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Chronic Runaway Youth: A Gender-Based Analysis

by

Michelle N. Jeanis

A dissertation submitted in fulfillment of the requirements for the degree of Doctorate of Philosophy Department of Criminology College of Behavioral and Community Sciences University of South Florida

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ABSTRACT

Runaway youth often face a multitude of negative experiences during their childhood, which often leads to trajectories of psychological disorder/distress, victimization, and offending. This propensity for negative life trajectories may be exacerbated by repetitive runaway behavior. Additionally, these negatives experiences may be further shaped by the gender of the youth, thus creating distinct gendered pathways to chronic runaway behavior, victimization, and offending. This study utilized a sample of youth runaways in the state of Florida (N=295) to build upon the classification/typology research on juvenile runaways by assessing the presence of latent groups of youth based on runaway frequency. In addition, this study utilized classical and modern criminology theories to influence the assessment of the relationship between known runaway risk factors and chronic runaway status. Group-based trajectory modeling was performed and two distinct groups of youth runaways were identified for both full and gender-exclusive models. Chronic runaway analyses indicated unique gender-based relationships between chronic runaway status and relevant risk factors, supporting a gender specific theoretical perspective. Results provide additional insight into youth runaway behavior while also suggesting support for a feminist criminology perspective to youth runaway behavior.



CHAPTER ONE:

INTRODUCTION

Runaway youth are a particularly at-risk group of juveniles, as they often experience violence in their early lives, which leads to early independence and places the youth on a trajectory of victimization, offending, and a host of negative life events (Whitbeck et al., 1999; Whitbeck & Hoyt, 1999). Since the 1950s, criminologists and practitioners have studied runaway youth, in hopes to better understand the complex factors that lead a youth to run from caregivers (Thrane, Hoyt, Whitbeck, & Yoder, 2006; Whitbeck & Simmons, 1993). Through these endeavors the literature suggests that most youth runaways are attempting to escape chaotic home environments; however, the reprieve from chaos is often short lived. The runaway experience often leads to exposure to deviant peers, reliance on deviant subsistence strategies, substance use and abuse, being victimized, offending, and psychological distress (Thrane et al., 2006; Yoder, Hoyt, & Whitbeck, 1998; Whitbeck & Hoyt, 1999; Whitbeck, Hoyt, & Ackley, 1997). In fact, when compared to non-runaway youth, runaways are more likely to drop out of school, engage in risky sexual behavior, experience depression, use drugs earlier and more often, be victimized, attempt suicide, and commit crimes during adolescence (Brennan, Huizinga, & Elliott, 1978; Edinburgh, Harpin, Garcia, & Saewyc, 2013; Englander, 1984; Tucker, Edelen, Ellickson, & Klein, 2011). In short, youth runaways are at considerable risk for trajectories that



lead to offending and victimization, which renders interaction with the justice system probable (Whitbeck et al., 1999; Whitbeck & Hoyt, 1999).

In the early years of runaway research, criminological theories were largely absent, with practitioners often focusing on understanding and identifying the presence of typologies (Homer, 1973; Robey, 1964; Zide & Cherry, 1992). Typologies of runaways were originally subjective and simplistic two group organizations, where youth were seen as "running to" excitement or "running from" abuse and trauma (Homer, 1973). However, as the research gained momentum, typologies reached groupings as large as 11 and included components of major criminology theories such as social bond theory, differential association theory, and strain theory (Brennan et al., 1978; Dunford & Brennon, 1976; Jones, 1988). Furthermore, advanced statistical analyses have been used to assess the presence of typologies within the runaway population, resulting in methodologically sound assessments of the types of runaway youth; however, this body of literature is quite limited (Brennan et al., 1978; Dunford & Brennon, 1976; Zide & Cherry, 1992).

From a theoretical standpoint, the application of criminology theory to elucidate runaway behavior and the negative consequences associated with the runaway experience is rather limited. The predominant perspective applied to the youth runaway population is that of the risk amplification model (Chen, Thrane, Whitbeck, Johnson & Hoyt, 2007; Thrane & Chen, 2010; Tyler, Hoyt, Whitbeck, & Cauce, 2001; Tyler & Bersani, 2008; Tyler, Hagewen, & Melander, 2011; Whitbeck & Simmons, 1993; Whitbeck et al., 1997; Whitbeck, Hoyt, & Yoder, 1999; Whitbeck & Hoyt, 1999). Spearheaded by Whitbeck, the risk amplification model provides a method of explanation for the mechanisms that lead to running away from caregivers, as well as



the intervening variables that lead to victimization, offending, and psychological distress once the runaway event occurs (Whitbeck & Hoyt, 1999).

Specifically, youth runaways experience trauma in the home due to ill equipped parents who struggle with substance abuse or behave criminally, which then leads to the youth attempting to escape the trauma by running away from home (Whitbeck & Hoyt, 1999). Next, runaway youth find themselves unsupervised and, because of learned maladaptive behaviors, alienated by non-delinquent/antisocial peers (Whitbeck & Hoyt, 1999). This then leads to substance use, reliance on deviant subsistence strategies, victimization, and delinquency, which in turn causes psychological distress/trauma (Whitbeck & Hoyt, 1999). Although research is limited, these negative events may be exacerbated by repetitive runaway behavior (Courtney & Zinn, 2009; Tyler & Bersani, 2008; Windle, 1988).

Studies on youth runaways have also underscored the importance of considering gender when examining the runaway experience and risk factors associated with being a runaway (Tyler et al., 2001; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999). For example, researchers have found that girls are more likely to experience sexual assault during childhood, utilize sexually based deviant subsistence strategies during a runaway event, experience victimization, and struggle with psychological distress (Tyler et al., 2001; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999). Although gender-based criminology theories (i.e., feminist criminology) have not been directly applied to the population, research does suggest a gendered nature of propensity to run away as well as the negative outcomes associated with the runaway experience (Tyler et al., 2001; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999).



The Present Study

This study builds upon the youth runaway literature by taking a gendered perspective to address two primary research goals related to the groupings of runaways as well as the risk factors that shape the frequency of runaway behavior. First, the manner in which runaways group based upon frequency of runaway behavior is assessed. Utilizing a large sample of runaway youth in the Pinellas County, Florida area, semi-parametric group-based modeling is used to assess the presence of distinct groups of runaways based upon frequency of runaway behavior. Analyses also evaluate gender based differences in groupings. This analysis offers an opportunity to address the gendered nature of runaway behavior while also considering grouping based upon frequency of runaway behavior, an assessment that is lacking in the literature. Although previous studies have utilized advanced statistical methods to assess how runaways group based upon offending, motivation, deviant peers, and social bonds (Brennan et al., 1978; Dunford & Brennon, 1976; Zide & Cherry, 1992), grouping based upon frequency of runaway behavior had yet to be investigated. In addition, gender based typology analysis had yet to be conducted with youth runaway samples prior to this study.

Second, this study examines the risk factors that are associated with being a high frequency runaway. Several empirically founded factors relate to initial runaway behavior as well as a secondary runaway event (Courtney & Zinn, 2009; Tucker et al., 2011; Tyler & Bersani, 2008; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999; Windle, 1988). Specifically, factors such as familial abuse, family dysfunction, and problems in school have been shown to precede runaway events (Tyler & Bersani, 2008; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999). Furthermore, substance use, delinquent behavior, school problems, and mental health problems are more strongly associated with youth who have run away twice, compared to one



time or non-runaways (Courtney & Zin, 2011; Tyler & Bersani, 2008; Windle, 1988). Building upon these studies, factors related to caretaker abuse, family dysfunction, school problems, mental health problems, alcohol and drug use, delinquency, antisocial peer association, and age at first runaway are evaluated as to their relationship with being a chronic runaway. Maintaining consistency with the gendered nature of the runaway experience, this study explores whether these processes vary by gender.

This research question adds to the runaway literature in several ways. First, studies have examined the factors related to one and two-time runaway events (Courtney & Zinn, 2011; Tyler & Bersani, 2008; Windle, 1988); however, variables related to high frequency (i.e. chronic) runaway behavior has yet to be assessed. Youth who run away from caregivers, even just once, are more likely than non-runaways to experience a host of negative events, including victimization, delinquency, school problems, and substance abuse problems (Thrane & Chen, 2011; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999). Furthermore, youth who run away twice during adolescence are more likely to struggle with substance abuse problems, report mental illness and depression, experience school problems, and have higher rates of delinquency (Courtney & Zinn, 2011; Tyler & Bersani, 2008; Windle, 1988). Considering this, high frequency runaway behavior may exacerbate the negative consequences associated with being a youth runaway, and further investigation of this is needed. In addition, exploration of the known risk factors for runaway behavior, as they relate to chronic runaway behavior had yet to be assessed prior to this study. Lastly, a gender based perspective of this topic has the ability to provide evidence for a gendered perspective to youth runaway behavior and negative outcomes.



Overview of the Chapters

Beyond this introductory chapter this dissertation is organized by chapter, with five additional chapters to follow. First to be discussed is the relevant literature related to the runaway experience. Chapter two consists of prevalence of youth runaways in the US, with a discussion of variation based upon demographic and situational characteristics. In addition, factors that precede runaway behavior are reviewed and negative consequences of the runaway experience are outlined. The primary runaway pathway model, the risk amplification model, is discussed in Chapter two as well. The use of typologies to categorize runaways is also discussed in Chapter two. Next, Chapter three takes a theoretical perspective to the literature and overviews classical criminology theories and feminist perspectives that provide the framework for the current study. Details regarding the current study, as well as hypotheses are also presented in Chapter three.

