young adults' strengths and resilience. Social work implications for practice, policy, and further research will be explored. Specific aims for this study are detailed in the next chapter.

Purpose of the Study

The purpose of this dissertation study is to explore the relationships between various domains of the estrangement model (institutional disaffiliation, psychological dysfunction, human capital, and identification with the homeless culture) and coping and resilience among homeless young adults. The literature review in Chapter Two reveals a significant gap in the research regarding how resilience is uniquely manifested for this population and describes the conceptual framework that will organize the risk and protective factors inherent in the lives of homeless young adults. Chapter Three will describe the research design and methodology that seeks to examine the factors that predict resilience for homeless young adults and explore if coping may mediate this process in order to shed light on their personal strengths and provide insight into how these vulnerable young adults cope with being homeless.

Chapter 3: Research Design and Methodology

Methods

Study Design

This dissertation study was part of a larger multi-site research project conducted to understand how homeless young adults perceived and processed traumatic experiences. Site locations for the research project included, Austin, Texas; Denver, Colorado; and Los Angeles, California. In an attempt to capture the multitude of ways in which young adults cope with life on the streets and their safety and survival strategies, researchers administered a detailed questionnaire and interviewed youth to elicit their perceptions of traumatic life experiences. This study captured data regarding the young adults' demographics, mental status, coping strategies, social connectedness, alcohol and substance use, self-esteem, survival strategies, service usage, and experiences and perceptions of trauma.

This study utilized a cross-sectional survey design in order to capture information regarding variables among homeless young adults. The 22 page survey was designed and revised by the Sanna Thompson PhD, Principal Investigator of the study, and her colleagues, Kimberly Bender, PhD, principal investigator in Denver, CO, and Kristin Ferguson, PhD, principal investigator in Los Angeles, CA. The author served as a research assistant in the Austin study. Responsibilities included administering surveys, creating a database, entering data, and data cleaning for the Austin study location. The Austin data was used for this dissertation study. Future research articles will examine the

entire Austin, Denver, and Los Angeles combined data; however, the author chose to utilize the Austin data due to her direct contact with this portion of the study.

Measures were included that reflected theoretically important factors among homeless young adults, including mental health disorder, substance use measures, and measures that elicited street experiences for this population. Additionally, the author and other doctoral student research assistants provided insight into the construction of the survey and determination of appropriate measurement scales.

Sample and Participant Recruitment

The data for this study was collected from a convenience sample of homeless young adults at a drop-in center in Austin, Texas. This drop-in center, located in a downtown urban area, has made contact with over 4000 street young adults since they opened in 1993. In 2010-2011, 2,108 young adults received meals, 306 new young adults were enrolled in the drop-in center, 498 young adults received dental or health care, according to a case manager at the center (Jenn McDavitt, personal communications, May, 31, 2011). Youth accessing the drop-in center had access to a multitude of services, including access to food pantry, group meals, clothing and hygiene supplies, health and dental care, case management and counseling. At the time data was collected, the drop-in center was staffed by a full-time director, and additional staff included two full-time counseling student interns who assist with case management, a part-time office assistant and a recently hired social worker who is available for individual and group counseling. The drop-in center was housed in the basement of a church and was currently open three

days a week from 12:00 p.m. to 4:00 p.m. with outreach, case management and therapeutic services available the other two days each week.

The sample consisted of 192 young adults, ages 18 to 24, who utilized services at the homeless drop-in center between the months of February 2010 and March 2011. Inclusion criteria for young adults to participate in this study required they were between the ages of 18 to 24 years of age, were identified by director and staff and were given a four-digit "phase number" that they used to access services at the facility. The author and other research assistants recruited homeless young adults at the drop-in center to participate in the survey. Young adults were approached by the author, or other doctoral student research assistants, and asked if they would like to participate in the study. Young adults were given brief information about the purpose of the study and if they wanted to participate they were accompanied to a private room. The young adults' phase numbers were recorded on copies of all the surveys to ensure that individuals were not surveyed more than once. Young adults were excluded from this study if they were identified as being under the influence of drugs or alcohol, were experiencing a significant mental health problem, or having aggressive behaviors that would put interviewer at risk. All homeless young adults were compensated for their participation in this study. Those who completed the quantitative survey received a $10 gift card to a local grocery store.

Data Collection Procedures

The Institutional Review Board (IRB) at the University of Texas at Austin approved all data collection procedures prior to study implementation. All members of the research team had at least 2 years of licensed clinical expertise and were prepared to utilize therapeutic skills during study implementation due to the sensitive nature of some of the questions being asked of the young adults. All members of the research team received a three-hour training to administer both the survey and interview. Informed consent was obtained by reading aloud the IRB approved consent form to the individuals and having them provide a written signature and four-digit phase number for identification. Homeless young adults were informed of their rights of confidentiality, risks and discomforts of the survey (due to the sensitive and personal nature of some of the questions), their voluntary rights to withdraw from the study and examples of mandatory reporting regarding child abuse and suicidality were described.

Surveys and interviews with all homeless young adults were conducted during the regular operating hours of the drop-in center. The author, or one of three other doctoral students on the research team, administered the surveys. All surveys were administered in either a preschool classroom or the private choir room. These private rooms were located on different floors and separated from the drop-in center to ensure privacy. The survey took approximately 45 minutes to complete. All surveys were read aloud to participants to ensure that reading abilities did not affect understanding the survey questions. Each participant was also given a written copy of the survey for him or her to read along with the researcher. Participants were also informed that they could read the more sensitive questions themselves and fill out the questions, if they were

uncomfortable with the researcher reading personal questions aloud. Participants were also reminded that they could ask questions about the survey or stop at any time if they became uncomfortable with the sensitive nature of the questions. At the conclusion of the survey administration, the researcher asked the young adult if they had any questions or wanted to process any feelings that may have emerged during the survey process. The survey was concluded once the participant communicated to the researcher that he or she was not affected by any sensitive questions and they had no questions for the researcher.

Measurement of Variables

Dependent Variable: Resilience

For the proposed study, resilience was measured by the Resilience Scale (Wagnild & Young, 1993)(See Appendix A). The Resilience Scale was adapted and published to measure an individual's level of resilience. This scale was originally created based on the findings from a 1987 qualitative study of how older adults fared following a major life event. Through their grounded theory research and review of the literature on the construct of resilience, the authors of this scale identified the five characteristics that make up resilience. These five characteristics serve as the guiding components that make up the present day Resilience Scale. The five concepts that underlie the creation of this measure are: self-reliance, meaning, equanimity, perseverance, and existential aloneness. Wagnild and Young (2009) define these five components as: *Self-reliance*, connoting the idea of relying on one's own personal strengths; *meaning*, a realization that that there is a purpose to one's own life; *equanimity*, the balanced perspective of one's own life and accepting life's trials and tribulations; *perseverance*, the ability one has to keep going in

life despite its setbacks and adversities; and finally, *existential aloneness*, the idea that although some life experiences are shared, some are completely unique and must be faced and dealt with alone.

The Resilience Scale consists of 26 items that reflect the five characteristics described above, which Wagnild and Young, the authors of the scale, believe compose the construct of resilience. This was coded as "disagree strongly" = 1, "disagree" = 2, "somewhat disagree" =3, "uncertain" =4, "somewhat agree" = 5, "agree" = 6, and "strongly agree" = 7. The Resilience Scale has shown consistent reliability with alpha coefficients ranging from 0.84 to 0.94. Factor analysis completed by Wagnild and Young has shown that it has two major factors, which are, *acceptance of self and life* and *personal competence* (Wagnild & Young, 1993). The first factor, *acceptance of self and life*, includes 8 items that suggest adaptability, balance, flexibility, and a balanced perspective of life. The second factor, *personal competence* includes 17 items that suggest self-reliance, independence, determination, invincibility, mastery, resourcefulness, and perseverance. Constructs that the Resilience Scale has been positively correlated with are, "optimism, morale, self-efficacy, self-reported health, health promoting behaviors, forgiveness, self-esteem, sense of coherence, effective coping, and life-satisfaction" (Wagnild, 2009, p. 18). In a review of completed studies that used the Resilience Scale, Cronbach's Alpha ranged from 0.72 to 0.94, which supports good internal consistency of this measure across populations with a variety of individuals from diverse socioeconomic groups, ages, and educational backgrounds (Wagnild, 2009). In Ahern, Kiehl, Sole, and Byers' (2006) review of instruments measuring resilience, the authors stated that Wagnild and Young's Resilience Scale was

the most appropriate instrument to use to study resilience in the adolescent population due to a lack of research applications with the other tested instruments. This scale has already shown promise with internal consistency rating of 0.91 with a research study on homeless adolescents (Rew et al., 2001).

Primary Independent Variables: Demographic/Background Variables

Independent Variable 1: Age. This was measured as the age of the individual in years.

Independent Variable 2: Gender. This variable includes categories of male and female. This was coded dichotomously as male =1 and female =2.

Independent Variable 3: Ethnicity. This variable includes the following categories: White/not Latino, Black/not Latino, Latino, American Indian, Asian and other. This was coded as White/not Latino =1, Black/not Latino =2, Latino =3, American Indian =4, Asian =5, and Other =6.

Independent Variable 4: Childhood Trauma History. This variable included in the demographic category as a reflection of the high rates of trauma and victimization which occur in youth's home of origin often prompting them to run away from home initially (Whitbeck et al., 2001a; Whitbeck, 2009). Childhood experiences of trauma were assessed by administering the Childhood Trauma Questionnaire (CTQ) (Bernstein & Fink, 1998) (See Appendix B). The CTQ is a brief self-report measure that retrospectively assesses physical, emotional and sexual abuse experiences among adolescents and young adults. Exploratory and confirmatory factor analyses were conducted on the original version of this measure in order to create the 28 –item version

of this scale (only 25 items were used for this study – the 3 validity items were not included).

This trauma assessment has proven useful as a screening tool and research tool in four diverse populations to understand the level and severity of trauma that has been experienced (Bernstein et al., 1994). Respondents indicate whether they have "never" = 1, "rarely" = 2, "sometimes" = 3, "often" = 4, or "very often" = 5 experienced a certain traumatic event in childhood or adolescence. The CTQ uses the Likert scales in order to create dimensional scales that allow cut scores to identify those individuals who have histories of abuse and neglect. Cut scores indicate mild trauma severity and are as follows for the five subscales: emotional abuse (8), physical abuse (7), sexual abuse (5), emotional neglect (9), and physical neglect (7). The subscales were based on the following definitions of abuse and neglect. *Emotional abuse* was based on the definition of, "verbal assaults on a child's sense of worth or well-being or any humiliating or demeaning behavior directed toward a child by an adult or older person" (Bernstein et al., 2003, p. 175). *Physical abuse* was based on the definition of, "bodily assaults on a chld by an adult or older person that posed a risk of or resulted in injury" (Bernstein et al., 2003, p. 175). *Sexual abuse* was based on the definition of, "sexual conduct or conduct between a child younger than 18 year of age and an adult or older person" (Bernstein et al., 2003, p. 175). *Emotional neglect* was based on the definition of, "the failure of caretakers to meet children's basic emotional and psychological needs, including love, belonging, nurturance, and support" (Bernstein et al., 2003, p. 175). Finally, *physical neglect* was based on the definition of, "the failure of caretakers to provide for a child's

basic physical needs including food, shelter, clothing, safety, and health care" (Bernstein et al., 2003, p. 175).

The CTQ has shown excellent test-retest reliability and convergent and discriminant validity with another structured trauma interview (Bernstein et al., 2003). A principal components analysis of the CTQ revealed four factors which included, physical/emotional abuse, emotional neglect, sexual abuse, and physical neglect (Bernstein et al., 1994). In a later study (Bernstein, Ahluvalia, Pogge, & Handelsman, 1997) that tested the reliability of this scale, physical and emotional abuse items loaded on separate factors, thus creating the five dimensions/subscales for this measure. The short version of the CTQ used for this dissertation study, has five items that represent each area of maltreatment.

A confirmatory factor analysis of the CTQ indicates that items on this measure perform equivalently for four different groups of people with various trauma histories. The factor structure of this measure demonstrated itself as a good fit for the diversity of maltreatment experienced among four samples. The CTQ also demonstrated good criterion validity as shown when corroborating data from a sample of 179 adolescents from information reported to their therapists (Bernstein et al., 2003). The CTQ has demonstrated reliability with test-retest coefficients ranging from .79 to .86 over a range of 4 months (Bernstein & Fink, 1998) and acceptable internal consistency across a range of samples with coefficients ranging from a median of .66 for the physical neglect subscale to a median of .92 for the sexual abuse subscale. This tool has demonstrated itself to be an excellent tool to use with larger samples in order to identity those who have experienced trauma in a brief assessment.

Primary Independent Variables: Disaffiliation

Independent Variable 5: Foster Care. Placement in the foster care system was assessed by young adults' indication during the survey administration of their answer to the following question, "Have you ever been in foster care?" If youth answered affirmatively, they were prompted to report the total number of placements they experienced. This was coded dichotomously as yes = 1 and no = 0.

Independent Variable 6: Criminal Justice Involvement. Involvement in the criminal justice system was assessed by young adults' indication during the survey administration in answer to the following question, "Have you ever been arrested?", "Have you ever been in juvenile detention?", and "Have you ever been in jail or prison?" This was coded as yes = 1 and no = 0. If young adults answer affirmatively to any of the above questions, they were prompted to report the number of times they had been arrested, detained in juvenile detention and in jail or prison.

Independent Variable 7: Education. Education level was assessed by asking which young adults completed high school or received their GED and those that dropped out by their indication during the survey administration. This was coded dichotomously as graduated, GED, or enrolled in school or program as yes = 1 and no formal source of education as no = 0.

Primary Independent Variables: Psychological Functioning

Independent Variable 8: Substance Use. Substance use (alcohol and drug use) was measured by modules of the Mini-International Neuropsychiatric Interview (M.I.N.I.) (Sheehan et al., 1998)(See Appendix C). The M.I.N.I. is a diagnostic interview that was developed in France and the United States to examine 17 psychological disorders (Lecrubier et al., 1997). This brief screening tool was created in order to be administered by clinicians or interviewers with little training needed. Each module utilized in this study was used as a standardized diagnostic interview with modification from the original. Structured diagnostic interviews have increasingly been used in research studies and in accountability for providing care in clinical settings (Sheehan et al., 1998). Moreover, the M.I.N.I., more comprehensive than a brief screening tool, was created with several goals in its utility, including brevity, ease in administration, specific, and compatibility with the International Classification of Diseases (ICD-10) and the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) (Sheehan et al., 1998).

In the alcohol abuse and dependence module an initial screening question is used to rule out an alcohol abuse or alcohol dependence diagnosis if the individual answers negatively (Lecrubier et al., 1997). Additional responses are elicited from respondents in a decision tree manner in which positive answers are explored with more in-depth questions in order to distinguish between alcohol dependence and alcohol abuse. For example, if an individual answers three or more questions affirmatively in the first alcohol module, then they are categorized with alcohol dependence and there is no need to answer any further questions that would indicate alcohol abuse; alcohol dependence

preempts alcohol abuse. This manner of questioning is consistent in the questions regarding the substance use module as well. If an individual answers three or more questions affirmatively in substance use module, then they are categorized with substance dependence and there is no need to answer any further questions that would indicate substance abuse. However, in both modules (alcohol abuse/dependence and substance abuse/dependence) if a person does not answer three or more questions affirmatively, then they continue with the module, answering additional questions to determine if they should be coded as current alcohol or substance abuse.

This diagnostic tool has shown to be consistent and have predictive power (Sheehan et al., 1997). The results for reliability and validity were very good overall for the M.I.N.I. and is completed in a shorter amount of time than other common diagnostic interviews including the Structured Clinical Interview (SCID) and the Composite International Diagnostic Interview (CIDI). Sheehan and colleagues computed the Kappa values for the M.I.N.I. in concordance with Structured Clinical Interview (SCID) for DSM-III-R diagnoses with current alcohol dependence as .67, current drug dependence as .43, and lifetime drug dependence as .64. Kappa values for the M.I.N.I. in concordance and the Composite International Diagnostic Interview (CIDI) with alcohol dependence as .82 and drug dependence as .81. This was coded dichotomously as alcohol abuse as yes = 1 and no = 0; alcohol dependence as yes = 1 and no = 0; substance abuse as yes = 1 and no = 0; and substance dependence as yes = 1 and no = 0.

Other substances used was also measured by asking homeless young adults to indicate on a research-developed checklist their drug of choice. Young adults indicated which substances they used in the past year. Choices included alcohol, marijuana,

cocaine/crack, prescription pills, heroin/morphine/opiates, meth/powder/base/crystal, LSD/hallucinogens, ecstasy, PCP or angel dust, amphetamines, inhalants, and over the counter drugs. This was coded dichotomously as yes = 1 and no = 0.

Independent Variable 9: M.I.N.I. Depression. Mental health status was measured by utilizing segments of the Mini-International Neuropsychiatric Interview (M.I.N.I.) (Sheehan et al., 1998)(See Appendix C). Young adults were screened for major depressive disorder (current or recurrent). Two initial screening questions were asked of respondents in order to rule out any diagnosis of depression if the individual answers negatively. Similar to the description for the alcohol and substance use modules, the major depressive episode module utilizes decision tree logic to elicit responses from individuals that determines whether or not they are experiencing a current major depressive episode. Questions are asked to screen out those individuals who have not experienced any significant symptoms of depression. Following the initial screening questions in this section, respondents continued to answer questions regarding depressive symptomatology. Individuals who answered five or more questions affirmatively in this module were assessed for any recurrent episodes of depression they had experienced.

Results from reliability and validity testing for the M.I.N.I. for both substance use and mental health status show favorable results in diagnosing individuals in relatively short lengths of time, and extremely useful for research studies utilizing large study sample sizes (Sheehan et al., 1998). According to Sheehan and colleagues, the M.I.N.I. has been shown to be successful in eliciting symptom criteria used to make DSM-III-R and International Statistical Classification of Diseases and Related Health Problems (ICD -10) diagnoses in half the time needed for other comparable diagnostic measures,

including the Structured Clinical Interview – patient version (SCID-P) or the Composite International Diagnostic Interview (CIDI)(Sheehan et al., 1998). Although the M.I.N.I. allows for less subtyping that the SCID-P, it's modules have been extremely useful in research and academic settings where it has been used with large samples as a screening assessment (Sheehan et al., 1998). Kappa values were computed for the M.I.N.I. in concordance with Structured Clinical Interview (SCID) for DSM-III-R diagnoses with major depressive disorder as .84. Kappa values for the M.I.N.I. in concordance and the Composite International Diagnostic Interview (CIDI) with major depressive disorder as .73. This variable was coded dichotomously as major depressive disorder as yes = 1 and no = 0.

Independent Variable 10: M.I.N.I. PTSD. Young adults were screened for posttraumatic stress disorder (current or recurrent). Sheehan and colleagues (1998) computed Kappa values for the M.I.N.I. in concordance with Structured Clinical Interview (SCID) for DSM-III-R diagnoses with posttraumatic stress disorder as .78. As with the previous modules, the PTSD module of the M.I.N.I. uses three initial screening questions in order to rule out any diagnosis of PTSD if the person answers negatively. Respondents who answered affirmatively regarding experiencing a traumatic event in their lifetime were then questioned about the extent of this experience. Individuals who experienced any posttraumatic symptoms as a result of their traumatic event continued to answer questions that probe further. Individuals who answered three or more questions regarding PTSD symptoms in this module were asked additional questions in order to elicit a diagnosis of current posttraumatic stress disorder. This scale was coded dichotomously for posttraumatic stress disorder as yes = 1 and no = 0.

Independent Variable 11: Self-esteem/Self-efficacy. Level of self-esteem and self-efficacy were measured by a composition of 13 items from the Client Evaluation of Self and Treatment (CEST) (Joe, Broome, Rowan-Szal, & Simpson, 2002)(See Appendix D). Researchers initially created this measure in order to understand patient functioning and treatment progress as related to an individual's self-esteem. This measure was used to monitor patient and treatment progress in substance abuse treatment facilities. Developed and researched over the course of ten years regarding substance use, this assessment tool has demonstrated effectiveness and utility in a treatment process (Joe et al., 2002).

The CEST in its original long format of 144 items is typically self-administered and takes approximately one half hour to complete. This assessment tool consists of several domains that include: treatment motivation, psychological functioning, social functioning, treatment process, social network support, and services received. For the purposes of this dissertation study in understanding homeless young adults' self-esteem and self-efficacy, only the 13 items (subscales for self-esteem and self-efficacy) reflecting these concepts were used from this measure. Six items measuring self-esteem and 7 items measuring self-efficacy were compiled and administered to the youth to gain an understanding of their sense of self. Young adults responded to statements from the self-esteem or self-efficacy subscales according to how they agreed or disagreed with the descriptions. This was coded as "disagree strongly" = 1, "disagree" = 2, "uncertain" =3, "agree" =4, and "agree strongly" = 5.

The coefficient alpha for the scales within the CEST has estimates of .70 or above for patient-level measurement (Joe et al., 2002). The dimensionality of each of the CEST subscales were examined separately and revealed principal component analysis results

with eigenvalues above 1.0 including self-efficacy. A confirmatory factor analysis, in conjunction with the principal component analysis suggests that this assessment tool is multidimensional. Joe and colleagues conducted a confirmatory factor analysis that included all 16 of the scales (including the self-esteem and self-efficacy scales used in this study) indicated that the CEST demonstrated good cross-structure validity.

The overall favorable psychometric properties of this measurement instrument lend itself to be used as a sound monitoring tool for intervention. It is also useful as a baseline measurement of an individual's treatment progress, including an individual's level of self-esteem and self-efficacy.

Independent Variable 12: Trauma Experience. Trauma experienced on the streets was measured by The Traumatic Life Events Questionnaire (TLEQ) (Kubany et al., 2000). This measure was created to fill a gap that existed in previous trauma assessments for detecting exposure to typically non-assessed types of trauma (sudden death of loved ones, witness to severe assault of others). The development of the TLEQ included a process in which 16 types of traumatic events were included in the brief screening tool. The TLEQ originally included 22 items that are behaviorally-descriptive of potential traumatic events. This study only included 10 of the TLEQ items that apply to the homeless young adult population, as determined by the literature. Frequency of the traumatic event was originally typified for respondents to answer, "never", "once", "twice", or "if more than twice, how many times." For the purposes of this study the research team only included options for young adults to indicate "never" = 0, "once"=1, or more than once" =2. In the analyses for this dissertation study this variable was dichotomized as "never" = 0 and "once or more than once" = 1 to indicate trauma experience. A strength of this

assessment measure is its content validity due to its inclusion of a broad range of traumatic events not previously included in previous measures of trauma (Kubany et al., 2000). In a one-week test-retest analysis of this measure in a sample of college students, Kubany and colleagues found kappa coefficients were .40 or higher for 14 of the 16 types of traumatic events. This measure also demonstrated good convergent validity compared to a traumatic events life interview that corresponded to questions on the TLEQ.

Primary Independent Variables: Human Capital

Independent Variable 13: Survival Behaviors. Survival behaviors were measured by a researcher developed checklist in which individuals indicate behaviors utilized on the streets that helped them make money, including selling self-made items, panhandling, selling clothes or personal possessions, selling blood or plasma, dealing drugs, trading sexual favors or resources, gambling, or stealing. This was coded dichotomously as yes = 1 and no = 0.

Independent Variable 14: Employment. Employment was measured and assessed for homeless young adults by researcher-developed checklist where individuals can indicate whether or not they have any type of formal employment, including full-time, part-time, seasonal work, or pick-up jobs. Each was coded dichotomously as yes = 1 and no = 0.

Independent Variable 15: Future Time Perspective. Future time and their sense of optimism versus pessimism was measured by the Future Time Perspective Scale (FTP) (Heimberg, 1963)(See Appendix F). Heimberg's measure is a self-report scale that was created for her dissertation study in order to examine how individuals conceptualize

future time in relation to it being perceived as predictable, structured, and controllable. A factor analysis of the FTP yielded five domains that include *flow of time, optimistic mastery, degree of future structure, time awareness, and rejection of fatalism* (Walsh, 1993). The FTP scale has 25 items on a Likert scale that include statements regarding their sense of optimism or pessimism regarding how time passes and their future. Each item on the FTP scale has a score from 1 to 7 and a range from 25 to 175, with higher scores indicating a more positive sense of the future among homeless young adults. Cronbach's alpha for the FTP was reported as ranging from .50 to .76 for the five aforementioned subscales: articulation with the flow of time (α=.66) optimistic mastery (α= .71) degree of future structure (α= .76) time-mindedness (α= .50) and rejection of fatalism (α= .62) and (α= .86) for the overall total score. Construct validity for the FTP scale has been reported for a comparison of the FTP to internal locus of control (r=.50) and anxiety (r= -.53) (Heimberg, 1963). The high internal consistency and correlations with other measures of theoretically similar behavioral criteria demonstrates its utility in the field. Young adults indicated the degree in which they agreed or disagreed with statements that related to their perspective of future time. Respondents indicated "strongly agree" = 1, "agree" = 2, "uncertain" = 3, "disagree" = 4, and "strongly disagree" = 5.

