

FACTORS ASSOCIATED WITH RISKY SEXUAL BEHAVIOR AMONG
HOMELESS YOUTH

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Homeless youth face numerous risks. Data on 602 homeless youth from the Midwest Homeless and Runaway Study and binary logistic regression were used to identify factors associated with their participation in risky sexual behaviors. Specifically, the effects of abuse/neglect and three potential moderating resiliency indicators, namely self-esteem, parental warmth, and parental monitoring, on having sex before adulthood and thinking about trading sex for food or shelter were examined. While none of the three resiliency indicators had the hypothesized moderating effects, controlling for abuse/neglect and various sociodemographic characteristics, parental monitoring had a direct, negative effect on having sex before adulthood, and self-esteem and parental warmth had direct, negative effects on thinking about trading sex for food or shelter. Policy implications of the findings are discussed.

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CHAPTER 1

INTRODUCTION

The reality of an increasing homeless youth population is something which the United States is currently facing. Children in the United States are afforded with the right to education, protection from workforce exploitation, and protection from being tried as an adult in most situations. When youth no longer have a place of residence, or live without permanent shelter and a primary caregiver, attaining these rights becomes much harder due to an existence outside the normal parameters of society. For homeless youth, the ability to exercise these rights becomes not only difficult legally, but emotionally as well due to the implications of interacting with agencies which could potentially threaten the delicate balance of subsistence the homeless youth has fought so hard to attain. As these youth enter adulthood, there becomes a greater likelihood of continuance of any learned deviant subsistence strategy and a decrease in the ability to leave behind poverty and the effects of extended experiences of homelessness such as risky sexual behavior, drug abuse and addiction, as well as any emotional difficulties associated with homelessness.

Homelessness is defined by the federal government as an individual experiencing lack of access to a regular, adequate, or fixed place of residence and who sleeps in a shelter designated for homeless individuals or a place not intended for individuals to sleep such as a park or a car (Department of Housing and Urban Development [HUD], 2010). According to recent studies, incidences of homelessness are on the rise in the United States, and therefore continued research and policy implementation for this population is relevant in seeking reasons behind increases

within this population. Unaccompanied minors, youth under the age of 18 who lack parental, foster, or institutional care, comprise 5% of the total population of homeless individuals within the United States as of 2008 (National Coalition for the Homeless, 2008). Further, incidences of homelessness for persons under the age of 18 have been increasing in the United States as reported by the National Coalition for the Homeless (Fact Sheet # 13, 2008). According to HUD, about 31% or 17,892 of the total 57,026 homeless youth in 2005 were unaccompanied youth under the age of 18 living on the streets, that is, not in temporary, transitional, or institutional housing (2010). Of the 2.3-3.5 million individuals who experience homelessness at least one night in the United States every year, 575,000-1.6 million of these individuals are unaccompanied youth from ages 16-22 (National Center on Family Homelessness, 2009). Living independently of adult supervision on the streets or without permanent residence becomes the difference between homeless youth and a child who experiences homelessness with his or her family (Kidd & Scrimenti, 2004).

Reasons for leaving home are, of course, specific to each youth's situation; however, classification by reason into four general categories is helpful for understanding the plight of the homeless population. The four general categories are: runaways—youth who leave their homes without consent of the parent or guardian; throwaways—those who are kicked out of their home by a parent or guardian; system kids—those who have left difficult institutional placements in hopes of betterment of their situation; and street youth—those who lack basic shelter (Rotherram-Borus, Koopman, & Ehrhardt, 1991). Even with the separation into four general categories, there is the possibility of an overlapping between two or more of these classifications (e.g. a system

kid who was also a runaway or throwaway). Reasons youth give for leaving home voluntarily range from parental drug and/or alcohol abuse, economic hardships, disrupted family units, difficult life transitions such as death of a primary caretaker or divorce, physical and/or sexual abuse, or general inability to get along with the caretaker (Kidd, 2007).

“Leaving” Home, Risky Behavior, and Resilience

The life stressors many homeless youth face on a daily basis before leaving home place undue burden on personal resources of self-efficacy and resilience but are oftentimes simply replaced with different stressors after he or she has left home and struggles to provide for themselves by whatever means possible (Williams, Lindsey, Kurtz, & Jarvis, 2001). Past research has shown that when youth experience extreme trauma, including physical and sexual abuse or neglect, and also running away or being thrown out of their homes, they are more likely to engage in risky behaviors including risky sexual behaviors (Chen, Tyler, Whitbeck, 2004; Johnson, Rew, & Sternglanz, 2006; Rew, 2002; Tyler, & Cauce, 2002; Yoder, Whitbeck, & Hoyt, 2003). Specifically, Whitbeck & Hoyt reported that sexually abused female youth are about 1.4 times more likely to have ever traded sex for food, shelter, or drugs (pg 103, 1999). Data for sexually abused male youths are very similar. Other risky sexual behaviors include having sex without consistent condom use and having sex at an early age, both of which become problematic with the presence of parental abuse (Whitbeck & Hoyt, 1999).

Due to the nature of stressors which homeless youth face every day, this

population can be greatly benefitted from the ability to cope effectively and stay resilient in the face of their day-to-day adversities. Effective coping and resilience is fostered through social involvement, involvement in school activities and academic achievement, strong relationships with one or more primary caregivers, being from a smaller family and retaining responsibility within that family unit, and/or having an easy-going personality (Davey, Eaker, & Walters, 2003; Kidd & Golan, 2008; Rew, 2002; Whitbeck & Hoyt, 1999; Williams et al., 2001;). Significant among factors that have been identified in the literature as promoting effective coping and resilience among youth are parental monitoring and warmth, as well as normal levels of self-esteem (Davey et al., 2003; Kidd, 2005; Kidd & Golan, 2008; Rew, 2002; Whitbeck & Hoyt, 1999; Williams et al., 2001). Thus, higher self-esteem and greater parental monitoring and warmth experienced by the youth prior to homelessness are expected to both reduce the chances of engaging in risky behavior, including risky sexual behavior, on the street and weaken any effects of past abuse/neglect on such behavior. In addition, “resilient” youth who experience homelessness will be more likely to leave behind any harmful effects of deviant subsistence strategies and reemerge among mainstream society as a productive member who is able to retain a job, home, and economic stability.

The Purpose and Significance of This Study

This thesis uses resilience theory (Williams et al., 2001; Davey et al., 2003; & Anne Santa, 2006) and data on 602 homeless youth from the Midwest Homeless and Runaway Adolescent Study (Whitbeck & Hoyt, 1999). The primary aim of the study is to examine the moderating effects of the youth’s resiliency on the relationship between

abuse/neglect in his or her past while still at home and his or her likelihood of engaging in risky sexual behaviors while living on the street. Youth's resilience is measured by how much parental monitoring and warmth was experienced by the youth before leaving home and his or her personal self-esteem on the street at the time of the study. The risky sexual behaviors considered are experiencing sex before adulthood and having thoughts of trading sex for food or shelter. While resiliency theory has previously been applied to the homeless youth population (Kidd, 2008), little has been written on the moderating effects of resiliency on the relationship between abuse/neglect and these particular risky sexual behaviors. With the growth of the homeless youth population and their related problems, such as risky sexual behavior, this study will contribute to the literature by identifying both factors associated with such behavior and those that provide protection against the effects of these factors.

Research Questions

The following questions are addressed in this investigation:

1. Other things being equal, among homeless youth, do physical and sexual abuse and neglect in the youth's past increase the likelihood of risky sexual behavior on the street? Specifically, do they increase the likelihood of experiencing sex before adulthood and/or having thoughts of trading sex for food and shelter?
2. Other things being equal, do certain "resilience"-promoting factors, such as parental monitoring and warmth before the youth left home and his or her personal self-esteem, decrease the likelihood of the homeless youth engaging in risky sexual behavior on the street? Do these "resilience"-promoting factors moderate the

hypothesized effects of past abuse/neglect on the likelihood of engaging in risky sexual behavior? For example, when parental monitoring and warmth before leaving home are high, does abuse/neglect have weaker effects on the likelihood of engaging in risky sexual behavior on the street? Similarly, when the youth's self-esteem is high, are the effects of abuse/neglect on his or her likelihood of engaging in risky sexual behavior on the street weaker?

Organization of the Following Chapters

The following chapters of this thesis are organized as follows: Chapter 2 begins with a delineation of the theoretical framework for this paper in a detailed analysis of previous research that has contributed to resiliency theory. Looking at previous research in the areas of characteristics of the homeless youth population such as the three types of abuse, sexual orientation, socioeconomic status, gender, race, and age, patterns among this population will be identified and a general understanding of the characteristics of homeless youth as represented in this dataset will emerge. This chapter concludes with an in-depth assessment of prior findings among the relationships of parental monitoring, parental warmth, and self-esteem to risky behaviors among this population. Chapter 3 details the methods utilized in the analyses as well as describes the dataset and methods of data collection. Within this chapter variable descriptions are provided, reliability and validity of the measures used are explained in depth, and specific hypotheses are stated. Chapter 4 is where findings of the analyses within this thesis are provided based on descriptive statistics and binary logistic regression analyses. Chapter 5, the final chapter, summarizes and discusses the

findings presented in chapter 4 as linked back to resiliency theory and past contributing literature in the field of homeless adolescents. Future policy implications and suggestions as associated with the findings of this thesis are also discussed in this final chapter, as are the limitations which this thesis did not overcome in its analyses.

CHAPTER 2

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Introduction

In this chapter, past literature regarding homeless youth specific to this thesis, especially work pertaining to risky sexual behaviors, past abuse by family members, and resiliency theory as a means to overcome life stressors is explored. According to the Midwest Homeless and Runaway Adolescent study, a significant number of homeless youth experienced some type of abuse while living at home and more specifically those who experienced sexual abuse were involved in trading sex for money, food, shelter, or some other life sustaining commodity at a higher rate than their non-homeless and runaway youth peers (Whitbeck & Hoyt, 1999). Due to the nature of homelessness and the causal factors leading up to it, the ability to bounce back from the negative impacts of situational stressors all youth face, whether housed or homeless, is critical for staying resilient. If homeless youth can stay resilient to the effects of parental abuse which was experienced prior to separating from their childhood home and the effects of time spent homeless, the likelihood they will eventually experience a successful reemergence into mainstream society should increase.