Chapter four comprises the methodological section of this study, which overviews the sample and outlines the operationalizations of the variables. Descriptive statistics related to the variables can be found in this chapter as well. Lastly, the analytic strategy is presented in Chapter four. Next, Chapter five overviews the results of the analyses. Results of group-based trajectory modeling as well as a series of logistics regressions aimed at identification of factors related to chronic runaway status are discussed. Lastly, Chapter six encompasses the discussion section of this study and presents limitations, policy implications of the results, and suggested future directions



CHAPTER TWO:

DEFINITIONS, PREVALENCE, AND EMPIRICAL LITERATURE

This chapter serves as a review of the relevant literature on youth who run away from caregivers. First, the legal definition of a runaway youth is delineated, as well as prevalence of runaway youth based upon individual level characteristics. Next, the environmental factors that shape a youth's likelihood of running away are reviewed. Subsequently, the overabundance of adverse events associated with the runaway experience are discussed, as well as the pathways that lead to these events. Next, the risk amplification model and its utility in youth runaway research is delineated. Lastly, a review of the typological research on runaway youth, from the 1950s to the most recent analyses in the 1990s, is provided.

The Runaway Event: Definitions and Prevalence

A runaway episode is defined as meeting one of the following criteria: 1. when a child leaves home overnight without permission 2. when a child 14 or younger (or mentally incompetent) leaves home overnight or does not return when expected, or 3. when a child 15 -17 leaves home without permission for two nights (Hammer, Finkelhor, & Sedlak, 2002). Often included in samples of runaways are those who are considered "thrownaway" children, or children who are asked or told to leave the home and are prevented from returning (Hammer et al., 2002). "Thrownaway" youth may serve as a new subpopulation of runaways, as they often utilize the same services and remain in the same areas, but motivations for leaving home and



subsequent risk factors may be different for this subgroup (Tyler & Bersani, 2008). Nonetheless, these youth interact in the same settings as runaways and are often included in national prevalence estimates and runaway studies (Hammer et al., 2002; Tyler & Bersani, 2008).

Running away is considered a status offense, which is an act that would be deemed noncriminal if the individual was not a minor when the act was committed (Developmental Service Group (DSG), 2015). Status offenses in the state of Florida include: running away, habitual truancy, and being an ungovernable or incorrigible youth (Status Offense Reform Center (SORC, 2013). Status offenses are often seen as indicators of underlying problems at the individual, familial, community, and/or systemic level (DSG, 2015; SORC, 2013). Youth who commit status offenses are assumed to be at elevated risk for more serious forms of delinquency and delinquent trajectories (Huizinga, Loeber, & Thornberry, 1995). Florida legislature considers status offenders as youth in need of services, and aims to avoid labeling status offenders as delinquent by providing services to curtail unruly behavior (SORC, 2013).

Unfortunately, it is difficult to obtain recent statistics on runaways, as nationwide prevalence surveys no longer exist. The most recent nationwide reports assessing the prevalence of runaway events in the US found that between 1.6 and 2.8 million youth run away each year (Greene et al., 2005; Hammer et al., 2002). In other words, one out of every seven children will run away from home at some point during their childhood (Hammer et al., 2002). Specific to Pinellas County, Florida, 3,236 youth were reported as runaways to the police. However, there are many runaway events that are not reported to officials. For example, The National Runaway Safeline (NRS), which is a hotline designed to provide services to youth who have or are considering running away from home, received more than 4,800 calls from youth in the state of Florida in 2012 (NRS, 2012). Further complicating the perceived prevalence issue, the majority



of runaway events may not be captured with official records, as Hammer and colleagues (2002) found that only 21% of runaway events were reported to the authorities.

Demographic Characteristics of Youth Runaways

There are several factors that shape a youth's propensity to run away from caregivers (Benoit-Bryan, 2011; Brakenhoff, Slesnick, & Snyder, 2015; Sanchez, Waller, & Greene, 2006; Thrane et al., 2006). In relation to age and running away, several studies utilizing a wide array of samples have found that most runaways are around the age of 15-16 (Baker et al., 2003; Hammer et al., 2002; Sanchez et al., 2006; Thrane et al., 2006). Furthermore, 15-17 year olds make up nearly two-thirds of all runaway events in a national sample of households (Hammer et al., 2002; Powers, Eckenrode, & Jaklitsch, 1990). Some factors have been found to be related to age at first runaway. In fact, youth who report neglect or sexual abuse, girls, and those with changing family structure are more likely to run away at a younger age (Thrane et al., 2006). The role of family structure and victimization as risk factors for running away are discussed more thoroughly in subsequent sections.

When examining the gendered nature of running away, results are mixed. For example, some studies find that male and female youth run away at about the same rate (Hockenberry & Puzzanchera, 2017; Thompson, Zittel-Palamara, & Maccio, 2004; Windle, 1988). However, several surveys have found that female youth may be more likely to run away, compared to male youth (Bailey, Camlin, & Ennet, 1998; Baker et al., 2003; Benoit-Bryan, 2011; McMorris, Tyler, Whitbeck, & Hoyt, 2002; Sanchez et al., 2006; Thrane, et al., 2006). These differences may be attributed to methodological limitations between studies (Kempf-Leonard & Johansson, 2007; McKinney, 2014). In particular, these differences may be attributed to a study's uses self-report



or official records (Kempf-Leonard & Johansson, 2007; McKinney, 2014). Evidence suggests that female runaways are more likely to be officially reported and enter the justice system for running from caregivers than male runaways; however, actual prevalence may be equal for both genders (Kempf-Leonard & Johansson, 2007; McKinney, 2014).

Ethnicity may also shape a youth's likelihood of running away from caregivers; however, research on the differential risk among racial/ethnic minorities is also mixed (Benoit-Bryan, 2011; Brakenhoff et al., 2015). Brakenhoff and colleagues (2015) examined the 1997 National Longitudinal Survey of Youth (NLSY) and found that Hispanic youth are significantly less likely to run away than White or African American youth. However, Benoit-Bryan (2011) assessed the National Longitudinal Study of Adolescent to Adult Health (ADD Health) data and found that, compared to non-Hispanic youth, Hispanics were more likely to run away from caregivers. This disparity in prevalence is also found for Native American and Asian or Pacific Islander youth, as both groups are more likely to run away from caregivers when compared to non-Native Americans or non-Asian or Pacific Islanders (Benoit-Bryan, 2011). In this same study, African American youth were less likely to run away from caregivers than non-African American youth. Further complicating the issue, some studies, using both national and geographically restricted samples, have found no significant differences in rates of running away when examined by race or ethnicity (Kempf-Leonard & Johansson, 2007; Tyler & Bersani, 2008), suggesting that there may be other factors beyond race that influence the likelihood of running away.

The location where the youth resides shapes a youth's propensity to run away as well (Sanchez et al., 2006; Thrane et al., 2006). Sanchez and colleagues (2006) reviewed the Add Health data for waves one and two and found that youth residing in urban settings are more likely to run away from home, when compared to those residing in rural settings. Even when the



youth is experiencing abuse in the home, which is a known predictor of running away (discussed in the next section), youth residing in rural settings delay running away for approximately 1.5 years longer than those in urban settings (Thrane et al., 2006). Although the factors that shape this delay are still unknown, Thrane and colleagues (2006) point to a lack of resources in rural areas for youth runaways as a contributing factor.

In addition to geographical factors, who the youth lives with also shapes the frequency of runaway events (Biehal & Wade, 1999; Thompson & Pillai, 2006). Biehal and Wade (1999) examined runaway cases for four law enforcement agencies and found that 30% of the 200 participant sample were runaways from substitute care (like foster care families or group homes). Youth who do not reside with primary caregivers are significantly more likely to run away multiple times throughout their adolescence, compared to youth residing with their parents (Thompson & Pillai, 2006).

Typically, youth who run away return to home relatively soon. An assessment of the National Incidence of Missing, Abducted, Runaway, and Thrownaway Children (NISMART)-2 (consisting of a large national sample of adult and juveniles) found that 77% of the sample returned home within one week (Hammer et al., 2002). Even youth identified as homeless (i.e., spending two consecutive nights away from home either willingly or after being kicked out) are likely to return home at some point (Cauce et al., 2000; Milburn et al., 2007). In addition to returning home relatively quickly, youth who run away typically do not travel very far from home (Hammer et al., 2002). For example, only 25% of a national sample of juveniles ran further than 50 miles during a runaway event (Hammer et al., 2002).



Environmental Factors Related to Propensity for Running Away

Decades of research have been dedicated to developing an understanding of the situational and familial risk factors for youth runaway behavior, especially considering that these factors may be more salient predictors of running away, compared to situational and demographic characteristic of the youth (Whitbeck & Hoyt, 1999). Early research followed the perspective that most youth who ran away from home were running to the promise of freedom and opportunities associated with a lack of parental supervision (Berger & Schmidt, 1958; Homer, 1973; Shellow, Schamp, Liebow, & Unger, 1967). However, subsequent research focuses on the negative life events (such as physical and sexual abuse, neglect and violence in the home) that precede a runaway event (Cauce et al., 2000; Dedel, 2010; Famularo, Kinscherff, Fenton, & Bolduc, 1990; Hammer et al., 2002; Haynie, Petts, Maimon, & Piquero, 2009; Kaufman & Widom, 1999; Rohr & James, 1994; Sullivan & Knutson, 2000; Thrane, et al., 2006; Tyler & Bersani, 2008; Whitbeck et al., 1999; Whitbeck, & Hoyt, 2001; Yoder et al., 1998). In other words, contemporary research suggests that youth are running from adverse home environments. This section will serve as an overview of the research that has examined the factors that are related to runaway events.