Primary Independent Variable: Homeless Culture

Independent Variable 16: Length of time on the streets. Time spent living on the streets was measured in years since the individual was last in their home.

Independent Variable 17: Social Connectedness. Social connectedness was measured by the Social Connectedness Scale (Lee & Robbins, 1995)(See Appendix G). The Social Connectedness Scale emerged as a result of the need to explore the concept of belongingness and connectedness as a construct that provides and predicts social satisfaction, well-being, and self-esteem (Lee & Robbins, 1995). This scale was based on self-psychology theory (Kohut, 1983) and the notion that a sense of connectedness allows individuals to better identify with others, increase perceived social support and decrease a sense of isolation and loneliness. Forty-five items were included on the original Social Connectedness Scale in order to reflect a sense of belongingness. Items are on a Likert-scale and are written in a negative direction in order to focus on the frustrations that may exist for certain groups regarding a sense of connectedness and also to avoid social desirability bias that may exist while completing the measure. The scale was shortened and certain items were excluded after the original principal components analysis revealed that particular items did not satisfy a moderate correlation cutoff of r=.30. Lee and Robbins found that nine factors emerged from the factor analysis with eigenvalues greater than 1.00. A scree plot reduced these to two major factors that accounted for 38% of the variance. The 16 items included in the Social Connectedness Scale for this dissertation study come from these two factors, which are *social connectedness* and *social assurance*. The first subscale, *social connectedness*, consists of items that reflect connectedness, affiliation, and companionship. These items suggest that individuals may have experienced frustration with friends or peers, and experience difficulty in socially connecting to others. The second subscale, *social assurance*, consists of items that reflect companionship and affiliation in relation to reassurance. The items in this subscale

suggest that individuals may need reassurance from others to have a sense of belonging, or feel frustrated from receiving inadequate support from others. Internal consistency was high for the first eight items (α = .91), and the second eight items (α = .82) (Lee & Robbins, 1995). Young adults indicated the degree in which they agreed or disagreed with statements that related to their level of social connectedness. Respondents indicated "strongly agree" = 1, "agree" 2, "agree somewhat" = 3, "disagree somewhat" = 4, "disagree" = 5, and "strongly disagree" = 6.

Independent Variable 18: Transience. Transience among homeless young adults was assessed by determining the number of cities a young adult had lived in at the time of the survey.

Independent Variable 19: Safety strategies. Safety strategies were assessed for homeless young adults by researcher-developed checklist developed from previous research determining how homeless young adults stay safe on the streets. Options include, carrying a weapon, staying away from certain places, staying away from certain people, sleeping during the day and staying awake at night, and always making sure that they were with someone they trust. Each was coded dichotomously as yes = 1 and no = 0.

Mediating Variable

A mediating variable is a variable that accounts for the relationship between the predictor variables and the dependent variables. Mediating variables explain how or why certain effects occur and implies a predictor variable causes a mediator which in turn causes a dependent variable (Baron & Kenny, 1986).

Mediating Variable: Coping. Coping was assessed by the Coping Scale (Kidd & Carroll, 2007a)(See Appendix H). The Coping Scale was administered to obtain homeless young adults' perspectives on their mechanism for coping and measures how often individuals utilize certain coping skills when confronted with a problem. The scale was originally created in order to examine how homeless young people utilized coping strategies to ameliorate suicidal ideation. Several different ways of coping were identified resulting in this scale that addressed the various strategies identified in the analysis and previous qualitative analyses.

Coping activities on this scale are measured using a five-point scale from "never" = 1, "rarely" = 2, "sometimes" = 3, "often" = 4, and "almost always" = 5, with coping being assessed as *problem-focused coping, avoidant/disengagement coping, social coping, and other coping domains that include how young adults' use anger, substances, or spirituality to cope with their problems.* This scale resulted from a study that examined the relationship between coping and suicidality among homeless young adults to confirm findings found in previous qualitative studies with quantitative findings. Comprised of items from Folkman and Lazurus's (1985) Ways of Coping Questionnaire (WCQ), Cronbach's alpha for *problem-focusing coping* items on this scale was $\alpha = .85$ for "concentrated on what to do and how to solve problem" and "think about what happened and try to sort in out in my head." *Avoidant/disengagement coping* was measured by two items "try not to think about it" and "go to sleep" was $\alpha = .61$. *Social coping* was measured by items included "go to someone I trust for support" which was derived from previous qualitative work of the scale author (Kidd, 2003). *Other domains of coping* included, "try to learn from the bad experience", "use my anger to get me through it",

“use drugs or alcohol”, “do a hobby”, “try to value myself and not think so much about other people’s opinions”, “realize I ams strong and can deal with whatever is bothering me”, “think about how things will get better in the future”, and “use my spiritual beliefs or belief in a higher power.” These statements were also derived from previous qualitative work with homeless youth (Kidd, 2003).

Table 1

Variables Included in the Study

	Domains	Name	Reference	Variable Type	Coding	Reliability	Items	Subscales
1	Demographic	Age		Continuous				
2		Gender		Dichotomous	Male =1 Female = 2			
3		Ethnicity		Categorical	White/not Latino = 1 Black/not Latino = 2 Latino = 3 American Indian = 4 Asian = 5 Other = 6			
4		Childhood Trauma Questionnaire	Bernstein & Fink, 1998	Continuous	Never = 1 Rarely = 2 Sometimes = 3 Often = 4 Very often = 5	α = .91 for all five subscales	25	physical abuse, emotional abuse, emotional neglect, sexual abuse, physical neglect
5	Disaffiliation	Foster Care		Dichotomous	Ever been in foster care Yes = 1 No = 0		1	
6		Criminal Activity		Dichotomous	Ever been arrested Yes = 1 No = 0		1	
7		Education		Dichotomous	Graduated, GED, or Enrolled in school or program Yes = 1 No = 0		1	
8	Psychological Functioning	MINI Alcohol - Substance	Sheehan et al., 1998	Dichotomous	Alcohol dependence/Abuse Substance dependence/Abuse Yes = 1 No = 0	κ = .67	12 - Alcohol 10 - Substance	abuse versus dependence

Table 1 (continued)

	Domains	Name	Reference	Variable Type	Coding	Reliability	Items	Subscales
9		MINI Depression	Sheehan et al., 1998	Dichotomous	Major depressive Disorder/ Current or Recurrent Yes = 1 No = 0	κ = .84	11	
10		MINI –PTSD	Sheehan et al., 1998	Dichotomous	PTSD current Yes = 1 No = 0	κ = .78	15	
11		Self Esteem/Self Efficacy	Joe, Broome, Rowan-Szal, & Simpson, 2002	Continuous	Disagree strongly =1 Disagree =2 Uncertain = 3 Agree =4 Agree strongly = 5	α = .70	13	self esteem, self efficacy
12		Traumatic Life Events Questionnaire	Kubany, et al., 2000	Dichotomous	Never = 0 Once or more than once= 1		10	
13	Human Capital	Survival Behaviors		Dichotomous	Selling self made items, panhandling, selling drugs, trading sex, gambling, stealing Yes = 1 No = 0		5	
14		Employment		Dichotomous	Formal versus informal means Yes = 1 No = 0		2	
15		Future Time Perspective	Heimberg, 1963	Continuous	Strongly agree = 1 Agree = 2 Uncertain = 3 Disagree = 4 Strongly disagree = 5	α = .50 to .76 for all five subscales	25	flow of time, optimistic mastery, degree of future structure, time awareness, and rejection of fatalism
16	Homeless Culture	Length of Time on Streets		Continuous				
17		Social Connectedness	Lee & Robbins, 1995	Continuous	Strongly agree = 1 Agree = 2 Agree somewhat = 3 Disagree somewhat = 4 Disagree = 5 Strongly disagree = 6	α = .91 α = .82	16	social connectedness, social assurance
18		Transience		Continuous				

Table 1 (continued)

	Domains	Name	Reference	Variable Type	Coding	Reliability	Items	Subscales
19		Safety Strategies	Researcher developed	Dichotomous	carrying a weapon, staying away from certain places, staying away from certain people, sleeping during the day and staying awake at night, and always making sure that they were with someone they trust Yes = 1 No = 0		5	
	Coping	Coping Scale	Kidd & Carroll, 2007	Continuous	Never = 1 Rarely = 2 Sometimes = 3 Often = 4 Almost always = 5	α =.85, α =.61	14	problem-focused coping, avoidant/disengagement coping, social coping, and other coping domains
	Resilience	Resilience Scale	Wagnild & Young, 1993	Continuous	Disagree strongly = 1 Disagree = 2 Somewhat disagree = 3 Uncertain = 4 Somewhat disagree = 5 Agree = 6 Strongly agree = 7	α = .91	26	acceptance of self and life, personal competence

Data Analysis Procedures

Power Analysis

An *a priori* power analysis was conducted utilizing G-power software (Erdfelder, Paul, & Buchner, 1996) to ascertain a certain level of acceptable power for this dissertation study. For a two-tailed experiment with an estimated medium effect size of .5 (Cohen's d) (Cohen, 1977, 1992; Valentine & Cooper, 2003), and an α level set at .05, the total sample size needed to achieve actual power of .95 would be n=89. For any given specific aim, the sample size of 192 was adequate to achieve acceptable power in this study to reject the null hypotheses.

Data Cleaning

The data set was examined for any missing data before any analyses could be conducted. From the original 200 collected surveys, four participants were removed from the data set because they did not complete the survey form for the dependent variable (The Resilience Scale). Additionally, four more participants were removed because they were determined to be outliers on the dependent variable (scores were more than 3 standard deviations from the mean), bringing the total number of participants who were included in the analysis to be n=192.

Assumptions for Standard Multiple Regression

Inherent in multiple regression analyses are certain assumptions that help to ensure that Type I and Type II errors were not made. These assumptions were tested in this model. Furthermore, measures were taken so that the violations were not made. The

three major assumptions for simultaneous multiple regression are as follows: (1) observations are independent, (2) observations are normally distributed on the dependent variable of resilience, and (3) homoscedasticity. First, an independent observation assumes that each person (in this case each homeless young adult participant) was drawn independently from the population. The errors for each person should be independent from all others in the sample. If the data are not drawn independently, errors (residuals) may not be independent and will effect standard errors (Keith, 2006). In an attempt to ensure this assumption was not violated in this study, interviews were conducted separately and individually in order to minimize interaction among the homeless young adults who participated in this study. Additionally, multivariate normality of residuals was examined in a scatterplot to compare residuals to the predicted residuals. This assumption was satisfied.

Second, the assumption that observations are normally distributed on the dependent variable presupposes that variables have normal distributions and are not highly skewed or have substantial outliers – as these can impact significance testing. In an attempt to ensure that this assumption was not violated in this study, visual inspections of data provided information on skewness and outliers that may have distorted results of this analysis (Osbourne & Waters, 2002). In this analysis, all three dependent variables were slightly skewed. In order to satisfy the assumption of normality, four outliers were removed. These four study participants were determined by examining their z-scores on each of the three dependent variables. Any outlier on the dependent variable with a z-score greater than 3 standard deviations away from the mean was removed. Removing the four outliers allowed the quotient of skewness divided by the standard error of skewness

to be between 3 and 4 for each of the dependent variables, which is acceptable level for normality (Tabachnick & Fidell, 1996). Third, the assumption of homoscedasticity means that the errors for all levels of the independent variables are the same. According to Tabachnick and Fidell, a problem with homoscedasticity can lead to distorting the findings and increasing the chances of having a Type I error. In an attempt to ensure that this assumption was not violated in this study, visual inspections of a scatterplot of the standardized errors was completed with PASW 18.0. Moreover, the ratio of the skewness statistic to the standard error of the unstandardized residuals was examined for homoscedasticity. Each of these quotients was under an acceptable level of 4 (Tabachnick & Fidell). In addition to the previous assumptions, the assumption of *mulitcollinearity* was assessed to determine that variables were not redundant or highly correlated with each other. Multicollinearity of the independent variables was tested by utilizing the variance inflation factor (VIF), which examines tolerance and R squared. For each of the variables in the multiple regression equations in this study VIF was under 5 and 10, which is acceptable and indicates there is no problem with multicollinearity (O'Brien, 2007).

Specific Aims and Analysis Strategies for Quantitative Methods

Detailed Data Analysis Plan for Quantitative Data

Aim 1.

Describe the Study Sample.

Specific Aim 1 included the demographic characteristics of the study sample.

Research Question 1.1 Who comprises the sample, regarding demographic characteristics, including age, gender, ethnicity, and childhood trauma experience?

Research Question 1.2 Regarding the disaffiliation domain: What is the foster care history, education level and criminal activity history among the sample?

Research Question 1.3 Regarding the psychological function domain: What are the mental health, alcohol and substance use problems among the sample?

Research Question 1.4 Regarding the human capital domain: What are the survival behaviors among the sample? What are the different ways young adults make money or gain resources? What are the future expectations among the sample?

Research Question 1.5 Regarding the homeless culture domain: What are the primary living locations and length of time on the streets among the sample? What are the levels of social connectedness among the sample? What are the safety strategies among the sample?

Research Question 1.6: What are the levels of *resilience* and *coping* for this population?

Analysis strategy for specific aim 1. In order to examine Specific Aim 1, frequencies and descriptive statistics were used to describe the homeless young adults examined in this study.

Aim 2.

Evaluate the psychometric properties of the scales used to measure variables in this study.

Specific Aim 2 determined the internal consistency for all study variables, including the dependent variable used for this study population. This aim described the internal consistency and the Standard Error of Measurement of the standardized scales (Resilience Scale, Coping Scale, Self-Esteem and Self-Efficacy Subscales, Social Connectedness Scale, Future Time Perspective, Childhood Trauma Questionnaire, and the Traumatic Life Events Questionnaire). Additionally, exploratory factor analyses were conducted for the Resilience Scale and the Coping Scale.

Research Question 2.1 To what extent do the internal consistency coefficients for each of the assessment scales used in this study meet acceptable thresholds for use in nomothetic research (i.e., .60 or higher)(Abell, Springer, & Kamata, 2009)?

Research Question 2.2 Do the exploratory factor analyses of the Resilience Scale and the Coping Scale suggest any changes to the factor structure on either of these measures?

Analysis strategy for specific aim 2. Cronbach's coefficient alpha was computed for each standardized scale, including the subscales for each scale. Standard Error of Measurement (SEM) was also computed for all standardized scales used in the study. In general, computing coefficiant alpha was completed to evaluate the covariances among items on each scale in order to determine the variance of the total score of each measure. Using PASW Statistics 18.0, the evaluation of coefficient alpha was used to determine any weak items of the scale and simplify the scale scoring (Abell et al., 2009). Standard error of measurement was then computed to determine the expected variation of the errors of measurement. Confidence intervals were examined to determine the probability of capturing the true score on each measure. A lower SEM of a scale resulted in a narrower confidence interval and indicated an acceptable level of measurement error, as another indicator of a scale's reliability (Abell et al., 2009).

Factor analyses were conducted to evaluate two of the most important scale's internal consistency. Exploratory factor analyses, specifically principal components analysis, were conducted on the Resilience Scale and the Coping Scale. Factor analyses were conducted using PASW Statistics 18.0 (Statistics, 2009) by including all the items in each scale. Next, eigenvalues were examined to determine the number of factors based on Kaiser criterion (Abell et al., 2009). A principal components analysis (PCA) was completed next as a method of factor extraction. Principal components analysis essentially has four goals: 1.) Extracting the most important data 2.) Compressing the size of the data by only retaining the most important information necessary 3.) Simplifying the data, and 4.) Analyzing the structure of the variables (Abdi & Williams, 2010). Following PCA, factor loadings were examined to determine the magnitude of the

relationships between scale items and extracted factors. The orthogonal rotation method called varimax rotation (Kaiser, 1958) was utilized in order to have the variation of factor loadings maximized for all factors at once.

Aim 3.

Evaluate the bivariate relationships between the domains of the estrangement model and resilience.

Specific Aim 3 tested bivariate relationships in order to reduce data and assess for multicollinearity. Independent T tests, analysis of variance (ANOVA) and correlations were conducted in data reduction procedures. These statistical tests identified the relationships between the variables in the estrangement model domains in relation to the dependent variable, resilience among homeless young adult participants.

Research Question 3.1 What is the relationship between resilience and demographic variables?

Research Question 3.2 What is the relationship between resilience and independent variables in each domain?

Research Question 3.3: What is the relationship between coping and independent variables in each domain?

Research Question 3.4 What is the relationship between resilience and coping?

Analysis strategy for specific aim 3. Bivariate relationships were examined between the dependent variable and the independent variables to determine significant relationships. The following statistical tests were utilized: First, independent t-tests were

conducted to determine the relationships between all dichotomous variables and resilience. Second, one-way analysis of variance (ANOVA) were conducted to determine the relationships between all categorical variables and resilience. Finally, correlations were computed between all continuous variables and resilience.

Aim 4.

Determine the extent to which each domain of the estrangement model predicts resilience.

Specific Aim 4 determined what variables in each domain accounted for the greatest amount of variance in resilience and its subscales among homeless young adults.

Research Question 4.1What variables predict total resilience?

Research Question 4.2 What variables predict personal competence (subscale)?

Research Question 4.3 What variables predict acceptance of self and life (subscale)?

Analysis strategy for specific aim 4. A simultaneous multiple regressions (also called forced entry regression) was conducted in order to determine the predictors of resilience among homeless young adults. Simultaneous multiple regression was the preferred statistical method for explanatory research in order to evaluate the extent of influence of independent variables on a dependent variable (Keith, 2006). Simultaneous multiple regression allowed the variables to be entered into the regression equation at one time in order to determine the overall effects of the variables as well as the individual effects. By conducting one simultaneous multiple regression, the overall effects of each domain of

the estrangement model were evaluated for its predictability with resilience. Standardized coefficients were examined in order to determine the relative importance of each variable within each domain.

Variables were entered into the regression equation in one multiple regression as they were organized in the estrangement model (including demographic variables in addition to the four domains of the model). First, demographic variables (age, gender, ethnicity, childhood trauma experience) were entered. Second, variables that were organized into the disaffiliation domain (foster care, criminal activity, education) were entered. Third, variables that were organized into the psychological functioning domain (alcohol and substance use, depression, PTSD, self-esteem/self-efficacy, trauma experiences on the streets) were entered. Fourth, variables that were organized into the human capital domain (survival behaviors, employment, future time perspective) were entered. Fifth, variables that were organized into the integration into homeless culture domain (length of time on the streets, social connectedness, transience, safety behaviors) were entered.

Aim 5.

Evaluate how coping mediates the relationship between resilience and the domains of the estrangement model.

Specific Aim 5 determined if coping served as a mediating variable in predicting resilience among homeless young adults.

Research Question 5.1: To what extent does coping mediate the relationship between variables implicit in the estrangement model and resilience?

Analysis strategy for specific aim 5. Analysis of mediation effects were conducted to determine if coping mediated resilience among homeless young adults. Statistical mediation analysis was conducted to determine if scores on the Coping Scale mediated the association between the variables implicit in the estrangement model and scores on the Resilience Scale. Statistical mediation occured when a third variable provides a more clear interpretation of a relationship between two other variables. Moreover, a mediating variable served as indirect effect on a third variable. For the purposes of this study, mediation analysis was conducted to determine if coping served as the mechanism through which a homeless young adults' level of resilience is manifested or produced, according to scores on the total Resilience Scale.

A series of four simultaneous multiple regressions were conducted in order to test if coping mediated resilience among homeless young adults. First, the independent variables were regressed onto the dependent variable (resilience). Second, the potential mediating variable (coping) was regressed on the dependent variable (resilience). Third, the independent variables were regressed onto the potential mediating variable (coping). Finally, the independent variables and the potential mediating variable (coping) were regressed simultaneously onto the dependent variable (resilience). All of the regression equations in the first three steps must be significant to establish mediation of coping with resilience. A Sobel test (Sobel, 1982) was conducted (as recommended by Baron and Kenny, 1986) as the final step in order to perform one single test examining the indirect paths between the independent variables and the dependent variables via the mediator. If met, the effect of the independent variables would be reduced when including the

mediating variable. Standardized coefficients were evaluated to determine that the final regression equation demonstrates a reduction from the first regression equation.

Establishing mediation in this model was used to determine if coping was the means through which the independent variables in the estrangement model predicted resilience. In other words, the inclusion of a coping variable into the model reduced or eliminated (reduced in this case) the relationship between the independent variables and the dependent variable (Baron & Kenny, 1986). According to Baron and Kenny (1986) these four regression equations conducted provided a test of linkages of the meditational model.

Chapter 4: Results

The results of this dissertation study are presented in this chapter, as outlined by each specific aim described in Chapter 3. First, univariate statistics will be presented as they relate to the four domains of the estrangement model. Second, the psychometric properties of the measurement scales and exploratory factor analyses will be discussed. Third, bivariate relationships will be presented for all independent variables and resilience. Fourth, the multiple regression models will be presented, and finally the mediation analysis will be described.

Specific Aim 1: Describe the Study Sample

Research Question 1.1: Who comprises the sample, regarding demographic characteristics, including age, gender, ethnicity, and childhood trauma experience?

Table 2 displays the basic demographic characteristics of the total sample. The total sample (N=192) was comprised of 64% (n=123) males and 36% (n=69) females. White, not Latino youth made up the largest portion of young adults (76%, n=146). The average age of young adults in this sample was about 21 years. Only 22.4% (n=43) reported that they were sexually abused during childhood. Over two-thirds (n=136) of young adults in this sample stated that they felt hated by someone in their family. Neglect played a large role for the young adults in this sample, with 47.9% (n=92) answering that they did not have enough to eat in their childhood home. Sixty-eight percent (n=130) of the sample reported being emotionally abused and over half (52.1%, n=100) stated they believed they were physically abused. Table 2 shows various trauma experiences that were assessed retrospectively among the sample. Additionally, average scores on the five

subscales for the *Childhood Trauma Questionnaire* are displayed below. These mean scores represent the level and severity of trauma that young adults experienced in their childhood home (see Table 1).

Table 2

Demographic Characteristics of Homeless Young Adults in Sample

Characteristic	N	(%)	M (SD)
Gender			
Male	123	64.1	
Female	69	35.9	
Ethnicity			
White, not Latino	146	76.0	
Black, not Latino	6	3.1	
Hispanic	18	9.4	
American Indian	9	4.7	
Asian	1	.5	
Other	12	6.3	
Childhood Trauma Questionnaire			
Sexually Abused	43	22.4	
Emotionally Abused	130	67.7	
Physically Abused	100	52.1	
Felt Hated by Family Member	136	70.8	
Didn't Have Enough to Eat	92	47.9	
Childhood Trauma Questionnaire Subscales			
Emotional Neglect			13.95 (5.33)
Physical Neglect			10.52 (4.55)
Emotional Abuse			14.10 (5.82)
Physical Abuse			10.76 (5.31)
Sexual Abuse			7.51 (5.11)

Research Question 1.2: Regarding the disaffiliation domain - What is the foster care history, education level and criminal activity history among the sample?

Table 3 displays the descriptive characteristics that relate to disaffiliation among the sample, and presents how many of the homeless young adults in the sample have a history of foster care placement. Of the total sample (N=192), 27.1% (n=52) young adults had been in the foster care system and the average number of placements they

experienced was 4.13 separate homes. Education levels for this sample indicate that 32.8% of young adults graduated from high school, 21.4% received a GED, 31.8% quit, dropped out or were suspended from school, and only 7.8% were currently enrolled in either high school or college. Homeless young adults' criminal activity indicates that four-fifths of the sample had been arrested while living on the streets; the average number of arrests was 8.87 (SD=14.37). Thirty-eight percent of the sample had spent time in juvenile detention and 63% of the young adults surveyed had spent time in either jail or prison. The average number of times that the young adults spent in jail or prison was 3.83 (SD=10.79).

Table 3

Descriptive Characteristics Related to Disaffiliation Among Homeless Young Adults in Sample

Characteristic	N	(%)	Mean (SD)
Foster Care History			
Been in foster care system	52	27.1	
Number of times in foster care			4.13 (13.20)
Education Level			
Graduated from High School	63	32.8	
GED	41	21.4	
Quit, dropped out, or suspended	61	31.8	
Currently enrolled in high school or college	15	7.8	
Criminal Activity			
History of arrest	155	80.7	
Total number of arrests			8.87 (14.37)
History of juvenile detention	73	38.0	
Total number of time in detention			2.32 (6.24)
History of jail/prison	121	63.0	
Total number of times in jail/prison			3.83 (10.79)

Research Question 1.3: Regarding the psychological functioning domain: What are the mental health, alcohol and substance use problems among the sample?