Literature Review

Homelessness for persons under the age of 18 has been increasing in the United States as reported by the National Runaway Switchboard & National Coalition for the Homeless for the year of 2008. Homelessness can be categorized more specifically by youth who leave home voluntarily as runaway youth and those who are forced out of

their homes as throwaway youth (National Coalition for the Homeless [NCH], 2008). Additional sources give further categorization with youth who reside on the streets for lack of shelter otherwise and those who voluntarily left their social service placement as runaways (Rotheram-Borus et al., 1991). Findings for reasons reported by youth for voluntarily leaving their home include those of physical and/or sexual abuse, economic hardships, drug abuse, and difficult relationships with family members, or neglect (NCH, 2008; Rotheram-Borus et al., 1991; Kidd & Shahar, 2008; Johnson et al., 2006; Pollio, Thompson, Tobias, Reid, & Spitznagel, 2006). Past research on homeless adolescents has explored the relationship of social connectedness and sexual abuse in regards to sexual health behaviors, length of time homeless, sexual orientation, and self-efficacy to that of drug usage for adolescents (Rohsenow, Corbett & Devine, 1988; Whitbeck & Hoyt, 1999; Rotheram-Borus et al., 1991); however, little has been written on self-esteem and the ability to stay resilient during times of hardship as a correlate to having thoughts of trading sex for food or shelter and having sexual intercourse prior to adulthood for this population of adolescents. Research has shown that past sexual abuse is considerably higher within the homeless and runaway population (Janus, Burgess, & McCormack, 1987) than for non-homeless adolescents. In addition to higher incidences of sexual abuse for homeless youth, research shows that past sexual abuse remains one of the key factors in running away within this population (Garbarino, Schellenback, & Sebes, 1987; Pollio et al., 2006; Chen et al., 2004).

Risky Sexual Behavior

Risky sexual behavior can be described as “practices that increase the likelihood of contracting a sexually transmitted disease (STD) and include having multiple sex

partners and exchanging sexual intercourse for money, food, shelter, or drugs” (Rew, 2001, p. 4). Risky sexual behavior is considered by researchers to be an absence of “protective behavior,” or self-efficacy, whereby precautions are taken to reduce incidences of disease and pregnancy with consistent condom and contraceptive use, by limiting the number of sexual partners, and by avoiding high-risk sexual partners such as prostitutes and IV drug users (Gangamma, Slesnick, Toviessi & Serovich, 2008). Additionally, safe practices are classified as the ability and forethought to seek medical care as needed to ensure good health, which increases the chances of prolonged lifespan survival (Hollander, 2008). Without the previous protective behaviors, homeless youth are more likely to suffer from increases in sexually transmitted disease such as HIV than their non-homeless counterparts (Slesnick & Kang, 2008), in addition, to suffering from other sexually transmitted diseases such as HPV and hepatitis, to name a few. Undoubtedly, the greatest risky sexual behavior lies in the practice of trading sex as a subsistence mechanism.

Individuals who have not faced homelessness may find it peculiar that a more traditional mode of seeking subsistence is not sought by youth in this particular situation instead of that of sex trade. Kimberly A. Tyler and Katherine A. Johnson report that “very few youth want to trade sex, but some do so because they are desperate and lack alternatives” (2006, p. 208). Using data from in-depth interviews of homeless youth, Tyler & Johnson explore the causal factors of sex trade among homeless youth. One possible conclusion of causal factors of sex trade might be that there remains a possibility that not all decisions to initiate sex trade are voluntary, but may arise through coercion from another individual who wishes to benefit from such an arrangement (Tyler

et al., 2006). “Getting angry, arguing, or using physical force that prompts an individual to engage in a sex act” are all actions defined as coercive (Tyler et al., 2006, p. 208) and may come from friends, sexual partners, or mere acquaintances.

Tyler and Johnson found that a high proportion of the homeless youth they interviewed had experienced past caretaker physical, sexual, and/or emotional abuse and that this past abuse was associated with a propensity to engage in sex trade (Tyler et al., 2006). Specifically, 17.5% of the respondents reported a history of trading sex for drugs, and of that 17.5%, the majority of those individuals and 15% of the total sample reported a history of caretaker abuse as well as a history of drug abuse (Tyler et al., 2006, p. 208). Interestingly, during the initial stages of sex trade, or commencement of practice in sex trade, it is not necessarily the individual selling themselves for commodity who is the originator of the idea to do so (Tyler et al., 2006), but oftentimes the idea is initiated by the peer group. Pressure from peers to participate in drugs, alcohol, and even sex trade can prove too much to withstand for an individual whose connections to family and past friends have been severed. With reports from homeless youth on this previous finding, a culture of homelessness becomes more clear, one in which the homeless youth are initiated in the ways of subsistence and relational statuses within the group. Within this culture, females appear to be more vulnerable than their male counterparts. Consistent with previous research, Tyler and Johnson (2006) found that females are more likely to participate in trading sex to meet physical subsistence needs.

On a nationally representative study of street youth and homeless shelter youth which defines “survival sex” as the “selling of sex to meet subsistence needs,” findings

showed that street youth engaged in survival sex at a rate of 27.5%, whereas shelter youths reported a rate of 9.5%, a difference of 17% points (Greene, Ennet and Ringwalt 1999, pp. 1406, 1408). This difference, when analyzed with time spent homeless, is better understood to indicate that the longer period of time homeless, an increase in the likelihood of survival sex grows. For street youth, 9.2% who reported being away from home 1-30 days have participated in this type of risky sex, 25.2% of youth who reported being away from home 31-365 days reported participating in sex trade, and 37.4% of youth who had been away from home longer than a year responded yes to participation in risky sex (Green et al., 1999, pg. 1407). Corresponding percentages for shelter youth were somewhat lower at 5.5%, 11.8%, and 18%, respectively (Green et al., 1999, pg. 1407). Nevertheless, the odds of ever having participated in survival sex are statistically significant for street and shelter youth alike. Furthermore, consistent with previous research (e.g., Johnson et al., 2006), Green et al. (2006) also finds a correlation between past parental abuses and risky sexual behavior after separation from home has taken place.

In support of the data which indicates that sexual abuse increases risky sexual behaviors among homeless youth, further studies indicate that among the homeless population, individuals who did not experience sexual abuse tended to show greater ability to utilize sexual health resources as well as engage in less overall risky behaviors in their sex practices than those who did report having experienced sexual abuse (Johnson, Rew, & Sternglanz 2006). Additionally, compared to their non-homeless counterparts, homeless youth tended to have lower self-esteem, and, in general, tended to be more likely to participate in other self-destructive or risky behaviors.

The question of why sex trade is so prevalent a mechanism of subsistence for homeless youth is addressed by Whitbeck and Hoyt (1999). They note that traditional governmental aid designed to sustain individuals in times of crisis are typically limited to adults. Programs such as food stamps, WIC, Social Security Disability, and government housing all require some form of documentation from an adult able to sign the forms. Additionally, youth typically do not have the needed experience to go out into the general labor force and work for a paycheck. Even jobs which do not require a certificate or degree, such as those within the construction field would still require knowledge more advanced than what youth typically retain. The complete lack of any skill or trade by which legitimate means of subsistence can be utilized by homeless youths almost necessitates them to seek out the sub-culture of illegal strategies such as sex trade and selling drugs to survive (Whitbeck & Hoyt, 1999). This finding shows an important gap between the government programs available for use by adult persons experiencing poverty and poverty stricken homeless youth who do not have an adult advocate or tie to any agency.

Family Life

Adolescents face numerous difficult situations and decisions on a daily basis, a fact that is compounded for homeless youth. Through a study among 176 homeless youth sampled in an urban community within the Southern/Central portion of the United States, the incidence of physical or sexual abuse within the youth's family history was correlated with an increase in risky sexual behaviors and even "survival sex" while on the street (Taylor-Seehafer, Johnson, Rew, Fouladi, Land, & Abel, 2007, p. 37). In

addition, early sexual abuse by a caretaker was also shown to increase the likelihood of “revictimization” once the child made the decision to leave home (Tyler, 2006). This finding is useful to this thesis’s current investigation of self-esteem and risk factors among homeless youth in that the simple act of victimization does not itself lead to further victimization later on down the line. Tyler’s 2006 findings point to the associations of past violations as the mechanisms which dictate self-efficacy and self-esteem of homeless youth and therefore change behaviors in regards to risk outcomes.

Leaving home to a world that is unknown and full of potential danger, never knowing where the next meal will come from or where an appropriate place to rest for the night will be, the life of a homeless adolescent is something which many Americans will never be able to comprehend. What are the circumstances which draw these youth away from that which others would consider a much better situation than living on the streets? Much research has been done in regards to the past family life of homeless youth and generally speaking, these youth face much higher rates of physical abuse, sexual abuse, and neglect than housed youth (Hyde, 2005; Chen et al., 2004; Johnson et al., 2006; Rew, 2002). Additionally, major changes in family structure, such as divorce, the death of a loved one, or remarriage, with increases in the stressors associated with these changes, are reported by homeless youth as reasons for separating from their families (Hyde, 2005; Kidd, 2006). Receiving some form of public assistance (Ringwalt et al., 1998) while the homeless youth resided in that home has also been a factor in their separation from the family. Many of these youth have endured seeing loved ones support a drug or alcohol addiction which severely eradicated a sense of normalcy from the home, oftentimes increasing the previously discussed forms

of abuse to the point of unbearable pain and suffering (Whitbeck and Hoyt, 1999; Hyde, 2005; Tyler, 2006).

Stress could be considered a factor in increasing risks associated with homelessness among youth. Through an analysis of a sample of 356 homeless youth, by “family-separation path,” or reasons for leaving home, Maclean, Embry, & Cauce found that it is not necessarily the historical background and the nature of the homeless adolescents' family life which proves to be the causal determinate of the “symptomatology” of homelessness, but more so the stressful nature of life on the streets itself which proves to be the determining factor of a “high risk life-style and threat of victimization” while living on the streets (1999, p. 186). This is a seemingly contradictory finding from the previously listed research unless it is combined with the finding that abuse increases the likelihood of revictimization. When faced with perpetrators on the streets, it is the individual who has previously experienced victimization who tends to lack the ability to defend against such abuse, possibly due in part to a lower self-esteem brought about by previous parental abuse. Looking at this family-separation path data, Maclean et al. demonstrated that there is a moderate difference between adolescent runaways who were removed from the home by an outside authority figure and the other two self-separation modes. Over one-half (55.7%) of respondents removed from the home by an outside authority figure experienced sexual abuse while living at home, whereas 35.0% and 36.4% of runaway and kick-out respondents, respectively, reported sexual abuse while living at home, a 19.3% difference (Maclean et al, 1999, p. 183).

According to this same work by Maclean et al, youth who experienced sexual

abuse while living at home were more likely to be removed from their living conditions from an outside agency (1999). Runaway youth and kicked-out youth showed very similar data on their age of first being sexually abused at a mean age of 8.78 years and 8.15 years respectively, whereas homeless youth who were removed from their homes from an outside authority reported a mean age of 6.65 years (Maclean et al, 1999, p. 184). Once on the streets however, these gaps between the three family-separation paths were reduced. That is, 8.8% of homeless runaway youth reporting being raped, 2.5% of the kicked-out homeless youth reporting being raped, and 9.5% of those removed homeless youth reporting being raped, a non-significant difference between separation paths (Maclean et al, 1999, pg. 184). This article suggests that a family-separation path should not be the main determining factor in an intervention plan for homeless youth because those factors matter less when faced with the reality of living on the streets. Self-efficacy is defined as the belief in one's ability to exercise control over events in life and to make changes towards desired outcomes as well as determines behavior and ability to cope with change and stressful situations (Zimmerman, Bandura, & Martinez-Pons, 1992) and is thought to be diminished in the presence of childhood abuse. In light of these findings, a possible link between sexual abuse and self-efficacy can be established for further investigation.