Maltreatment

Generally, runaways are more likely to have a history of maltreatment and sexual abuse than all other types of juvenile offenders (Famularo et al., 1990). Estimated rates of sexual abuse range from 5 to 35% among runaway samples (Famularo et al., 1990; Kurtz, Kurtz, & Jarvis, 1991; Powers et al., 1990; Schaffner, 1998; Thompson et al., 2004). A review of nearly 400 juvenile records finds that runaways have histories of sexual abuse seven times higher than all



other types of status offenders (Famularo et al., 1990). In addition, the NISMART reports that a primary indicator (along with physical abuse) of endangerment of running away is a history of sexual abuse (Hammer et al., 2002). Similarly, Edingburg, Harpin, Garcia, and Saewyc (2013) analyzed youth records at a youth advocacy center in Minnesota and found that those who have a history of running away are significantly more likely to have experienced severe sexual abuse (prostitution, gang rape, or multiple sexual assaults by non-family members), compared to non-runaway cases. Furthermore, girls may be especially at risk for sexual abuse in the home, as the prevalence of self-reported sexual abuse by caregivers is higher for female runaways (Cauce et al., 2000; Tyler et al., 2001; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999).

Physical abuse by caregivers is more likely to be reported by runaway youth, when compared to youth referred to the youth advocacy center in Minnesota who do not have a history of running away (Edingburg et al., 2013). Numerous studies have attempted to gauge the prevalence of physical abuse histories in runaway samples and a review of the literature finds that self-reports of physical abuse range from 16 to 77% of runaway and homeless youth (Kurtz et al., 1991; Powers et al., 1990; Schaffner, 1998; Thompson et al., 2004) Whitbeck and colleagues (1999) surveyed youth living in shelters and on the streets and find that 43% of the sample report being physically assaulted by a caretaker. Again, female youth are more likely to report experiencing physical abuse by caregivers than their male counterparts (Cauce et al., 2000).

Neglect and emotional abuse are also related to running away from home (Powers et al., 1990; Thompson et al., 2004; Yoder, Whitbeck, & Hoyt, 2001). Rates of neglect in runaway samples range from 29% to 48% of runaways (Powers et al., 1990; Thompson et al., 2004). In addition, 30 to 42% of runaways report a history of experiencing emotional abuse (Powers et al.,



1990; Thompson et al., 2004). Yoder and colleague's (2001) study utilizing a data sample of runaways and homeless youth from four Midwestern states report that neglect by a caregiver is associated with running away for the first time. This pattern is also supported in Kaufman and Windom's (1990) study that matches abused and non-abused samples of youth runaways.

Unstable Environments

Even if there is no reported or documented abuse or neglect, it seems that the youth runaway's home life is still one of difficulty (Spillane-Grieco, 1984; Thompson et al., 2004). For example, runaway samples report significantly less empathy, understanding, and positive regard between child and parents, compared to those with no history of running away (Spillane-Grieco, 1984). Furthermore, Thompson and colleagues (2004) surveyed youth residing in a runaway shelter and report that 84% of runaway youth have problems with their mother or father in the time preceding the runaway event.

Even when the youth is removed from dysfunctional home environments, they are still at increased risk for running away from residential centers (Biehal & Wade, 1999; Courtney & Zinn, 2009; Kim, Chenot, & Lee, 2015; Thompson & Pillai, 2006). Several studies have found that youth who are placed in out of home settings (foster homes, group homes, shelters, or residential treatment centers) are more likely to run away than those who reside at home (Biehal & Wade, 1999; Courtney & Zinn, 2009; Kim et al., 2015; Thompson & Pillai, 2006). In addition, frequency of out of home placement also increases the likelihood of running away (Courtney & Zinn, 2009). Experiencing out of home placement is also related to increased likelihood of being a repeat runaway (Thompson & Pillai, 2006).



In sum, decades of research utilizing diverse samples and methodological applications have found that many runaway youth are running from abusive and dysfunctional early life experiences (Biehal & Wade, 1999; Courtney & Zinn, 2009; Edingburg et al., 2013; Famularo et al., 1990; Kaufman & Windom, 1990; Kim et al., 2015; Kurtz et al., 1991; Powers et al., 1990; Schaffner, 1998; Spillane-Grieco, 1984; Thompson et al., 2004; Thompson & Pillai, 2006; Yoder et al., 2001). This understanding that youth are typically running from something negative has caused a shift in the perspective of the runaway research. This shift resulted in a focus on the risks associated with the runaway experience, as well as the compounding factors that shape the likelihood of experiencing victimization, psychological distress, criminal behavior, and a host of other negative life events. This next section reviews the adverse consequences of running away for youth, including victimization and offending.

Protective Factors

Alternatively, there are also many protective factors that can curtail or prevent runaway behavior, as well as the adverse events associated with the runaway experience (Edinburgh et al., 2013; Lightfoot, Stein, Tevendale, & Preston, 2011; Saewyc & Edinburgh, 2010; Thrane & Chen, 2010). Previous research has determined that risk factors are not the only components that shape delinquent pathways or negative life events, but that protective factors also shape youth outcomes (Carr & Vandiver, 2001; Loeber & Farrington, 2000; Stouthamer-Loeber, Loeber, Wei, Farrington, & Wikstrom, 2002; Werner, 1989). Protective factors, typically discussed in three domains: personal, familial, and environmental, may serve to decrease the negative events in a youth's life that are associated with delinquency (Carr & Vandiver, 2001; Werner, 1989).



Protective factors are often examined in studies that aim to understand repetitive offending in youth samples (Carr & Vandiver, 2001; Loeber & Farrington, 2000; Stouthamer-Loeber et al., 2002). For example, longitudinal studies have found support for both risk and protective factors' combined ability to predict persistent offending for juveniles (Loeber & Farrington, 2000; Stouthamer-Loeber et al., 2002). Furthermore, Carr and Vandiver (2001) included protective factors within their analyses of male and female juvenile probationers and found that factors such as personal characteristics, familial conditions, and peer selection are able to differentiate repeat youth offenders from one time offenders. The addition of protective factors can also provide researchers and practitioners with additional insight into the youth's risks and needs (Carr & Vandiver, 2001).

Specific to runaway youth, protective factors have been examined as additional factors that shape propensity to run away from caregivers as well as the adverse events associated with the runaway experience (Edinburgh et al., 2013; Lightfoot et al., 2011; Saewyc & Edinburgh, 2010; Thrane & Chen, 2010). For example, Edinberg and colleagues (2013) examined the presence of protective factors in a sample of adolescent girls and found that runaway youth are less likely to report the presence of protective factors, compared to non-runaway girls. Similarily, Saewyc & Edinburgh (2010) found that sexually abused runaway girls were more likely to report low levels of protective factors than non-abused non-runaway girls.

Specific to adverse events associated with running away, Thrane and Chen (2010) found that school attachment (but not positive parental relationship) served to negate the likelihood of exhibiting risky sexual behavior during a runaway event. In addition, Lightfoot and colleagues (2011) assessed the relationship between protective factors and problem behaviors (substance use, risky sexual behavior, and delinquency) in a sample of runaway and homeless youth and



found that higher levels of planning skills and problem solving are associated with fewer problem behaviors. Although limited in application to runaway youth, protective factors have the ability to better assess the scope of the problems within a youth's life as well as the factors that can curtail detrimental behaviors of runaway youth (Edinburgh et al., 2013; Lightfoot et al., 2011; Saewyc & Edinburgh, 2010; Thrane & Chen, 2010).

Adverse Events Associated with Running Away

This section begins with a discussion of the development of research on the adverse events associated with youth runaways. These adverse events and experience can encompass psychological distress/disorder, victimization, and delinquency. The interrelationship between victimization and delinquency through reliance on deviant subsistence strategies is also reviewed. Numerous studies report that running away, even for a short period of time, puts youth at considerable risk of both physical and sexual victimization, as well as a host of negative emotional and physical adverse experiences (Benoit-Bryan, 2011; Clark et al., 2008; Edinburgh, et al., 2013; Kingree, Braithwaite, & Woodring, 2001; Whitbeck, Hoyt, & Bao, 2000; Yoder et al., 1998; Yoder et al., 1999). Since the publication of Robins and O'Neil's (1959) longitudinal study on runaways and adult offending, the field of criminology, and eventually the US government, recognized a need to better understand what causes someone to run away from home and how that shapes their subsequent life experiences.

Psychological Distress/Disorder

Youth who run away from home have been found to struggle with many negative life events, often at higher rates than those who do not have has history of running away (Benoit-



Bryan, 2011; Edinburgh, 2013; Johnson, Whitbeck, & Hoyt, 2005; Kingree et al., 2001; Kipke, Montgomery, Simon, & Iverson, 1997; Whitbeck et al., 2000; Yoder et al., 1998; Yoder, 1999). Runaway samples often report higher rates of depression, self-injurious behavior, suicidal ideation, and even suicide attempts (Benoit-Bryan, 2011; Kingree et al., 2001; Whitbeck et al., 2000; Yoder et al., 1998; Yoder, 1999). For example, Benoit-Bryan (2011) utilized the Add Health longitudinal data and determined that youth who report running away from home are more likely to have suicidal thoughts in adulthood and are three times more likely to attempt suicide, compared to those with no history of running away. In addition, Yoder and colleagues (1998) examined the prevalence of psychological distress in a sample of 270 runaway and homeless youth in four Midwestern states and found that a full half of the sample report suicidal thoughts and one-fourth of the sample attempted suicide in the previous year. Whitbeck and colleagues (2000), in a continuation of the Yoder and colleagues' (1998) study, control for histories of family victimization and find that negative street experiences is the most powerful predictor of depressive symptoms.