Table 4 displays the characteristics that relate to psychological functioning among the sample. Statistics related to *mental health* and *alcohol and substance use* related problems among the sample are shown. Among the total sample (n=192), 55.7% (n=107) were categorized as *alcohol dependent*, while 16.7% (n=32) were categorized as *alcohol abusers*. The drug of choice among the sample was predominately marijuana, with 63.5% (n=122) stating they used this drug more than any other drug in the past year. Over 90% of the sample had used marijuana during the past year. Over 70% (N=138) of the sample met criteria for *alcohol abuse* or *alcohol dependence*, and 75.8% (N=144) met criteria for *drug abuse or dependency*. Additionally, problems with dependency were more prevalent than issues with abuse (the MINI does not allow for individuals to be duplicated in these categories due to coding and criteria which are elicited in a decision tree manner with dependency preempting abuse) (Sheehan et al., 1998). Seventy-one percent (n=137) of the sample met criteria for *alcohol or drug dependency*, while 43.2% (n=82) of the sample met criteria for *alcohol or drug abuse*. Overall, addiction issues are prevalent among participants, with over 85% of the young adults (n=162) identified as addicted to drugs or alcohol.

Twenty-two percent of the sample met criteria for having a *major depressive disorder*, according to the MINI's categorization of DSM criteria, only 16.1% (n=31) of the sample was categorized as having *PTSD*; however, 76% (n=146) of the sample answered positively to a trauma screening question on the MINI in which young adults

were asked if they been exposed to an “extremely traumatic event that included actual or threatened death or serious injury” to themselves or someone else.

Participants’ scores on the full CEST measure were rather high with average score of 49.50 out of a possible score of 65. Self-efficacy (26.54 out of a possible high score of 42) and self-esteem subscale scores (22.96 out of a possible high score of 30) were also high as items were reverse coded to indicate higher self-esteem and self-efficacy with higher scores.

Finally, participants responded to experiencing incidents of trauma while on the streets, with 66% of the sample witnessing someone overdose on drugs, 64% experiencing the sudden death of loved one, 62% witnessing a severe assault, 61% experiencing the threat of death or bodily harm and 60% experiencing a physical assault by an acquaintance or a stranger.

Table 4

Descriptive Characteristics Related to Psychological Functioning Among Homeless Young Adults in Sample

Characteristic	N	(%)	Mean (SD)
Substance Use Related Problems			
Alcohol dependent	107	55.7	
Alcohol abuse	32	16.7	
Marijuana as primary drug of choice	122	63.5	
Substance dependent	83	43.2	
Substance abuse	63	33.2	
Alcohol or drug addiction	162	85.3	
Major depressive disorder	46	24.1	
Exposed to trauma while on streets	146	76.0	
PTSD	31	16.1	
Self-esteem			
CEST full scale			49.50 (7.87)
Self-efficacy subscale			26.54 (4.26)
Self-esteem subscale			22.96 (4.47)
Traumatic Life Events Questionnaire			
Seen someone overdose on drugs	127	66.1	
Experienced sudden death of friend/loved one	123	64.1	
Witness to severe assault of someone	120	62.5	
Experienced the threat of death or serious bodily harm	117	60.9	
Physical assault by acquaintance or stranger	115	59.9	
Physical assault by intimate partner	61	31.8	
Robbery involving a weapon	58	30.2	
Personally overdosed on drugs	52	27.1	
Sexual assault by acquaintance or stranger	42	21.9	
Sexual assault by intimate partner	13	6.8	

Research Question 1.4: Regarding the human capital domain: What are the survival behaviors among the sample? What are the different ways young adults make money or gain resources? What are the future expectations among the sample?

Table 5 displays the characteristics that relate to human capital among the sample. Statistics display those variables related to *survival behaviors, the ways in which young adults make money, and their expectations related to the future*. Young adults reported that they utilized a variety of techniques to make money and/or resources in order to

survive while living on the streets. A portion of the sample reported that they worked *full time* (16.7%, n=32), *part-time* (26%, n=50) or had a temporary job that may have been a *"pick-up" job, seasonal work, or day labor position* (52.1%, n=100). Other skills utilized among the sample are seen in Table 4 and included both adaptive and maladaptive ways of making money to survive on the streets.

Table 4 also includes young adults' scores on the *Future Time Perspective Inventory*. Mean scores for each of the five subscales of this measure are displayed. The scores indicate young adults' *expectations of their future* on the streets, and in their transitions out of homelessness as well. Young adults scored relatively high in items on this scale that indicated they were *mindful of time* and how they spent it, with scores ranging from 3.2 to 6.58 out of a possible score of 10. Additionally, young adults' high scores resulted from items that indicated that young adults were *optimistic about their future* with scores ranging from 14.73 to 22.07 out of a possible score of 25.

Table 5

Descriptive Characteristics Related to Human Capital Among Homeless Young Adults in Sample

Characteristic	N	(%)	Mean (SD)
Ways in which youth make money/gain resources			
Panhandling	153	79.7	
Temporary work (day labor, seasonal work)	100	52.1	
Obtain money or resources from friends	90	46.9	
Agency program, social security or welfare	89	46.4	
Obtain money or resources from relatives	74	38.5	
Selling self-made items	60	31.3	
Selling personal possessions	59	30.7	
Stealing	54	28.1	
Dealing drugs	53	27.6	
Working part time (<40 hours a week)	50	26.0	
Selling bottles or cans	39	20.3	
Working full time (40+ a week)	32	16.7	
Gambling	27	14.1	
Selling blood or plasma	19	9.9	
Prostitution	13	6.8	
Future expectations of homeless young adults			
Concerned with the flow of time			25.64 (5.96)
Optimistic perspective of the future			18.40 (3.67)
Mindful of time			4.89 (1.69)
Anxiety regarding the structure of the future			30.77 (7.17)
Rejection of fatalism regarding the future			18.34 (4.51)

Research Question 1.5: Regarding the homeless culture domain: What are the primary living locations and length of time on the streets among the sample? What are the levels of social connectedness among the sample? What are the safety strategies among the sample?

Table 6 displays the characteristics that relate to homeless culture among the sample. Rates of various characteristics related to *primary living locations, length of time on the street, levels of social connectedness and safety strategies* are shown. Homeless young adults often reside in a variety of places as their primary living location; however,

the majority (62%, n=119) of young people interviewed reported that they were *living on the streets or in a temporary shelter*. The second highest reported living location was *residing with adults friends in their house or apartment* (22.4%, n=43) and that they had spent the majority of their time in the past six months living in this situation. *Transience* among this population (measured as the number of cities the participant lived in since they left home for good) was nearly 6 cities (M=5.90, SD=3.76). The youth had lived in an average of 3.72 (SD=3.19) states. Finally, young adults lived in one country on average.

The Social Connectedness Scale measured *the level of connections* participants felt with others. Mean scores for this measure were assessed via two subscales. The mean score on the full measure was 59.39 (SD=11.73), out of a possible high score of 96 indicating that participants felt more socially connected to others in their lives. Findings revealed that the young adults utilized a variety of *strategies in order to stay safe* on the streets. The most utilized skill was *staying away from certain people to be safe* on the streets (75.5%, n=145). The safety strategy with the lowest frequency of use was *sleeping during the day and staying awake at night* (24.6%, n=47).

Table 6

Descriptive Characteristics Related to Homeless Culture Among Homeless Young Adults in Sample

Characteristic	N	(%)	Mean (SD)
Primary living locations			
Homeless or temporary shelter	119	62.0	
With adult friends in house or apt	43	22.4	
Other	12	6.3	
With parents or guardians in house or apt	8	4.2	
In jail, youth detention, or residential housing	7	3.6	
With relatives in house or apt	3	1.6	
Length of time living on the streets (years)			3.08 (2.80)
Levels of social connectedness			
Full Social Connectedness scale			59.39 (11.73)
Social connectedness subscale (1-8)			32.49 (8.73)
Social assurance subscale (9-16)			26.90 (7.85)
Transience			
Total number of cities lived in			5.90 (3.76)
Total number of states lived in			3.72 (3.18)
Survival behaviors			
Stayed away from certain people	145	75.5	
Carried a weapon to be safe	136	70.8	
Stayed away from certain places	133	69.3	
Always with someone trusted	128	66.7	
Slept during the day and stayed awake at night	47	24.6	

Research Question 1.6: What are the levels of *resilience* and *coping* for this population?

Scores for homeless young adults on the Resilience Scale are rather high, displaying moderately high to high resilience with a mean score on the total measure of 145.21, ranging from 128.75 to 161.67. Wagnild and Young's describe that scores above 145 indicate moderately-high to high resilience, scores between 121-145 indicate moderately-low to moderate levels of resilience and scores below 120 indicate low resilience. The average score for young adults on the Personal Competence subscale were

95.68, ranging from 84.14-107.22, and the average score for young adults on the Acceptance of Self and Life subscale were 43.53, ranging from 37.5 to 49.56.

Coping scores for homeless young adults, as measured by the Coping Scale, were M= 47.14, ranging from 41.24 to 53.04.

Specific Aim 2: Evaluate the psychometric properties of scales used to measure variables in the study.

The psychometric properties of the scales utilized in this dissertation study were evaluated to describe the internal consistency of each measure. The extent of reliability coefficients of each of the assessment scales was examined to determine if acceptable thresholds for nomothetic research were met. Cronbach's alpha was computed for each standardized scale (including all subscales). Additionally, the standard error of measurement (SEM) was also computed to determine the level of measurement error.

Research Question 2.1: To what extent do the internal consistency coefficients for each of the assessment scales used in this study meet acceptable thresholds for use in nomothetic research (i.e., .60 or higher)?

This section will describe the internal consistency coefficients of the measures included in this study, followed by a discussion of their standard error of measurement. *The Resilience Scale*, evaluated in its entirety as a full measure, has a Cronbach's alpha of .87 (subscales have alphas of *Personal Competence* = .85 and *Acceptance of Self and Life* = 69). *The Resilience Scale*, the dependent variable, and the *Childhood Trauma Questionnaire*, α = .94, have the highest reliability coefficients in the study. The *Social Connectedness* assessment measure also has an acceptable reliability coefficient, with an

alpha level of .79 (subscales have alphas of .87 and .82) indicating a good estimate of reliability for this scale. Additionally, the scale measuring *Future Time Perspective* has a good alpha level (0.84). The only measure with a low alpha is the *Coping Scale* (in its entirety) with a reliability coefficient of .51. This scale was further evaluated and is described later in this chapter.

Every individual item of each scale was evaluated to determine how it effectively contributed to the reliability of the measure for this population. Scale items were considered for deletion if this would have a significant impact on enhancing the overall reliability of the measure. Scales with high alpha levels or those in which deleting an item would not substantially increase their reliability, were left in their original format (i.e., *The Resilience Scale, Self-Esteem and Self-Efficacy scales (CEST), Social Connectedness Scale, Future Time Perspective Inventory, Childhood Trauma Questionnaire, and the Traumatic Life Events Questionnaire*). For example, each item on the *Coping Scale* was examined to determine if deleting any of the items would raise the relatively low overall alpha level of .51; however, there was only one item that would raise the alpha to .56 by deleting it (closer to the .60 threshold for research studies). The item that would be deleted was "using drugs or alcohol" to cope with problems on the streets. This item was kept due to the importance of this coping mechanism in assessing this population (i.e., its clinical and heuristic value).

The standard error of measurement (SEM) for each scale was computed in order to evaluate the expected variation around the true scores for each measure used in the dissertation study. Lower SEMs indicate greater reliability and more precision regarding participants' scores on each scale. In general, a high reliability coefficient and a low SEM

indicate good indicator of reliability for a measure, and is a good estimate of how far the actual true score may lie from the observed scores from a person (Abell et al., 2009). The SEM can be mapped back to the emergence of *Classical Test Theory*, (Lord & Novick, 1968), a theory which has implications for the study of psychometrics. Classical test theory assumes that a person has a "true" test score (T), and that the observed score (O) is equal to that elusive "true" score plus measurement error. It is reflected in the equation: 0 = T + E (Abell et al., 2009; Crocker & Algina, 1986). This theory relates to how a SEM is conceived as the error of scores for an entire measure. Classical test theory assumes that if we knew the error scores and subtracted them from the observed scores, we would obtain the "true" scores. In short, "reliability is defined through error" variances (Kerlinger, 1986, p. 408).

The Resilience Scale has an acceptable level of SEM of .083 (when converted into a summed score for the entire measure) falling below the recommended 5% or less of possible scores of an assessment measure rule (Springer, Abell, & Hudson, 2002). The only subscales which exceed the 5% rule are the social coping and other forms of coping subscales for *The Coping Scale*; also, the time mind subscale for the *Future Time Perspective Inventory*. Table 7 displays internal consistency coefficients and SEM for each of the scales and subscales that are included in this study, including the 5% threshold for each scale and subscale. The SEM for *The Trauma Life Events Questionnaire* was not computed because this scale was coded dichotomously and used as a list of items.

Table 7

Internal Consistency for All Scales and Subscales used in Study

Scale	α	SEM	5% threshold
Resilience Scale	.87	.083	.91
Personal competence	.85	.051	.59
Acceptance of self and life	.69	.214	.35
Coping Scale	.51	.183	.35
Problem focused coping	.75	.008	.05
Avoidant coping	.57	.020	.05
Social coping	.05	.187	.05
Other forms of coping	.47	.233	.20
CEST	.82	.050	.33
Self-efficacy	.66	.099	.18
Self-esteem	.80	.018	.15
Social Connectedness	.79	.154	.48
Social connectedness	.87	.078	.24
Social assurance	.82	.094	.24
Future Time Perspective	.84	.104	.63
Flow time	.75	.047	.20
Optimistic perspective	.74	.125	.13
Time mind	.42	.069	.05
Future structure	.77	.082	.23
No Fatalism	.72	.076	.15
Childhood Trauma Questionnaire	.94	.077	.63
Emotional abuse	.87	.029	.13
Physical abuse	.87	.069	.13
Sexual abuse	.97	.001	.13
Emotional neglect	.89	.023	.13
Physical neglect	.79	.014	.13
Traumatic Life Events Questionnaire	.77		

Note. full measure is **bolded**; SEM = Standard Error of Measurement.

Research Question 2.2: Do the exploratory factor analyses (EFA) of the Resilience Scale and the Coping Scale suggest any changes to the factor structure on either of these measures?

An exploratory factor analysis was completed on the *Resilience Scale* and the *Coping Scale* in order to address any changes that might need to be made to the factor structure of each scale. Principal components analysis (PCA) was completed on each of

the previously mentioned scales as a method of exploratory factor analysis. This method of factor analysis is commonly used when there is no previous research regarding how items on the scale will load onto factors for a specific population. Research on the factor structure of these scales with a homeless young adult population had not been done before, suggesting that a PCA is an appropriate choice for further evaluating these measures.

EFA for the Resilience Scale. Factor analysis was conducted in order to determine the lowest number of factors that account for common variance among a set of variables in the *Resilience Scale*. Principal components analysis was chosen as the method of factor extraction due to the exploratory nature of this research; this method is preferred with initial data exploration (Abell et al., 2009). In all of the scales evaluated in this study, factors were retained with eigenvalues greater than 1.0, as suggested by the Kaiser Criterion (Abell et al., 2009). The exploratory factor analysis for the *Resilience Scale* yielded 8 factors with eigenvalues greater than 1; the first factor had an eigenvalue of 6.747 and accounted for 26% of the variance of the factor structure. Additionally, when including the remaining 7 factors (components), 60% of the total variance of the factor structure was accounted for in these components. Table 8 displays the total variance explained by the EFA for the *Resilience Scale*.

Table 8

Variance Explained by each Seven-Factor Solution for the Resilience Scale

Component	Total	% of the Variance	Cumulative %
1	6.747	25.950	25.950
2	1.625	6.251	32.201
3	1.434	5.514	37.716
4	1.354	5.209	42.925
5	1.236	4.753	47.678
6	1.157	4.448	52.126
7	1.095	4.213	56.338
8	1.039	3.996	60.334

Factor loadings for each item were examined to determine which item loaded onto which factor (component) see table 9. Guidelines for retaining factors establishes that loadings greater than .70 = excellent, > than .63 = very good, > than .55 = good, > .45 = fair, and > .32 is considered poor (Comrey & Lee, 1992). Researchers have established that loadings above .30 are retained for each of the factors, according to an appropriate cut-off criterion (Abell et al., 2009). For this study, factor loadings over .50 were separated into the various categories depending on which factor, or component, they loaded on. The benchmark of .50 was used to retain items as this is an acceptable level for item loadings in psychometric research (Costello & Osborne, 2005). For example, factor 1 included five items with loadings over the .50 threshold. Table 8 displays the items that loaded onto the various 8 factors after a Varimax rotation with Kaiser Normalization (Guttman, 1954). The Kaiser Normalization approach allows for the determination of factors by the magnitude of the eigenvalues, suggesting that a factor should have a higher eigenvalue than what could be obtained from a single-indicator factor (Abell et al., 2009). Factor loadings are a simple structure, meaning that scale

items only load onto one factor, as opposed to a complex structure whereby items may load onto more than one factor at a time in the factor analysis.

Table 9

Factor Loadings on the Varimax Rotation for the Resilience Scale

Resiliency Scale item	1	2	3	4	5	6	7	8
When I make plans I follow through with them.	**.673**	-.075	.044	.299	.034	.078	-.014	.257
I usually manage one way or another.	.061	.238	.411	.496	.193	.140	.110	.025
I am able to depend on myself more than anyone else.	.108	-.028	.106	**.824**	.022	.141	.097	.044
Keeping interested in things in important to me.	.190	**.584**	-.101	.465	.216	-.165	-.010	.151
I can be on my own if I have to.	.056	.091	.127	.312	.059	.694	.001	-.028
I feel proud that I have accomplished things in life.	**.593**	.160	.226	.384	-.050	.055	.120	-.098
I usually take things in stride.	.090	**.529**	.050	.288	-.042	.241	-.282	.049
I am friends with myself.	.128	**.528**	.139	.025	-.017	.306	.274	-.207
I feel that I can handle many things at a time.	.328	.298	.359	.211	.278	.189	-.030	.014
I am determined.	**.630**	.195	-.094	.129	.301	.203	.057	-.139
I seldom wonder what the point of it all is.	.064	.139	.026	.041	.136	.105	.029	**.783**
I take things one day at a time.	.025	.084	-.031	.122	.065	.071	.771	.023
I can get through difficult times because I've experienced difficulty before.	.086	.096	.174	-.002	.482	.296	.481	-.141
I have self-discipline.	**.680**	.128	.143	-.115	-.122	.087	-.030	.149
I keep interested in things.	.234	**.660**	.094	-.041	.009	.059	-.061	.318
I can usually find something to laugh about.	-.128	**.602**	.450	-.050	.075	.013	-.029	.128
My belief in myself gets me through hard times.	.372	**.574**	.225	.105	.067	.218	.143	-.002

Table 9 (continued)

Resiliency Scale item	1	2	3	4	5	6	7	8
In an emergency, I am someone people can generally rely on.	**.562**	.171	.358	.052	.320	-.054	.150	-.012
I can usually look at a situation in a number of ways.	.197	.278	.297	.377	.347	.059	.094	-.106
Sometimes I make myself do things whether I want to or not.	.103	-.016	.028	.078	**.772**	-.096	.051	.247
My life has meaning.	.462	.445	.054	-.085	.178	-.098	.239	-.208
I do not dwell on things I can't do anything about.	.166	.149	**.517**	.150	-.212	-.073	.456	.257
When I'm in a difficult situation, I can usually find my way out of it.	.371	.099	**.583**	-.017	.268	.107	.028	.050
I have enough energy to do what I have to do.	.090	.105	**.744**	.201	-.013	.197	-.039	-.064
It's okay if they are people who don't like me.	.179	.126	.106	-.062	-.033	**.703**	.150	.211
I am resilient.	-.106	.387	.145	.148	.423	.320	-.280	-.081

Note. Items that are bolded are factor loadings above .50, which were retained for each component.

Several of the items did not meet the threshold and did not load on any of the eight components. Additionally, the items on this scale did not load on to components in a particular way in which a conceptual or theoretical significance could be determined.

Finally, the communalities were examined for items on the *Resilience Scale*. Communalities represent the proportion of each variables' variance that can be explained by the principal components analysis. All of the scale items have communalities higher than the threshold of .40 (Costello & Osborne, 2005). Items with communality values lower than .40 may typically be considered for removal from the scale. All of the items have values higher than .40, ranging from .483 to .735. Variables with higher communality extraction values are well represented in the factor structure, while items

with lower communality values are not as well represented. Only two items had communality extraction values less than .50. “I feel I can handle many things a time”, and “I can usually look at a situation in a number of ways” which had values of .483 and .490, respectively.

Overall, this exploratory factor analysis did not suggest any changes were needed to the factor structure. Items loading onto each of the eight factors did not load in any observable theoretical pattern. Additionally, an eight-factor structure for 25 scale items may be difficult to justify when the two predetermined subscales have relatively high reliability coefficients (Reise, Waller, & Comrey, 2000; Zwick & Velicer, 1986). Furthermore, this EFA not only does not improve the psychometric properties of this measure but the overextraction may prove to make it more difficult to interpret. Therefore, moving forward with bivariate and regression analyses, the total score for the *Resilience Scale* and its two subscales (*Personal Competence* and *Acceptance of Self and Life*) will be used.

EFA for the Coping Scale. The initial exploratory factor analysis for the *Coping Scale* yielded 5 factors with eigenvalues greater than 1, with the first factor having an eigenvalue of 3.372 and accounting for 24% of the variance of the factor structure. Additionally, when including the remaining 4 factors (components), 61% of the total variance of the factor structure is accounted for in there components.

All of the scale items loaded onto one of the 5 factors. All of the communalities for scale items were higher than the .40 cutoff, ranging from .406 to .704. The lowest communality value was for the item, “Use my anger to get me through it”, which has an

extraction value of .406. This item had the lowest proportion of variance that was explained by this principal components analysis. The high values of communalities suggest that each item is well represented in the factor structure of this scale. Items did "hold together" conceptually in the five factors that emerged; however, alpha levels for at least one of the factors did not reflect an acceptable level of reliability for this scale among this population according to standards for nomothetic research (Abell et al., 2009). Cronbach's alphas for each of the four factors were calculated as: .68, .56, .39, and .66. The last factor only had one item included in this component; consequently Cronbach's alpha could not be computed. Cronbach's alphas above .60 are considered to be acceptable for scientific research with large samples (Hudson, 1982); however, .39 is low for a reliability coefficient and indicates poor internal consistency for this population.

Due to the low reliability coefficients that emerged in one of the components in the EFA for this scale, a four-factor extraction was forced to determine if reliability coefficients would increase for any of the factors. Table 10 displays items from the *Coping Scale* and how each factor loaded onto the four-factor solution.

Table 10

Factor Loadings for Forced Four-Factor Solution on the Varimax Rotation for the Coping Scale

Coping Scale item	1	2	3	4
Concentrated on what to do and how to solve the problem.	.342	-.313	**.487**	.371
Think about what happened and sort it out in my head.	.217	-.213	**.541**	.416
Try not to think about it.	-.144	**.741**	-.094	-.084
Go to sleep.	-.169	**.693**	.363	-.100
Go to someone I trust for support.	.090	-.116	**.710**	.022
Go off by myself to think.	.110	.172	-.036	**.792**
Try to learn from the bad experience.	**.583**	-.003	.382	.085
Use my anger to get me through it.	.089	**.543**	-.186	-.046
Use drugs or alcohol.	.000	**.587**	-.304	.119
Do a hobby (e.g. reading, drawing).	-.008	-.187	.142	**.591**
Try to value myself and not think so much about other people's opinions.	**.663**	.037	-.274	.221
Realize I am strong and can deal with whatever is bothering me.	**.768**	-.169	-.059	.178
Think about how things will get better in the future.	**.742**	-.051	.255	.007
Use my spiritual beliefs or beliefs in a higher power.	**.513**	-.002	.232	-.176

Note. Items that are bolded are factor loadings above .50, which were retained for each component.

The scale items that loaded onto the four factors in this forced solution resulted in an observed pattern that appeared theoretically related to this scale and population under study. This scale originally had four subscales, including: problem focused coping, avoidant coping, social coping and other domains of coping. While the first three subscale of this measure included items that theoretically clustered together, the other domains of coping subscale seemed unstructured, containing 8 items that included both maladaptive and adaptive coping strategies. This forced four-factor solution resulted in four new components that conceptually related to the scale and the population under study. The factors included: positive coping strategies (items 1,2, 5), self-actualizing strategies (items 7, 11, 12, 13, 14), maladaptive coping strategies (items 3,4, 8, 9), and withdrawal from peers (in an adaptive manner e.g., "go off by myself to think", and "do a hobby")(items 6, 10). Reliability coefficients that emerged for each of the four factors were relatively similar to the five-factor solution. Alpha levels were .63, .68. .56, and .39 respectively for the four factors forced in this extraction. Although the alpha level for the fourth component remains low, the items continue to load onto components that conceptually and theoretically fit for this population. The exploratory factor analysis demonstrates that the pool of items cluster around four domains that reveal a clearer picture of the *Coping Scale's* psychometric properties. This analysis maps specifically to the second aim of this study. However, to examine Specific Aim 3, the entire *Coping Scale* will be used, as it is able to capture the myriad of ways (both adaptive and maladaptive) in which homeless young adults cope with a precarious environment. Utilizing the entire pool of items enables the full conceptualization of coping to be examined (both positive and negative strategies) and used as a variable for Specific Aim

3. Therefore, moving forward for bivariate and regression analyses, the total score for the *Coping Scale* was used.

Specific Aim 3: Evaluate the bivariate relationships between the domains of the estrangement model and resilience.