Demographics and Risks of Homeless Youth

Research has shown that street victimization and prostitution among homeless youth is more strongly associated with gay, lesbian, and bisexual youth than their heterosexual counterparts (Tyler, 2008). Heterosexual males and females tend to differ

from each other in their likelihood to use condoms. Heterosexual males have been found to have higher self-efficacy in condom usage, meaning they were more likely to make use of condoms than female heterosexuals (Taylor-Seehafer et al., 2007, p. 45). Heterosexual males were more likely than homosexual males to utilize condoms as well (Taylor-Seehafer et al., pg. 45, 2007). The results presented by Taylor-Seehafer et al. suggest that there is a difference between sexual orientation and self-efficacy of homeless youth in regards to condom use. The difference in gender in regards to condom use is important to this investigation because condom use is considered a risky sexual behavior in that without consistent usage by sexually active individuals, the likelihood of contracting an STD will increase. For sexually abused and physically abused males, the intention to use condoms during sexual activity is greater than that of their non-abused male counterparts (Taylor-Seehafer et al., 2007). This finding of increases in intentionality to use condoms by males is posited to be due to male self-reliance preservation techniques (Taylor-Seehafer et al., 2007). Data for females is similar in the differences between abused and non-abused youth.

Taylor-Seehafer et al. also noted that for males who have experienced abuse, the time spent homeless is longer than that of their non-abused male counterparts (2007). The previous finding of abused males having an increase in intentionality to utilize condoms during sexual activity can be explained by an identification of a connection between the length of time homeless and increases of social connectedness. As social connectedness increases, so too does self-efficacy and thereby preservation techniques such as condom usage (Taylor-Seehafer, et al., 2007). Other research has shown that nearly 50% of homeless youth do not make use of any form of contraceptive

use at all, a reality which not only increases the risk of contracting an STD but pregnancy as well (Frost, 2004).

Pregnancy of homeless females tends to be a problem in that with the addition of a child, all symptomatology of homelessness will become compounded. It is not uncommon for homeless youth to report pregnancy during their time on the streets. A study by Ramashwar in 2008 reported 7% of those 268 youths in a Southwestern United States urban center reported being pregnant. To further the understanding of pregnancy among homeless youth, its causes and risks, a systematic sampling of pregnant and non-pregnant homeless females was undertaken which controlled for equality of responses to various demographic and situational questions posed to these individuals (Ramashwar, 2008). Pregnant youth can encounter numerous situational cues which possibly lead to the current situation which they find themselves, such as low socioeconomic status, neglect, physical, sexual, or emotional abuse from one or both caretakers, peer pressure to participate in sexual activities, or dropping out of school. Among homeless youth, teenagers who reported emotional abuse or feelings of abandonment by their mother had a higher rate of pregnancy than those who suffered physical abuse from their mothers (Thompson, 2008; Ramashwar, 2008). Additionally, it was found that the longer time on the streets is correlated with a greater risk of pregnancy but as age goes up, the likelihood of becoming pregnant decreases slightly (Thompson, 2008; Ramashwar, 2008).

Median sexual debut is reported as 16.9 years for boys and 17.4 years of age for girls within the general, non-homeless population (The Henry J. Kaiser Family Foundation, 2008). When compared to statistics of sexual debut within the homeless

adolescent population, it is found that the average self-initiated sexual debut is approximately 13 years of age, a difference of 4 years (Gangamma et al., 2008; Forst, 1994).

Resiliency Theory

As stated earlier, the ability to perform and function within society without any long-term negative effects of adversity previously faced can be defined as the general description of resiliency. In the population of homeless youth, the ability to cope with the stressors presented on a daily basis can mean the difference between escaping the effects of life on the street and the risks associated with past familial hardships by overcoming them and moving their lives in a more positive direction or simply succumbing to them altogether. When looking at hardships the homeless youth population faces such as abuse, drug addiction, victimization while living on the street, and lack of parental support, it can be difficult to imagine how one would survive these stressors or become a functioning, productive member of society who leaves all the vestiges of past experiences behind. The ability which some homeless youth have shown in shaking off the bonds of past hardship and overcoming the effects of stress associated with homelessness while others have a more difficult time in overcoming this stress is the purpose behind investigation of resilience within this thesis. Resiliency has been linked to coping mechanisms of children and adults; however, not much has been written on the resiliency of homeless youth (Kidd & Golan, 2008; Brooks, 1994; Rak & Patterson, 1996; Anne Santa, 2006; Davey et al., 2003; Williams et al., 2001).

Past research has indicated that individuals who show more resilience are

individuals who typically have easy temperaments, strong attachments to parents or other adults, strong self-efficacy, and higher self-esteem (Williams et al., 2001). Social connectedness and strong relationships to others of good influential capabilities are important for the building or retaining of resilience and can therefore be gained at any point in one's life (Williams et al., 2001). The link between positive role models, strong peer relationships, and resiliency has been established many times before among youth and adults. It is the resilient homeless youth who do not seem to have strong peer relationships or positive role models which are of interest in this thesis. If it can be shown that resilience is integral in avoiding risky sexual behaviors, a better understanding of the importance of self-esteem when it comes to the ability to cope and overcome will ensue.

Williams et al., in their longitudinal study of 22 former homeless adolescents, explored factors which contribute to the gaining of resilient behaviors among the homeless youth population. The findings from this study show that if homeless youth are able to build positive relationships with trust and communication, their self-esteem and self-efficacy will likely increase (2001, p. 249). When the relationships formed prove to be non-trustworthy, especially with those of an authority figure such as a health care worker, homeless youth show few signs of an increase in resiliency. This trustworthiness of formed relationships was found to be related to the quality of those relationships and the ability of those relationships to provide quality interactions in support of change towards betterment of life for the homeless youth. If the relationships formed were superficial or trust was breached, those particular youths were unable to gain a sense of trust in general towards authority figures within society at large. Without the ability to

trust authority figures, homeless youth are much more disadvantaged as it takes some reliance on others, such as psychiatrists, doctors, parole officers, judges, and social workers to bridge the gap between continuance of homelessness and once again becoming a housed youth. Additionally, a shift in perception of proper self-care techniques, hope for the future, and sense of purpose in the world all were shown to be integral to a positive development of resiliency through higher self-efficacy and self-esteem (Williams et al., 2001). Resilient homeless youths' self-care techniques developed into a systematic approach towards attitudes, hopes, and goals whereby one-step action plans for success were set, worked towards, and eventually met. These self-care techniques allowed for a fostering of positive reinforcement towards the growth of self-efficacy and self-esteem. Oppositional to this, the non-resilient homeless youth did not implement action-plans for improvement or concrete goal setting (Williams et al., 2001).

One might be inclined to believe that the non-resilient and resilient homeless youth differ in inherent personality traits which determine the differences outlined previously. However, Davey et al. found that variance of personality types such as a protective personality versus a moderately protective personality did not explain differences between resilient youth (2003). This same study found that resilience can and does act as a mediator towards risk, one that is linked directly to self-worth of youth as found in the research (Davey et al., 2003). Higher self-worth is associated with that of a higher resiliency of youth; however, it is a complex mechanism and the specifics of how it is developed were not explored in this article (Davey et al., 2003). We can recall however, from the previously discussed Williams et al. article that positive relationships

are integral to development of resiliency (2001).

Anne Santa contributed to the literature on resiliency which supports the previous findings that strong relationships are integral to development of resiliency among youth (2006). Santa added that a wide-ranging social support, a sense of self-efficacy, and secure attachment are all necessary components of resiliency (2006). Recalling that self-efficacy is the personal belief that there is control over choices, actions, decisions, and changes in life, a connection can be drawn between positive relationships and self-efficacy.

Robert Brooks also contributed to the literature of resilient children at risk by showing that the social environment and social connectedness of that child to others, as well as strong family relationships can affect development of resilience (1994). Additionally, Brooks found that even in the face of risk and hardships, youth who exhibited higher levels of self-esteem and presented feelings that there was hope for their situation, were then more likely to prove resilient during difficult times (1994). This self-esteem, for Brooks, was an internal measure and not an attribute, which was fostered through relationship strength of community or family. This finding of Brooks' can help in the current investigation and possibly explain that even in the presence of abuse, a child has the potential to retain resilience, and therefore may develop a higher likelihood of avoiding risk while homeless.

The following conceptual model found in Figure 1, shows the proposed moderating effect of self-esteem between parental physical abuse, sexual abuse, and neglect with that of having sexual intercourse prior to adulthood and having thoughts of trading sex for food or shelter while living on the streets. Additionally, parental

monitoring and warmth, as indicators of “strong” relationships, are tested as moderators between all three types of abuse and ever having sex and thoughts of sex trade. Specifically, self esteem and parental monitoring and warmth are expected to have protective effects. That is, the greater the parental warmth and monitoring experienced by the homeless youth before leaving home and the greater his or her sense of self worth on the street, the weaker the link between his or her risky sexual behavior and past abuse/neglect is expected to be.

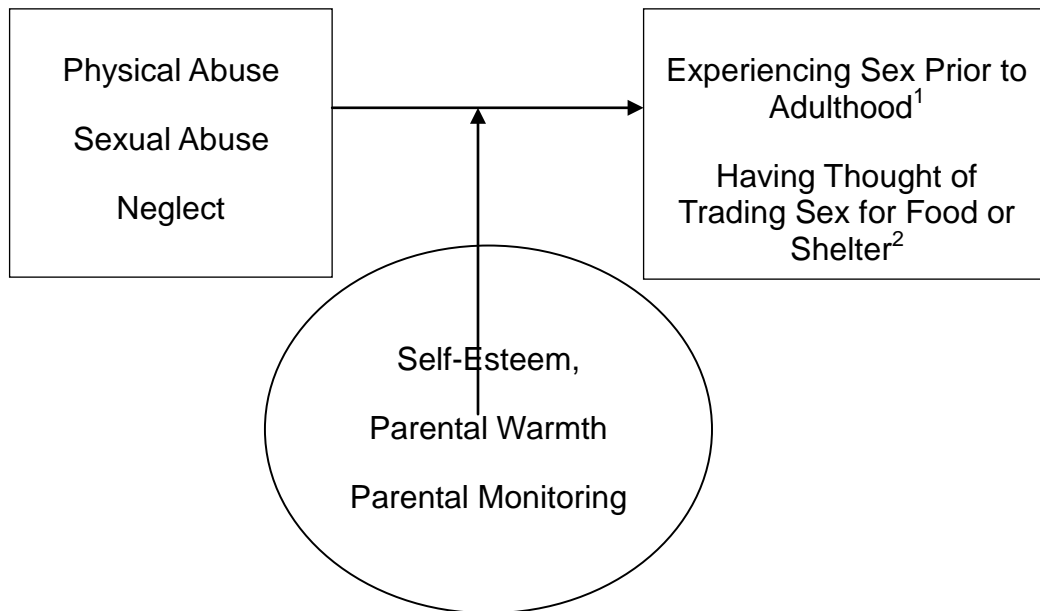


Figure 1. Conceptual model.