Runaway youth are also at increased risk for substance use and drug addiction (Edinburgh et al., 2013; Johnson et al., 2005; Kipke et al., 1997; Van Leeuwen et al., 2004). Van Leeuwen and colleagues (2004) surveyed a sample of 186 youth at shelters and find a significant relationship between the runaway experience and using illegal substances. Furthermore, Johnson and colleagues (2005) performed a longitudinal assessment of youth in eight Midwestern cities and report that runaway samples use substances earlier in life and on a more frequent basis than youth without a history of running away.



Victimization and Offending

Youth who run away from caregivers do not just struggle with psychological distress and substance use, as they are often at increased risk for victimization and are more likely to engage in delinquent behaviors, compared to non-runaways (Hammer et al., 2002; Kaufman & Windom, 1999; Whitbeck & Hoyt, 1999). Often participation in deviant strategies to meet basic needs while on the streets opens the door for these youth to commit crimes and be victimized (Chen et al., 2007; Whitbeck & Hoyt, 1999). This section will serve as an overview of the literature concerning victimization, offending, and the use of deviant subsistence strategies for runaway youth.

Victimization experiences. Although research suggests that youth are often running from familial or caregiver environments fraught with physical, emotional, and sexual abuse, these conditions are not ameliorated by running away, as youth are more likely to be victimized while on the streets. From a victimization perspective, runaways are at considerable risk for being victims of both violent and non-violent crime (Bailey et al., 1998; Edinberg et al., 2013; Hammer et al., 2002; Mitchell, Finkelhor, & Wolak, 2010; Rotheram-Borus et al., 1991; Terrell, 1997; Thrane et al., 2006; Whitbeck & Simons, 1993; Whitbeck et al., 1997; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999; Whitbeck, Hoyt, Yoder, Cauce, & Paradise, 2001). Whitbeck and colleagues' (1997) assessment of runaway and homeless youth in four Midwestern states finds that one-third of the sample report being a victim of at least one physical assault during a runaway event. Furthermore, Thrane and colleagues (2006) indicate that three-fourths of their sample of 602 homeless and runaway youth report experiencing street victimization. Rotheram-Borus and colleagues (1991) report similar rates of victimization in a sample of runaways in the



state of New York, as 40% of the sample disclose either a sexual or physical assault during their runaway event.

In addition, Hammer and colleagues (2002) analyzed the NISMART–2 data, and found that approximately 38,600 runaway youth are at risk for sexual assault, based on reported assaults and exposure to sex offenders. Furthermore, Edinberg and researchers (2013) find that runaways are significantly more likely to experience severe sexual assault than youth with no history of running away. Lastly, running away as a juvenile is significantly related to juvenile and adult sex work (Mitchell et al., 2010).

Delinquent behavior. Running away from caregivers exposes youth to an increased risk of not just victimization and psychological distress, but offending and delinquent behavior as well (Benoit-Bryan, 2011; Crawford, Whitbeck, & Hoyt, 2011; Kaufman & Windom, 1999; Thrane et al., 2006; Whitbeck et al., 1997; Whitbeck & Hoyt, 1999; Windle, 1988). Windle (1998) examined the NLYS and found that delinquent behavior increases as the frequency of running away increases. Furthermore, runaways in the sample were four to five times more delinquent than those without a history of running away (Windle, 1988). In addition, Benoit-Bryan (2011) also examined the long term effects of running away with the Add Health data and found that youth with a history of running away are 1.5 times more likely to be arrested for a crime during adulthood.

Kaufman and Windom (1999) assessed the relationship between running away and offending behavior by testing running away as a moderator or mediator for child abuse and later adult offending in a sample of matched youth. Analyses found that running away acts as a moderator, and has a direct effect on offending, unique to that of child abuse (Kaufman & Windom, 1999). In fact, running away has a stronger effect on subsequent criminal behavior for



youth with no history of abuse (Kaufman & Windom, 1999). Repeat runaways may be especially at risk for committing crimes, as offending rates in a repetitive runaway sample are 4-5 times higher than those with no history of running away (Windle, 1988). In addition, compared to one time runaway youth, offending rates are twice as high for repetitive runaways (Windle, 1988). This correlation between repetitive running away and delinquency has been supported in a sample of girls reported missing by their parents (Shellow et al., 1967).

Deviant subsistence strategies. The above sections highlight the negative behaviors, experiences, and risky situations that runaway youth often face while on the run. Many youth who enter these high risk situations are motivated by a desire to survive on the streets and meet basic needs while experiencing early independence from family and caregivers (Chen et al., 2007; Greene, Ennett, & Ringwalt, 1999; Thrane et al., 2006; Whitbeck & Hoyt, 1999; Whitbeck et al., 2001). Deviant subsistence strategies can include acts of theft, procuring illegal substances for financial gain, trading sex for food, shelter, and/or safety, and participating in commercial sex work (Greene et al., 1999; Thrane et al., 2006). Thrane and colleagues' (2006) study assessing the use and consequences of using deviant subsistence strategies of 602 youth using runaway/ homeless services found that those with a history of physical abuse are more likely to participate in these deviant survival strategies. Similarly, Greene, Ennett, and Ringwalt (1999) examined the prevalence and correlates of survival sex in a nationally representative sample of shelter youth and found that youth are more likely to participate in survival sex if they have a history if victimization. This finding was replicated by Tyler (2001) and colleagues in a sample of 372 homeless and runaway youth in Seattle, Washington.

Thrane and colleagues (2006) also found that the use of deviant subsistence strategies (both sex and non-sex strategies) increases the probability of being victimized. This was also



supported, in relation to sexual deviant subsistence strategies, by a study of 204 runaway and homeless youth in Iowa (Terrell, 1997). In an attempt to isolate the effect of deviant subsistence strategies, Whitbeck and colleagues (2001) controlled for several correlates of victimization, including a history of victimization, and found that using non-sexual deviant strategies significantly increases the likelihood of both physical and sexual victimization. Furthermore, youth who participate in sexual deviant subsistence strategies are four times more likely to be a victim of a sex offense (Whitbeck et al., 2001). In addition to victimization, utilizing deviant survival strategies increases one's likelihood of IV drug use (Greene et al., 1999).

The Risk Amplification Model

In the late 1990s, Whitbeck and colleagues proposed a risk-based model to explain the causal mechanisms that interact to result in runaway behavior, victimization, offending, and psychological problems of runaway youth (Whitbeck et al., 1997; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999). Since the model's conception, support for its explanatory ability has been reported in several samples and with both cross-sectional and longitudinal data (Chen et al., 2007; McGarvey et al., 2010; McMorris et al., 2002; Thrane & Chen, 2010; Tyler et al., 2001; Tyler & Bersani, 2008; Tyler et al., 2011; Whitbeck et al., 1997; Whitbeck et al., 1999; Whitbeck & Hoyt, 1999; Whitbeck et al., 2001). In addition to evidence supporting its applicability to the population, the risk amplification model is the most frequently applied pathway model of runaway behavior.

The central theme of the risk amplification model is that youth runaway from negative experiences in the home, which leads to more negative experiences, in the form of victimization, offending, substance use/abuse, and psychological distress (Whitbeck & Simmons, 1999).



Specifically, parental inadequacies (such as substance abusing and/or criminal parents) decreases adult supervision, increases the likelihood of abuse in the home, and exacerbates the youth's likelihood of running away from caregivers (Whitbeck & Hoyt, 1999; Whitbeck et al., 1999). These factors then expose the youth to a host of negative events such as: association with deviant peers, drug use, participating in deviant subsistence strategies and dangerous sexual experiences, victimization while on the street, and psychological distress (Whitbeck & Hoyt, 1999; Whitbeck & Simmons, 1999; Whitbeck et al., 1999).

The risk amplification model builds off of Patterson's (1982; 1984) social interaction perspective, which states that abusive and dysfunctional families essentially teach children how to behave aggressively with others. Youth from these types of families then carry the learned antisocial behavior to other contexts. Specifically for runaways, this becomes how they interact with individuals on the streets (Whitbeck et al., 1999). These abusive situations that youth endure cause them to "drift" from the family unit in the form of running away, and they carry their expectations for violence into the shelter and street context (Patterson, 1984; Caspi et al., 1989; Whitbeck et al., 1999). Whitbeck and colleagues (1999) state that, similar to Patterson (1982; 1984), most runaway youth experience dysfunctional and abusive families, which shape not only their propensity to run away but also the maladaptive, aggressive manner in which they interact with others during a runaway event.

Caspi and colleagues (1989) outline the ways in which maladaptive behavior of the youth shape expectations about how others will behave, which results in negative perceptions and aggression towards others. Whitbeck, Hoyt, and Yoder (1999) suggest that the learned antisocial behavior internalized by the runaway youth results in rejection by conventional peers and increased likelihood of bonding with delinquent peers. This leads to a host of opportunities to



participate in deviant subsistence strategies, risky sexual behavior, and substance use, while also increasing likelihood of victimization and psychological distress, PTSD, and depression (Whitbeck et al., 1999; Whitbeck & Hoyt, 1999).

The successfulness of the risk amplification model to explain the causal mechanisms for running away as well has the negative life experiences associated with the runaway experience has been assessed by several researchers. Whitbeck and Hoyt's (1999) book on youth runaways tested the risk amplification model for both female and male runaways. The authors found support for the model to identify significant relationships between parental problems, youth runaway events, and subsequent affiliation with deviant peers, substance use, utilization of deviant subsistence strategies, risky sexual behavior, victimization, and psychological distress. These relationships also vary by the gender of the youth (Whitbeck & Hoyt, 1999).