The bivariate relationships between the domains of the estrangement model and resilience were examined in order to reduce data and determine which variables would be examined in the multiple regression models in this study. Independent t-tests were conducted between all dichotomous variables and total resilience scores as well as with each of the two sub-scales of the *Resilience Scale, personal competence* (PC) and *acceptance of self and life* (ASL). For all independent t-tests, Levene's Test for Equality of Variances was examined. When a p value less than .05 was found, the t value for non-equal variances was used. Conversely, for p values higher than .05 t-values for equal variances assumed was used. One-way analysis of variance (ANOVA) tests were conducted between all categorical variables and total resilience scores, as well as with each of the two sub-scales of the Resilience Scale. Finally, Pearson correlations were conducted between all continuous variables and total resilience scores, as well as with each of the two sub-scales of the *Resilience Scale*. Additionally, the bivariate relationships between the independent variables in each domain and the *Coping Scale* were also evaluated to determine the extent of these relationships.

Research Question 3.1: What is the relationship between resilience and demographic (including childhood trauma history) variables?

Table 11 displays the background variables for homeless young adults and their relationships with resilience. Sections of the *Childhood Trauma Questionnaire* showed small negative correlations with the total resilience score on the *Resilience Scale* and the *Acceptance of Self and Life* (ASL) subscale.

Table 11

Bivariate Relationships with Demographic Variables (including Childhood Trauma Experience) and Resilience

Variable Name	M (SD)		Total Resilience	PC	ASL
			r value		
Age	20.78 (1.72)		.011, p=.88	.002, p=.98	.020, p=.78
Childhood Trauma					
Emotional neglect	13.95 (5.33)		-.134, p=.063	-.124, p=.087	**-.140, p=.053***
Physical neglect	10.52 (4.55)		-.083, p=.255	-.059, p=.413	-.127, p=.079
Emotional abuse	14.10 (5.82)		**-.169, p=.019***	-.135, p=.062	**-.216, p=.003****
Physical abuse	10.76 (5.31)		.052, p=.473	.073, p=.313	-.024, p=.738
Sexual abuse	7.51 (5.11)		-.085, p=.244	-.066, p=.360	-.114, p=.117
		df	t statistic		
Gender		190	-.060, p=.95	-.290, p=.77	.256, p=.80
		df	f statistic		
Ethnicity		191	.290, p=.92	.461, p=.81	.652, p=.66

Note. *p < .05, ** p < .01, ***p <.001. Bolded items are significant in the model.

Research Question 3.2: What is the relationship between resilience and independent variables in each domain?

The relationship between resilience and the independent variables in the disaffiliation domain are displayed in Table 12. None of the variables within this domain had significant relationships with the total resilience score or scores on either of the subscales, *Personal Competence (PC) or Acceptance of Self and Life (ASL)* subscales.

Table 12

Bivariate Relationships with Disaffiliation Domain and Resilience

Variable Name	M (SD)		Total Resilience	PC	ASL
			r value		
Total # Arrests	8.87 (14.37)		-.010, p=.89	.003, p=.97	-.045, p=.53
Total # Juvenile Detention	2.32 (6.23)		.022, p=.76	.048, p=.51	-.012, p=.87
Total # Jail or Prison	3.83 (10.79)		.100, p=.17	.079, p=.28	.106, p=.14
		df	t statistic		
Education		190	.155, p=.88	.055, p=.96	.280, p=.78
Foster Care		190	.090, p=.93	.039, p=.97	.313, p=.76
Arrest History		190	-1.374, p=.17	-1.414, p=.16	-1.017, p=.31
Juvenile Detention		190	-.173, p=.86	-.211, p=.83	.187, p=.85
Jail or Prison		190	-1.913, p=.057	-1.770, p=.078	-1.912, p=.057

Note. *p < .05, **p <.01, ***p <.001. PC = Personal Competence subscale and ASL = Acceptance of Self and Life Subscale. Bolded items are significant in the model.

Table 13 displays the bivariate relationships between resilience and the variables in the psychological functioning domain. There was a significant relationship for homeless young adults who were *drug dependent*, t(190) = -2.879, p= .004 compared to *total Resilience scores* as well as with the *Personal Competence* subscale, t(190) = -2.843, p= .005, and the *Acceptance of Self and Life* subscale, t(190) = -2.086, p= .038. This indicates that homeless young adults who were drug dependent were more likely to

have lower scores on the *Resilience Scale* and both of the subscales. A diagnosis of *depression* was also significantly related to scores on the *Resilience Scale* and both subscales, with p values showing significance at a .001 level. The full *CEST* measure and each of the subscales, *self-esteem* and *self-efficacy* were also significantly related to total scores and both subscales at a .001 level. The full *CEST* measure was strongly correlated with total resilience scores, and moderately correlated with both subscales. The *self-efficacy subscale* of the CEST showed medium correlations with the total *Resilience Scale* and the two subscales. The *self-esteem* subscale was strongly correlated with all three measures of resilience. Finally, none of the items from the list of *Traumatic Life Events Questionnaire (TLEQ)* showed a significant relationship with the total *Resilience* score or either of the subscales.

Table 13

Bivariate Relationships with Psychological Functioning Domain and Resilience

Variable Name	M (SD)		Total Resilience	PC	ASL
			r value		
Self-esteem/Self-efficacy					
CEST (full measure)	49.50 (7.87)		**.503, p=.000*** **	**.466, p=.000*** **	**.436, p=.000*** **
Self-efficacy	26.54 (4.26)		**.356, p=000*** **	**.339, p=000*** **	**.294, p=000*** **
Self-esteem	22.95 (4.47)		**.547, p=.000*** **	**.498, p=.000*** **	**.488, p=.000*** **
		df	t statistic		
Alcohol Dependence		190	-1.419, p=.16	-1.868, p=.063	-.512, p=.61
Alcohol Abuse		190	-.407, p=.68	-.061, p=.95	-.732, p=.46
Drug Dependence		190	**-2.879, p=.004** **	**-2.843, p=.005** **	**-2.086, p=.038* **
Drug Abuse		190	.676, p=.500	.535, p=.593	.386, p=.700
Depression		190	**-4.051, p=.000*** **	**-3.439, p=.001** **	**-4.021, p=.000*** **
PTSD		190	-1.391, p=.17	-1.397, p=.16	-.887, p=.38
Trauma Life Events Questionnaire					
Sudden death of loved one		190	.104, p=.92	.061, p=.96	.132, p=.90
Robbery involving weapon		190	-1.138, p=.26	-1.080, p=.28	-1.108, p=.27
Physical assault		190	-.526, p=.60	-.622, p=.53	-.475, p=.64
Sexual assault		190	-.941, p=.35	-.444, p=.66	-1.836, p=.07
Witness to severe assault		190	-.181, p=.86	-.158, p=.88	-.447, p=.66
Threat of death/harm		190	-.012, p=.99	-.096, p=.92	.109, p=.91
Physical assault by partner		190	.078, p=.94	.425, p=.67	-.489, p=.63
Sexual assault by partner		190	-.413, p=.68	-.194, p=.85	-.610, p=.54
Witness to drug overdose		190	-.023, p=.98	-.395, p=.69	.484, p=.63
Personally overdose		190	.681, p=.50	.770, p=.44	.259, p=.80

Note. *p < .05, **p <.01, ***p <.001. PC = Personal Competence subscale and ASL = Acceptance of Self and Life Subscale. Bolded items are significant in the model.

Table 14 displays the bivariate relationships between resilience and the variables in the human capital domain. The *Future Time Perspective Inventory* and each of its five subscales demonstrated significant relationships with total scores on the *Resilience Scale* and both subscales, with p values < .001.

Table 14

Bivariate Relationships with Human Capital Domain and Resilience

Variable Name	M (SD)		Total Resilience	PC	ASL
			r value		
Future Time Perspective (FTP)					
FTP full scale	79.82 (13.88)		**.426, p=.000*** **	**.426, p=.000*** **	**.335, p=.000*** **
Concerned with flow of time	25.64 (5.96)		**.332, p=.000*** **	**.317, p=.000*** **	**.289, p=.000*** **
Optimistic perspective of the future	18.40 (3.67)		**.434, p=.000*** **	**.434, p=.000*** **	**.358, p=.000*** **
Mindful of time	6.14 (1.82)		**.142, p=.05***	**.140, p=.05***	**.142, p=.05***
Anxiety regarding structure of the future	30.77 (7.17)		**.323, p=.000*** **	**.337, p=.000*** **	**.220, p=.002** **
Rejection of fatalism regarding the future	18.34 (4.51)		**.344, p=.000*** **	**.328, p=.000*** **	**.286, p=.000*** **
		df	t statistic		
Survival Behaviors					
Selling self-made items		190	.685, p=.49	.949, p=.34	-.169, p=.87
Panhandling		190	-.129, p=.90	-.428, p=.67	.134, p=.89
Selling drugs		190	.029, p=.98	-.040, p=.97	-.104, p=.92
Trading sex		190	-.661, p=.52	-.494, p=.63	-.978, p=.35
Gambling		190	.357, p=.72	-.328, p=.74	1.652, p=.10
Stealing		190	.435, p=.66	.589, p=.56	.016, p=.99
Employment		190	1.299, p=.20	1.502, p=.14	.404, p=.69

Note. *p < .05, **p <.01, ***p <.001. PC = Personal Competence subscale and ASL = Acceptance of Self and Life Subscale. Bolded items are significant in the model.

Table 15 displays the bivariate relationships between resilience and the variables in the homeless culture domain. The full *Social Connectedness Scale* and the *social connectedness* subscale (items 1-8) were significantly related to the total *Resilience Scale* score and scores on both subscales. Additionally, only one survival strategy demonstrated a relationship with the total resilience score. Young adults reporting that *staying away from certain places as a safety survival strategy* had a significant relationships with total resilience scores, $t = -2.009$ ($df = 190$), $p = .046$.

Table 15

Bivariate Relationships with Homeless Culture Domain and Resilience

Variable Name	M (SD)		Total Resilience	PC	ASL
			r value		
Length of Time on Streets	3.08 (2.80)		.093, p=.20	.070, p=.33	.103, p=.15
Social Connectedness	59.39 (11.73)		**.282, p=.000*** **	**.253, p=.000*** **	**.263, p=.000*** **
Social Connectedness	32.49 (8.73)		**.352, p=.000*** **	**.318, p=.000*** **	**.338, p=.000*** **
Social Assurance	26.90 (7.85)		.029, p=.69	.024, p=.74	.017, p=.81
Transience					
City	5.90 (3.76)		.056, p=.44	.065, p=.37	-.004, p=.95
State	3.72 (3.19)		.049, p=.50	.053, p=.47	-.002, p=.97
International	.09 (.48)		-.137, p=.06	-.136, p=. 06	-.098, p=.18
		df	t statistic		
Survival Strategies (List)					
Carrying a weapon		190	-1.220, p=.22	-1.380, p=.17	-.856, p=.39
Staying away from places		190	**-2.009, p=.05***	-1.731, p=.09	-1.851, p=.07
Staying away from people		190	-.613, p=.54	-.569, p=.57	-.507, p=.61
Sleeping during day		190	.138, p=.89	.227, p=.82	.129, p=.90
Always with trusted person		190	.756, p=.45	1.214, p=.23	-.262, p=.79

Note. *p < .05, **p <.01, ***p <.001. PC = Personal Competence subscale and ASL = Acceptance of Self and Life Subscale. Bolded items are significant in the model.

Research Question 3.3: What is the relationship between coping and independent variables in each domain?

The relationship between homeless young adults' scores on the *Coping Scale* and the demographic variables are displayed in Table 16. The demographic variables used in this study were not significantly related to scores on the full *Coping Scale*.

Table 16

Bivariate Relationships with Demographic Variables and Coping

Variable Name	Coping Scale
	r value
Age	.102, p=.16
Childhood Trauma	
Emotional neglect	.005, p=.94
Physical neglect	.047, p=.52
Emotional abuse	.068, p=.35
Physical abuse	.038, p=.60
Sexual abuse	.063, p=.38
df	t statistic
Gender	-1.916, p=.06
df	f statistic
Ethnic	1.258, p=.28

Note. *p < .05, **p <.01, ***p <.001. Bolded items are significant in the model.

Table 17 displays the bivariate relationships between the variables in each domain of the estrangement model with scores on the full *Coping Scale*. Overall, fewer variables emerged with significant relationships with the coping measure used in this study. Only two variables in the disaffiliation domain was significantly related to *coping*, two variables (from the same measure) in the psychological functioning domain and one in the human capital and homeless culture domain. The bivariate relationships are shown below, with significant relationships in bold.

Table 17

Bivariate Relationships with Variables in Estrangement Model and Coping

Domain	Variable Name		Coping Scale
Disaffiliation			
			r value
	Total # Arrests		-.108, p=.14
	Total # Juvenile Detention		**.145, p=.05***
	Total # Jail or Prison		-.108, p=.14
		df	t statistic
	Foster Care	190	-1.464, p=.15
	Education	190	-.709, p=.48
	Arrest History	190	.557, p=.58
	Juvenile Detention	190	.129, p=.90
	Jail or Prison	190	**-1.949, p=.05***
Psychological Functioning			
			r value
	Self Esteem (full scale)		**.242, p=.001****
	Self-efficacy subscale		.132, p=.07
	Self-esteem subscale		**.300, p=.000*****
		df	t statistic
	Alcohol Dependence	190	.874, p=.38
	Alcohol Abuse	190	.448, p=.66
	Substance Dependence	190	1.180, p=.24
	Substance Abuse	190	-.856, p=.39
	Depression	190	.807, p=.42
	PTSD	190	.757, p=.45
	Trauma Life Events		
	Sudden death of loved one	190	.696, p=.49
	Robbery involving weapon	190	.296, p=.77
	Physical assault	190	.634, p=.53
	Sexual assault	190	.157, p=.88
	Witness to severe assault	190	-.031, p=.98
	Threat of death/harm	190	.655, p=.51
	Physical assault by partner	190	1.071, p=.29
	Sexual assault by partner	190	-.669, p=.50
	Witness to drug overdose	190	.279, p=.78
	Personally overdose	190	.026, p=.98
Human Capital			
			r value
	Future expectations of young adults		
	Future Time Perspective (full scale)		.139, p=.06
	Concerned with the flow of time		.072, p=.32
	Optimistic perspective of the future		**.331, p=.000*****
	Mindful of time		-.073, p=.31
	Anxiety regarding structure of the future		.091, p=.21
	Rejection of fatalism regarding the future		.073, p=.60

Table 17 (continued)

Domain	Variable Name		Coping Scale
		df	t statistic
	Survival Behaviors		
	Selling self-made items	190	-.056, p=.96
	Panhandling	190	-.751, p=.45
	Selling drugs	190	1.063, p=.29
	Trading sex	190	-1.502, p=.14
	Gambling	190	.398, p=.69
	Stealing	190	.752, p=.45
	Employment	190	-.338, p=. 74
Homeless Culture			
			r value
	Length of Time on Streets		.032, p=.66
	Social Connectedness		
	Social connectedness (full scale)		-.033, p=.65
	Social Connectedness		.062, p=.39
	Social Assurance		-.119, p=.10
	Transience		
	City		-.016, p=.83
	State		.010, p=.89
	International		-.097, p=.18
		df	t statistic
	Survival Strategies		
	Carrying a weapon	190	-.172, p=.86
	Staying away from places	190	1.274, p=.20
	Staying away from people	190	1.092, p=.28
	Sleeping during day	190	.883, p=.38
	Always with trusted person	190	**2.165, p=.032***

Note. *p < .05, **p <.01, ***p <.001. Bolded items are significant in the model.

Research Question 3.4: What is the relationship between resilience and coping?

The correlations between *resilience* scores, and the *Personal Competence* (PC) and *Acceptance of Self and Life* (ASL) subscales, and *coping* are displayed in Table 18. Total *resilience* scores, as well as scores of both subscales, reveal moderate correlations with scores on the Coping Scale. Each of the correlations were significant at p < .001 level.

Table 18

Correlations with Resilience and Coping

Variable Name	Correlations with Coping Scale
Total Resilience	(.402)***
Personal competence subscale (PC)	(.384)***
Acceptance of self and life subscale (ASL)	(.338)***

******* p < .001

Specific Aim 4: Determine the extent to which each domain of the estrangement model predict resilience.

Multivariate analyses were conducted to determine which factors across the domains predicted resilience among this sample of homeless young adults. Demographic variables and variables significant with the full resiliency scale across all four domains of the estrangement model were regressed simultaneously. The same strategy was employed with the two subscales of the resiliency measure, which reflect *personal competence* and *acceptance of self and life*.

Research Question 4.1: What variables predict total resilience?

Total Resiliency Regression Model. The variables that were significant on a bivariate level with total resilience scores were included in a single regression model. A single simultaneous regression was conducted in order to minimize the chance for having a Type 1 error. Including all the variables into one regression decreases the chances for an inflated alpha and is a more parsimonious manner of analyzing this data (Lorch & Myers, 1990).

Table 19 displays the variables that were included in the regression equation as well as beta coefficients, p values and confidence intervals. This model accounts for 38% of the variance of total resilience scores among this population. Resilience was clearly impacted by *drug dependency*. If a young adult in this sample was drug dependent, b = -.142, $t(190) = -2.354$, $p < .05$, the lower their scores were for the full measure of the *Resilience Scale*. Young adults with higher scores on the *self-esteem* subscale, $b = .516$, $t(190) = 6.072$, $p < .001$, and higher scores on the *optimistic perspect*ive subscale of the FTP inventory, $b = .303$, $t(190) = 4.504$, $p < .001$ had higher resilience scores. The items on the *self-esteem* subscale had the most impact in this model with a standardized beta coefficient of .516. Thus low *drug dependency,* higher *self-esteem* and a higher *optimistic perspective* significantly predicted resilience on the full measure, F= 9.940 (190), p = .000.

Table 19

Multiple Regression Model with Total Resilience Scores

Variable	β	t value	P value	95% CI
Childhood trauma Emotional abuse	.085	1.308	.193	[-.122, .604]
Drug Dependence	**-.142**	**-2.354**	**.020***	[-8.639, -.760]
Depression	-.038	-.547	.585	[-6.743, 3.818]
Self-efficacy items	-.068	-.829	.408	[-.892, .364]
Self-esteem items	**.516**	**6.072**	**.000*****	[1.282, 2.516]
Concerned with the flow of time	.104	1.285	.200	[-.155, .734]
Optimistic perspective of the future	**.303**	**4.504**	**.000*****	[.764, 1.955]
Mindful of time	-.044	-.638	.524	[-1.773, .907]
Anxiety regarding structure of the future	.074	.794	.428	[-.253, .593]
Rejection of fatalism regarding the future	-.064	-.628	.531	[-.973, .503]
Social Connectedness Total	-.032	-.348	.728	[-.304, .212]
Social Connectedness subscale	-.051	-.532	.595	[-.304, .212]
Staying away from places	-.018	-.299	.765	[-4.952, 3.650]

Note. *p < .05, **p <.01, ***p <.001. Bolded items are significant in the model.

Partial and semi-partial correlations were also examined in order to determine the relative importance of each of the variables' contribution to the overall variance in resiliency accounted for in the regression model. Table 20 displays the partial and semi-partial correlations for each of the variables in the regression with total *resilience* scores. Partial correlations represent the amount of variance of the independent variable not estimated by the other variables in the model. The square of this correlation shows the percentage of variation in total resilience that was unexplained by the others variable in the model. For example, the square of the partial correlation of *drug dependence* = .0302, means that 3% of the variance of total resilience is left unexplained by the other variables in the model, but was explained by adding drug dependence. Moreover, the square of the partial correlation for *self-esteem* = .172, indicates that 17% of the variance of total resilience that is left unexplained by the other variables in the model was explained by adding the *self-esteem* variable. Additionally, the square of the partial correlation for the *optimism* subscale = .103, indicating the 10% of the variance of total resilience that is left unexplained by the other variables in the model was explained by adding this variable.

Semi-partial correlations (also called part correlations) indicate the unique proportion of variance that is uniquely associated with that independent variable. The square of this correlation indicates how much the overall R^2 would decrease if that variable was removed from the model. In this model, the square of the semi-partial correlations included: *drug dependence* = .018, *self-esteem* = .120, and *optimistic perspective* = .066. Therefore, the amount of variance uniquely explained by the various independent variables (2% for *drug dependence*, 12% for *self-esteem*, and 7% for *optimistic perspective*) can be summed (21%) and subtracted from the overall R^2 (38%)

to show the common variance accounted for by these three variables. The common variance for these three variables is 21%, leaving 17% of the variation explained by the other independent variables in the model.

Table 20

Partial and Semi-partial Correlations with Total Resilience Regression Model

Variable	Partial Correlations	Semi-partial Correlations
Childhood trauma	.98	.075
Emotional abuse		
Drug Dependence	**-.174**	**-.135**
Depression	-.041	-.031
Self-efficacy items	-.062	-.047
Self-esteem items	**.415**	**.347**
Concerned with the flow of time	.096	.073
Optimistic perspective of the future	**.321**	**.257**
Mindful of time	-.048	-.036
Anxiety regarding structure of the future	.060	.045
Rejection of fatalism regarding the future	-.047	-.036
Social Connectedness Total	-.026	-.020
Social Connectedness subscale	-.040	-.030
Staying away from places	-.022	-.017

Note. Bolded items are significant in the model.

Research Question 4.2: What variables predict personal competence (Resilience subscale)?

Personal Competence Regression Model. Table 21 displays the independent variables that were entered into the regression equation with the *Personal Competence* subscale of the *Resilience Scale*. In this model, similar to the previous model higher scores on the *Personal Competence* subscale of the *Resilience Scale* were associated with lower levels of *drug dependency* among the sample, b = -.146, t(190) = (-2.384), $p < .05$. Additionally, higher scores on this subscale were associated with higher levels of *self-esteem*, b = .449, t(190) = (5.180), $p < .001$, and *optimism*, b = .315, t(190) = 4.548, p <

.001. The variable with the most impact on this model was the *self-efficacy* subscale with a beta coefficient of .449. This model accounts for 34% of the variance of *personal competence*, F=9.950 (df=190), p =.000.

Table 21

Multiple Regression Model with Personal Competence Subscale Scores

Variable	β	t value	P value	95% CI
Drug Dependence	**-.146**	**-2.384**	**.018***	[-6.203, -.584]
Depression	-.012	-.166	.868	[-4.125, 3.485]
Self-efficacy items	-.056	-.659	.511	[-.604, .302]
Self-esteem items	**.449**	**5.180**	**.000*****	[.717, 1.599]
Concerned with the flow of time	.095	1.145	.254	[-.133, .502]
Optimistic perspective of the future	**.315**	**4.548**	**.000*****	[.561, 1.420]
Mindful of time	-.053	-.734	.464	[-1.328, .608]
Anxiety regarding structure of the future	.153	1.615	.108	[-.055, .547]
Rejection of fatalism regarding the future	-.132	-1.276	.204	[-.858, .184]
Social Connectedness Total	-.018	-.191	.849	[-.204, .168]
Social Connectedness subscale	-.071	-.718	.473	[-.352, .164]

Note. *p < .05, **p <.01, ***p <.001. Bolded items are significant in the model.

Table 22 displays the partial and semi-partial correlations for each of the variables in the regression with the *Personal Competence* subscale. The square of the semi-partial correlations for *drug dependence* = .019 (2%), *self-esteem* = .093 (9%), *optimistic perspective* = .072 (7%) represents the unique amount of variance for this variable with the dependent variable. The partial correlations shown below indicate the amount of variance of each independent variable when the variances for other independent variables have been partialled out.

Table 22

Partial and Semi-partial Correlations with Personal Competence Regression Model

Variable	Partial Correlations	Semi-partial Correlations
Drug Dependence	**-.175**	**-.140**
Depression	-.012	-.010
Self-efficacy items	-.049	-.039
Self-esteem items	**.361**	**.305**
Concerned with the flow of time	.085	.067
Optimistic perspective of the future	**.332**	**.268**
Mindful of time	-.055	-.043
Anxiety regarding structure of the future	.120	.095
Rejection of fatalism regarding the future	-.095	-.075
Social Connectedness Total	-.014	-.011
Social Connectedness subscale	-.054	-.042

Note. Bolded items are significant in the model.

Research Question 4.3: What variables predict *acceptance of self and life* (Resilience subscale)?

***Acceptance of Self and Life* Regression Model.** Table 23 displays the independent variables that were entered into the regression equation with the *Acceptance of Self and Life* subscale of the *Resilience Scale*. In this model, only the *self-esteem* subscale, b = .456, t(190) = 4.910, p < .001, and the *optimistic perspective* subscale of the Future Time Perspective Inventory, b = .238, t(190) = 3.237, p < .01, significantly predicted higher scores on the *Acceptance of Self and Life* subscale of the *Resilience Scale*. The variable with the most impact on this model was the *self-esteem* subscale with a beta coefficient of .456. This model accounts for 26% of the variance of *acceptance of self and life*, F=6.190 (df=190), p =.000.