Self-Esteem

Self-esteem can be defined as a general sense of self-worth as measured through self-assessment questions. Questions measuring self-esteem are typically coded onto a Likert scale for ease of rating the overall individual self-esteem. This thesis used Dr. Morris Rosenberg’s widely accepted self-esteem scale (Rosenberg, 1965, Guindon, 2002). Self-esteem is considered an internal resource which an

individual can draw upon in times of adversity throughout various points in life. As was discussed previously, resilience is partially developed through a stronger sense of self-esteem. As is oftentimes the case with homeless youth, the ability to develop resilience with the help of external resources such as strong relationships with authority figures, is not always possible. Due to limitations of the resources necessary for resiliency development among homeless youth, a strong bank of internal resources must be available to these youth in order for resilience to develop, according to the previous articles discussed. The question remains however, how does self-esteem develop and can it remain even in the face of extreme cases of risk such as physical abuse, sexual abuse, and neglect as is oftentimes found among the homeless adolescent population?

Lipschitz-Elhawi and Itzhaky, in their investigation of at-risk youth living in an Israeli residential center found that coming from a background where parental abuse was reported, the external resource of strong family support was still possible and was seen to contribute to resiliency (2005). Interestingly, it was not actual support which allowed for a greater sense of achievement ability among this population, but perceived family support, which made the difference in resiliency. In other words, facility workers did not report a difference of parental support between those youth who had high resiliency versus those with low resiliency; however, the perception of strong family support as reported by the youth themselves seemed to be a deciding factor to this internal resource. Research has shown that family connectedness and support is a deciding factor of youth self-esteem, allowing for the fact that perception can change the outcome of parental support measures (Noack & Puschner, 1999).

As the research suggests, self-esteem is integral to increasing factors associated

with resilience among youth. If homeless youth can retain resiliency even after facing serious abuse at home, greater understanding of how to prevent risky sexual behaviors can be gained. Kidd and Shahar found that self-esteem is a moderator to risks associated with loneliness for homeless youth (2008). Some youth are able to resist risks associated with feelings of loneliness as moderated by strong self-esteem (2008). The implications of Kidd and Shahar's investigation are that an understanding of the low self-esteem of youth in treatment is necessary prior to that youth regaining stores of resilience (2008). Without all necessary components of resilience, Kidd and Shahar suggest homeless youth will not be able to overcome risk and the effects of homelessness (2008).

Whereas self-esteem, especially lower self-ratings of this measure, have been associated with reports of childhood sexual abuse or physical abuse, behavioral problems, academic failures, drug usage, alcohol usage, and maladaptive behaviors (DuBois & Hirsch, 2000; Ang, Neubronner, Oh, & Leong, 2006; Whitbeck & Hoyt, 1999; Malcolm, 2004) some researchers urge caution when utilizing such self-measures. When analyzing predictors or outcomes associated with risk, caution should be taken due to the subjective nature of such self-measures. Self-measures are not interchangeable in meaning between individuals or even between one individual's early life phase and later life phase (Malcolm, 2004; Ang et al., 2006). After all, self-esteem as measured through self-rating of an indicator question such as, "All in all, I am inclined to feel that I'm a failure," may vary from someone else's of the same background and demographics (Whitbeck & Hoyt, 1999). However, as this measure of self-esteem has been utilized many times prior to this current study, confidence in the general

acceptance of overall relevant sustainability of its methodology are accepted.

Some differences among gender measures of self-esteem are noted within the literature as females have tended to report lower levels than their male counterparts (Puskar, Bernardo, Ren, Haley, Tark, Switala, & Siemon, 2010). Additionally, Kimberly Mahaffy found in her investigation of girls' self-esteem that generally girls suffer from a lower self-esteem than boys and this is oftentimes translated into lower socioeconomic achievements (2004). The differences between males and females in regards to self-esteem and self-efficacy are noted in this thesis only as a general reference point and point of interest.

Hypotheses

With an examination of prior literature in the fields of homeless adolescents and risk factors associated with risky sexual behaviors, the following list of research hypotheses are examined in the thesis.

Dependent Variable, Sex with Another Person Prior to Adulthood Hypotheses

- H₁: Among homeless youth, all three types of abuse (physical, sexual, and neglect) are positively related to having sex with another person prior to adulthood.
- H₂: Self-esteem is negatively related to having sex with another person prior to adulthood.
- H₃: Parental warmth and monitoring, which are measures of strong family relationships, are negatively associated with having sex with another person prior to adulthood.

H₄: However, the more resilient the homeless youth is, the weaker the predicted positive effects of caretaker abuse/neglect on the likelihood of having sex with another person prior to adulthood will be. That is, abuse/neglect will have no or less of an effect on having sex with another person prior to adulthood when self-esteem, parental warmth, and/or parental monitoring are high.

Dependent Variable, Having Thoughts of Sex Trade for Food or Shelter Hypotheses

H₅: All three types of abuse (physical, sexual, and neglect) are positively related to having thoughts of trading sex for food or shelter while homeless.

H₆: Self-esteem is negatively related to having thoughts of trading sex for food or shelter for homeless youth.

H₇: Parental warmth and monitoring, which are measures of strong family relationships, are negatively associated with having thoughts of trading sex for food or shelter for homeless youth.

H₈: However, the more resilient the homeless youth is, the weaker the predicted positive effects of caretaker abuse/neglect on the likelihood of having thoughts of trading sex for food or shelter will be. That is, abuse/neglect will have no or less effect on having thoughts of trading sex for food and shelter when self-esteem, parental warmth, and/or parental monitoring are high.

CHAPTER 3

METHODS AND DATA

Introduction

The hypotheses listed in the previous chapter were examined using data from the Midwest Homeless and Runaway Adolescent Study (MHRAS). This chapter describes the study and dataset. It also discusses the measurement of the subset of variables from the dataset that are used in this thesis. The chapter concludes with the analytic strategy used to test the hypotheses.

Midwest Homeless and Runaway Adolescent Study

This thesis used data gathered by the Midwest Homeless and Runaway Adolescent Study conducted by Les B. Whitbeck and Dan R. Hoyt of Iowa State University during the 18 month time span from early 1995 to August of 1996 (Whitbeck & Hoyt, 1999). Street outreach agencies in Missouri, Iowa, Nebraska, and Kansas aided with the access to 602 homeless and runaway youth for extensive one to one and one-half hour interviews. Interviews covered topics pertaining to demographics, life transitions, family histories, and incidences of abuse and victimization while at home and during time spent on the street. Interviewees were also asked about personal drug addiction, reasons for leaving home, relationship proximities, survival strategies while on the street, sexual behaviors, deviant lifestyles, and general measures of personal well-being such as self-esteem and happiness. The MHARS also interviewed 201 parent/caretakers, but for purposes of this thesis, this information was not used. Interviewees were given sample questions, \$15, and the reassurance that they could

terminate the interview at any time before they accepted the offer of participating in the study.

One benefit of utilization of this particular dataset is that a focus of cities within agricultural areas such as Nebraska and Iowa were chosen as opposed to the larger and more well-known areas of high concentrations of homeless youth such as New York City or Los Angeles. Utilization of less densely populated areas within the dataset also strengthens resolve of policy makers towards helping homeless youth populations due to proof of a widespread presence of unaccompanied youth.

Another benefit of utilization of this dataset is the extensiveness of overlapping questioning techniques which was undertaken in multiple urban areas and outreach centers, ensuring variance of sample as well as depth and richness of data. Questions were designed to better understand the life histories of the respondents from birth to present stage. Details of this investigation included city which the respondent was born, where they lived at varying stages in their life, and any family transitions such as divorces or deaths, including the relationship and strength of those relationships to the respondent.

For the purposes of this thesis, only information from the dataset pertaining to sexual history, ever having had thoughts of trading sex for food or shelter, parental abuse/neglect, self-esteem, parental monitoring and warmth, participation in a public assistance program, and general demographic information, such as age and race, was utilized. While most of the homeless youth in the original sample answered most of the questions, there were missing values for some of the variables included in this thesis. To handle this problem, listwise deletion was utilized. The original data set consisted of

602 cases. After deletion of youth with missing data on any of the variables used in the analysis of the dependent variable ever having sex prior to adulthood, 567 cases remained, an acceptable 5.8% reduction in cases ($567 / 602 = .9418$ [$100 - 94.2 = 5.8$]). For the dependent variable ever having thoughts of trading sex for food or shelter while homeless, listwise deletion reduced the sample size from 602 to 564, which is an acceptable 6.3% reduction in cases ($564 / 602 = .9369$ [$100 - 93.7 = 6.3$]).

Variable Descriptions

Dependent variables. There were two dependent variables for this thesis: (a) ever having had sex with another person before (that is, prior to adulthood) and (b) ever having thoughts of trading sex for food or shelter. The first dependent variable “ever having had sex” was measured by the youth’s response to the question “Have you ever had sex with anyone?” The variable was coded 1 for a “yes” response and 0 for “no” response. As Table 1 shows, 84.1% of the sample reported having had sex with another person at least once in their lifespan at the time of interview. The term sex in current society has undergone a slight change and therefore can be defined by people differently. For example, one person could possibly consider “sex” as oral sex, while another considers it sexual intercourse. During the interview process, the variations of sex are expounded upon with further questioning such as, “During the past 12 months, did you ever have oral sex with your partner(s)?” For purposes of this thesis, however, the question used was the first, perhaps more general question.

The second dependent variable “having thoughts of trading sex for food or shelter” was also measured as a dichotomous variable. Respondents were asked,

“Have you ever thought about trading sex for food or shelter?” The variable was coded 1 for a “yes” response and 0 for a “no” response. As Table 1 shows, while a majority of respondents answered “yes” to ever having sex with another person in the course of their life, only 10.8% admitted to ever having thoughts of trading sex for subsistence needs.

Table 1

Distribution of the Two Dependent Variables

	Frequency	Percent
<i>Sex Prior to Adulthood</i>		
No	90	15.9%
Yes	477	84.1%
Total	567	
<i>Thoughts of Sex Trade</i>		
No	503	89.2%
Yes	61	10.8%
Total	564	

Independent variables. There were three main independent variables or “risk factors” for the models: parental physical abuse towards the adolescent, parental sexual abuse towards the adolescent, and neglect by the parent towards the adolescent. Abuse has been shown to increase the likelihood of ever living on the street as well as risky behaviors such as having thoughts of trading sex for food or shelter (Hyde, 2005; Whitbeck & Hoyt, 1999). The variable of abuse was broken down into three main types:

sexual, physical, and neglect, with all item indicators beginning with the question, “How often has a parent, a foster parent, an adult relative or any adult who was supposed to be taking care of you ever...” (Whitbeck & Hoyt, 1999). For purposes of this thesis, when parental abuse or parent was used, it was assumed to be the parent or primary caretaker who held the position of parental responsibilities towards the respondent.