Whitbeck, Hoyt, and Yoder (1999) also applied the risk amplification model to a sample of 225 homeless and runaway youth and report that experiences during the runaway event (drug use, participation in deviant subsistence strategies, risky sexual behavior, and affiliation with deviant peers) exacerbate (i.e. amplify) the effects of family victimization for youth by significantly increasing the odds of serious victimization. In addition, the serious victimization(s) experienced while on the street amplifies depressive symptoms for female runaways (Whitbeck et al., 1999).

In relation to sexual victimization, Tyler and colleagues (2001) report that sexual victimization of youth runaways can be explained by the risk amplification model, in that family dysfunction results in early independence, which leads to highly risky behavior and increases the odds for sexual victimization. Whitbeck and colleagues (2001) tested the degree of amplification associated with one type of risky behavior (the use of deviant subsistence strategies) and found



that participation in non-sexual deviant subsistence strategies increases the likelihood of experiencing physical victimization during a runaway event. Next, the authors tested the amplification effects of sexual deviant subsistence strategies and found that participation in these strategies amplifies this risk of experiencing sexual victimization four times as much as those who do not use sexual deviant subsistence strategies (Whitbeck et al., 2001).

Utilizing the same data set as Whitbeck and colleagues' (2001) study (homeless and runaway youth residing in shelters and on the streets in four Midwestern states) McMorris and colleagues (2002) report that the risk amplification model successfully explains the elevated substance use of runaway youth. In a continuation of Whitbeck and Hoyt's (1999) assessment of structural conditions that shape the runaway experience, Chen and colleagues (2007) assess the risk amplification model with structural equation modeling and find support for the notion that family abuse significantly increases a youth's likelihood to interact with deviant peers and to experience violent victimization (Chen et al., 2007).

Since the publication of *Nowhere to Grow* (1999), Whitbeck and Hoyt have called for the use of longitudinal data to assess the ability of the risk amplification model to explain the runaway experience. Tyler and Bersani (2008) answered this call with the use of longitudinal data from the NLSY97. The authors find that family problems and experiencing victimization significantly increases the frequency of running away from home (Tyler & Bersani, 2008). It is important to note that having troubles in school and delinquency are also significant predictors of running away; however, the authors argue that these events may all stem from difficulties in the family (Tyler & Bersani, 2008).

Thrane and Chen (2010) also assess the applicability of the risk amplification model with longitudinal data by using the ADD Health data set to identify the effects of running away on



risky sexual behavior. The authors find that running away from caregivers puts female youth on a developmental trajectory that leads to significantly earlier sexual behavior, compared to non-runaways, which increases propensity for risky behavior. Tyler, Hagewen, and Melander (2011), utilizing the same ADD Health data set containing over 7,000 youth find support for the risk amplification model as well. Specifically, family instability predicts running away from home, which predicts problem behaviors, homelessness, and high frequency of running away (Tyler et al., 2011). In summation, the risk amplification model has the ability to identify not only the causes of youth runaway behavior, but also the mechanisms that facilitate the increased likelihood of experiencing negative life events (such as risky sexual behavior, substance use/abuse, juvenile offending, victimization, and psychological distress) for youth runaways (Chen et al., 2007; McMorris et al., 2002; Thrane & Chen, 2010; Tyler et al., 2001; Tyler & Bersani, 2008; Tyler et al., 2011; Whitbeck et al., 1997; Whitbeck et al., 1999; Whitbeck et al., 2001).

Although much of the runaway literature does not assess gender differences, the origins of the risk amplification model are embedded within the exploration of gendered perspectives to identify the structural conditions that shape runaway behavior. For example, the first assessment of the risk amplification model assessed the utility of the model in both combined and gender-exclusive runaway samples (Whitbeck & Hoyt, 1999). The authors found support for similar pathways to psychological distress, victimization, and offending; however, the strength of the relationship varied by gender (Whitbeck & Hoyt, 1999). In sum, the risk amplification model lends support for a gendered perspective to understanding how runaway behavior occurs and the factors that shape negative life events for runaway youth.



Typologies/Classifications of Youth Runaways

The application of the risk amplification model in varied samples of youth highlights the factors that lead to running away from caregivers, as well as the numerous negative life events that these youth often experience. Building upon this, many researchers and practitioners have attempted to better understand youth runaways, in order to help triage needs and reduce the proclivity of victimization experiences and offending behavior. One method undertaken since the infancy of runaway research is that of classification and the creation of typologies of youth runaways.

Runaway typologies were born from a practitioner-based need to provide services for runaways that reduce runaway behavior, but also to disseminate information that has the potential to help other practitioners working with these youth (see Berger and Schmidt, 1958; Rosenwald & Mayer, 1967 for a review of the origins of the classification of runaways). Studies that focus on typologies of runaways work to verify that runaways are a heterogeneous group of youth, who have different motivations for running away and varied levels of risk for offending and victimization (Berger & Schmidt, 1958; Brennan et al., 1978; Brennan et al., 1978; Dunford & Brennon, 1976; English, 1973; Homer, 1973; Jones, 1988; Levy, 1972; Orten & Soll, 1980; Rosenwald & Mayer, 1976; Shellow et al., 1967; Tsunts, 1966; Zide & Cherry, 1992).

Early runaway classification research focuses on motivation for running away and utilize a dichotomous system of identification (Berger & Schmidt, 1958; Homer, 1973; Shellow et al., 1967; Tsunts, 1966). Although the titles given to the dichotomous categories may differ, the majority of these early typologies focus on youth who are either running *from* something or running *to* something (Berger & Schmidt, 1958; Homer, 1973; Tsunts, 1966). The "running from" group consists of runaway youth who are attempting to escape negative events in the



home, possibly that of abuse (Berger & Schmidt, 1958; Homer, 1973; Tsunts, 1966). On the other hand, the opposing group of runaways are seen as adventure seekers who run from caregivers to seek out excitement, pleasure, and fun (Berger & Schmidt, 1958; Homer, 1973; Tsunts, 1966).

Dichotomous typologies of runaways have been criticized by researchers for being too simplistic, thus categorizing some runaways with different motivations into the same category as others, essentially obscuring certain types of youth runaways (Brennan 1980; Zide & Cherry, 1992). Typologies of runaways have been documented to range from two (primarily early studies) to six distinct groups, with subgroups within each (Zide & Cherry, 1992). Zide and Cherry (1992) review the literature on typologies and suggest that typologies are, at their base, categorized into three primary groups: the "running to" group, the "running away" group, and the "thrown out" group. This third group of "thrown out" youth runaways emerged in the literature in the 1980s and highlights an understudied group of youth who are kicked out of the home and/or parents of the youth have no desire to reunite (Brennan, 1980; Jones, 1988; Zide & Cherry, 1992).

Brennan and colleagues (1978) assessed the presence of typologies in a large sample of youth receiving services in the state of Colorado and find four distinct groups of runaways. However, the authors felt as though four groups was too inclusive and did not accurately represent the heterogeneous nature of runaways; therefore, they separate the groups by offending status prior to performing analyses, resulting in a two classes and seven group (total) typology of runaways (Brennan et al., 1978). In a similar fashion, several researchers group runaways based upon motivation or severity, then identify subcategories within each primary classification (Dunford & Brennon, 1976; English, 1973; Jones, 1988; Orten & Soll, 1980). See Table 1 for an



overview of the types of runaway typologies that have been created since the origins of runaway research.

From a methodological perspective, studies assessing typologies of runaways can be categorized into two primary groups: practitioner-based subjective classifications and statistically-based classifications. Several studies base typologies on professional experience with runaways, essentially categorizing runaways based upon a summarization of their personal experience with youth runaways (English, 1973; Greene & Esselstyn, 1972; Homer, 1973; Jones, 1988; Levy, 1972; Orten and Soll, 1980; Robey, 1969; Rosenwald & Mayer, 1967). For example, English (1973) identifies four classes of runaways based upon his position as a counselor for a one-year period at a drop-in center for runaways in the state of Michigan. Similarly, Orten and Soll (1980) create typologies based upon degree of alienation by combining their professional experience as well as review of the literature on runaways.

In contrast, several studies have utilized statistical methods to assess the presence of typologies within runaway samples (Brennan et al., 1978; Brennan, 1980; Dunford & Brennon, 1976; Zide & Cherry, 1992). For example, Dunford and Brennon (1976) utilize hierarchical cluster analysis to identify typologies based upon five scales that assess family dynamics, labeling, alienation, opportunity, and delinquency. Similarly, Brennan and colleagues (1978; 1980) use hierarchical cluster analysis to identify classes of runaways. The most recent assessment of the presence of typologies in a sample of runaways utilizes discriminate analysis to identify the presence of the classic typology model of "running to", "running away", and "thrown out", while also identifying a new "forsaken" group (Zide & Cherry, 1992).