Table 23

Multiple Regression Model with Acceptance of Self and Life Subscale Scores

Variable	β	t value	P value	95% CI
Childhood trauma Emotional abuse	-.037	-.402	.688	[-.225, .149]
Childhood trauma Emotional neglect	.054	.605	.546	[-.138, .261]
Drug Dependence	-.081	-1.238	.218	[-2.563, .587]
Depression	-.065	-.854	.394	[-3.023, 1.197]
Self-efficacy items	-.094	-1.048	.296	[-.385, .118]
Self-esteem items	**.456**	**4.910**	**.000*** **	[.368, .862]
Concerned with the flow of time	.095	1.078	.283	[-.080, .272]
Optimistic perspective of the future	**.238**	**3.237**	**.001** **	[.153, .630]
Mindful of time	.011	.144	.886	[-.499, .578]
Anxiety regarding structure of the future	-.063	-.624	.534	[-222, .115]
Rejection of fatalism regarding the future	-.011	-.094	.925	[-.312, .284]
Social Connectedness Total	-.066	-.628	.531	[-.141, .073]
Social Connectedness subscale	.021	.202	.840	[-.130, .160]

Note. *p < .05, **p <.01, ***p <.001. Bolded items are significant in the model.

Table 24 displays the partial and semi-partial correlations for each of the variables in the regression with the *Acceptance of Self and Life* subscale. The square of the semi-partial correlation for *self-esteem* = .093 (9%) and *optimistic perspective* = .041 (4%) represent the unique amount of variance accounted for by each of these independent variables.

Table 24

Partial and Semi-partial Correlations with Acceptance of Self and Life Regression Model

Variable	Partial Correlations	Semi-partial Correlations
Childhood trauma Emotional abuse	-.030	-.025
Childhood trauma Emotional neglect	.045	.038
Drug Dependence	-.093	-.077
Depression	-.064	-.053
Self-efficacy items	-.079	-.065
Self-esteem items	**.346**	**.306**
Concerned with the flow of time	.081	.067
Optimistic perspective of the future	**.236**	**.202**
Mindful of time	.011	.009
Anxiety regarding structure of the future	-.047	-.039
Rejection of fatalism regarding the future	-.007	-.006
Social Connectedness Total	-.047	-.039
Social Connectedness subscale	.015	.013

Note. Bolded items are significant in the model.

Aim 5: Evaluate how coping mediates the relationship between resilience and the domains of the estrangement model.

Meditation analyses (Baron & Kenny, 1986) were conducted through a series of multiple regression equations to evaluate if scores on the *Coping Scale* mediated the relationship between the independent variables and scores on the *Resilience Scale* or its two subscales (*Personal Competence* and *Acceptance of Self and Life*). A step-by-step process was followed in order to determine the extent of the potential mediating relationship. Baron and Kenny (1986) outlined four steps to establish mediation. This step-by-step process examined the direct effects of the potential mediating variable. In order to test the indirect effects, an additional test was also conducted. A Sobel test (Sobel, 1982) was conducted to test the significance of the indirect effects of the

mediator. Although Baron and Kenny's steps for mediation are recommended to test the effects of introducing a mediator into the model to determine the impact on the predictor and the dependent variable, the Sobel test is recommended as a final step that reduces the chance of a Type I and II error (Kenny, 2011; Preacher & Hayes, 2004). This test has been considered a robust method, recommended to be conducted following Baron and Kenny's (1986) step-by-step method (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002).

Research Question 5.1: To what extent does coping mediate the relationship between variables implicit in the estrangement model and resilience?

First, meditation testing was conducted following the four steps proposed by Baron and Kenny (1986). First, the independent variables, which were significant in each of the multiple regression models, were included in this mediation analysis process and were regressed onto each of the dependent variables (total *resilience*, *Personal Competence* subscale, and *Acceptance of Self and Life* subscale). Table 25 displays the results of each of these regression equations in the first step. All of the independent variables must have a significant relationship with the dependent variable in order to continue with each succeeding step in the mediation analysis. Significant relationships between independent variables and each of the dependent variables for the total effect must satisfy the requirements for step one of the mediation analysis.

Table 25

Step 1 of Mediation Testing with Total Resilience, Personal Competence and Acceptance of Self and Life

Independent Variable	B	β	P value	Dependent Variable
Drug dependence	-4.512	-.136	.018**	**Total Resilience**
Self-esteem items	1.644	.447	.000***	
Optimistic Perspective	1.299	.290	.000***	
F=41.44 (df=3,188), p=.000***				
Drug dependence	-3.202	-.138	.020**	**Personal Competence subscale**
Self-esteem items	1.014	.393	.000***	
Optimistic Perspective	.961	.193	.000***	
F=34.68 (df=3,188), p=.000***				
Self-esteem items	.564	.418	.000***	**Acceptance of Self and Life subscale**
Optimistic Perspective	.383	.233	.000***	
F=38.09 (df=2,189), p=.000***				

Note. *p < .05, **p <.01, ***p <.001.

The results of step 2 are displayed in Table 26, with the potential meditating variable, *coping.* The Coping Scale was regressed on the total *Resilience* score and the *Acceptance of Self and Life* subscale and the *Personal Competence* subscale. As shown in Table 26, the potential mediator of *coping* is significantly related to total resilience and both subscales, satisfying the requirements for step 2 of the mediation analysis.

Table 26

Step 2 of Mediation Testing with Coping and Total Resilience, Personal Competence and Acceptance of Self and Life

Independent Variable	B	β	P value	Dependent Variable
Coping	1.120	.402	.000***	**Total Resilience**
Coping	.751	.384	.000***	**Personal Competence (PC)**
Coping	.345	.338	.000***	**Acceptance of Self and Life (ASL)**

Note. *p < .05, **p <.01, ***p <.001.

Step 3 is displayed in Table 27, with the independent variables being regressed onto the potential mediator, *coping*. All of the independent variables satisfy the requirements for mediation testing by showing p values of .05 or less.

Table 27

Step 3 of Mediation Testing with Independent Variables Regressed onto Coping

Independent Variable	B	β	P value	Dependent Variable
Total Resiliency Model				
Drug Dependence	1.552	.131	.052*	**Coping**
Self-esteem items	.305	.232	.001**	
Optimistic Perspective	.438	.273	.000***	
F=12.91 (df=3,188), p=.000***				
Personal Competence Model				
Drug Dependence	1.552	.131	.052*	**Coping**
Self-esteem items	.305	.232	.001**	
Optimistic Perspective	.438	.273	.000***	
F=12.91 (df=3,188), p=.000***				
Acceptance of Self and Life Model				
Self-esteem items	.291	.221	.002**	**Coping**
Optimistic Perspective	.426	.265	.000***	
F=17.20 (df=2, 189), p=.000***				

Note. *p < .05, **p <.01, ***p <.001.

Step 4 is displayed in Table 28, with the independent variables and the potential mediator variable being regressed onto the dependent variable *(Resilience, Personal Competence, and Acceptance of Self and Life).* As indicated in the table, each of the independent variables and *coping* are significantly related to items on total resilience scores and both subscales of the Resilience Scale. These variables satisfy all four steps of the Baron and Kenny (1986) mediation analysis. Findings indicate that coping mediates the relationship between *drug dependence, self-esteem* and *optimistic perspective* with scores on the total *Resilience Scale* and the *Personal Competence* subscale. *Self-esteem* and *optimistic perspective* mediates relationships with scores of the *Acceptance of Self and Life* subscale.

Table 28

Step 4 of Mediation Testing with Independent Variables and Coping Regressed onto Resilience

Independent Variable	B	β	P value	Dependent Variable
Drug dependence	-5.469	-.165	.003**	**Total Resilience**
Self-esteem items	1.456	.396	.000***	
Optimistic Perspective	1.029	.230	.000***	
Coping	.617	.221	.000***	
F=36.53 (df=4,187), p=.000***				
Drug Dependence	-3.848	-.166	.005**	**Personal Competence subscale**
Self-esteem items	.887	.344	.000***	
Optimistic Perspective	.778	.248	.000***	
Coping	.416	.213	.001**	
F=30.37 (df=4,187), p=.000***				
Self-esteem items	.516	.383	.000***	**Acceptance of Self and Life subscale**
Optimistic Perspective	.313	.191	.004**	
Coping	.163	.160	.016*	
F=28.00 (df=3,188), p=.000***				

Note. *p < .05, **p <.01, ***p <.001.

Finally, a Sobel test (Sobel, 1982) was conducted in order to perform one single test examining the indirect paths between the independent variables and the dependent variables via the mediator. This test, recommended by Baron and Kenny (1986), is appropriate for studies with larger samples. It was first proposed by Sobel and is found to be a final step in determining mediation. To conduct this test, the indirect effect path is divided by its standard error. A Sobel test calculator (see http://www.quantpsy.org/sobel/sobel.htm) is used to determine the p value of the indirect path. Results of the Sobel test are displayed in Table 29. Each of the three independent variables, *drug dependence, self-esteem subscale, and optimistic perspective,* were entered in the Sobel test calculator to determine whether the mediator is the mechanism through which the independent variable influences the total *Resilience* scores and *Personal Competence* subscale scores. Only self-esteem and optimistic perspective were entered to determine their influence on the *Acceptance of Self and Life* subscale. As shown in table 28, the Sobel test reveals coping mediates the effects of self-esteem and optimistic perspective on total *Resilience* and the *Personal Competence* subscale. The variable measuring *drug dependence* appears to drop out of the mediation analysis with a p value on the Sobel test that exceeds .05 for both total *Resiliency* and *Personal Competence* subscale scores. Moreover, *coping* was found to mediate the influence of *self-esteem* and *optimistic perspective* items with scores on the *Acceptance of Self and Life* subscale.

Table 29

Results of the Sobel test for Drug Dependence, Self-Esteem, and Optimistic Perspective of the Future

Independent Variable	Dependent Variable	*a* = Unstandardized coefficent between IV and mediator	Standard error of *a*	*b* = unstandardized coefficient between mediator and DV (when IV is predictor)	Standard error of *b*	p value
Drug dependence	Total Resilience	1.014	.859	1.178	.180	**.207**
Self-esteem items		.395	.091	.729	.170	.002
Optimistic Perspective		.532	.110	.808	.185	.001
Drug dependence	Personal Competence	1.014	.859	.790	.128	**.246**
Self-esteem items		.395	.091	.504	.124	.003
Optimistic Perspective		.532	.110	.528	.130	.002
Self-esteem items	Acceptance of Self and Life	.395	.091	.215	.066	.009
Optimistic Perspective		.532	.110	.252	.071	.004

An examination of a reduction in the unstandardized beta coefficients from step 1 to step 4 determines whether coping fully or partially mediates these relationships. For each variable that passed the Sobel test, a reduction in the unstandardized beta coefficient indicates that *coping* partially mediates the relationship between each variable and the dependent variable. Table 30 displays the reduction for each variable indicating partial mediation.

Table 30

Reduction in Unstandardized Beta Coefficients from Step 1 to Step 4

Independent Variable	B (step 1)	B (step 4)	Dependent Variable
Self-esteem items	1.644	1.456	Total Resilience
Optimistic Perspective	1.299	1.029	
Self-esteem items	1.014	.887	Personal Competence
Optimistic Perspective	.961	.778	
Self-esteem items	.564	.516	Acceptance of Self and Life
Optimistic Perspective	.383	.313	

In conclusion, these results add to the knowledge base regarding an understudied and adverse population. Predictors of resilience and evidence for how coping mediates this process close a proverbial gap regarding the unique strengths of this population. The literature on homeless young adults will benefit from the implications arising from this study on the hidden resilience of these vulnerable young adults. The following chapter will provide a detailed interpretation for all of the findings presented in this section. Results will be compared to previous literature on the homeless young adult population. Additionally, implications regarding practice, policy and future research will be discussed.

Chapter 5: Discussion

In recent years, research devoted to exploring coping and resilience among the homeless young adult population has grown. A focus on the maladaptive and deviant nature that can often characterize this group has begun to shift to examining homeless young adults' strengths and positive capabilities (Bender et al., 2007; Kidd & Shahar, 2008; Rew & Horner, 2003a). This new perspective allows researchers to begin to understand the unique coping strategies and resilient nature of young adults living in dangerous settings. By understanding this vulnerable group and recognizing their potential, practitioners and service workers can better engage with this hard to reach population to assist them to improve their lives on the streets and possibly assist them in transitioning out of homelessness (Bender et al., 2007; Luthar, 2003; Rutter, 1985). This dissertation study contributes to the growing knowledge-base concerning resilience among homeless young adults. A strengths-based analysis of a homeless young adult population was conducted to examine the predictors of resilience and sought to determine if coping mediated the relationship between resilience and the domains in the estrangement model among this group.

This chapter will be organized into three sections. In the first part of this chapter, a detailed interpretation of each of the specific aims will be provided and will compare the findings of the current study with extant literature. The second part of this chapter will include implications for practice and policy, based on this study's results. Finally, the chapter will conclude with a discussion of limitations of this dissertation study and implications for future research with this population.

Specific Aim 1

Specific Aim 1 sought to describe the study sample. The following section will discuss the findings related to each of the variables implicit in each of the domains of the estrangement model. Before each of the domains of the estrangement model are explored, the demographics will be discussed. First, gender was consistent with other studies in the literature that found that the number of males living on the streets was higher than the number of females (Cauce et al., 2000a; Hwang, 2001). Nearly two-thirds of this sample was male. This finding is congruent with literature that found homeless youth and homeless young adults directly living on the streets are more likely to be male (Cauce et al., 2000b; Ringwalt, Greene, Robertson, & McPheeters, 1998) while females are more likely to be residing in shelters (Robertson & Toro, 1999; Whitbeck & Hoyt, 1999).

Contrary to studies that depict ethnic minorities are overrepresented among a homeless youth population (Durham, 2003), ethnic background among this sample was overwhelmingly White/not Latino. Hispanic young adults were the next largest minority group (under 10%), followed by American Indian, and Black young adults respectively. Taking a closer look at the ethnic breakdown, the percentage of each race reflects the ethnic make-up of the country to some extent. According to the U.S. Census Bureau in 2010, 72.4% of the country's population was White, 12.6% were Black, .9% were American-Indian and Alaska Native, 4.8% were Asian, and 16.3%*[1] were Hispanic. Statistics from Texas show 70.4% of the state's population was White, 11.8% were Black, .7% were American-Indian and Alaska Native, 3.8% were Asian, and 37.6%*

[1] This Information from the U.S. Census Bureau notes that all of the ethnic categories are from persons only reporting one race, except for Hispanic individuals who may be of any race and so can be included in other applicable race categories.

were Hispanic (U.S. Census Bureau, 2010). Although minorities were not prevalent in this sample, the numbers of young adults from some ethnic groups warrant discussion. For example, Black young adults in this sample were underrepresented in comparison to national population estimates while American Indian young adults were overrepresented among this sample. One possible reason why American Indian young adults were higher in this sample could be related to the geographic location of the study site. Although transience is a common factor for homeless young adults (Bender et al., 2007), the proximity of this study site to states with larger American Indian populations may have impacted the numbers of youth from that ethnic background. While the numbers of ethnic minorities in this study is relatively small, developing a clear and relevant understanding of the cultural differences between these ethnic groups is important to acknowledge when working with these young adults (Slesnick et al., 2002; Thompson et al., 2003). Cultural sensitivity is important for two reasons. First, it may help professionals engage more effectively with minority homeless young adults. Second, it allows professionals to have a clear understanding of the different family and kinship dynamics that exist among various ethnic minority groups (Thompson et al., 2003).

Childhood trauma experiences among this sample reflects the high rates of trauma and victimization that have been previously documented in the literature (Whitbeck et al., 2001a; Whitbeck, 2009). In general, this sample reported high rates of traumatic experiences in their childhood. This finding is congruent with literature that reveals homeless youth experience more physical and sexual abuse than same-aged peers who are not homeless (Wolfe, 1999; Zerger et al., 2008). Almost half of the young adults reported emotional and physical abuse in their home of origin, with over 70% of the

sample stating that someone in their family hated them. Additionally, mean scores on the Childhood Trauma Questionnaire exceeded each of the standardized cut scores that identified mild trauma severity for each of the five subscales. This finding is congruent with the literature that finds the homeless young adult population has high rates of experiences with trauma in their homes of origin, often becoming a primary factor in their leaving initially (Bender et al., 2010; Toro et al., 2007; Williams et al., 2001). High rates of trauma among this population have been related to problems including depression, anxiety, dissociation, and substance use and therefore should be carefully assessed in order to increase positive outcomes and assist young adults into transitioning into main stream society (Bao et al., 2000a; Thompson, 2005).

Disaffiliation Domain

Rates of foster care history, education level and criminal activity will be discussed it this section. Similar to findings from other studies who report that former foster care youth make up a substantial percentage of a homeless youth population (Courtney & Heuring, 2005; Courtney et al., 2001; Lenz-Rashid, 2006). Findings from this study showed that nearly 30% of young adults were in the foster care system at one time with an average of 4 placements in different foster homes. This finding is congruent with the literature, specifically to Barbell and Freundlich's (2001) study that reported that 3 out of 10 homeless adults were in foster care at one time in their life, and another study (Nelson, 2004) that found 25% of emancipated youth were homeless within 2 to 4 years of leaving their foster homes. It is also consistent with findings from Cauce and colleagues (2000a) revealing 33% of homeless youth were involved in the foster care system. Interestingly, the number of young adults who had been in the foster care system was smaller in this

study than other studies of homeless young youth and adults that show ranges from 21 to 53 percent (Cauce et al., 1998; Firdion, 2004; Toro & Goldstein, 2000). The lower rate in this sample may be due to better relationships among social service organizations working with the foster care system to ensure that emancipated youth are making positive transitions out of custodial care (Kennedy, 1991). While percentages may be lower for this group, the problems that these doubly homeless (youth who were removed from their homes and placed into custodial care only to run away from their placement) have remained substantial. One study found that 17.7% of a homeless youth sample had experience with the foster care system before becoming homeless and those youth reported the most difficult family problems among youth who had runway and those youth who had been thrown out of their homes (MacLean, Embry, & Cauce, 1999). Other studies in the literature found similar results indicating that young adults who were involved in the foster care system reported high rates of personal victimization, deviant behavior, psychological distress, and problems with alcohol and substance use (Fowler, Toro, Tompsett, & Hobden, 2006; Samuels & Pryce, 2008). Findings from this dissertation coupled with the existing literature suggest that for young adults aging out of the foster care system, it is important to consider their current circumstances on the street while also taking into account that these young adults where often removed from their homes due to parental physical abuse or neglect (Aviles & Helfrich, 2004).

Education levels among this sample seems to mirror other studies that depict low levels of education, as well as youth who drop out of school (Ayerst, 1999; Cumella, Grattan, & Vostanis, 1998; Slesnick et al., 2008; Thompson et al., 2003). As just over 30% of the young adults in this study graduated from high school, findings are consistent

with the literature that youth homelessness is associated with more difficulties in school and poor academic performance (Hagan & McCarthy, 1998; Thompson, Barczyk, et al., 2010). Educational detachment and academic difficulties can also be a contributing factor to conflicts in the home, potentially contributing to reasons why the youth is leaving home (Toro et al., 2007). Additionally, these problems may have manifested from attention-deficit disorders (Cauce et al., 2000a) or other learning disabilities (Barwick & Siegel, 1996; Sullivan & Knutson, 2000). Overall, the low levels of education and higher than average drop-out rates in this sample are congruent with the extant research that exemplify the disaffiliation that this population experiences from the traditional educational system (cf.Robertson, 1991; Robertson & Toro, 1999; Whitbeck & Hoyt, 1999). Reconnecting young adults with educational institutions may help to relieve the marginalization and stigma that often characterizes this population.

Finally, criminal activity among this population also confirms previous findings (Bender et al., 2010; Hoyt, Ryan, & Cauce, 1999b; Rohde et al., 2001; Tyler, Hoyt, Whitbeck, & Cauce, 2001a), which have revealed that high rates of criminal activity are prevalent among this population. Findings were consistent with other studies that found homeless youth (particularly those on the streets longer than 6 months) were more likely to have experienced juvenile detention previously (Mallett, Rosenthal, Myers, Milburn, & Rotheram-Borus, 2004; Milburn, Rotheram-Borus, Rice, Mallet, & Rosenthal, 2006) and having been arrested during time spent on the streets (Gaetz, 2004a). These findings confirm that homeless young people consistently reflects a population that remains highly involved in the criminal justice system and may be at higher likelihood of becoming a crime victim (Bender et al., 2010; Rohde et al., 2001). Overall, these findings suggest a

high level of disaffiliation and suggests the importance in reconnecting these young adults with prosocial institutions to assist them with life on and off the streets. For example, young homeless adults who commit relatively minor crimes (e.g, public intoxication, engaging in graffiti) may be better served by courts that are informed by a therapeutic jurisprudence philosophy of courts, such as a mental health court or drug court, than they are by a retributive criminal justice court model (Trawver & Rivera, 2011). Increasing homeless young adults' sense of affiliation may help to reestablish more positive relationships and assist them with life choices on the streets and transitioning out of homelessness.

Psychological Functioning

Previous research has found that this population has high rates of mental illness (Merscham et al., 2009), substance use (Thompson et al., 2009) and exposure to trauma and victimization (Thompson, 2007a). The findings from this study corroborate the preceding literature that homeless young adults have alcohol and drug disorders at high rates (Johnson et al., 2005; Thompson et al., 2009), often impacting their ability to transition to life off of the streets (MacLean, Paradise, & Cauce, 1999). Homeless young adults in this study struggled with alcohol and drug dependency (approximately 76% had an alcohol or drug dependency problem), with over 60% stating that marijuana was their drug of choice. This finding is consistent with the literature that found between 39 to 70% of homeless youth abused drugs or alcohol while living on the streets (Chen, Thrane, Whitbeck, & Johnson, 2006a; Martijn & Sharpe, 2006). Researchers have found homeless youth report using more than one substance while living on the streets and over 50% being identified as either alcohol or drug dependent (Thompson et al., 2009).

Findings from this study add to the literature that has documented the persistent drug and alcohol problems among homeless young adults which have been positively associated with time spent on the streets (Kipke, Montgomery, Simon, & Iverson, 1997). An interesting aspect of this sample's substance use is the influence of its peer network (Thompson et al., 2009). Some studies have found that the high rates of drug and alcohol use among this population are highly influenced by homeless young adults' street peers (Dinges & Oetting, 1993; Kipke, Unger, et al., 1997; Rice, Milburn, Rotheram-Borus, Mallett, & Rosenthal, 2005a), while other investigators have found that substance use helps individuals on the streets cope with the anxiety and fear associated with being homeless (Mallett et al., 2005). Therefore, it is important for service providers to understand the nature and degree of young adults' problems with drugs and alcohol to determine the amount of harm experienced in their using in relation to the potential benefits as a way of coping. Helping homeless young adults discover healthy, more adaptive coping strategies may assist young adults in reducing and even replacing harmful substance use which is often utilized to cope with the adversity of street life (Thompson, McManus, et al., 2006a).

The literature has found that homeless young adults are more likely to experience depression (Ayerst, 1999; Bao et al., 2000a; Thompson, Jun, et al., 2010) than young adults who are not homeless This study found that 24% met the diagnosis for major depressive disorder. While this percentage does not seem overwhelmingly high, it does exceed the percentage for the general public, which is approximately between 5 and 10.3%, with 2% of these cases being considered "severe" (NIMH: Major Depression Disorder Among Adults; Olfson et al., 2002). With these rates that are higher than those

of the general population (Bassuk, Buckner, Perloff, & Bassuk, 1998; Rohde et al., 2001), service providers must focus on this mental health problem in order to best help these young adults.

Understanding the temporal order of a young person's depression is also paramount when working with this group in order to determine if their depression begins before or after their onset of homelessness (Rohde et al., 2001). Almost three-fourths of youth surveyed in another study reported experiencing their first episode of depression even before they left home for good, and the remaining experienced depression either when they left home or soon after they became homeless (Rohde et al., 2001). Additionally, in-depth assessment of the influence of peer networks and social support of homeless young adults is important as these factors have been found to impact the rate of depression for homeless young adults (Bao et al., 2000a). Hence, professionals can gain insight into whether or not young adults' peer networks are beneficial or harmful, and assist young adults in gaining perspective on the nature of their social support. Overall, the higher than average rate of depression found in this study is congruent with the literature on homeless youth and signifies the importance of assessment and intervention with this population who often show depressive symptoms even before they begin their life on the streets.