For parental sexual abuse, responses from two items were combined to create an indicator or dummy variable. The two items asked the respondents how often their parent had asked them “to do something sexual” and how often their parent “messed around with [them] sexually”. Response categories for these two items were 1 for *never*, 2 for *once*, 3 for *a few times*, and 4 for *many times*. The parental sexual abuse indicator or dummy variable was coded 0 if the respondent reported “never” experiencing either situation and was coded 1 if the respondent reported having experienced one or both situations at least once. There were some follow-up questions which asked how old the respondent was when these occurrences happened and if there were multiple offending adults when the offense took place. For this thesis, only the two previous questions regarding reported parental sexual abuse were used (Whitbeck & Hoyt, 1999). Referring to Table 2, we see that for sexual abuse, 10.1% of males and 31.5% females, and 22.9% overall, reported having experienced sexual abuse at least once by their parent/primary caretaker.

Physical abuse was measured by an index. The sum of the responses to five items was used. Response categories for each of the items ranged from 1 for *never* to 4 for *many times*. As such, when responses to the five items were summed, the index ranged from 5 to 20, with higher responses indicating more frequent physical

victimization of the adolescent by the parent. This measure did not utilize all the items of physical abuse which were presented to the respondents, specifically not included were the ones which could be classified as indicators towards threat or assault with a weapon. The five items that were included in the index asked about how often the respondent's parent had "thrown something at [him/her] in anger," "pushed, shoved, or grabbed [him/her] in anger," "slapped [him/her] in the face or head with an open hand," "hit [him/her] with some object," and "beat [him/her] up with their fists." The Cronbach's alpha for the internal reliability of the physical abuse index is "acceptable" at .85 (Whitbeck & Hoyt, 1999). Referring to table 2, we see that for physical abuse, 87.0% of males and 91.3% of females, and 89.6% overall, reported having experienced some type of physical abuse at least once by their parent/primary caretaker.

Parental neglect was measured in the same way as parental sexual abuse. Responses from two items were combined to create an indicator or dummy variable. The two items asked the respondents if their parent had ever "punished [them] by making [them] go a full day without food, water, clothing or a toilet," and if there had ever been an instance when the parent had ever, "abandoned [them] for at least 24 hours." Response categories for these items also ranged from 1 for *never* to 4 for *many times*. The parental neglect indicator or dummy variable was coded 0 if the respondent reported *never* experiencing either situation and was coded 1 if the respondent reported having experienced one or both situations *at least once* (Whitbeck & Hoyt, 1999). Referring to Table 2, we see that 28.5% of males and 34.3% of females, and 31.9% overall, reported being forced by their parent to go without food, water, clothing, or a toilet, and/or being abandoned by same for at least one 24-hour period.

In sum, for homeless youth of the MHARS, substantial percentages experienced each of these three types of abuse, with physical abuse being the most frequently reported type of abuse and females being more likely to report each of the three types. In addition, those who reported experiencing one type of abuse tended to have a greater chance of experiencing another type of abuse. For example, there is a strong, positive correlation between having experienced some type of physical abuse and having experienced sexual abuse or neglect by a parent (Appendix, $p < 0.01$, two-tailed test).

Table 2

Descriptive Statistics of Key Independent Variables or “Risk” Factors

Type of Abuse	Males	Females	Total	Percent Not Abused by Caretaker
<i>No Report of Abuse</i>				
Sexual	214	244	458	77.1% (N=594)
Physical	31	31	62	10.4% (N=596)
Neglect	171	236	407	68.1% (N=598)
<i>Yes Report of Abuse</i>				
Sexual	24	112	136	22.9% (N=594)
Physical	207	327	534	89.6% (N=596)
Neglect	68	123	191	31.9% (N=598)

Note. The items of abuse in this table are not mutually exclusive so totals are not added after each sub-section.

Moderating independent variables or “resiliency” factors. The following three moderating variables—parental warmth, parental monitoring, and self-esteem—have

been linked to adolescents' abilities to stand resilient amidst trying times during their life course (Beardslee & Poderefsky, 1988, Whitbeck & Hoyt, 1999). The first moderating independent variable or resiliency factor "parental warmth and supportiveness" was measured through a nine-item index whereby respondents were asked questions about the degree of their parent's warmth. Items in general asked how often the respondent's parent spoke with them about what was happening in their life or how often the two spoke on things which were bothersome to the respondent. The response categories ranged from 1 for *always* to 5 for *never* and were reverse coded to allow for the higher scores to indicate a greater measure of parental warmth towards the respondent. For the index, the responses for the nine items were summed. The Cronbach's alpha, or internal reliability, for the index of parental warmth and supportiveness was .91 (Whitbeck & Hoyt, 1999).

The second moderating independent variable or resiliency factor "parental monitoring" was measured with a four-item index whereby adolescents were asked questions such as, "On a day-to-day basis, how often did [your parent] know where you were?," with response categories ranging from 1 to 5, with 1 representing *always* and 5 representing *never*. These response categories were once again reverse coded and then summed, with higher values on the index indicating a greater measure of parental monitoring towards the adolescent. Cronbach's alpha for this index was .75 (Whitbeck & Hoyt, 1999).

The last moderating independent variable or resiliency factor was adolescent self-esteem. Self-esteem was assessed through the Rosenberg Self-Esteem Scale (Rosenberg, 1965), which includes ten items. Since 5 of the 10 items have reverse

wording but had the same response scaling, these five items were recoded, such that higher scores indicate better self esteem. An example of the “reverse” wording within this widely-used measure of self-esteem is that respondents were asked to assess the following two items on a Likert scale from 1 to 5, with 1 being *strongly agree* and 5 *strongly disagree*. Following is an example of this reverse wording, “I feel that I have a number of good qualities,” and “All in all, I am inclined to feel that I’m a failure.” The first item was reverse coded, and the second item kept the original coding. For the index, responses to the ten items were averaged. Cronbach’s alpha was .89 for the self-esteem index (Whitbeck & Hoyt, 1999). Self-esteem as reported by this population is similar to that of the non-homeless population of youth in rural America ($M = 3.7$ [not shown in a table] and $M = 3.3$ [Whitbeck & Hoyt, 1999] on a 1 – 5 scale, respectively). However, using scores such as these to indicate “normal” and “not normal” self-esteem should be cautioned against as they are internal measures which vary throughout one’s lifespan as well as between populations, and, thus, are therefore difficult to interpolate as shown by some reports of a self-esteem score as being low if it falls within the “neutral or mixed” category or a “3” score, with a high score being “4” or “5” (Briggs, Landry, & Wood, 2007; Lipschitz-Elhawi & Itzhaky, 2005).

Control variables. The analyses controlled for the effects of other variables that might affect risky sexual behaviors among homeless youth. These control variables included participation of adolescent’s parent in a public assistance program while the adolescent still lived at home and adolescent’s race, sexual orientation, gender, and age at time of interview.

The variable assessing if respondent's parent had ever participated in a

government assistance program while the adolescent lived with the parent was measured by the adolescent's response to a question which asked if their parent had made use of any government program such as, "welfare, or food stamps, social security, or something like that." The question left the respondent free to answer "yes" even if the program was not specifically listed. For the thesis, the question was dummy coded as 1 for yes and 0 for no. Referring to Table 3, we can see that 48.5% of respondents answered yes to the question, suggesting a low socioeconomic status. This rate of low socioeconomic status is similar to other estimates of around 40% for lower socioeconomic statuses for this population (National Runaway Switchboard, 2009). In this thesis, participation in a public assistance program was meant to measure general socioeconomic status of the parent's household during the respondent's time spent in that household. Homeless youth are disproportionately found to be from a lower socioeconomic status and therefore this measure is applicable to understanding the population (Rew, 2001; National *Runaway* Switchboard, 2009; Yoder et al., 2003).

The respondent's race was measured by asking, "What race or ethnic origin do you consider yourself to be?" with 21 categories to choose from within this dataset. For use in this thesis, since some numbers in some of the categories were small, a recoding of this question into the categories of either white or non-white allowed for a more direct comparison. If respondents viewed themselves as *white*, they were coded as 0 and if they did not they were considered non-white and coded as 1. As Table 3 shows, about 60.1% of respondents considered themselves to be *white*.

The measure of sexual orientation was recoded into a dichotomous variable of either heterosexual (coded 0) or non-heterosexual (coded 1) from the original response

categories of heterosexual, gay/lesbian, bisexual, something else, never thought about it, or unsure. 94.2% of the respondents claimed a heterosexual orientation (Table 3). Gender was also dummy coded with females coded as 0 and males coded as 1. The homeless youth in the MHRAS is comprised of 60% females and 40% males (Table 3).

Age is the last control variable and was measured through a simple question asking respondent’s birth date, month, day, and year. The information was recoded into age in years. The mode for females was about 16 years of age (25%) and 17 years of age (21%) for males (Whitbeck & Hoyt, 1999).

Thus, in sum, homeless youth in the MHRAS were in their late teenage years, predominately white, and heterosexual. Almost half of the youth in this study by MHRAS grew up in poor households. More than half of the population sampled was female.

Table 3

Distribution of Control Variables

<u>Variable</u>	<u>No</u>		<u>Yes</u>		<u>% Totals</u>
	<i>Frequency</i>	<i>Percent</i>	<i>Frequency</i>	<i>Percent</i>	
Male	361	60.0%	241	40.0%	100%
Public Assistance	307	51.5%	292	48.5%	100%
Non-White	362	60.1%	233	38.7%	99%
Non-Heterosexual	567	94.2%	32	5.3%	100%

Note. Non-White, yes category shows 99% due to rounding.

Interaction variables. To test the “protective” or moderating effects of self-esteem, parental warmth and/or monitoring, nine interaction terms were created. Specifically, each of the three measures of abuse—physical, sexual, and neglect—was multiplied by

each of the three “resilience” indicators—self-esteem, parental warmth, and parental monitoring (e.g., sexual abuse * self-esteem, physical abuse * self-esteem, neglect * self-esteem, sexual abuse * parental warmth, etc.).

Analytical Strategy

This thesis used binary logistic regression analysis to analyze the effects of the independent and control variables on the two dependent variables, having sex with another person prior to adulthood and experiencing thoughts of trading sex for food or shelter. Binary logistic regression analysis was chosen because both dependent variables were dichotomous (No = 0 and Yes = 1). Four logistic regression models were estimated for each of the dependent variables. The first model regressed ever having sex on parental physical abuse, sexual abuse, and neglect, which were the key independent or “risk” factor variables. The second model added the three “moderating” independent variables, the three indicators of resilience, self-esteem and parental warmth and monitoring. The third model added the control variables: age at time of interview, gender, socioeconomic status, race, and sexual orientation. And finally, the fourth model added the set of nine interaction variables. The same series of models was estimated for the logistic regression analysis of the second dependent variable, having thoughts of trading sex for food or shelter

However, before proceeding with the logistic regression analyses, diagnostics from linear regression analyses were used to determine if there was a problem with multicollinearity among the independent and control variables. Tolerance values for each of the independent and control variables were examined. The lowest tolerance

value reported in the results from the linear regression analysis of having sex with another person prior to adulthood was that of 0.672 for parent warmth. As this tolerance value is close enough to 1, and far enough away from the 0.40 threshold suggested by Allison (1999, p. 141), the results suggest that multicollinearity was not a problem. Results were similar from the linear regression analysis of having thoughts of trading sex for food or shelter. The lowest tolerance value reported for the independent and control variables in that sample was 0.675.