 Table 1. Runaway Typologies

Author(s)	Year	Sample Size	Sample Characteristics	Type of Analysis	Groups	Types of Runaways
Robey	1964	N=42	Female runaway offenders	No statistical analyses	2	Running from familial sexual abuse Running to adventure
Tsunts	1966	Unknown	Boys and girls	No statistical analyses	2	Escapist runaway Romantic adventures
Shellow, Schamp, Liebow, & Unger	1967	N=731	Boys and girls reported missing	Frequencies	2	Running from severe family dysfunction Limited runaway, less dysfunction
Green & Esselstyn	1972	Unknown	Female runaway offenders	No statistical analyses	3	 Rootless Anxious Terrified
Levy	1972	N=15	Girls in residential treatment	No statistical analyses	5	 Angry defiance Psychotic disorganization Escape To go on one's own Fusion with parents
Homer	1973	N=20	Runaway girls only	No statistical analyses	2	 Running to Running from
English	1973	N=~300	Youth who entered a shelter in Michigan	No statistical analyses	4	 Floaters Runaways Splitters Hard road freaks
Dunford & Brennon	1976	N=53	Youth using shelters Girls and boys	Hierarchical cluster analysis	6	 Self-confident unrestrained girls Well-adjusted runaway Double failures- high delinquency Fleeing youth Young, highly regulated and negatively influenced Young and unrestrained
Brennan Huizinga, & Elliott	1978	N=451	Household sample of girls and boys	Hierarchical cluster modeling	2 classes, 7 types	Class 1: 1. Young, over controlled escapists 2. Middle-class loners 3. Un-bonded, peer-oriented Class 2: 1. Rejected peer-oriented 2. Rebellious, constrained middle-class drop-out girls 3. Normless, rejected, unrestrained youth. 4. Rejected push-outs
Brennan	1980	N=165	Homeless and runaway youth Boys and girls	Hierarchical cluster modeling	4	 Younger non-delinquent with family problems Lower social class strong family relations, high economic/ education strains Older youth with high levels of autonomy Highly delinquent youth, high strains in both family and school



Table 1 (Continued)

Author(s)	Year	Sample Size	Sample Characteristics	Type of Analysis	Groups	Types of Runaways
Orten & Soll	1980	Unknown	Unknown	No statistical analyses	3 classes, 4 profiles	Class 1: 1. Walkaways 2. Fugitives
						Class 2: Repeat runner with some survival skills
						Class 3: Older, street smart, no intention to return home
Jones	1988	Unknown	Unknown	No statistical analyses	3 classes, 11 groups	Class 1: Family dynamics 1. Running from
						2. Abandoned youth
						Class 2: Personal types
						Psychiatrically disabled
						2. Alternative values
						3. Adventurous 4. Causal behavioral disordered
						5. Negative peer influence
						Class 3:Temporal model
						 Abortive runaways Floaters and crisis Multiple runaways Homeless/hard-core
Zide & Cherry	1992	N=261	Homeless and runaway youth Girls and boys	Discriminate analysis	4	1. Running to 2. Running from 3. Thrown out 4. Forsaken

In summation, youth who run from caregivers are typically running away from violence, dysfunction, and abuse in the home (Thrane et al., 2006; Whitbeck et al., 1997; Whitbeck & Hoyt, 1999; Yoder, et al., 1998). According to previous research, running away serves as an escape from family dysfunction. Unfortunately, this often leads to an increase in victimization, delinquency, and negative psychological and health outcomes (Brennan et al., 1978; Edinburgh et al., 2013; Englander, 1984; Tucker et al., 2011). Attempts to understand this phenomenon resulted in the creation of the risk amplification model, as well as classifications of youth runaways. The next chapter outlines theoretical perspectives that have been applied to runaway youth samples, as well as a novel theoretical application to the literature



CHAPTER THREE:

APPLICATION OF CRIMINOLOGY THEORIES TO RUNAWAY YOUTH

This chapter serves as an overview of the theories used to explain the processes that shape propensity for running away, as well as the casual mechanisms and pathways that lead to negative experiences (such as psychological distress, delinquency, and victimization), which are often experienced by runaway youth. Moving beyond the risk amplification model, this chapter overviews the classical criminology theories that are predominantly applied to runaway youth samples. In addition, a theoretical perspective that supports the need for gender specific analyses of the youth runaway phenomenon is also delineated. Lastly, how these theoretical perspectives and the youth runaway empirical literature build to form the foundation of the hypotheses for current study are discussed.

Classical Criminology Theoretical Perspectives

Social Bond Theory

Early research on runaway youth was largely atheoretical, instead focusing on practitioner examination of motivations for youth runaway behavior or surveys to identify prevalence of runaways (English, 1973; Homer, 1973; Jones, 1988; Levy, 1972; Nye & Edelbrock, 1980; Orten & Soll, 1980; Rosenwald, 1967). Subsequently, research endeavors shifted to primarily focus on the negative consequences associated with running away from caregivers, as well as the factors that predict runaway events (Kipke et al., 1997; Powers et al.,



1990; Terrell, 1997; Yates et al., 1988; Yoder et al., 1998). This research focus brought about the testing of several prominent criminology theories such as social learning, routine activities, social bond theory, and life-course theory (Chen, Thrane, & Adams, 2012; Haynie et al., 2009; Herrenkohl, Huang, Taima, & Whitney, 2003; McGarvey et al., 2010; Schaffner, 1998; Whitbeck & Simons, 1993; Whitbeck et al., 2001).

Of particular interest for this study is the use of social bond theory to explain runaway behavior. Social bond theory, also known as control theory or social control theory, assumes that all humans have the ability to commit crime, but those that do not have social or personal controls within their life that deters offending (Hirschi, 1969; Reckless, 1961; Reiss, 1951). These controls can occur in the form of strong bonds with family, prosocial peers, school, and/or the community. Hirschi, (1969) whose pivotal text coined the term "social bond" states that there are four elements that form a social bond: attachment to conventional groups (like family, peers, or community), commitment to conventional societal values, involvement or participation in traditional activities, and belief in mainstream societal morals and values (Hirschi, 1969). Hirschi's (1969) social bond theory was created specifically to explain juvenile offending, and variants of the theory have been a part of mainstream criminology for decades. Evidence supporting social bond theory in the juvenile population is mixed, with some components of Hirschi's original theory having stronger support than others (Chesney-Lind & Shelden, 2013). None the less, bonds to school, family, and prosocial peers are considered empirically established inhibitors for adolescent delinquency and violence (Herrenkohl et al., 2003).

Social bond theory, like most traditional criminology theories, was initially studied in male only samples (Chesney-Lind & Shelden, 2013). Hagan is attributed as the first researcher to assess the applicability of social bond theory to explain female youth offending (Chesney-Lind



& Shelden, 2013). Hagan, Simpson, and Gillis' (1979) study on juvenile delinquency found that, holding delinquent behavior constant, boys and girls experience controls differently.

Specifically, boys are more likely to experience formal social controls (e.g. police contact), while girls experience stronger informal social controls by parents (Hagan, Simpson, & Gillis, 1979).

Social bond theory and runaway youth. Several studies have assessed the applicability of social bond theory in youth runaway populations (Brennan et al., 1978; Chen et al., 2012; McGarvey et al., 2010; Thrane & Chen, 2010). Chen and colleagues (2012) examined school, peer, and parental bonds in the Add Health data and found that bonds with deviant peers is significantly related to running away from home. In addition, prosocial peer relationships, as well as parental attachment serve as protectors against running away from caregivers (Chen et al., 2012). It is important to note that school bonding does not have a significant relationship with running away in the sample studied (Chen et al., 2012). This means that relationships with parents and peers influence runaway behavior, where prosocial peer relationships and strong parental attachment can curtail runaway behavior in adolescents (Chen et al., 2012). Brennan (1980) assessed group adherence of runaway youth using several social bond variables, including peer, school, family, and community bonds, and found that youth group distinctly based upon level of bonding with the above described variables.

Social bond theory and gender. In relation to male runaway youth, parental bonding is a significant protective factor for running away for incarcerated adolescent males (McGarvey et al., 2010). When social bonds are examined specific to female runaways, results are conflicting (Thrane & Chen, 2010). Thrane and Chen (2010) examined an exclusively female sample of youth from the Add Health data and found that parental bond is not significantly related to running away from caregivers; however, school attachment is positively related. This finding,



although only one study, supports the notion that there may be gender specific relationships between theoretically driven variables and female runaway behavior. The scarcity of research on the gendered effect of social bonds on runaway youth necessities further exploration of this topic.

Labeling Theory

Labeling theory is an alternative traditional criminology theory that may be especially applicable to runaway youth and the processes involved in chronic runaway behavior (Brennan et al., 1978; Dunford & Brennan, 1980; English, 1973; Humphrey, 2004). Labeling theory proposes that formal responses to delinquency (i.e., arrests) facilitates, as opposed to curtails, future offending behavior (Becker, 1963; Lemert, 1967; Tannenbaum, 1938). Formal interventions propel youth onto pathways of offending due to the stigmatizing nature of the judicial process as well as the reduced opportunities available to the individual (Becker, 1963; Lemert, 1967; Tannenbaum, 1938). Since the work of early labeling theorists, several researchers have expanded upon the mechanisms that lead to trajectories of offending for youth who experience formal judicial intervention (Johnson, Simons, & Conger, 2004; Bernberg, Krohn, & Rivera; 2006).

One aspect of the labeling process that may be particularly suited for the study of youth runaway behavior is that of deviant labels leading to further reliance on and entrenchment into deviant peer groups (Becker, 1963; Bernberg et al., 2006; Johnson et al., 2004; Mahoney, 1974; West & Farrington, 1977). For example, Bernberg and colleagues (2006) assessed the labeling to increased delinquency process with the Rochester Youth Developmental Study (RYDS) and found that official labeling of youth results in increased involvement with deviant peer groups



and further delinquency. In addition, Johnson and colleagues (2004) also utilized longitudinal data to assess the labeling process and found positive relationships between youth who experience official system involvement, further deviant peer association, and subsequent criminal behavior.

Status offenders may also be at risk for the negative consequences of labeling (Jennings, 2011; Kelly, 1985; Stewart, Vockell, & Ray, 1986). Kelly (1985) found that as formal interventions for status offenses increase, frequency of violent offenses committed by the youth increase as well. Similarly, Stewart and colleagues (1986) found that first time status offenders who experience formal judicial intervention have higher rates of subsequent formal intervention, compared to first time status offenders who were diverted from formal court appearances.