In looking at homeless young adults, particularly those who have experienced trauma and victimization, findings from previous literature suggest that self-esteem and self-efficacy among this group is rather low (Johnson et al., 2006; Kidd, 2006). This seems to improve once young adults begin to utilize their social networks for support and engage in adaptive coping strategies that include accepting help from others and finding

comfort and guidance through peers (Kidd & Shahar, 2008; Williams et al., 2001). Interestingly, scores for this sample indicate that homeless young adults interviewed in this study have above-average scores for self-esteem and self-efficacy. One possible reason for higher scores among this sample may be a social desirability bias that could have impacted how they answered questions that may have sounded demeaning or reflected a lack of power. Oftentimes during survey administration, respondents may answer questions that make them appear to be more positive (Rubin & Babbie, 2008). Questions that include, "You feel like you are basically no good", "Sometimes you feel that you are being pushed around in life", and "You feel like a failure" may have influenced how these young adults answered. Alternatively, higher scores on this scale may be related to young adults' sense of connectedness and social support of peers (Bender et al., 2007; Johnson et al., 2005; Whitbeck & Hoyt, 1999). Positive relationships have been found to support self-esteem (Ladd, Kochenderfer, & Coleman, 1996) and become a buffer to stressful daily living situations by moderating feelings of loneliness and worthlessness (Kidd, 2003). Research has shown that high self-esteem may protect against depression (Smart & Walsh, 1993) and potentially reduce stigma among this population that struggles with multiple challenges on a daily basis (DiBlasio & Belcher, 1993; Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001).

While previous literature has documented higher rate of PTSD symptoms and trauma among this population (Bender et al., 2010; McManus & Thompson, 2008; Stewart et al., 2004; Thompson, 2005; Thompson et al., 2007; Whitbeck, Johnson, et al., 2004), the findings from this study found that only 16% of homeless young adults met the diagnostic criteria for PTSD. This finding is lower than rates reported by Johnson,

Whitbeck and Hoyt (2005), who found that 40% of their sample met criteria for PTSD. However, it is similar to other studies that found between 18 to 24% of youth living in shelters or on the streets met diagnostic criteria for trauma related symptoms (Bender et al., 2010; McManus & Thompson, 2008) . The rate for trauma exposure, including exposure to a traumatic event that included actual or threatened death or serious injury to themselves or someone else, among this sample is 76%, this is congruent to findings in other studies that show between 57-83% of young adults report victimization experienced on the streets (Bender et al., 2010; Stewart et al., 2004). Overall, this population experienced traumatic events while on the streets that can be related to psychological issues including depression, anxiety and dissociation (Thompson, 2005), but may not actually reach diagnostic criteria for PTSD. Furthermore, trauma has been found to predict depression and anxiety in individuals who experienced a physical trauma (Birmes et al., 2001; Rayburn et al., 2005). The findings in this study suggest tailored services to this population are required in order to help them identify and work through symptoms related to their particular trauma experiences.

Human Capital

Findings from this study suggest that homeless young adults utilize a variety of ways to enrich their level of human capital. Human capital was defined in Chapter 2 as the ability and knowledge to produce highly valued goods and services that may be viewed as a mechanism for bettering the community (Bullock, Stallybrass, & Trombley, 1998). Human capital is typically related to employment (Lundgren et al., 2003) and was also used in this study to capture how young adults adopt optimistic perspectives of the future to assist them with life on the streets (Rew et al., 2002). Similar to the previous

literature on homeless young adults (Ferguson et al., 2011; Lippman et al., 2011; Rowe, 2002; Whitbeck, 2009), this sample used various strategies to make money on the streets, in both adaptive and maladaptive ways. Strategies to make money and/or gain resources range from prosocial means including temporary to full time working, to more deviant behaviors that included dealing drugs, stealing and prostitution. Congruent with the literature (Kipke, Unger, et al., 1997), this study found that panhandling was a strategy employed by almost 80% of participants to make money. Almost half of the sample reported they received resources from an agency program (drop-in center), social security or welfare. The findings from this study corroborate other studies in the literature that suggest that youth living on the streets want to and are willing to work; however, they are faced with barriers and obstacles which may make this difficult (Gaetz & O'Grady, 2002). The need for monetary resources coupled with a large percentage of young adults who are willing to seek assistance from an agency setting may suggest that this group would benefit from services provided to strengthen job skills or counseling on how to locate employment. It has been shown that youth who received services (even for a short time) from agencies or crisis shelters showed positive outcomes in employment, self-esteem, and school-related problems (Thompson, Pollio, Constantine, Reid, & Nebbitt, 2002). The strengths of young adults living on the streets can be enhanced with providing positive and effective services aimed at moving this group toward more adaptive ways of meeting their financial needs.

In addition to having a multitude of ways in which homeless young adults make money, this sample was also found to adopt optimistic perspectives of the future to survive in a dangerous environment (Rew et al., 2002). The five subscales on the Future

Time Perspective Inventory represent different conceptions of how young adults view their environment as predictable, structured and controllable (Heimberg, 1963). Findings demonstrated that homeless young adults reported a quite optimistic perspective of the future. Scores among this sample were lower than another sample of homeless youth ages 16-20 (Rew et al., 2002), and a sample of non-homeless youth ages 15-21 (Yarcheski, Mahon, & Yarcheski, 1997). The finding that participants in this study scored lower than a sample of youth who are not homeless is not surprising, as a homeless population has often been perceived as a more present-centered, focused less on their future and more on the daily tasks of obtaining food, shelter, and other necessary resources (Fest, 2003; Rew et al., 2002). In her conception of this measure, Heimberg (1963) related this concept to a more positive evaluation of self. Thus, lower scores on this measure seem to relate to previous literature on this population regarding a shortened conception of their future (Fest, 2003; Rew et al., 2002) and simply the fact that meeting daily needs in an adverse environment is topmost in their minds. Strengthening homeless young adults' ability to view their future as optimistic and with less anxiety may increase their ability to make better choices on the streets (Rew et al., 2002). According to one group of investigators, an investment in this populations' human capital is necessary for strengthening their perspectives on the future, meet goals and potentially transition off of the streets (Kurtz, Lindsey, Jarvis, & Nackerud, 2000). Other researchers suggest that a person's perspective of the future can be enhanced by utilizing strength-based treatment modalities to help them effect change in their lives (Baer, Peterson, & Wells, 2004; Bender et al., 2007; Kidd, 2003; Levy, 1998).

Homeless Culture

Homeless young adults in this sample reported that they primarily lived on the streets or in a temporary shelter, similar to other studies in the literature (Baer et al., 2004; Goering, Tolomiczenko, Sheldon, Boydell, & Wasylenki, 2002; Klein et al., 2000). Moreover, this sample seems to reflect the characteristics of other homeless youth populations recently studied in that they are highly transient (Aviles & Helfrich, 2004; Gaetz, 2004a; Greenblatt & Robertson, 1993), with young adults' living in an average of 6 cities, ranging from 2 to 10 before they were interviewed in Austin. Additionally, young adults in this study lived in an average of 4 states since they had runaway/left from home.

Although transient, young adults in this study also demonstrated that they were quite connected to their street peers. Much like previous literature on this population, the findings from this study revealed that these young adults felt socially connected to others who lived on the street. Researchers have found that a high sense of social connectedness exhibited by more social supports, as well as a homeless young adults' "street family," counteracted the stress and strains of life on the streets (Kidd, 2003; King, King, Fairbank, Keane, & Adams, 1998; McCarthy, Hagan, & Martin, 2002; Rew & Horner, 2003a; Thompson, Pollio, Eyrich, Bradbury, & North, 2004; Unger et al., 1998c).

Interestingly, homeless young adults scored only slightly lower than a similar aged population of college students on this same measure of social connectedness (Lee & Robbins, 2000). This supports the work of Fest who found that homeless young adults often create social networks, similar to housed young adults, in order to establish feelings

of acceptance, connection and a sense of control over their lives. However, when surveyed on feelings of companionship and affiliation related to social assurance, homeless young adults were more likely to feel frustrated from inadequate social support from others in comparison to a similar-aged college cohort (Lee & Robbins, 1995). This lack of social assurance may be the result of homeless young adults needing more reassurance from others to achieve a sense of belonging in social situations. Higher feelings of self-assurance or confidence in social situations suggest that homeless young adults may feel empowered from the social support they receive from their peer network, potentially motivating them to achieve goals or complete tasks independently. Young adults in this study appear to be more frustrated with a lack of support from individuals and peers in social situations and may not have developed adequate social skills or confidence. This lack of confidence and social skills may be the result of the social isolation and disaffiliation that this group often experiences (Piliavin et al., 1993a), in addition to the strained relationships in these young adults' homes (Thompson et al., 2004; Whitbeck, 2009) that may impact their confidence in social situations. Recognizing the potential of developing and strengthening homeless young adults' social supports and increasing their confidence may have implications for how these vulnerable young people cope with the adversities they face.

Finally, young adults in this study revealed a number of safety strategies they utilized on the streets. Similar to other studies that explored how youth populations stay safe in a dangerous environment (Ferguson et al., 2011; Gaetz, 2004a; Lankenau et al., 2005; Lippman et al., 2011), the majority of this sample reported that they stayed safe by avoiding certain people on the streets, carrying a weapon, staying away from certain

places and always being with someone that they trusted. For young adults living on the streets, utilizing safety strategies is paramount as their environment is wrought with the potential for trauma and victimization (Gaetz, 2004b). The safety strategies employed by young adults in this study reflect a type of resilience (Lankenau et al., 2005). This unique type of resilience can be linked back to the concept of hidden resilience, characterized by non-normative mechanisms for survival in an adverse environment (Ungar, 2004d). Utilizing various strategies to remain safe in an adverse life situation is essential for this populations' survival. An ability to navigate life among the barriers and obstacles facing young adults on a daily basis remains a strength of this group.

Resilience and Coping

Resilience for this group were high, which suggests that homeless young adults may have a more non-traditional and contextually sensitive model of resilience that is outside of the common conception. The maladaptive and adaptive coping strategies that fall outside of conventional norms (Lippman et al., 2011), coupled with homeless young adults' substance use and mental health challenges appear to contribute to a picture of "street resilience" (Whitbeck, 2009) that helps these young people survive in an adverse environment. The scores of resiliency were higher (on item means) than reported for a sample of homeless adolescents (Rew et al., 2001), and students in an inner city vocational school (Hunter & Chandler, 1999). Additionally, homeless young adults' scores were only slightly lower than a sample of non-homeless adolescent mothers (Black & Ford- Gilboe, 2004).

Understanding homeless young adults' high levels of resiliency is a growing body of research (Bender et al., 2007; Lippman et al., 2011; Rew & Horner, 2003a). Contrasting with previous literature that has negatively labeled this group of young people as deviant and maladaptive (DeLisi, 2000; Whitbeck, Hoyt, Yoder, Cauce, & Paradise, 2001b), understanding their high level of resiliency addresses a much-needed gap in knowledge base on homeless young adults, with implications for practice and policy arenas. Gaining knowledge on this group within their contextual environment will generate implications for helping young adults navigate their lives and overcome challenges. Findings from this study confirm the view that resilience may be atypical, context-specific, and even maladaptive at times, for certain populations. Utilizing resources that are available at the moment, homeless young adults display resiliency that may include drug and alcohol use, crime, or unique survival strategies to survive on the streets. These manifestations of resilience may be described as maladaptive; however they may be more effective for homeless young adults' unique way of life (Ungar, 2004d). This finding confirms the notion of a non-traditional manifestation of resilience among this group, their *hidden resilience* (Ungar, 2004a). Understanding this populations' *hidden resilience* will help service providers and professionals working with this group to appreciate their diversity and better understand them from a perspective that is non-pathologizing.

Coping strategies that were examined indicated a wide range of strategies that were both prosocial and antisocial, congruent with the literature that these young adults often employ various mechanisms to cope with life on the streets (Greene, Ennett, & Ringwalt, 1999; Hagan & McCarthy, 1998). The various strategies suggest the multi-

dimensional nature of homeless young adults' coping. For example, strategies included more positive, or adaptive, strategies of coping including problem solving and learning from mistakes to more negative strategies including using drugs and alcohol or anger to cope with life on the streets. Understanding this populations' complexity in how they cope and the varied strategies they employ will allow practitioners to better appreciate their world view (Kidd, 2003).

Specific Aim 2

Specific Aim 2 sought to evaluate the psychometric properties of the scales used in this study. The following section will discuss the findings related to exploring the internal consistency of each of the scales, as well as the exploratory factor analyses for the Resilience Scale and the Coping Scale.

Internal Consistency of Scales Used in the Study

Overall, the reliability coefficients for each of the scales utilized in this study were high and acceptable for nomothetic research (Abell et al., 2009). Internal consistency coefficients were determined for each of the scales and findings revealed that each scale consistently and adequately measured the particular construct. *The Resilience Scale, the Client Evaluation of Self and Treatment measure (CEST), the Social Connectedness Scale, the Future Time Perspective Inventory, the Childhood Trauma Questionnaire, and the Traumatic Life Events Questionnaire* all demonstrated Cronbach's alphas of .79 or above. According to frequently cited rule of thumb, these scores would be considered "acceptable" and approaching "good" reliability levels (Abell et al., 2009; Hudson, 1982). Coefficients between .70 and .80 are considered acceptable,

alpha levels that fall between .80 and .90 are considered good, and alpha levels above .90 are considered excellent (George & Mallery, 2003). Thus, the high reliability coefficients found in the instruments used in this study indicate good internal consistency with instrument performing consistently over time (Abell et al., 2009). Furthermore, this indicates an added value to this study in that most of these instruments have not yet been tested with a homeless young adult population.

The only measure used in this study with a Cronbach's alpha that could be questioned is the *Coping Scale*, which had an overall reliability coefficient of .51. According to previously cited standards, an alpha level of .51 is considered poor (George & Mallery, 2003). In the initial construction of this scale, four items were included from the *Ways of Coping Questionnaire* (Folkman & Lazarus, 1985). These four items comprised two of the initial subscales of this measure: *problem-focused coping* and *avoidant/disengagement coping*. Cronbach's alphas for each of the two subscales were .85 and .61 respectively, which are acceptable according to common research standards (Nunnally & Bernstein, 1994). It appears that the inclusion of items that originated from a separate study lowered the reliability coefficient for the entire measure. While these items clearly add to the heuristic or clinical value of capturing how homeless young adults specifically cope, the myriad of items appears to inhibit the reliability of this scale. A possible reason that the alpha level for this scale is low is that the structure of the scale may not be conceived as following a common structure. For adequate scale construction, individual scale items should reflect the same construct (DeCoster, 2000). Including items that may have a perceived negative connotation may have impacted the reliability of this measure, by indicating a slightly different construct. For example, homeless young

adults in this study may have construed items that indicated they used drugs or alcohol or used anger to cope as indicating a negative or maladaptive manner of coping. Hence, homeless young adults may have been answering questions in attempt to meet the assumed expectations of the researcher. The respondent's reactivity, or the possibility that a reaction to the scale items may inhibit the person's willingness to disclose (Abell et al., 2009), may have impacted how young adults responded to these items. In exploring the possibility of deleting an item to raise the alpha level of this measure, the item suggested for deletion was "using drugs or alcohol." Although deleting this item would raise the alpha level closer to an acceptable level (to .56) according to research standards, this item has heuristic value to the extent that it contributes to the clinical assessment of how this population copes by using substances.

Exploratory Factor Analyses

Resilience Scale. The exploratory factor analysis (EFA) conducted on the Resilience Scale did not suggest any significant changes to the factor composition for this measure. Above all, the goal of an EFA is to improve the structure of a measure (Reise et al., 2000), and findings suggest that an overall improvement of the Resilience Scale was not achieved. The first plausible reason that the EFA does not suggest a change to the factor structure is that it is already psychometrically sound with a clear factor structure (Springer, 2012). Second, the EFA was conducted because the scale was initially normed on a different population, and it seemed reasonable to examine if that factor structure held with the current sample. When a clear factor structure did not emerge, it became clear that the Resilience Scale is a sound tool to use with homeless young adults.

Therefore, this EFA lends support for the existing factor structure (Nunnally & Bernstein, 1994; Springer, 2012) and its use in future research.

Coping Scale. In looking at the EFA for the Coping Scale, the findings from this analysis suggest a change in the organization of this scale. The Coping Scale in its original format contained four subscales: problem-focused coping, avoidant/disengagement coping, social coping and other domains of coping. This scale emerged from the findings of a qualitative study on homeless youth. Inherent are a weak composition of its subscales. The fourth subscale, the other domains of coping, included heterogeneous items that did not reflect a common structure. The newly re-organized structure of the Coping Scale conducted in this study with its four domains, positive-coping strategies, self-actualizing coping strategies, maladaptive coping strategies, and withdrawal from peers (in an adaptive manner) reflect a more cohesive organization. These new domains narrow the focus of this scale and essentially loses the "catch all" category of other domains of coping. This emerging factor organization allows for a more common factor structure that seems to reflect more homogenous constructs within the scale. Moreover, this newly organized scale has implications for future research with the potential to explore the various different ways in which homeless young adults cope with life of on the streets.

Specific Aim 3

Specific Aim 3 sought to examine the bivariate relationships between the estrangement model and resilience. The following section will discuss the findings related to the significant relationships between each of the variables in the estrangement model and scores on the total *Resilience Scale* and each of the subscales.

Demographic Variables (Including Childhood Trauma Experience) and Resilience

The results from the bivariate analyses with demographic variables and resilience revealed significant relationships between the childhood trauma experiences and resilience. Homeless young adults who reported emotional neglect in their home of origin had lower scores on the subscale that reflected characteristics including adaptability, balance, flexibility and a sense of peace (Wagnild, 2009a). Additionally, homeless young adults who reported being emotionally abused in their homes also had lower resiliency. Interestingly, the two subscales that clearly impacted scores on the resilience measure were indicators of emotional pain and trauma that have been determined to be a common experience for homeless young adults (Martijn & Sharpe, 2006). While the literature has shown the pervasiveness of trauma within this population (Stewart et al., 2004; Thompson, 2007a), it is notable that the emotional aspect of abuse and neglect may have more of an impact on resilience than the physical manifestations of trauma. This finding is interesting and suggests the importance of assessing the impact of trauma to determine its emotional affect on the homeless young adult. Furthermore, understanding this emotional component for homeless young adults can help these individuals deal with the consequences of their emotional distress which has related to depression, anxiety and

dissociation (Thompson, 2005). Understanding that the mere context of homelessness is a psychological trauma itself (Goodman et al., 1991), an investment by service providers to understand the chronic stress and emotional pain that has impacted this populations' lives (Williams et al., 2001) could help them move forward. Considering the implications for resilience, service providers and professionals dealing with homeless young adults must continue to focus on helping to heal the emotional abuse that often prompts them to leave home in the first place (Whitbeck, Hoyt, & Ackley, 1997).

Disaffiliation Variables and Resilience

The findings from this bivariate analysis suggest that issues related to disaffiliation do not appear to be important to homeless young adults in relation to resilience. One reason for the absence of relationships within this domain, consistent with findings from Piliavin and colleagues (1993a) could be that young adults' level of disaffiliation is so entrenched that it has no clear impact on their level of resilience. Research has found this population to have weak relationships with familial and societal institutions that have created tremendous obstacles (Kidd & Davidson, 2007; Whitbeck et al., 2001a) inhibiting them from positive outcomes or transitioning out of homelessness (Main, 1998). This is reflected in this study's high rates of institutional disaffiliation, including greater involvement in the foster care system, low education levels and high rates of criminal justice involvement. Reconnecting homeless young adults with society and strengthening meaningful connections with institutions (e.g., implementing programs that involve skill building and problem-solving (Karabanow, 2003) or introducing mentorship programs to improve self-esteem and reduce health risks (Karabanow &

Clement, 2004; Taylor-Seehafer, 2004)) may help to establish more clear relationships with resilience.

Psychological Functioning Variables and Resilience

Psychological variables significantly correlated with resilience were congruent with the other studies that found resilient youth to have higher levels of self-esteem (Kidd & Shahar, 2008; Ungar & Teram, 2000; Williams et al., 2001). Additionally, these findings relate to Rutter's (1987) work that suggests that the construct of resilience itself includes both self-efficacy and self-esteem as major components. This connection between self-esteem and resiliency is important because higher levels of self-esteem have also been shown to help youth transition off of the streets (MacKnee & Mervyn, 2002) and is related to less loneliness, feeling trapped in a life of homelessness, suicidal ideation, youth's personal view of their health status, and less substance use (Kidd & Shahar, 2008). Understanding and focusing on a homeless young adult's sense of self-esteem has also been recommended as a necessary focus for helping professionals who want to assist homeless young adults (Kidd, Miner, Walker, & Davidson, 2007). Furthermore, working with homeless young adults to develop and strengthen their sense of self-esteem may counteract or reduce the impact of the health and behavioral risks that are present in their daily lives (Kidd & Shahar, 2008) and enable them to take steps to make positive change in their lives.

Finding also suggested that young adults who met criteria for major depressive disorder and those who were dependent on drugs were also more likely to have lower resiliency. Other researchers have found similar results regarding substance use and

mental health in relation to resilience (Bonanno, Galea, Bucciarelli, & Vlahov, 2007; Fergus & Zimmerman, 2005), suggesting that substance use and depression may increase the vulnerability of young adults on the streets. Having a substance use problem or depression may also increase young adults' risks of trauma and victimization (Cauce et al., 2000a). Their unstable lifestyle of homelessness may exacerbate these problems making homeless young adults more likely to experience additional stresses and strains, further decreasing their resiliency. Working with homeless young adults on these issues is a pivotal component in obtaining positive outcomes and transitions out of homelessness. Strengthening young adults' resilience is important among this population with such high rates of depression and drug addiction issues (Rhule-Louie, Bowen, Baer, & Peterson, 2008; Thompson, Jun, et al., 2010; Whitbeck, Johnson, et al., 2004).

Moreover, early intervention is important as research shows that psychological disorders and substance use issues greatly increase the longer the duration of homelessness (Martijn & Sharpe, 2006). Additionally, drug issues and mental health problems tend to influence the degree of social estrangement that these youth experience and reentry into conventional society becomes more difficult (Piliavin et al., 1993a; Thompson, Jun, et al., 2010). The findings from this study that link drug use and depression to lower resiliency demonstrate the importance of including substance use and mental health components in work with this population to maximize the capabilities of this vulnerable population, and thus strengthening their resiliency.

Human Capital Variables and Resilience

Findings indicate that overall young adults with an optimistic perspective of the future were more resilient, similar to previous literature that indicated homeless youth with optimistic perspectives make healthier life choices (Rew et al., 2002). Other researchers have found that optimism and a sense of hope in the future was related to feelings of resilience (Williams et al., 2001) and that helping young adults adopt a sense of optimism and future-oriented perspective may help them realize their strengths, and be more successful (Bender et al., 2007; Selekman, 1997; Walker, 2008). Furthermore it has been shown that helping homeless young adults see a more hopeful future may help them overcome the challenges that exist in their lives, as well as their more present-centered focus (Fest, 2003) and potentially transition off of the streets (Thompson, McManus, et al., 2006a). The findings from this analysis contrast with recent literature that focuses on the maladaptive characteristics of youth homelessness (McMorris, Tyler, Whitbeck, & Hoyt, 2002; Whitbeck et al., 2001a; Whitbeck, Hoyt, & Bao, 2000), and shift the focus to seeking the positive capabilities that exist amongst this vulnerable group. These findings illustrate that helping homeless young adults improve their conception of the future and their ability to act and accomplish goals is important in increasing one's resiliency.

Homeless Culture Variables and Resilience

Resiliency was also related to social connectedness and survival strategies. This finding confirms outcomes seen in previous literature which show that social connectedness and the importance of peer relations buffers the dangerous risks found on the streets (Johnson et al., 2005; Rew & Horner, 2003a; Thompson et al., 2003; Weed,

Keogh, & Borkowski, 2000; Williams et al., 2001). This finding is also consistent with literature that found that utilizing survival strategies is a common phenomenon among this population in order to stay safe on the streets (Gaetz, 2004a; Greenblatt & Robertson, 1993). Research has consistently shown that a positive presence of a social support system is indicative of higher resiliency (Werner & Smith, 1992); however, some literature has shown that social connectedness among a homeless population can have negative impacts on substance use, maladaptive behavior, even their transition out of homelessness (Bao et al., 2000a; Gomez et al., 2010; MacKnee & Mervyn, 2002). Assessing the impact of one's social support network and their level of connectedness is an important goal in working with these young adults who can be easily influenced by their street peers (Bao et al., 2000a). Moreover, determining if any non-street friends and family members may offer support and resources (Johnson et al., 2005) could be a useful service offered when working with these young adults.

Staying away from certain places to stay safe was negatively related to young adults' resiliency in this study. Investigators in the field have found that homeless young adults have a vast knowledge of the resources they need on the streets and often utilize a variety of strategies to safe (Bender et al., 2007; Lippman et al., 2011; Rew & Horner, 2003a). This finding seems to indicate that the young adults in this sample were well versed with skills to navigate their environment (Rew & Horner, 2003a), and their resiliency was higher if they did not feel the need to avoid any specific places on the streets. This confirms literature that shows that homeless young adults are often extremely knowledgeable about their environment and their adaptation to the adversity on the streets is essential to their survival (Gaetz, 2004a; Lankenau et al., 2005; Rew &

Horner, 2003a). Street-smart interventions that focus on sustaining and extending this knowledge of the environment may be empowering and helpful to young adults in order to effect positive change.