SPSS 17.0 for Windows was used for all analyses. Results of descriptive and binary logistic regression analyses are presented and discussed in the next chapter.

CHAPTER 4

ANALYSES AND FINDINGS

Introduction

Quantitative findings of the study are presented in this chapter. To begin, sample characteristics of all variables are presented, followed by the logistic regression analyses results.

Descriptive Statistics

Tables 4 and 5 present the minimum and maximum values, means, standard deviations, skewness, and kurtosis of all of the variables in the analyses. Table 4 presents these statistics for the two dependent variables, the key independent variables or “risk” factors, and the moderating independent variables or “resiliency” factors in the analyses. Table 5 lists them for the control variables used in the analyses. If the variable has been dummy coded, as was having thought of trading sex for food or shelter, the mean shown is the proportion of the sample scoring 1 on the variable. For example, looking at the second row in Table 4, we see that about 11% of the homeless youth within this Midwestern United States population had had thoughts about trading sex for food or shelter. Incidences of having sex with another person prior to adulthood were about 84% for this population.

The next part of Table 4 presents descriptive statistics for all key independent variables or risk factors and the moderating independent variables or resiliency factors. As for the key independent variables or risk factors, that is, the abuse variables, results indicate that overall, homeless youth are more likely to experience neglect (32%) than

sexual abuse (23%). Physical abuse tends to be fairly frequent, averaging about 12 on an index ranging from 5 to 20.

Table 4

Means, Standard Deviations (SD), Skewness, and Kurtosis of Dependent and Independent Variables Used in Both Analyses of Midwest Homeless and Runaway Adolescent Study, 1996

Variable	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
<i>Dependent Variables</i>						
<u>Ever Have Sex Prior to Adulthood (1 = yes)</u>	0	1	.84	.37	-1.87	1.48
<u>Have Thoughts of Trading Sex (1 = yes)</u>	0	1	.11	.32	2.47	4.11
<i>Independent Variables</i>						
<u>Physical Abuse Index</u>	5	20	12.29	4.70	.00	-1.18
<u>Sexual Abuse Index (1 = yes)</u>	0	1	.23	.42	1.29	-.33
<u>Abuse by Neglect Index (1 = yes)</u>	0	1	.32	.47	.78	-1.40
<u>Parental Warmth Index</u>	10	50	29.99	9.85	.055	-.84
<u>Parental Monitoring Index</u>	4	20	14.70	4.00	-.67	-.28
<u>Self-Esteem Index</u>	1	5	3.65	.72	-.34	-.02

As for the moderating independent variables or resiliency factors, Table 4 shows that none of these factors was especially low among the homeless youth sampled. Parental warmth is on average 30, or in the middle, on an index ranging from 10 to 50. Parental monitoring is on average 15, or slightly above the middle, on an index ranging from 4 to 20. And, as mentioned earlier in Chapter 3, self-esteem as reported by this population is similar, on average, to that of the non-homeless population of youth in rural America ($M = 3.65$ and $M = 3.3$ [Whitbeck and Hoyt, 1999] on a 1 – 5 scale, respectively).

Table 5 presents descriptive statistics for all of the control variables used in the analyses. Homeless youth in the Midwest United States are represented in the data at an average age of about 16 years of age, with the youngest 12 and the oldest within this population 22 years of age ($M = 16.27$, $SD = 1.93$). Females are represented slightly more in this population (60%). Approximately half of this population's parents were on some kind of public assistance such as "welfare or food stamps, social security, or something else like that" while the youth still lived with them (49%). The majority of homeless youth surveyed described themselves as white (61%) with a vast majority classifying themselves as heterosexual in orientation (95%).

Table 5

Means, Standard Deviations (SD), Skewness, and Kurtosis of Control Variables Used in Both Analyses of Midwest Homeless and Runaway Adolescent Study, 1996

Control Variable	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
Age of youth at time of survey	12	22	16.27	1.93	.12	-.35
Gender (1 = male)	0	1	.40	.49	.41	-1.84
Socioeconomic Status by Public Assistance (1 = yes)	0	1	.49	.50	.05	-2.00
Race (1 = non-white)	0	1	.39	.49	.45	-1.80
Sexual Orientation (1 = non-heterosexual)	0	1	.05	.23	4.00	13.90

Multivariate Analyses

Analysis Dependent Variable 1: Having Sexual Intercourse Prior to Adulthood

Table 6 presents a series of logistic regression results for the first dependent variable in this thesis, having sexual intercourse prior to adulthood (0 = no; 1 = yes). In Model 1, the likelihood of sexual intercourse prior to adulthood was regressed on the extent to which homeless youth experienced physical abuse, sexual abuse, and neglect from their primary caretaker before leaving home. In Model 2, the "resiliency"

independent variables of self-esteem and parental warmth and monitoring were added.

Table 6

Logistic Regression Estimates Predicting Adolescent Experience of Sexual Intercourse Prior to Adulthood, Midwest Homeless and Runaway Adolescent Study, 1996

<i>Predictors</i>	Model 1		Model 2		Model 3		Model 4	
	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio
Physical Abuse by Parent	0.05 ⁺ (0.028)	1.051	0.04 (0.030)	1.040	0.00 (0.033)	1.002	-0.37 ⁺ (0.206)	0.692
Sexual Abuse by Parent	-0.08 (0.297)	0.920	0.00 (0.302)	1.002	-0.03 (0.337)	0.975	0.94 (2.101)	2.559
Neglect by Parent	0.40 (0.294)	1.487	0.28 (0.298)	1.320	0.27 (0.316)	1.314	1.73 (2.093)	5.617
Warmth Measure of Parent			-0.00 (0.014)	0.999	0.00 (0.016)	1.003	0.02 (0.046)	1.016
Monitoring by Parent			-0.11 ^{**} (0.038)	0.892	-0.14 ^{***} (0.041)	0.870	-0.20 (0.126)	0.821
Self-Esteem of Adolescent			0.07 (0.175)	1.070	0.08 (0.201)	1.083	-0.87 (0.600)	0.421
<i>Controls</i>								
Age of Adolescent					0.60 ^{***} (0.083)	1.821	0.60 ^{***} (0.084)	1.820
Gender (1 = Male)					-0.54 (0.285)	0.581 ⁺	-0.54 ⁺ (0.291)	0.584
Public Assistance SES (1 = Yes)					-0.10 (0.261)	0.901	-0.11 (0.266)	0.894
Race (1 = Non-white)					-0.01 (0.265)	0.988	0.02 (0.270)	1.020
Sexual Orientation (1 = Non-heterosexual)					1.22 (1.065)	3.391	1.11 (1.070)	3.040
<i>Interactions</i>								
Self-Esteem x Physical Abuse							0.09 ⁺ (0.048)	1.090
Self-Esteem x Sexual Abuse							-0.083 (0.464)	0.920
Self-Esteem x Neglect							-0.380 (0.493)	0.684
Monitoring x Physical Abuse							0.01 (0.010)	1.007
Monitoring x Neglect							-0.05 (0.092)	0.952
Warmth x Physical Abuse							-0.00 (0.004)	0.998
Warmth x Sexual Abuse							0.01 (0.036)	1.005
Warmth x Neglect							0.02 (0.038)	1.022
Constant	0.99 ^{**} (0.314)	2.68	2.67 ^{**} (0.935)	14.427	-5.79 ^{***} (1.564)	0.003	-1.69 (2.920)	0.184
<i>Overall Model Fit</i>								
-2 log likelihood	488.064		476.029		401.859		397.429	
Model χ^2	8.127 [*]		20.162 ^{**}		94.332 [*]		98.762	
Degrees of freedom	3		6		11		20	
Nagelkerke R ²	0.024		0.060		0.263		0.274	
N	567		567		567		567	

⁺ $p \leq .10$, ^{*} $p \leq .05$, ^{**} $p \leq .01$, ^{***} $p \leq .001$ (two-tailed tests)

Note. The odds ratio is the antilog of the B; the standard errors are in parentheses.

Model 3 added age of the adolescent at time of interview, gender, socioeconomic status, race, and sexual orientation. In Model 4, the interaction variables were introduced to test whether the effects of physical abuse, sexual abuse, and neglect of the youth by the parent on the likelihood of sexual intercourse prior to adulthood were moderated by the three resiliency variables, self-esteem and parental warmth and monitoring.

As Model 1 in Table 6 shows, parental/caretaker abuse before separation from that parent/caretaker was associated with the likelihood of having sex prior to adulthood among homeless adolescents in the Midwestern United States (Model $\chi^2(3) = 8.127$, $p < .05$), and explains 2% of its variation (Nagelkerke $R^2 = .024$). While research Hypothesis H₁ predicted all three types of abuse by a parent/caretaker would increase the chances of having sexual intercourse prior to adulthood; only one type approached statistical significance, physical abuse ($p < 0.10$, two-tailed test). The odds of having sexual intercourse prior to adulthood increased by 5% with each level increase in parental physical abuse, all else being equal ($5\% = [(1.05 - 1) * 100]$).

Continuing on with Table 6, Model 2 introduced the three resiliency variables. While the model was statistically significant (Model $\chi^2(6) = 20.162$, $p < 0.01$), and was an improvement over Model 1 ($\chi^2(3) = 12.032$, $p < 0.05$), it only explained 6% of the variation in ever having had sex (Nagelkerke $R^2 = .06$). Research Hypothesis H₂ stated that the first resiliency variable, self-esteem, will decrease the odds having sexual intercourse prior to adulthood; however, as self-esteem was insignificant ($p > 0.10$), the hypothesis was not supported. Research Hypothesis H₃ also predicted a negative relationship between the likelihood of ever having had sex and both parental warmth

and monitoring. This hypothesis was only partially supported. While parental warmth did not have the predicted effects ($p > 0.10$), parental monitoring did ($p < 0.01$). As predicted, all else being equal, the odds of ever having had sex decreased 11% with each level increase in parental monitoring (11% = $[(.89 - 1) * 100]$). Whereas parental warmth was not significant in reducing the likelihood that homeless youth will have sex prior to adulthood, parental monitoring significantly reduced the likelihood. Notably, the marginally significant relationship between parental physical abuse and ever having had sex observed in the first model ($p < 0.10$) was lost within this second model, when resilience was taken into account.

The addition of the control variables—age, gender, socioeconomic status, race, and sexual orientation—in Model 3 was an improvement over Model 2 ($\chi^2 (5) = 74.170$, $p < 0.05$). Together with the abuse and resiliency variables, the control variables explained 26% of the variation in ever having had sex (Nagelkerke $R^2 = .26$). Interestingly, with the addition of the control variables, the effect of parental physical abuse remained insignificant ($p > 0.10$) and the effect of parental monitoring remained significantly negative ($p < 0.001$). All else equal, the odds of ever having had sex decreased 13% with each level increase in parental monitoring (13% = $[(.87 - 1) * 100]$). The only control variable with a statistically significant effect on the odds of having sex prior to adulthood was age ($p < 0.001$). As might be expected, the odds of having ever had sex were increased with age. Specifically, all else equal, the odds increased 82% with each additional year of age (82% = $[(1.82 - 1) * 100]$).