Jennings (2011) also finds support for the labeling effect of formal intervention for status offenders in the state of Florida. Specifically, group basted trajectory modeling shows that once formal intervention for status offenders occurs, offense escalation occurs (Jennings, 2011).

Labeling theory and runaway youth. Specific to youth runaway samples, although very limited, studies have utilized the labeling theoretical perspective to assess runaway group adherence (Brennan et al., 1978; English, 1973). Brennan and colleagues (1978) assessed negative labeling (in addition to several other variables, including several social bond variables) and identified several groups of runaways based upon experiences with stigmatization as well as reliance on peer relationships. Furthermore, English (1975) examined patterns in the histories of youth who entered a shelter in Michigan and identified a group of youth who continue to run away from caregivers because they experience stigmatization due to being labeled as deviant.

Labeling theory and gender. Unfortunately, gender and labeling with runaway youth is a profoundly understudied perspective. However, the various labeling effects of general



delinquency has been assessed with a gendered perspective (Bartusch & Matsueda, 1996). Bartusch and Matsueda (1996) utilized the National Youth Study (NYS) and found similar pathways of negative labeling to delinquency; however, male youth were significantly more likely to be negatively labeled by parents than female youth. Moreover, the formal labeling process may be especially detrimental to female youth (Lanctot, Cernkovich, & Giordano, 2007). Lanctot and colleagues (2007) assess the long term effects of formal intervention and labeling on youth and found that girls experience adverse consequences of labeling in a larger variety of life domains, when compared to male youth. These studies suggest that female and male youth may be associated with varied levels of labeling (both formally and informally), and the negative outcomes associated with formal labeling may be stronger for female youth than male youth (Bartusch & Matsueda, 1996; Lanctot et al., 2007).

Being labeled as a status offender does not come without stigma, as youth can be formally sanctioned for status offenses and may be seen as incorrigible and internalize the negative label (Humphrey, 2004). This is of particular concern for female runaway youth, as female runaways are significantly more likely to face formal judicial intervention for running away than male youth (Chapple et al., 2004; Chesney-Lind, 1987; Finkelhor, Hotaling, Lewis, & Smith, 1990; Hammer et al., 2002; Hockenberry & Puzzanchera, 2017; Kaufman & Widom, 1999; Kempf-Leonard & Johansson, 2007). Moreover, female status offenders may respond more negatively to the labeling process, compared to male status offenders (Jennings, 2011). For example, Jennings' (2011) longitudinal study found that some female status offenders have higher delinquent trajectories post-arrest, compared to male status offenders. This proposes that female status offenders may experience stigma differently and react to the labeling process differently, compared to male status offenders (Jennings, 2011). However, it is important to note



that this difference in behavior may also be due to the varied law enforcement response to female status offenders, discussed in the previous section.

Gendered-Based Perspective: Feminist Criminology Theory

Historically, research on crime and delinquency primarily studied the male offender, with little regard for the female offender (Belknap & Holsigner, 2006; Chesney-Lind, 1986; Chesney-Lind, 1989; Chesney-Lind & Okamoto, 2001; Chesney-Lind & Shelden, 2013). Starting in the 1960s and 1970s, a movement grew within criminology that focused on the factors related to the female offender, utilizing both juvenile and adult samples (Burgess-Proctor, 2006; Chesney-Lind & Shelden, 2013; Chesney-Lind, 1973). These studies aimed to bring awareness to the female offender, while also identifying the factors that shape offending behavior that may be specific or heightened for women (Belknap & Holsinger, 2006; Burgess-Proctor, 2006; Chesney-Lind, 1973; Chesney-Lind, 1986; Chesney-Lind, 1989; Chesney-Lind & Shelden, 2013; Daly, 1992; 1994; Daly & Chesney-Lind, 1988; Jones, Brown, Wanamaker, & Greiner, 2014; Turanovic, Reisig, & Pratt, 2015).

A predominant theoretical perspective in the study of gender and crime is that of feminist criminology (Burgess-Proctor, 2006; Chesney-Lind & Shelden, 2013). Feminist criminology was born from not just the neglect of female participants in analyses of traditional criminology theories, but from the inability of these theories to adequately explain trends in female offending (Chesney-Lind & Shelden, 2013). Feminist criminology theory largely consist of three primary perspectives: Marxist feminism, radical feminists, and intersectional feminist perspectives (Chesney-Lind, 1987; Chesney-Lind & Shelden, 2013; Connell & Messerschmidt, 2005).

Marxist feminism perspective states that gender inequality occurs because of society's reliance



on capitalism, which is dominated by men and renders women powerless (Chesney-Lind, 2013). Because of this, women may turn to non-violent self-destructive offending to compensate and experience higher rates of victimization (Chesney-Lind, 2013). Radical feminist perspectives purpose that the patriarchy leads to subordination of women and increased male aggression, which leads to female victimization and results in female offending in the form of drug use or runaway behavior (Chesney-Lind, 1987; Chesney-Lind & Shelden, 2013). Lastly, intersectional feminist perspectives consider the interrelated factors that shape female offending, such as gender, race/ethnicity, and class, which results in additional levels of subjugation for low-income, disadvantaged women and girls (Chesney-Lind & Shelden, 2013; Connell & Messerschmidt, 2005). No matter the perspectives encompassed by feminist criminology, all aim to identify the factors, at the societal and individual level, that are unique to female offenders (Chesney-Lind & Shelden, 2013).

Feminist criminology perspectives centralize on the notion that one must consider women and their experiences and behaviors within the cultural context of the patriarchy (Chesney-Lind, 1986; Daly, 1992; Daly & Chesney-Lind, 1988). Feminist perspectives focus on the ways in which socialized gender roles and structural conditions shape human behavior, which varies by gender (Belknap & Holsinger, 2006; Chesney-Lind, 1973; Chesney-Lind, 1986; Daly & Chesney-Lind, 1988). Because socialization and developmental processes may be different for girls and boys, pathways to offending may be different as well, thus requiring gender specific analyses. (Belknap & Holsinger, 2006; Chesney-Lind, 1973; Daly & Chesney-Lind, 1988).

Feminist criminology takes the perspective that gender shapes unique experiences and interactions with society for women and girls (Chesney-Lind & Shelden, 2013). It serves to follow then, that theories to explain male offending may be inadequate in explaining the factors



that shape female offending (Belknap & Holsinger, 2006; Chesney-Lind & Shelden, 2013; Daly, 1992). Considering this as a framework, researchers examine the ways in which the experiences of women and girls are qualitatively different. Taking a feminist theoretical perspective to understand pathways to crime for girls, researchers have found that female youth may experience different pathways to adult offending than their male counterparts (Chesney-Lind & Shelden, 2013; Daly, 1992; 1994; Kempf-Leonard & Johansson, 2007; Moffitt & Caspi, 2001; Salisbury & Van Voorhis, 2012; Simpson, Yahner, & Dugan, 2008). For example, Salisbury and Van Voorhis (2012) interviewed 313 women on probation and identified three unique pathways to offending that are intricately tied to their experiences as women. The first statistically determined pathway is that of childhood victimization, which contributes to adult mental health problems and substance abuse (Salisbury & Van Voorhis, 2012). Second, dysfunctional intimate relationships lead to adult victimization, reduced self-efficacy, and subsequent mental health problems and substance abuse, resulting in incarceration (Salisbury & Van Voorhis, 2012). Lastly, limited social capital result in reduced opportunities for education, family support, and self-efficacy, which lead to dysfunctional relationships and difficulties in achieving financial/education goals, resulting in criminal behavior and incarceration (Salisbury & Van Voorhis, 2012).

Moreover, Chesney-Lind and Shelden (2014) also propose a unique gendered pathway to offending and recidivism for female offenders that stems from victimization and structural conditions and leads to adult offending and incarceration. However, research on this topic is mixed. For example, Turanovic and colleagues (2015) examined the ADD Health data and found similar pathways to adult offending for men and women, based on self-control and risky lifestyles. In addition, Jones and colleagues (2014) assessed pathways to offending for male and



female juvenile offenders and identified two pathways for female juvenile offenders. One is the typical offending pathway seen exclusively in girls: victimization and poverty result in mental health issues and financial constraints, which lead to minor delinquency (Jones et al., 2014). The other pathway is very similar to the male pathway to offending, with participant reporting antisocial beliefs, high impulsivity, and more violent offending behavior (Jones et al., 2014). These studies highlight the fact that research on pathways to offending is still developing, and that there may be multiple and possibly unique pathways to offending for female youth, with a multitude of factors shaping delinquent behavior.

Feminist Criminology and Runaway Youth

Feminist criminology researchers have found support for gender specific pathways to delinquency (Chesney-Lind & Shelden, 2013; Daly, 1992; 1994; Kempf-Leonard & Johansson, 2007; Jones et al., 2014; Moffitt & Caspi, 2001; Salisbury & Van Voorhis, 2012; Simpson et al., 2008). Unique, gender specific pathways to running away have yet to be explored with a feminist criminology perspective in mind, and pathways to running away may function similar to delinquency pathways. This section serves as an overview of the factors that support the need for an application of the feminist criminology perspective to youth runaways.

The youth runaway population is particularly suited for a feminist criminology perspective; however, this framework has yet to be purposefully applied. Research on juvenile offenders generally, as well as studies using exclusively runaway samples, have found that risks for victimization and delinquency vary by gender (Belknap & Holsinger, 2006; Cauce et al., 2000; Chesney-Lind, 1986; 1989; Chesney-Lind & Pasko, 2004; Chesney-Lind, 2006; Chesney-Lind & Shelden, 2013; Daly & Chesney-Lind, 1988; Hammer et al., 2002; Jones et al., 2014;



Kempf-Leonard & Johansson, 2007; Turanovic et al., 2015; Tyler et al., 2001; Whitbeck & Simmons, 1990; Whitbeck et al., 1999). Specifically, research with non-runaway samples have found that the probability of juvenile victimization and offending vary based upon gender, and risk and protective factors vary by gender as well (Chesney-Lind & Pasko, 2004; Chesney-Lind & Shelden, 2013; Jones et al., 2014; Miller & Mullins, 2006). This gender based variability of offending and victimization has been supported in the runaway literature as well (Chapple et al., 20014; Tyler et al., 2001; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999), although limited in scope in comparison to non-runaway samples.