Independent Variables and Coping

Coping among a homeless young adult population has been the focus of several studies (Rew, 2000; Tischler, 2009; Tischler & Vostanis, 2007; Votta & Manion, 2004), with investigators uncovering the unique ways in which homeless young adults navigate the challenges in their lives and combat feelings of loneliness (Rokach, 2006). Findings from this study suggest that some of the same variables that were related to resiliency were also related to how young adults rate their ability to cope with life on the streets. Homeless young adults in this study who had greater self-esteem and those who had a more optimistic perspective of the future also had higher levels of coping. Gardner and Pierce connect high self-esteem with a higher likelihood of have high self-efficacy, with one informing the other (1998). This finding is congruent with research from Epel and colleagues (1999) who determined that high self-efficacy and future orientation predicted positive coping behaviors that helped adults transition out of homelessness. The findings from this study underscore the notion that individuals with high self-esteem may be motivated to utilize more functional ways of coping (Bandura, 1997). Additionally, the finding from this study that an optimistic perspective of the future relates to better coping is similar to research that found a positive orientation of the future to be related to positive outcomes in a multitude of settings (Zimbardo & Boyd, 1999). Consequently, the results from this study suggest that helping homeless young adults cultivate feelings

of self-esteem and adopt optimistic perspectives of the future may have better coping skills enabling them to achieve goals and potentially transition into mainstream society.

While discussing coping among this population, it is important to note that some of the coping strategies utilized by young adults in this study could be considered negative (e.g., using alcohol or drugs, using anger). Exploring the myriad of ways in which homeless young adults cope, researchers have begun to understand that this population utilizes different styles of coping strategies (Rokach, 2006; Votta & Manion, 2004). Investigators have found that some homeless youth utilize more adaptive, engagement strategies that include seeking prosocial support and problem solving, while other homeless young adults utilize more maladaptive, disengagement strategies that include problem avoidance, denial and withdrawal from their social support networks (Rokach, 2006; Tischler & Vostanis, 2007; Votta & Manion, 2004). Dashora and colleagues (2011) found that engagement coping strategies predicted lower delinquency among homeless youth.

Homeless young adults in this study who utilized being with a trusted friend to stay safe also reported utilizing more coping skills. This finding is congruent with other studies that revealed reaching out to others for social support and relating to others on the street were commonly used positive coping strategies (Tischler, 2009; Tischler & Vostanis, 2007). Utilizing social support networks to cope was also found to be a strategy by Rew (2000) who indentified homeless youth reduced feelings of loneliness on the streets by spending time with friends as well as having a pet. Conversely, disengagement coping strategies were found to be utilized more by homeless youth in comparison to non-homeless youth and have been associated with suicidal ideation,

mental health problems and behavior problems (Dashora, Erdem, & Slesnick, 2011; Votta & Manion, 2004). Harmful behaviors, including self-mutilation has also been found to be used to be a maladaptive way of coping with the adversity of homelessness, with 69% of youth in one study reporting that they had engaged in self-mutilating acts at one time during their homelessness (Tyler et al., 2003).

Overall, the findings found in this study regarding coping and resilience suggest that these two constructs may have similar conceptual foundations among this population, and may precipitate further exploration (Glennie, 2010). The literature suggests that coping is the result of a set of skills one develops in response to adversity, while resilience is an adaptation process in response to stress and strain (Glennie, 2010; Lazarus & Folkman, 1984; Rutter, 1987) linking coping and healthy development (Leipold & Greve, 2009). Overall, these findings underscore the importance of studying how coping informs one's resiliency among this highly vulnerable population.

Specific Aim 4

Findings from the regression model to determine which factors predict resiliency suggest that the absence of drug dependence, an increased sense of self-esteem, and a more optimistic perspective of the future predicted higher scores on total resilience scores, and scores on the Personal Competence subscale.

Drug Dependence

Findings from the multiple regression analyses revealed that if a young adult living on the streets was drug dependent, they had lower resilience and personal competence. Homeless young adults who had problems with drug use in this study were not as resilient as other youth who were not dependent on drugs. High rates of addiction problems within this population create multiple barriers, even prolonging homelessness (Piliavin et al., 1993a). The finding from this study is similar to other studies in the literature that found that increased substance use had negative impact on this population (Kim, Ford, Howard, & Bradford, 2010; Kipke, Montgomery, et al., 1997; Rhule-Louie et al., 2008; Thompson et al., 2009; Zlotnick, Tam, & Robertson, 2003). Therefore, the notion that drug dependency can lower one's ability to display resilience has numerous implications for service providers working with this population (Karabanow & Clement, 2004; Thompson, McManus, et al., 2006a).

As recommended in the literature, direct service workers must focus on these highly prevalent substance use issues in a manner that involves elements of mutual respect and support allowing homeless young adults to feel respected and safe (Karabanow & Clement, 2004). A balance must be struck between helping young adults

reduce harm and control their drug addiction while recognizing that drugs may have been perceived as a coping mechanism (Thompson, Barczyk, et al., 2010). While findings suggest that young adults who had drug dependency issues had more problems on the streets, including higher likelihood of involvement in the criminal justice system (Chen et al., 2006b; Martijn & Sharpe, 2006), research has also found that alcohol and substance use have been found to relieve the stress and anxiety that has been associated with street life (Mallett et al., 2005). Often viewed as problematic and a barrier to transitioning off the streets, homeless young adults' substance use was reported to substantially help them cope with the day-to-day stresses and strains of street life (Thompson, Barczyk, et al., 2010). Additionally, other investigators found that using drugs and alcohol helped young adults deal with the isolation and loneliness they experienced on the streets as well as helped them manage health and behavioral issues in their lives (Christiani, Hudson, Nyamathi, Mutere, & Sweat, 2008).

Finding a way to balance out the negative aspects of drug addiction, and reduce harm, without removing a strategy that may help youth cope, may be a challenge for professionals working within this population. Incorporating culturally relevant programs may resonate with homeless young adults' values (Steiker, 2008). Additionally, enlisting homeless young adults in the creation of preventions programs is advised so that direct service workers incorporate vernacular and circumstances that may better engage the homeless young adult (Steiker, 2008). Utilizing a harm-reduction (MacMaster, 2004) model of drug prevention may engage this group more than an abstinence-based model.

Harm-reduction models of prevention include efforts to reduce the harmful consequences of alcohol or drugs, provide alternative to abstinence-based treatments by

incorporating goal attainment, and promote access to low-threshold services (Marlatt & Witkiewitz, 2002). These modalities have been found to be equally as effective as abstinence-based models that promote a zero tolerance policy toward substance use (Marlatt & Witkiewitz, 2002). Including a harm-reduction model in working with these young adults provides an alternative perspective that would allow homeless young adults to reduce the harm in their drug use without removing it as an integral coping mechanism (MacMaster, Holleran, & Chaffi, 2005).

Self-esteem

Greater self-esteem appeared to predict greater resiliency. Self-esteem is described in the literature as the degree in which individuals see themselves as capable and significant (Coopersmith, 1967). Rosenberg (1965) defined self-esteem as the overall sense of self-worth that can be attributed to a person. Among a homeless youth sample, Kidd and colleagues (2008) found that high self-esteem was found to be a primary protective factor that against loneliness, feeling trapped, and suicidal ideation. In this same study, high self-esteem also helped to buffer an impact of fearful attachment on loneliness, This finding is supported by other researchers in the field who study resilience (Rutter, 1987; Werner & Smith, 1992) and suggests that self-esteem may be self-reinforcing with individuals garnering more self-esteem after they have helped others (Williams et al., 2001). The notion of helping others may be incorporated into work by service providers and utilize peer networks to raise self-esteem and self-efficacy since these have been found to be highly influential among homeless youth (Bender et al., 2007).

Congruent with the extant literature, these findings are supported by other studies that showed self-esteem differentiated individuals who were more resilient from those who were less resilient (Cicchetti & Rogosch, 1997; Dumont & Provost, 1999; Williams et al., 2001). Having a higher self-esteem was also associated with a reduced sense of stigma commonly associated with homelessness (Kidd, 2007). Displaying qualities that are associated with higher self-esteem can also impact choices regarding sexual partners and health-related issues, including drug and alcohol use (Kidd & Shahar, 2008).

The findings from this study that homeless young adults with higher self-esteem were also more resilient adds to the knowledge base and underscores the importance of focusing on this concept in working with this population. Increasing a homeless young adults capacity for self-esteem can be achieved by focusing on this concept over the course of treatment. Professionals can use evidence-based treatments that support self-esteem and self-efficacy to help young adults reframe adverse events in more positive light and work with youth to highlight and focus on their positive accomplishments (Kidd & Shahar, 2008).

Optimistic Perspective of the Future

Results suggesting that the more optimistic a homeless young adult is about their future, the more resilient they are is supported in the literature. Findings confirming that having an optimistic view of the future is helpful for young adults to survive in adverse situations (Rew & Horner, 2003a). In recent years, more research has been conducted on the concept of optimism and related constructs that include positive psychology (Lee Duckworth, Steen, & Seligman, 2005; Seligman & Csikszentmihalyi, 2000).

Additionally, researchers have suggested that resilience and more positive emotions are related (Block & Kremen, 1996; Fredrickson, Tugade, Waugh, & Larkin, 2003; Tugade & Fredrickson, 2004). One group of investigators also found that optimism can be beneficial for health as well as mental health problems including depression (Seligman, Schulman, DeRubeis, & Hollon, 1999). This notion that an increased sense of optimism about the future can increase one's resilience suggests the importance of engaging young adults on ways to develop this perspective. A sense of optimism has been related to cognitive, emotional and motivational concepts that can help a person persevere and lead a more successful life (Seligman & Csikszentmihalyi, 2000). Linked with self-esteem and mastery, engaging homeless young adults with a sense of optimism is important for increasing their capability for positive change on the streets. While sustaining optimism within a young person may be a challenge, finding relevant ways in which to focus on the positive and build strength-based elements into work with this population is essential (Bender et al., 2007; Karabanow & Clement, 2004; Thompson, McManus, & Voss, 2006b). Incorporating techniques from the field of positive psychology that are grounded in building positive affect and personal strengths (Lyubomirsky, Sheldon, & Schkade, 2005) may be valuable in developing a more optimistic perception of the future that would help homeless young adults feel they can move in an "upward spiral" (Fredrickson & Joiner, 2002).

Having a clear understanding of a homeless young adults' drug use, their self-esteem and how they perceive the future is important when conceptualizing the unique resilience and personal capabilities that are inherent in a homeless young adult. Findings from this study show a relationship between these variables and resiliency; therefore

focusing on these issues while working with homeless young adults is paramount. It has been shown that self-efficacy and optimistic perceptions of the future have an impact on transitioning out of homelessness (Epel et al., 1999). This finding coupled with the results from this study, indicating that drug dependency can inhibit resiliency suggest the importance of examining these three variables in conjunction. Exploring the relationship of drug dependence, self-esteem and optimistic perspectives of the future within the lives of homeless young adults is important to the field of resilience. The personal capabilities of these vulnerable young adults must be examined in order to help them make positive changes in their lives and reenter mainstream society.

Specific Aim 5.

Specific Aim 5 sought to evaluate if coping mediated the relationship between the independent variables in this study and resilience. Findings from mediation analysis revealed that coping mediated the relationship between self-esteem and optimistic perception of the future with resilience. The finding that coping only partially mediated the relationships in this model indicates that while coping accounts for part of the association between self-esteem and an optimistic perception of the future with resilience, it does not remove the relationship that these two concepts have with resilience. Hence self-esteem and optimism predict greater resilience; however, coping becomes the mechanism through which these young adults' self-esteem and sense of optimism impact their resiliency.

These findings underscore the extant literature on coping among this population that have shown the unique ways in which these resilient young adults survive and

overcome some of the challenges of street life (Kidd, 2003; Kidd & Carroll, 2007c; Unger et al., 1998a). Understanding that coping accounts for the part of the relationship between self-esteem and optimism in relation to homeless young adults' resiliency underscores the need to focus on increasing the positive ways in which these young adults cope. The current literature reveals themes regarding how homeless young adults cope with their adversity including having to rely solely on themselves, enlisting the support of supportive social networks, caring for those close to them, and spirituality (Kidd, 2003; Lindsey et al., 2000; Rew & Horner, 2003a; Williams et al., 2001). A more thorough understanding of these complex relationships and coping may assist these young adults in effecting positive change in their lives and even transitioning to a more conventional lifestyle (Unger et al., 1998a).

Overall, these findings indicate the importance of coping among this population and the emphasis and exploration that must be conducted about how these young people survive on the streets. The outcome from this mediation analysis suggests that young adults who have higher self-esteem and are more optimistic are more likely to use various coping strategies to increase their resilience. Attention to these specific strategies is important due to their variability of the positive and negative influence they have on a young adults' life. Additionally, these findings suggest that coping plays an inherent role in how young adults live and survive on the streets. While utilizing survival strategies that are both adaptive and maladaptive, young people living on their own have higher levels of resilience when they have a greater sense of self-esteem and more optimistic about the future. The ability of these young adults to cope in a dangerous environment is a strength in and of itself and indicates the positive capabilities of homeless young adults.

Implication for Practice and Policy

Implications for Practice

The findings from this study indicate that homeless young adults would develop greater resiliency from understanding ways to reduce substance use problems, improve and sustain their sense of self-esteem, and adopt more optimistic perspectives of their future. Therefore, implications for service provision for working with this population must address these issues in order to reduce stigma (Kidd, 2007) and shift the focus away from treating these young adults as victims. Hyde (2005) suggests that focusing on young adults' victimization permits professionals to overlook their resiliency and impedes efforts to help them make positive change in their lives with new life experiences.

In working with this vulnerable population, several recommendations are offered. Direct service workers must effectively engage young adults in a mutually respectful working relationship that promotes autonomy (Levy, 1998), as this was found to be an important factor in young adults' transitioning out of homelessness (Thompson et al., 2004). Moreover, direct service workers must acknowledge and validate young adults' "street culture" (Fest, 2003) with its unique circumstances and values (Thompson, McManus, et al., 2006a). Recognition of young adults' hidden resilience (Ungar, 2004d) is consistent with other research that found working with homeless young adults requires an understanding of their diverse life circumstances (Kidd et al., 2007).

Additionally, utilizing treatment strategies and intervention techniques such as solution-focused brief therapies and motivational interviewing that are strength-based may help homeless young adults in having a more optimistic perspective of the future and

overcome feelings of helplessness (Gingerich & Eisengart, 2000; Thompson, McManus, et al., 2006a; Walker, 2008). These interventions have been shown to be more effective with this population for reducing PTSD symptoms and substance abuse among homeless youth (Thompson, McManus, et al., 2006a).

The finding that being dependent on drugs is related to lower resiliency has relevance for direct service workers in addressing high rates of substance use. Service providers must address drug and alcohol issues including all risk factors (Hawkins et al., 1992) and assessing family experiences that may have impacted their use (Steiker & MacMaster). However, service providers may want to transition away from abstinence-based models of drug use and engage young adults in harm-reduction models (MacMaster, 2004). These models allow young adults to continue drug use; however, they aim to reduce harm caused by drug use without imposing a zero-tolerance policy. These harm-reduction models have been found to help to decrease the serious problems caused by increased substance use on the streets (MacMaster et al., 2005).

An important component in interventions with homeless young adults includes the development and strengthening of young adults' self-esteem. Service providers working with this population may have more success increasing young adults' resilience by helping them find ways to improve how they view themselves and their potential to achieve their goals. High self-esteem may help individuals realize the extent of their own competence in life's situations (Bandura, 1977). One's self-esteem along with an ability to achieve set goals is directly related to the level of resilience exhibited by an individual living on the streets (Kidd & Shahar, 2008). A focus on both self-esteem and self-efficacy in working with these young adults is essential, as self-esteem was found to be associated

with less loneliness, feelings of being trapped in their life situation, suicidal ideation, substance use and better subjective health (Kidd & Shahar, 2008). The finding from this study that self-esteem can predict higher levels of resilience is quite relevant for social workers, counselors, and service providers who work with a homeless youth population. Instilling a sense of self-worth, setting clear goals, with distinct objectives, and engaging with young adults to create practical and achievable ways to accomplish these goals is paramount for helping these youth overcome substantial barriers (Karabanow & Clement, 2004) and reduce stigma associated with homelessness (Kidd, 2007).

Service providers can also work to help increase the sense of optimism regarding the future among these homeless young adults, as findings revealed that having an optimistic perspective of the future predicted higher resiliency. In order to cultivate feelings of optimism, counselors and direct service workers can incorporate aspects of positive psychology into work with this vulnerable group. Incorporating tenets from positive psychology allow the client to value the subjective experiences of well-being, hope and optimism and understand its impact on one's life (Seligman & Csikszentmihalyi, 2000). Increasing a homeless young adult's capacity for optimistic thinking may have significant benefits regarding problems with mental illness and substance use issues. While having an optimistic sense of the future has been found to protect other individuals from certain illnesses (Taylor, Kemeny, Reed, Bower, & Gruenewald, 2000), a similar perspective can be adopted for this population. Instilling a sense of optimism to enhance health and encourage enlisting help from formal services would be beneficial for homeless young adults. Incorporating techniques grounded in positive psychology such as volitional activities that include striving for important goals

(Sheldon & Houser-Marko, 2001) or cognitive activities that may include reframing situations (King, 2001), may focus on building positive affect and personal strengths. Building personal strengths among a homeless youth population, rather than focusing on pathology and weakness may prove to help homeless young adults survive in a manner that is more conducive to assisting them transition out of homelessness (Bender et al., 2007).

In essence, practitioners and service providers who work with this population must be aware of the potential strengths and capacity of young adults living on the streets (Rew & Horner, 2003a). While substance use issues, mental health problems and trauma present difficult obstacles for their day-to-day life, young people living on the streets have an enormous capacity for resilience and coping (Rew & Horner, 2003a). Findings from this study revealed that young adults deal with multiple challenges to their survival, while still displaying a highly resilient spirit. Moreover, homeless young adults may have the ability to increase their resiliency by establishing highly trusted relationships that help the young adult feel safe and secure. A trusted client-practitioner working relationship is extremely important within this population which may often have a hard time distinguishing who is safe and trustworthy (Aviles & Helfrich, 2004). Adjusting professional's expectations and tailoring their engagement with homeless young adults is important for service providers (Kidd et al., 2007) in order to recognize the unique strengths and hidden resilience of this vulnerable population. Direct service providers also have a responsibility to model the behaviors that homeless young adults can incorporate into their daily lives for additional success in an often-dangerous environment.

The obstacles facing young adults living on the streets are numerous. Psychological dysfunction, high rates of substance use issues, trauma and victimization represent just a portion of the barriers that young adults must navigate each day in order to survive on their own with little support from others (Unger et al., 1998a). Having a sense of self-esteem and optimistic perspective of the future instilled by a trusted adult would undoubtedly assist them in overcoming the daily challenges of street life.

Implications for the Estrangement Model

In utilizing the estrangement model as an organizing framework for this study, several important discoveries were made regarding its utility as a guiding conceptual framework. First, this model served as an excellent framework for capturing the various factors implicit in the lives of homeless young adults. All four domains of this model: *disaffiliation, psychological functioning, human capital* and *homeless culture* were useful in capturing risk and protective factors that were used to explore this groups' hidden resilience. Understanding homeless young adults from this perspective was achieved in a manner that was clear and parsimonious. Furthermore, this model distinctly reflected the level of estrangement homeless young adults' experience. The utility of this framework is grounded in its flexibility. Inherent in its organization is the ability to contain various factors that reflect the level of connection and disconnection that homeless young adults experience in their daily lives. Lessons learned in this study included the notion that certain variables could possibly be conceptualized in different domains than were used in this study. For example, in future research educational levels and attainment could be contained in the domain of human capital, as young adults educational attainment can be linked to their ability to produce goods or services and assist young adults in becoming

more competitive in an formal economy (Piliavin et al., 1993a). Finally, future research could look at each domain separately to explore its relationship with coping and resilience over time.

Implications for Policy

The high rates of young adults living on the streets are rising (Zerger et al., 2008), and the current state of our country's economy does not provide a promising outlook for these youth. Moreover, few legislative initiatives have addressed the homelessness issue for young adults. Findings from this dissertation study emphasize the strengths and capabilities of young adults who have become homeless. Support for more policies that favor this population and assist youth in transitioning out of homelessness is required in order to help these vulnerable young adults. Large gaps in legislation reside for young adults ages 18-24 that are out of school and moving into adulthood. Recent amendments to the Reauthorization of the Higher Education Act, H.R. 4137 (Higher Education Opportunity Act, 2008) attempt to improve access to higher education for homeless and former-foster care youth. Aspects of these policies could impact homeless young adults and include an increase in public awareness of the availability of financial aid, grant programs to provide housing and support services for homeless young people or former foster care youth, and an expansion of the definition of "independent student" to include those individuals who at one time were in foster care (Duffield, 2011). These efforts, while a worthy attempt to address the policy needs for young adults, do not adequately close the gap for those vulnerable individuals living on the streets. As findings from this study reveal that young adults living on the streets have a likelihood of having higher levels resilience if they are optimistic about their futures and have increased levels of

self-esteem, it is imperative to create funding for service organizations that work with this population to help sustain and further develop these characteristics. Furthermore, it has been shown that young people living on the streets often seek out alternative or less formal resources for help (Karabanow, Clement, Carson, & Crane, 2005; Kidd, 2003). Therefore, policy initiatives aimed at providing funds for direct service organizations to provide assistance that embraces the nonconventional strengths and coping strategies of this group would have a profound impact on how these young adults fare on the streets. Young adults who have the opportunity to increase their sense of self-esteem and sense of optimism for the future may be able to raise their level of resilience and thus "bounce back" from adversity (Rutter, 1987; Ungar, 2004d). Policies which direct funds towards service organizations and service providers may be able to help these young adults feel more empowered about their lives and be more inclined to take the steps to move into a more conventional way of living. Assistance with dealing with the daily challenges of street life, navigating complicated education and health care systems are important services that are provided by agencies that lack funding and support from the larger federal, state and city governments. The ability to reach this often un-reachable population and nurture their hidden resilience (Ungar, 2004d) would increase the options available for this vulnerable group.

Limitations to this Study

There are several limitations to this dissertation study. First, several important variables were left out of this survey which could have provided important information regarding sexual identity and sexual habits of homeless young adults. Research reveals that a large percentage of the homeless young adult population is gay, lesbian, bisexual,

transgendered, and/or questioning (GLBTQ) (Craig, 2011; Taylor-Seehafer, Rew, & Sternglanz, 2005). Exploring how and if a young adult's gender may relate to resiliency would have implications for practice with these specific groups. Further exploration with these subgroups may be suggested by the high rates of physical and sexual violence in their homes (Whitbeck, Johnson, et al., 2004) as well as the increased rates of trauma and victimization they experience on the streets (Cochran et al., 2002). The higher rates of violence and victimization experienced by this subgroup may necessitate further research on how this may impact their level of resilience.

A second limitation to this study is the validity of the Coping Scale, which was found to be a mediating variable in the study. The low Cronbach's alpha ($\alpha = .51$) for this scale indicates that the reliability of this measure, and its subsequent use, could be questioned. As mentioned in Chapter 4, guidelines for nomthetic research indicate that alpha levels below .60 are questionable and levels below .50 are unacceptable (George & Mallery, 2003). In an attempt to examine the factor structure of the scale, the factor analysis conducted did yield changes to how the items clustered together in subscales. As mentioned previously in the discussion of Aim 5, coping strategies among this population range from more typical maladaptive mechanisms to more adaptive ones. Although the alpha level was low for this scale, the clinical and heuristic value compensates for a low reliability coefficient. An alternative to raise the alpha level of this instrument would be to delete this item from the scale, which would require that one assess coping with drugs and alcohol via a different method. Utilizing a timeline follow back calendar (Sobell & Sobell, 1992), for example, would allow this weaker item to be dropped from this scale. Including this self-report measure as part of the measurement package would allow a

clinician or researcher to assess use, dropping the substance use item from the coping scale. The only limitation in using the timeline calendar is that substance use is not necessarily assessed in relation to coping, so a component could be added that prompted young adults to relay if their use was utilized as a coping strategy.

A third limitation to this study is the study design. This study utilized a cross-sectional design that captured homeless young adults at one point in time. The results from this study are limited in that this dissertation study aims to understand the predictors of resilience and explore mediation among variables based on participants' self-report that occurred in one interview. The ability to study this population in a longitudinal study over an extended period of time would have the advantage of studying resilience and how factors related to the estrangement model would impact young adults' coping and resilience over time. According to Rubin and Babbie (2008) longitudinal studies have advantage because they can examine populations and processes over time; however, the reality of conducting a longitudinal study with a homeless population is difficult due to their transient nature. A second limitation regarding study design is that this study sample came from one study site. Exploring this population in multiple settings would have enabled researchers to examine regional differences among a homeless young adult population to determine if the setting impacted coping strategies or predictors of resilience, as was shown regarding transience and survival behaviors (Ferguson et al., 2011).