Research Hypothesis H₄, posited that self-esteem, parental warmth, and parental monitoring will moderate the relationship between parental abuse and/or neglect and

having sex prior to adulthood. That is, higher levels of these indicators of resiliency were expected to reduce any effects of parental abuse and/or neglect on the likelihood of ever having had sex. To test the proposed moderating effects of self-esteem and parental warmth and monitoring, Model 4 in Table 6 included a set of interaction terms. Since a comparison of Model 4 with Model 3 indicated that Model 4 was not a statistically significant improvement over Model 3 ($\chi^2(9) = 4.430, p > 0.05$), research Hypothesis H₄ was not supported.

Analysis of Dependent Variable 2: Trading Sex for Food or Shelter

Table 7 presents the logistic regression results of the second dependent variable in this thesis, having thoughts of trading sex for food or shelter (0 = no; 1 = yes). The analysis of this second dependent variable followed the same model progression as the first dependent variable analyzed. Specifically, in Model 1 having thoughts of trading sex for food or shelter was regressed on parental physical abuse, sexual abuse, and neglect. Model 2 added as predictors the variables which, according to the literature, support resiliency theory, self-esteem, parental warmth, and parental monitoring. Continuing on with Model 3, control variables, age, gender, socioeconomic status, race, and sexual orientation were added. Lastly, Model 4 introduced the set of interaction terms.

Table 7

Logistic Regression Estimates Predicting Adolescent Thoughts of Trading Sex for Food or Shelter, Midwest Homeless and Runaway Adolescent Study, 1996

Predictors	Model 1		Model 2		Model 3		Model 4	
	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio	B	Odds Ratio
Physical Abuse by Parent	0.08* (0.035)	1.081	0.04 (0.038)	1.041	0.04 (0.039)	1.042	-0.35 (0.249)	0.702
Sexual Abuse by Parent	0.36 (0.306)	1.434	0.30 (0.315)	1.348	0.45 (0.338)	1.562	1.98 (1.935)	7.247
Parental Neglect	0.456 (0.303)	1.578	0.48 (0.312)	1.608	0.38 (0.329)	1.456	1.41 (2.061)	4.083
Parental Warmth			-0.03+ (0.018)	0.968	-0.03 (0.018)	0.970	0.06 (0.058)	1.060
Parental Monitoring			-0.02 (0.036)	0.980	-0.01 (0.038)	0.990	-0.21 (0.139)	0.814
Self-Esteem of Adolescent			-0.64*** (0.190)	0.527	-0.78*** (0.197)	0.459	-2.11** (0.785)	0.122
<i>Controls</i>								
Age of Adolescent					0.11 (0.080)	1.118	0.09 (0.081)	1.092
Gender (1 = Male)					0.44 (0.323)	1.547	0.45 (0.329)	1.574
Public Assistance SES (1 = Yes)					0.21 (0.303)	1.228	0.20 (0.309)	1.219
Race (1 = Non-white)					0.41 (0.302)	1.504	0.42 (0.309)	1.523
Sexual Orientation (1 = Non-heterosexual)					1.55*** (0.470)	4.697	1.48 (0.480)	4.373
<i>Interactions</i>								
Self-Esteem x Physical Abuse							0.10+ (0.057)	1.105
Self-Esteem x Sexual Abuse							-0.03 (0.420)	0.968
Self-Esteem x Neglect							-0.30 (0.456)	0.738
Monitoring x Physical Abuse							0.02+ (0.010)	1.018
Monitoring x Sexual Abuse							-0.09 (0.081)	0.916
Monitoring x Neglect							-0.09 (0.085)	0.911
Warmth x Physical Abuse							-0.01+ (0.004)	0.993
Warmth x Sexual Abuse							-0.01 (0.040)	0.991
Warmth x Neglect							0.05 (0.040)	1.051
Constant	-3.42*** (0.458)	0.033	0.53 (1.051)	1.704	-1.64 (1.645)	0.194	3.55 (3.781)	34.96
<i>Overall Model Fit</i>								
-2 log likelihood	369.407		349.652		332.350		324.456	
Model χ^2	17.094***		36.849***		54.151***		62.045	
Degrees of freedom	3		6		11		20	
Nagelkerke R ²	0.060		0.128		0.185		0.210	
N	564		564		564		564	

+ $p \leq .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$ (two-tailed tests).

Note. The odds ratio is the antilog of the B; the standard errors are in parentheses.

Model 1 of Table 7 shows that parental/caretaker abuse and/or neglect before separation was significantly associated with the likelihood of having thoughts of trading sex for food or shelter while living on the streets among homeless youth in the Midwestern United States (Model $\chi^2(3) = 17.09, p < 0.001$). The model explained around 6% of the variation in having such thoughts (Nagelkerke $R^2 = .06$). Consistent with previous research, the research Hypothesis H_5 predicted that all three types of abuse (physical, sexual, and neglect) will be positively associated with thoughts of sex trade for food or shelter. However, as the results for Model 1 in Table 7 show, the hypothesis was only partially supported. The only type of parental/caretaker abuse before separation that had a significant effect on the homeless youth's having thoughts of trading sex for food or shelter while on the streets was physical abuse ($p < 0.05$). Specifically, the odds of having had such thoughts increased about 8% for every level increase in physical abuse experienced by the homeless youth from his or her parent or primary caretaker before leaving home ($8\% = [1.081 - 1] * 100$).

Model 2 in Table 7 added the resiliency variables and allowed for the assessment of research Hypotheses H_6 and H_7 . The model was statistically significant (Model $\chi^2(6) = 36.849, p < 0.001$), and was an improvement over Model 1 ($\chi^2(3) = 19.755, p < 0.05$), explaining about 13% of the variation in having had thoughts of trading sex for food or shelter on the streets (Nagelkerke $R^2 = .128$). As predicted in research Hypothesis H_6 , self-esteem was negatively related to having thoughts of trading sex for food or shelter for homeless youth ($p < 0.001$). All else equal, the odds of having had such thoughts decreased by 47% with each level increase in self-esteem ($47\% = [.53 - 1] * 100$). The results for Model 2 in Table 6 provided mixed support for research Hypothesis H_7 .

Parental monitoring had no significant effect on thinking about trading sex for food or shelter ($p > 0.10$), whereas parental warmth had a marginally significant, negative effect on such thinking ($p < 0.10$, two-tailed test). All else equal, the odds of such thinking decreased by 3% with each level increase in parental warmth ($3\% = [.97 - 1] * 100$). As observed before in the first analysis of ever having had sex, the significant physical abuse effect on having thoughts of trading sex in Model 1 of Table 7 disappeared in Model 2 ($p > 0.10$) with the addition of the resiliency variables.

Control variables were added in Model 3 of Table 7. Cross comparison of this model with Model 2 revealed a few differences. Model 3 is statistically significant (Model $\chi^2(11) = 54.151, p < 0.001$), and is an improvement in fit to the data over Model 2 ($\chi^2(5) = 17.302, p < 0.05$), explaining about 19% of the variation in the likelihood of thinking of about trading sex for food or shelter (Nagelkerke $R^2 = .19$). Controlling for the effects of sociodemographic characteristics, the effects of self-esteem remained significant ($p < 0.001$) and in the predicted direction. All else equal, with each additional increase in youth's self-esteem, the odds of thinking about trading sex for food or shelter on the streets decreased by 54% ($54\% = [.46 - 1] * 100$). However, when controls were added, the marginally significant effect of parental warmth was lost ($p > 0.10$). Interestingly, the only control variable that had a significant association with having had thoughts of trading sex for food or shelter was sexual orientation ($p < 0.001$). Homeless youth with a non-heterosexual orientation were 1.55 times as likely to have had such thoughts as their heterosexual peers.

Research Hypothesis H_8 predicted moderating effects of resiliency on the relationship between parent/caretaker abuse and/or neglect and having had thoughts of

trading sex for food or shelter among homeless youth. To test the proposed moderating effects of self-esteem and parental warmth and monitoring, Model 4 in Table 7 included a set of interaction terms. Since a comparison of Model 4 with Model 3 indicated that Model 4 was not a statistically significant improvement over Model 3 ($\chi^2 (9) = 7.894, p > 0.05$), research Hypothesis H₈ was not supported.

CHAPTER 5

DISCUSSION AND CONCLUSIONS

This study examined the relationship between parental physical abuse, parental sexual abuse, and parental neglect towards homeless youth and the likelihood of those youth having sexual intercourse prior to adulthood or having thoughts of trading sex for food or shelter while homeless. The Midwest Homeless and Runaway Adolescent Study, 1996, conducted by Les B. Whitbeck and Dan R. Hoyt of Iowa State University was utilized in this work. Self-esteem, parental warmth, and parental monitoring were explored to understand their role in the lives of homeless adolescents and are fundamental to this investigation. Specifically, self-esteem and parental warmth/monitoring were explored in their role as potential moderators towards the negative effects which parental abuse can have towards a homeless youth's decisions to have sexual intercourse prior to adulthood or have thoughts of trading sex for food or shelter as a subsistence mechanism while living on the streets.

The overall theoretical framework which was adopted for this investigation was that of resiliency theory (Rak & Patterson, 1996; Kidd & Shahar, 2008) with the view that the factors which increase resilience of youth who are at risk are inclusive of parental monitoring and warmth, as well as individual self-esteem. Relationships with an authority figure especially that of a parent, greatly increase resilience as an external factor. Self-esteem is one of the few internal factors which contribute to resilience, in addition to specific personality traits which the individual is born with. This thesis did not investigate any variances among personality; however, self-esteem was assessed for its role as a moderator towards risk for this population. Past research has found that

resilience to risk is stronger for adolescents who have had the opportunity to have some form of responsibility within the family unit, come from smaller families overall, are highly involved in school, have a strong relationship to peers and parents, have high self-esteem, and have an easy-going personality (Kidd & Shahar, 2008; Williams et al., 2001; Rew, 2002; Davey et al., 2003; Whitbeck & Hoyt, 1999).

As homeless youth are not always afforded with the range of resources necessary to build the foundation to strong resilience, it has been shown that even in the face of severe parental abuse, addiction, instability, and homelessness, homeless youth have the amazing ability to redraw the foundations of resilience and stay on firm ground during times of stress (Rak & Patterson, 1996; Brooks, 1994). Oftentimes, these youth overcome situations which the majority of Americans cannot understand. To test the effects of risk, namely that of parental abuse, associated with homeless adolescence, this investigation looked at having intercourse prior to adulthood and having thoughts of trading sex for food or shelter as a subsistence mechanism while living on the street as risky sexual behaviors. Parental warmth and monitoring, as well as self-esteem, were tested for potential moderating effects towards risk outcomes.

This study supported previous findings which indicate parental physical abuse tends to increase risky sexual behaviors (Greene et al., 1999; Taylor-Seehafer et al., 2007). Parental physical abuse before separation was found to affect both the homeless adolescent's probability of having sexual intercourse prior to adulthood and his or her chances of having thoughts of trading sex for food or shelter while on the streets. However, the findings of this thesis were not consistent with previous research findings showing sexual abuse as an antecedent to increases in risky sexual behaviors

(Johnson et al., 2006; Tyler & Johnson, 2006). This discrepancy could potentially be due to differences in the indicators of risky sexual behavior chosen for analysis, for example, using thoughts of trading sex for food or shelter as opposed to the actual act which is somewhat different and could potentially explain the incongruity of data. The proposed hypothesis was for all three types of abuse to show a relationship, specifically to increases in risky sexual behavior for this population and therefore was only partially accepted. Homeless youth are well documented as coming from homes whereby parental abuse is abundant (Whitbeck & Hoyt, 1999; Whitbeck & Simons, 1990; Kidd & Shahar, 2008). Moreover, homeless youth oftentimes experience other life stressors such as parental drug and/or alcohol use (Whitbeck & Hoyt, 1999) economic hardships and difficult relationships with family members (NCH, June 2008; Johnson et al., 2006; Pollio et al., 2006) which could prove fatal to resilience resources.

As this study primarily focused on the moderating effects of parental warmth, parental monitoring, and self-esteem, the analysis findings were not as supportive as had been hypothesized. Past research has shown that parental warmth and monitoring are key resources in resiliency, as measured through social and family connectedness (Santa, 2006; Kidd & Shahar, 2008) but the findings of this thesis only partially supported past studies. As expected, among homeless youth, parental monitoring before separation tended to lower the likelihood of having sexual intercourse prior to adulthood, but had no effect on the likelihood of having thoughts of trading sex for food or shelter while on the streets. And, on the other hand, the findings for parental warmth were opposite that of monitoring. That is, among homeless youth, while parental warmth before separation had no effect on the likelihood of having sexual intercourse prior to

adulthood, it had a marginally significant effect on the likelihood of having had thoughts of trading sex for food or shelter while on the street. Such thoughts were less likely among homeless youth who experienced greater degrees of parental warmth before leaving home. Nevertheless, while both parental monitoring and warmth had expected direct effects on the engagement of homeless youth in risky sexual behaviors, neither resiliency factor was found to moderate the relationship between parental abuse and/or neglect and such behaviors.

Self-esteem is widely considered as another important resource in resilience among youth from all backgrounds (Guindon, 2002; Kidd & Shahar, 2008; Lipschitz-Elhawi et al., 2005; Ang et al., 2006). This thesis sought to investigate whether in the presence of severe adversity such as parental physical abuse, sexual abuse, and neglect, stores of resilience, such as self-esteem, decreases the likelihood of participating in risky sexual behaviors for homeless youth. Even though the model including the interaction of abuse with self-esteem was not supported, self-esteem did show a significantly strong relationship with that of having had thoughts of trading sex for food or shelter. The higher self-esteem homeless youth had, the less likely they were to have had thoughts of trading sex for food or shelter. If homeless youth have had thoughts of sex trade, it stands to reason there is the possibility that action will follow. This finding is resoundingly supportive of previous research which has found that lower self-esteem increases risk of participating in self-destructive and risky behaviors, including risky sexual behaviors (Kidd & Shahar, 2008).

The thesis also found that as age of the adolescent increased, the likelihood of having sexual intercourse increased as well, a finding which is not altogether surprising.

As youth attain years in age, so too do they gain life experiences for numerous situations, including not just sexual experiences but all life experiences in general. Previous research was supported with this current finding of a strong relationship to age and sexual activity (Levin, Xu, & Bartkowski, 2002). Additionally, this study supported previous findings that sexual orientation is a factor for risky sexual behaviors, namely, that non-heterosexual homeless youth were more likely than their peers to have thought about trading sex for food or shelter (Greene et al., 1999). However, sexual orientation had no effect on the likelihood of experiencing sex prior to adulthood. Adolescent race, socioeconomic status, and gender did not reach statistical significance with risky sex within this particular analysis although previous research suggests that females are at a greater risk of participating in risky sexual behaviors (Tyler & Johnson, 2006).

This study had limitations which are in need of discussion. One limitation of this investigation lies with the narrowness of some select variables tested. For example, the variable testing for socioeconomic status was measured through a question which asked the adolescent if the household received public assistance of any kind, a non-direct method of seeking this particular information. This question does not have the ability to see the whole picture about total household income or level of poverty which was experienced. The indicators to risky sexual behavior were also somewhat narrow in scope.

This thesis utilized data which was taken as self-reported by the adolescents themselves and oftentimes the categories of answer choices were subjective on an individual basis. As subjectivity goes, universality in meanings behind answers given does not always prove concrete. Additionally, some questions, such as “Have you ever

thought about trading sex for food or shelter?” can be invasive to respondents’ privacy and as such, answers have the potential of being misstated.

Some differences between this investigation’s findings and previous research were outlined above. However, these differences do not necessarily suggest that past research was inaccurate or that this research analysis was incorrect, but may possibly be explained by variances in resilience indicators from this thesis to past research. The differences of parental warmth and monitoring as resilience factors towards the dependent variables could be due in part to the nature of risk assessed. The dependent variable having sexual intercourse prior to adulthood is a measure of risk which is not unique to populations of homeless youth; rather increases of sexual intercourse at younger ages have been growing in recent decades. In short, having sex prior to adulthood is more common to the general population at large which could explain non-relational status to moderators. Having thoughts of sex trade has not been previously used in the literature as a measure of risky sex as had the actual act of trading sex, which could potentially explain slight differences between these findings and past literature findings (Taylor-Seehafer et al., 2007; Tyler & Johnson, 2006).

Even though self-esteem, parental warmth, and parental monitoring were not found to be significant moderators of the effects of parental abuse and/or neglect on risky sexual behaviors, they were found to have independent direct effects on such behaviors. As relationships with family members are strained and broken through such instances of extreme abuse, the ability of youth at risk to retain certain resilient factors such as self-esteem will possibly prove the difference between participation and avoidance of certain risky behaviors. If homeless youth can avoid participation in having

sexual intercourse prior to adulthood and having thoughts of trading sex for food or shelter while living on the streets, their risk associated with life on the street can possibly be greatly reduced. If homeless youth are unsuccessful in avoiding the risky sexual behaviors tested within this thesis, serious consequences could ensue. Participation in the previously listed risky behaviors could lead to acting out on those thoughts of trading sex for food or shelter as a subsistence mechanism, which would then greatly increase the chances that sexually transmitted diseases would be contracted, further victimization due to the sex trade life-style in the form of physical abuse and sexual abuse, or possibly pregnancy could occur. All negative consequences which could arise from participation in the risky behaviors as tested in this thesis would only make it all the more difficult for the homeless youth to pull out of their current situation and become housed once more.

Policy Implications

The findings of this thesis can be helpful in policy formation within the areas surrounding the issues which will most affect homeless youth in gaining resilience. Resilience is foundational to an ability to overcome adversities faced, which can be quite numerous for this particular population. Currently, shelters are set up to provide immediate assistance to homeless youth who have no other place to go (National Coalition for the Homeless, 2008; National Center for Family Homelessness, 2009). While in these shelters, youth are provided access to food, a place to sleep, and assistance from a social worker willing to find placement for them. As is often the case however, youth who have run away from a serious and life-threatening home situation

do not feel they can go to a shelter for fear of being placed back in the very same home from which they ran away. Future policy towards helping homeless youth regain the ability to successfully function in society after placement has occurred should focus on growth of resilience resources.

This thesis has shown that low self-esteem lessens the ability to prove resilient amidst hardships and if programs are developed whereby homeless youth are able to increase self-esteem, their chances of defying future risks of hardships will be greatly increased. If youth are identified as homeless and come under the care of a social service agency once more, it is my suggestion a greater intensity of educational integration with the placement is accepted as necessary for growth of future resilience. No longer can we ignore the fact that simple placement efforts do not work. Homeless youth oftentimes do not understand reasons behind choices they make towards risky behaviors; however, if the programs with which they are involved prior to and during the initial stages of homelessness would focus on increasing self-esteem through closely monitored educational success, the United States could see a difference in rates and durations of homelessness among this population. The focus should be on food, shelter, clothing, and a closely monitored educational advancement when homelessness is addressed among youth. Parents currently being monitored by social workers and foster parents should be trained and monitored towards the appropriate ways to reinforce growth of self-esteem among their children and foster children.

Unfortunately, due to the avoidance of gaining attention from authority figures that shelters would most certainly present, homeless youth in these situations must try to find a way to survive without help as officially provided by the government through

shelters. An intensive and long-term services approach must be sought in dealing with homeless youth. Finding foster care, placement back in the school system or sending these youth back home to face the same situation they left is not a lasting solution which has promise of hope for rehabilitation. These youth must be afforded a much more intensive program whereby a panel of practitioners ranging from doctors, to a personal mentor outside of the social worker is employed to retrain the youth's resources of resilience. The current situation of addressing the plight of homeless youth is just not working.

Additionally, education for parents and foster parents could include the other identified factors of resilience, monitoring and warmth. Focusing on concrete steps by which they can help youth in their care feel more warmth and benefit more from a stricter monitoring, parents and foster parents can help the child grow more resilient with each passing day. Social workers could also focus on the importance of more responsibility for the youth which would then translate into a greater sense of self-efficacy and self-esteem. Without the resources of higher self-esteem and parental warmth and monitoring, risky behaviors will still be appealing as a way to cope with current crises due to depleted resources of resilience. Unfortunately, the homeless and especially homeless youth live within the shadows of our society but in order to make serious changes to the way this issue is dealt with, the plight of these individuals must become known to the population at large.

Future investigations towards the plight of homeless youth should examine other potential resiliency factors such as participation in faith-based communities. Future studies should also include a wider range of indicators towards risky sexual behavior, as

opposed to the two, dichotomous indicators of ever having sex and having thoughts of sex trade that were used in this thesis. Additionally, it would be my recommendation that future studies include a dataset whereby homeless youth from all regions of the United States are included through a quantitative and qualitative investigative study.

APPENDIX
CORRELATIONS MATRIX OF DEPENDENT VARIABLES WITH
KEY INDEPENDENT AND MODERATING VARIABLES

Variables	Eversex	Sextrade	Self-esteem	Monitor	Warmth	Abuphy	Abuneg	Abusex
Eversex	—			-.156**	-.106*	.126**	.104*	
Sextrade		—	-.176**	-.114**	-.163**	.160**	.148**	.103*
Self-esteem		-.176**	—		.211**	-.135**		-.082*
Monitor	-.156**	-.114**	.211**	—	.446**	-.177**	-.199**	
Warmth	-.106*	-.163**	-.135**	.446**	—	-.370**	-.217**	-.110**
Abuphy	.126**	.160**		-.177**	-.370**	—	.402**	.302**
Abuneg	.104*	.148**		-.199**	-.217**	.402**	—	.210**
Abusex		.103*	-.082*		-.110**	.302**	.210**	—

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