Implications for Future Research

There are several implications for future research among a homeless young adult population. Studies that continue to explore resilience among a homeless young adult population would be strengthened by further examinations of the assessment measures that were used in this dissertation study. Conducting an exploratory factor analyses (EFA) was a reasonable first step to examine the factor structure of the scales used in this study (Abell et al., 2009). However, since the EFA did not yield any changes to the factor structure of the measures, continued study of these scales with confirmatory factor analyses (CFA) may offer additional insight. A CFA may help to determine if constructs are consistent with our current understanding of resilience and coping with homeless young adults. Additionally, building upon CFA to explore the factor structure, a second implication for future research would be utilizing structural equation modeling (SEM) to test direct and indirect paths between coping and resilience within the confines of the estrangement model. Structural equation modeling would allow for further theory development in assessing this model and allow for construct validation. Testing causal relationships within the estrangement model would further this theory by allowing for the exploration of any existing latent variables (Anderson & Gerbing, 1988).

Another implication for future research would be to include additional variables that examined sexual preference and sexual behavior. Including these variables would allow for a more in-depth exploration of homeless young adults' gender identity and behavior having important implications for interventions related to their health and behavioral change and resiliency. Having a better understanding of the gender issues and the sexual behaviors of young adults living on the streets would impact how service

providers can effectively engage and work with young adults on issues that are important and congruent with their sense of self and identity.

Exploring how homeless young adults conceive of their own personal strengths and resilience using qualitative methods is a fourth implication that emanates from this dissertation study. Rich and insightful findings that could coalesce with the quantitative findings from this study would enhance the research field regarding how the strengths of homeless young adults are conceived. Utilizing descriptive qualitative interviews of how homeless young adults' drug use, self-esteem, and perceptions of the future impact their resilience would contribute to the knowledge base for this population.

Expanding the scope of this study to include the additional study sites in various parts of the country and/or cross-culturally would allow for an exploration of regional and cultural differences in how young adults cope with street life. Recently, investigators have begun to explore the global aspects of resilience and its impact among people from less powerful or dominant cultures (Ungar & Liebenberg, 2011). Findings from Ungar and Liebenberg's (2011) study are comparable to findings from this study that suggest that resilience is more contextual and reflects one's capacity to negotiate resources that are accessible and available. Studying homeless young adults in a variety of locations, including globally, would enable researchers to compare and contrast coping strategies, resilience, and examine potential mediating and moderating variables within populations from the other site locations. This would also allow researchers to continue to understand and explore resilience in a manner that reflects its complexity and contextual relevance.

Introducing intervention studies that targets self-esteem and self-efficacy as well as young adults' sense of optimism regarding the future would be a logical next step in this research agenda regarding coping and resilience. Finally, evaluation of future interventions to test the efficacy for the proposed strength-based approaches, including solution-focused brief therapy and positive psychology interventions is recommended among the homeless young adult population.

Appendix A.

Resilience Scale

Source: Wagnild, G.M., & Young, H.M. (1993). Development and psychometric evaluation of the Resilience Scale. *Journal of Nursing Measurement, 1,* 165-178.

Please circle the number which best indicates your feelings about that statement:

	Strongly Disagree	**Disagree**	**Somewhat Disagree**	**Uncertain**	**Somewhat Agree**	**Agree**	**Strongly Agree**	
When I make plans, I follow through with them.	1	2	3	4	5	6	7	RES1
I usually manage one way or another.	1	2	3	4	5	6	7	RES2
I am able to depend on myself more than anyone else.	1	2	3	4	5	6	7	RES3
Keeping interested in things is important to me.	1	2	3	4	5	6	7	RES4
I can be on my own if I have to.	1	2	3	4	5	6	7	RES5
I feel proud that I have accomplished things in life.	1	2	3	4	5	6	7	RES6
I usually take things in stride.	1	2	3	4	5	6	7	RES7
I am friends with myself.	1	2	3	4	5	6	7	RES8
I feel that I can handle many things at a time.	1	2	3	4	5	6	7	RES9
I am determined.	1	2	3	4	5	6	7	RES10
I seldom wonder what the point of it all is.	1	2	3	4	5	6	7	RES11
I take things one day at a time.	1	2	3	4	5	6	7	RES12
I can get through difficult times because I''ve experienced difficulty before.	1	2	3	4	5	6	7	RES13
I have self-discipline.	1	2	3	4	5	6	7	RES14
I keep interested in things.	1	2	3	4	5	6	7	RES15
I can usually find something to laugh about.	1	2	3	4	5	6	7	RES16

My belief in myself gets me through hard times.	1	2	3	4	5	6	7	RES17
In an emergency, I'm someone people can generally rely on.	1	2	3	4	5	6	7	RES18
I can usually look at a situation in a number of ways.	1	2	3	4	5	6	7	RES19
Sometimes I make myself do things whether I want to or not.	1	2	3	4	5	6	7	RES20
My life has meaning.	1	2	3	4	5	6	7	RES21
I do not dwell on things that I can' 't do anything about.	1	2	3	4	5	6	7	RES22
When I'm in a difficult situation, I can usually find my way out of it.	1	2	3	4	5	6	7	RES23
I have enough energy to do what I have to do.	1	2	3	4	5	6	7	RES24
It's okay if there are people who don't like me.	1	2	3	4	5	6	7	RES25
I am resilient.	1	2	3	4	5	6	7	RES26

Appendix B.

Childhood Trauma Questionnaire

Source: Bernstein, D. P., & Fink, L. (1998). Childhood Trauma Questionnaire: A retrospective self-report manual. San Antonio, TX: The Psychological Corporation: Harcourt Brace.

The following questions are sensitive and you may want to answer them privately. Choose now whether you would like me to read the questions to you or whether you would prefer to read them and mark your answers on your own.

Please indicate how often the following things happened to you *before you left home for good:*

	Never	**Rarely**	**Sometimes**	**Often**	**Very Often**	
I didn't have enough to eat.	1	2	3	4	5	CTQ1
I knew that there was someone to take care of me and protect me.	1	2	3	4	5	CTQ2
People in my family called me things like stupid, lazy, or ugly.	1	2	3	4	5	CTQ3
My parents were too drunk or high to take care of the family.	1	2	3	4	5	CTQ4
There was someone in my family who helped me feel that I was important or special.	1	2	3	4	5	CTQ5
I had to wear dirty clothes.	1	2	3	4	5	CTQ6
I felt loved.	1	2	3	4	5	CTQ7
I thought my parents wished I had never been born.	1	2	3	4	5	CTQ8
I got hit so hard by someone in my family that I had to see a doctor or go to the hospital.	1	2	3	4	5	CTQ9
People in my family hit me so hard it left me with bruises or marks.	1	2	3	4	5	CTQ10
I was punished with a belt, a board, a cord, or some other hard object.	1	2	3	4	5	CTQ11
People in my family looked out for each other.	1	2	3	4	5	CTQ12
People in my family said hurtful or insulting things to me.	1	2	3	4	5	CTQ13
I believe I was physically abused.	1	2	3	4	5	CTQ14
I got hit or beaten so badly that it was noticed by someone like a teacher, neighbor or doctor.	1	2	3	4	5	CTQ15
I felt that someone in my family hated me.	1	2	3	4	5	CTQ16

People in my family felt close to each other.	1	2	3	4	5	CTQ17
Someone tried to touch me a sexual way, or tried to make me touch them.	1	2	3	4	5	CTQ18
Someone threatened to hurt me or tell lies about me unless I did something sexual with them.	1	2	3	4	5	CTQ19
Someone tried to make me do sexual things or watch sexual things.	1	2	3	4	5	CTQ20
Someone molested me.	1	2	3	4	5	CTQ21
I believe that I was emotionally abused.	1	2	3	4	5	CTQ22
There was someone to take me to the doctor if I needed it.	1	2	3	4	5	CTQ23
I believe that I was sexually abused.	1	2	3	4	5	CTQ24
My family was a source of strength and support.	1	2	3	4	5	CTQ25

Appendix C.

Source for MINI: Sheehan, D.V., Lecrubier, Y., Sheehan, K.H., Amorim, P., Janavs, J., Weiller, E., et al. (1998). The Mini-International Neuropsychiatric Interview (M.I.N.I.): The development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry, 59*, 22-33.

ALCOHOL ABUSE AND DEPENDENCE

(\ MEANS: GO TO DIAGNOSTIC BOXES, CIRCLE **NO** IN BOTH AND MOVE TO THE NEXT MODULE)

J1		**In the past 12 months**, have you had 3 or more alcoholic drinks within a 3 hour period on 3 or more occasions?	\NO	YES
J2		**In the past 12 months**:		
	a	Did you need to drink more in order to get the same effect that you got when you first started drinking?	NO	YES
	b	When you cut down on drinking did your hands shake, did you sweat or feel agitated? Did you drink to avoid these symptoms or to avoid being hungover, for example, "the shakes", sweating or agitation? IF **YES** TO EITHER, CODE **YES**.	NO	YES
	c	During the times when you drank alcohol, did you end up drinking more than you planned when you started?	NO	YES
	d	Have you tried to reduce or stop drinking alcohol but failed?	NO	YES
	e	On the days that you drank, did you spend substantial time in obtaining alcohol, drinking, or in recovering from the effects of alcohol?	NO	YES
	f	Did you spend less time working, enjoying hobbies, or being with others because of your drinking?	NO	YES
	g	Have you continued to drink even though you knew that the drinking caused you health or mental problems?	NO	YES

ARE **3** OR MORE **J2** ANSWERS CODED **YES**?

* IF YES, SKIP J3 QUESTIONS, CIRCLE N/A IN THE ABUSE BOX AND MOVE TO THE NEXT DISORDER. DEPENDENCE PREEMPTS ABUSE.

NO **YES***
ALCOHOL DEPENDENCE
CURRENT

J3		**In the past 12 months:**		
	a	Have you been intoxicated, high, or hungover more than once when you had other responsibilities at school, at work, or at home? Did this cause any problems? (CODE **YES** ONLY IF THIS CAUSED PROBLEMS.)	NO	YES
	b	Were you intoxicated more than once in any situation where you were physically at risk, for example, driving a car, riding a skateboard, riding a bicycle, riding a motorbike, using machinery, boating, etc.?	NO	YES
	c	Did you have legal problems more than once because of your drinking, for example, an arrest or disorderly conduct?	NO	YES
	d	Did you continue to drink even though your drinking caused problems with your family or other people?	NO	YES

ARE **1** OR MORE **J3** ANSWERS CODED **YES**?

NO **N/A** **YES**
ALCOHOL ABUSE
CURRENT

7

K2 **Considering your use of (NAME THE DRUG / DRUG CLASS SELECTED), in the past 12 months:**

a Have you found that you needed to use more (NAME OF DRUG / DRUG CLASS SELECTED) to get the same effect that you did when you first started taking it? NO YES

b When you reduced or stopped using (NAME OF DRUG / DRUG CLASS SELECTED), did you have withdrawal symptoms (aches, shaking, fever, weakness, diarrhea, nausea, sweating, heart pounding, difficulty sleeping, or feeling agitated, anxious, irritable, or depressed)?Did you use any drug(s) to keep yourself from getting sick (withdrawal symptoms) or so that you would feel better? NO YES

IF **YES** TO EITHER, CODE **YES**.

c Have you often found that when you used (NAME OF DRUG / DRUG CLASS SELECTED), you ended up taking more than you thought you would? NO YES

d Have you tried to reduce or stop taking (NAME OF DRUG / DRUG CLASS SELECTED) but failed? NO YES

e On the days that you used (NAME OF DRUG / DRUG CLASS SELECTED), did you spend substantial time (>2 HOURS), obtaining, using or in recovering from the drug, or thinking about the drug? NO YES

f Did you spend less time working, enjoying hobbies, or being with family or friends because of your drug use? NO YES

g Have you continued to use (NAME OF DRUG / DRUG CLASS SELECTED), even though it caused you health or mental problems? NO YES

ARE **3** OR MORE **K2** ANSWERS CODED **YES**?

***** IF YES, SKIP K3 QUESTIONS, CIRCLE N/A IN THE ABUSE BOX FOR THIS SUBSTANCE AND MOVE TO THE NEXT DISORDER.
DEPENDENCE PREEMPTS ABUSE.

NO **YES ***
SUBSTANCE DEPENDENCE
CURRENT

Considering your use of (NAME THE DRUG CLASS SELECTED), in the past 12 months:

K3 a Have you been intoxicated, high, or hungover from (NAME OF DRUG / DRUG CLASS SELECTED) more than once, when you had other responsibilities at work, school, home? Did this cause any problem? (CODE **YES** ONLY IF THIS CAUSED PROBLEMS.) NO YES

b Have you been high or intoxicated from (NAME OF DRUG / DRUG CLASS SELECTED) more than once in any situation where you were physically at risk (for example, driving a car, riding a skateboard, riding a bicycle, riding a motorbike, using machinery, boating, etc.)? NO YES

c Did you have legal problems more than once because of your drug use, for example, an arrest or disorderly conduct? NO YES

d	Did you continue to use (NAME OF DRUG / DRUG CLASS SELECTED), even though it caused problems with your family or other people?	NO	YES

ARE **1** OR MORE **K3** ANSWERS CODED **YES**?

NO N/A YES
SUBSTANCE ABUSE
CURRENT

MAJOR DEPRESSIVE EPISODE

(Please answer the following questions without regard to any effects of alcohol, drugs, traveling, and where you are staying)

(MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

A1	Have you been consistently depressed or down, most of the day, nearly every day, for the past two weeks?	NO	YES
A2	In the past two weeks, have you been much less interested in most things or much less able to enjoy the things you used to enjoy most of the time?	NO	YES
	IS **A1** OR **A2** CODED **YES?**	(NO	YES
A3	**Over the past two weeks, when you felt depressed or uninterested:**		
a	Was your appetite decreased or increased nearly every day? Did your weight decrease or increase without trying intentionally (i.e., by ±5% of body weight or ±8 lbs. or ±3.5 kgs., for a 160 lb./70 kg. person in a month)? IF **YES** TO EITHER, CODE **YES.**	NO	YES *
b	Did you have trouble sleeping nearly every night (difficulty falling asleep, waking up in the middle of the night, early morning wakening or sleeping excessively)?	NO	YES
c	Did you talk or move more slowly than normal or were you fidgety, restless or having trouble sitting still almost every day?	NO	YES *
d	Did you feel tired or without energy almost every day?	NO	YES
e	Did you feel worthless or guilty almost every day?	NO	YES
f	Did you have difficulty concentrating or making decisions almost every day?	NO	YES
g	Did you repeatedly consider hurting yourself, feel suicidal, or wish that you were dead?	NO	YES

ARE **5** OR MORE ANSWERS **(A1-A3)** CODED **YES**?

NO YES *
MAJOR DEPRESSIVE EPISODE, CURRENT

***** IF PATIENT HAS CURRENT MAJOR DEPRESSIVE EPISODE CONTINUE TO A4,
OTHERWISE MOVE TO NEXT MODULE:

A4	a	During your lifetime, did you have other periods of two weeks or more when you felt depressed or uninterested in most things, and had most of the problems we just talked about?	(NO	YES

b Did you ever have an interval of at least 2 months without any depression and any loss of interest between 2 episodes of depression?

NO **YES**

MAJOR DEPRESSIVE EPISODE, RECURRENT

I. POSTTRAUMATIC STRESS DISORDER

(\ MEANS : GO TO THE DIAGNOSTIC BOX, CIRCLE NO, AND MOVE TO THE NEXT MODULE)

I1	Have you ever experienced or witnessed or had to deal with an extremely traumatic event that included actual or threatened death or serious injury to you or someone else? EXAMPLES OF TRAUMATIC EVENTS INCLUDE: SERIOUS ACCIDENTS, SEXUAL OR PHYSICAL ASSAULT, A TERRORIST ATTACK, BEING HELD HOSTAGE, KIDNAPPING, FIRE, DISCOVERING A BODY, SUDDEN DEATH OF SOMEONE CLOSE TO YOU, WAR, OR NATURAL DISASTER.	\ NO	YES
I2	Did you respond with intense fear, helplessness or horror?	\ NO	YES
I3	During the past month, have you re-experienced the event in a distressing way (such as, dreams, intense recollections, flashbacks or physical reactions)?	\ NO	YES

I4		**In the past month:**		
	a	Have you avoided thinking about or talking about the event ?	NO	YES
	b	Have you avoided activities, places or people that remind you of the event?	NO	YES
	c	Have you had trouble recalling some important part of what happened?	NO	YES
	d	Have you become much less interested in hobbies or social activities?	NO	YES
	e	Have you felt detached or estranged from others?	NO	YES
	f	Have you noticed that your feelings are numbed?	NO	YES
	g	Have you felt that your life will be shortened or that you will die sooner than other people?	NO	YES
		ARE **3** OR MORE **I4** ANSWERS CODED **YES**?	\ NO	YES
I5		**In the past month:**		
	a	Have you had difficulty sleeping?	NO	YES
	b	Were you especially irritable or did you have outbursts of anger?	NO	YES
	c	Have you had difficulty concentrating?	NO	YES
	d	Were you nervous or constantly on your guard?	NO	YES
	e	Were you easily startled?	NO	YES
		ARE **2** OR MORE **I5** ANSWERS CODED **YES**?	\ NO	YES

I6 During the past month, have these problems significantly interfered with your work or social activities, or caused significant distress?

NO **YES**

POSTTRAUMATIC STRESS DISORDER CURRENT

12

Appendix D.

Client Evaluation of Self and Treatment (CEST)

Source: Joe, G.W., Broome, K.M., Rowan-Szal, G.A., & Simpson, D.D. (2002). Measuring patient attributes and engagement in
treatment. *Journal of Substance Abuse Treatment, 22,* 183-196.

Please respond to each of the statements about yourself by circling the number in the box to indicate how much you agree or disagree with each one. Mark only one choice for each statement.

	Disagree Strongly	**Disagree**	**Uncertain**	**Agree**	**Agree Strongly**	
You have little control over the things that happen to you.	1	2	3	4	5	SeffCest5
You have much to be proud of.	1	2	3	4	5	SECest17
What happens to you in the future mostly depends on you.	1	2	3	4	5	SeffCest23
There is little you can do to change many of the important things in your life.	1	2	3	4	5	SeffCest33
There is really no way you can solve some of the problems you have.	1	2	3	4	5	SeffCest45
You feel like a failure.	1	2	3	4	5	SECest59
You wish you had more respect for yourself.	1	2	3	4	5	SECest71
You feel you are basically no good.	1	2	3	4	5	SECest88
In general, you are satisfied with yourself.	1	2	3	4	5	SECest100
You can do just about anything you really set your mind to do.	1	2	3	4	5	Seffest108
You feel you are unimportant to others.	1	2	3	4	5	SECest109
Sometimes you feel that you are being pushed around in life.	1	2	3	4	5	SeffCest117
You often feel helpless in dealing with the problems of life.	1	2	3	4	5	SeffCest120

Appendix E.

The Traumatic Life Events Questionnaire (TLEQ)

Source: Kubany, E.S., Leisen, M.B. Kaplan, A.S., Watson, S.B., Haynes, S.N., Owens, J.A., & Burns, K. (2000). Development and preliminary validation of a brief-broad spectrum measure of trauma exposure: The Traumatic Life Events Questionnaire: Psychological Assessment, 12(2), 210.

Since leaving home for the streets, how often have you experienced each of the following?

	Never	**Once**	**more than once**	
Sudden death of a close friend or loved one	0	1	2	TEQ 1
Robbery involving a weapon	0	1	2	TEQ 2
Physical assault by acquaintance or stranger	0	1	2	TEQ 3
Sexual assault by acquaintance or stranger	0	1	2	TEQ 4
Witness to severe assault of acquaintance or stranger	0	1	2	TEQ 5
Threat of death or serious bodily harm	0	1	2	TEQ 6
Physical assault by an intimate partner	0	1	2	TEQ 7
Sexual assault by an intimate partner	0	1	2	TEQ 8
Saw someone overdose on drugs	0	1	2	TEQ9
Personally overdosed on drugs	0	1	2	TEQ10

Appendix F.

Future Time Perspective Scale

Source: Heimberg, L.K. (1963). *The measurement of future time perspective.* Unpublished Doctoral Dissertation, Vanderbilt University, Nashville.

Please tell me how much you agree/disagree with the following statements:

	Strongly Agree	**Agree**	**Uncertain**	**Disagree**	**Strongly Disagree**	
I find it hard to get things done without a deadline.	1	2	3	4	5	FTP1
Often I am upset because I feel that I am not making the best use of my time.	1	2	3	4	5	FTP2
I always seem to be doing things at the last moment.	1	2	3	4	5	FTP3
I have too much to do.	1	2	3	4	5	FTP4
I am afraid of getting older.	1	2	3	4	5	FTP5
Sometimes I feel that everything is moving on ahead and leaving me behind.	1	2	3	4	5	FTP6
I need to feel rushed before I can really get going.	1	2	3	4	5	FTP7
My future seems dark to me.	1	2	3	4	5	FTP8
I expect to become the kind of person I most want to be.	1	2	3	4	5	FTP9
I look forward to the future with hope and enthusiasm.	1	2	3	4	5	FTP10
I have great faith in the future.	1	2	3	4	5	FTP11
A person with ability and willingness to work hard will be successful.	1	2	3	4	5	FTP12
It is very hard for me to visualize the kind of person I will be ten years from now.	1	2	3	4	5	FTP13
I expect that my plans for my future will change many times between now and the time I leave the streets.	1	2	3	4	5	FTP14
I don't know what kind of work I will do in the future.	1	2	3	4	5	FTP15
I can't even imagine what my life will be like in 20 years.	1	2	3	4	5	FTP16
The future seems very vague and uncertain to me.	1	2	3	4	5	FTP17
It's really no use worrying about the future, because what will be, will be.	1	2	3	4	5	FTP18
It often seems like the day will never end.	1	2	3	4	5	FTP19

I know the kind of job I want when I leave the streets.	1	2	3	4	5	FTP20
Sometimes I feel that the future is a mere repetition of the past.	1	2	3	4	5	FTP21
I generally act on the spur of the moment.	1	2	3	4	5	FTP22
Sometimes I feel there is nothing to look forward to in the future.						FTP23
When I am depressed, I often fear I may never be really happy again.	1	2	3	4	5	FTP24
I often find myself looking for ways to kill time.	1	2	3	4	5	FTP25

Appendix G.

Social Connectedness Scale

Source: Lee and Robbins (1995). Measuring belongingness: The social connectedness and the social assurance scales. *Journal of Counseling Psychology, 42,* 232-241.

Please indicate the degree to which you agree/disagree with the following statements:

	Strongly Agree	**Agree**	**Agree Somewhat**	**Disagree Somewhat**	**Disagree**	**Strongly Disagree**	
I feel disconnected from the world around me.	1	2	3	4	5	6	SCS1
Even around people I know, I don't feel that I really belong.	1	2	3	4	5	6	SCS2
I feel so distant from people.	1	2	3	4	5	6	SCS3
I have no sense of togetherness with my peers.	1	2	3	4	5	6	SCS4
I don't feel related to anyone.	1	2	3	4	5	6	SCS5
I catch myself losing all sense of connectedness to society.	1	2	3	4	5	6	SCS6
Even among my friends, there is no sense of brotherhood/sisterhood	1	2	3	4	5	6	SCS7
I don't feel I participate with anyone or any group.	1	2	3	4	5	6	SCS8
I feel more comfortable when someone is constantly with me.	1	2	3	4	5	6	SCS9
I'm more at ease doing things together with other people.	1	2	3	4	5	6	SCS10
Working side by side with others is more comfortable than working alone.	1	2	3	4	5	6	SCS11
My life is incomplete without a buddy beside me.	1	2	3	4	5	6	SCS12
It's hard for me to use my skills and talents without someone beside me.	1	2	3	4	5	6	SCS13
I stick to my friends like glue.	1	2	3	4	5	6	SCS14

I join groups more for the friendship than the activity itself.	1	2	3	4	5	6	SCS15
I wish to find someone who can be with me all the time.	1	2	3	4	5	6	SCS16

Appendix H.

Coping Scale

Source: Kidd & Carroll (2007). Coping and suicidality among homeless youth. *Journal of Adolescence, 30,* 283-296.

Please rate how often you use each of the following ways to deal with problems:

	Never	**Rarely**	**Sometimes**	**Often**	**Almost Always**	
Concentrated on what to do and how to solve the problem	1	2	3	4	5	CTQ1
Think about what happened and try to sort it out in my head	1	2	3	4	5	CTQ2
Try not to think about it	1	2	3	4	5	CTQ3
Go to sleep	1	2	3	4	5	CTQ4
Go to someone I trust for support	1	2	3	4	5	CTQ5
Go off by myself to think	1	2	3	4	5	CTQ6
Try to learn from the bad experience	1	2	3	4	5	CTQ7
Use my anger to get me through it	1	2	3	4	5	CTQ8
Use drugs or alcohol	1	2	3	4	5	CTQ9
Do a hobby (e.g. read, draw)	1	2	3	4	5	CTQ10
Try to value myself and not think so much about other people’ ’s opinions	1	2	3	4	5	CTQ11
Realize that I am strong and can deal with whatever is bothering me	1	2	3	4	5	CTQ12
Think about how things will get better in the future	1	2	3	4	5	CTQ13
Use my spiritual beliefs/belief in a higher power	1	2	3	4	5	CTQ14

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