Gender and propensity to run away. In regards to victimization, one of the most salient factors that lead to running from care givers is family victimization, which then results in early independence and places the youth on a trajectory of offending and victimization (Chapple et al., 2014; Tyler et al., 2001; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999). It is argued here that the feminist perspective has particular applicability in runaway samples, in part due to the nature of family victimization, which is more often reported by girls (Cauce et al., 2000; Chapple et al., 2014; Tyler et al., 2001; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999) and may partially explain why some studies find high rates of female runaways. In fact, Robey (1964) determined a specific type of runaway group consists of girls who are running away from home to escape sexual abuse committed by their parent(s). Furthermore, Tyler and colleagues (2001) report that runaways with higher rates of sexual abuse runaway at younger ages. This early run from caregivers, as well as experiencing sexual victimization, places the youth on a trajectory of affiliation with deviant peers, which increase rates of street victimization, substance use, and sexual deviant subsistence strategies (Tyler et al., 2001).



Another factor that may explain the unequal official rates of running away for female youth is that of biased formal interventions and the gendered socialization process (Chapple et al., 2014; Hockenberry & Puzzanchera, 2017; Kaufman & Widom, 1999; Kempf-Leonard & Johansson, 2007). Status offenses (which include running away) are more often committed by female youth (Chapple et al., 2004; Chesney-Lind, 1973; Finkelhor et al., 1990; Hammer et al., 2002; Kaufman & Widom, 1999; Kempf-Leonard & Johansson, 2007; Hockenberry & Puzzanchera, 2017). The causes of this difference may stem from beliefs that girls are more vulnerable than boys, and steps to protect female runaways must be taken from both informal and formal control perspectives (Chesney-Lind, 1973; Shellow et al., 1967).

Gender and adverse events associated with running away. Gender not only shapes when or why youth run away from caregivers, but also how youth behave after running away from home (Tyler et al., 2001; Whitbeck et al., 1999; Whitbeck & Hoyt, 1999). Female runaways are significantly more likely than male runaways to use deviant subsistence strategies, which in turn, increases their risk for victimization, both physically and sexually (Whitbeck et al., 1999). While male youth runaways may be more at risk for physical victimization, female youth are at increased risk for sexual victimization during a runaway event (Whitbeck et al., 1999), thus providing further support for a gendered perspective for runaway victimization.

Pathways to youth offending also vary by gender (Chapple et al., 2004; Whitbeck & Simmons, 1993; Whitbeck & Hoyt, 1999). Family victimization is also related to deviance and criminal behavior for runaways, with varying strength and unique pathways for girls and boys (Whitbeck & Simmons, 1993; Whitbeck & Hoyt, 1999). Family victimization is indirectly related to deviance and offending for runaway girls, as victimization leads to reliance on deviant



peers and survival strategies, which in turn leads to delinquency (Whitbeck & Simmons, 1993; Whitbeck & Hoyt, 1999). On the other hand, victimization has a direct effect on deviance for male runaways and is not mediated by deviant subsistence strategies (Whitbeck & Simmons, 1993; Whitbeck & Hoyt, 1999). Furthermore, deviant peer association has a stronger relationship with arrests for runaway males, compared to runaway females (Chapple et al., 2004). In addition, the effects of prior arrest has a greater effect on the male runaway than their female counterpart (Chapple et al., 2004).

Female youth may also cope with the runaway experience differently than male youth, as female runaways with a history of victimization are more likely to report psychological distress, mental health disorders, maladaptive coping strategies (substance use/abuse) and suicidal ideation during or after a runaway event (Cauce et al., 2000; Whitbeck & Hoyt, 1999). Research with non-runaway samples have found that a primary pathway to offending for females is victimization, which leads to mental health problems and substance use/abuse, which often includes or requires criminal acts (Chesney-Lind & Shelden, 2014; Salisbury & Van Voorhis, 2012). Since female runaways are more likely to experience family victimization (especially sexual abuse) and cope with the runaway experience in maladaptive patterns consistent with the traditional gendered pathway to offending, research will benefit from a feminist perspective to explain offending pathways.

Previous research has shown that experiences, perceptions, and behaviors prior to and during the runaway event vary based upon gender (Cauce et al., 2000; Chapple et al., 2004; Tyler et al., 2001; Whitbeck & Simmons, 1993; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999). Some researchers have found, after the conclusion of studies that assessed other aspects of the runaway youth population (such as familial predictors of running away), that a gendered perspective to the



runaway experience provides a more complete understanding of the mechanisms that shape the runaway experience (Whitbeck & Hoyt, 1999). The results of Whitbeck and Hoyt's (1999) study on runaways in the Midwest so strongly supported the notion of a gendered approach to victimization and deviance for runaways that the authors explicitly called for additional research with a focus on the gendered nature of youth runaways.

Although there has been some progress on the topic since the 1990s (see Tyler et al., 2001), a gap in the literature assessing the youth runaway experience via a gendered perspective still exists. For example, Tyler and colleagues (2001) examined the relationship between childhood sexual abuse and later victimization of runaway girls and boys. Results highlight the gendered nature of victimization of youth runaways. Unfortunately, non-sexual abuse variables and well as delinquency are not assessed in the researchers' 2001 study (Tyler et al., 2001). In sum, studies have highlighted the discrepancies between the experiences and behaviors of male and female runaways; however, application of a gender based theory as a causal explanation is lacking. A better understanding of the factors that shape female and male youth runaway events has the potential to fill a void in the literature and help to shed light on the gender nature of juvenile deviance.

Implications for the Present Study

Although great gains have been made for the study of youth runaways, there are still many components of the runaway experience that are vastly understudied (Whitbeck & Hoyt, 1999). Inferences made about youth runaways are often limited by methodological constraints (Tyler & Bersani, 2008; Windle, 1988). First, many runaway studies are limited by small sample sizes (Dunford & Brennon, 1976; Greene et al., 1999; Schaffner, 1998; Tyler et al., 2011). In



addition, sample bias also occurs due to samples obtained exclusively from shelters or on the streets (Bowden & Lambie, 2015; Greene et al., 1999; Sanchez et al., 2006; Whitbeck et al., 1997), which means that only runaways utilizing these services or happen to be in the area at the time of the data collection are included in the sample. This study aims to ameliorate the above stated limitations by utilizing a large sample of youth obtained from official records gathered over the course of a year. This method reduces the likelihood of sampling bias associated with singular, site specific sampling methods that restricted previous studies. Runaway youth samples often include both homeless and runaway youth, which may constitute two distinct groups of individuals, with different needs and risks (Tyler & Bersani, 2008; Zide & Cherry, 1992). To account for the differences between homeless and runaway youth, this study assesses only runaway youth and excludes homeless youth from the sample. Reliance on self-report methods to obtain data is common in the runaway literature (Tyler & Bersani, 2008; Whitbeck et al., 1999); however, this can be problematic, as there is no method of the researchers to verify the accuracy of reports of abuse, victimization, and offending behavior. This study accounts for this issue by utilizing both official and self-report data to obtain information related to the youth's victimization and offending history.

The youth runaway literature has yet to examine chronic runaway status, despite findings that support the notion that repetitive runaway behavior is associated with increased risk for delinquency, psychological distress, and substance use/abuse (Courtney & Zinn, 2009; Tyler & Bersani, 2008; Windle, 1988). This study aims to address this gap in the literature by quantifying chronic runaway status and identifying the factors that are related to chronic runaway status. In addition, a gendered perspective is taken, via analyses of gender-exclusive models, in order to identify gender based differences.



In regards to typologies of runaways, great gains have been made in the literature over the years, as researchers have suggested that runaways are not a homogeneous group of youth, with the same risks and needs throughout (Brennan et al., 1978; Brennan, 1980; Dunford & Brennan, 1976; English, 1973; Homer, 1973; Jones, 1988; Levy, 1972; Orten & Soll, 1980; Shellow, et al., 1967; Zide & Cherry, 1992). However, much of the typology research is limited by the use of methodologically weak assessments of group adherence, often based upon subjective experiences with runaway youth that lack objectivity, validity, and replicability (Brennan et al., 1978; Zide & Cherry, 1992). While researchers have called for the identification of distinct homogenous groups within diverse samples of runaways, few methodologically sound studies exist today (see Brennan et al., 1978; Brennan, 1980; Dunford & Brennon, 1976; Zide & Cherry, 1992). In addition, several studies have highlighted the gender specific risks/needs for runaways, but research on this perspective is limited (Tyler et al., 2001; Whitbeck & Simmons, 1993).

In order to build upon the runaway youth classification literature and account for the limitations of previous classification research, this study aims to utilize group-based trajectory modeling. This statistical method allows for researchers to summarize large amounts of data in an easily interpretable format (Nagin & Odgers, 2010). Furthermore, group-based modeling offers the ability to assess group-based behavior throughout the youth's adolescence, as opposed to a snapshot of behavior in previously conducted cross-sectional analyses (Brennan et al., 1978; Dunford & Brennan, 1976; Zide & Cherry, 1992). This statistical method also allows for the researcher to identify seasonal patterns of runaway behavior within the sample, which has been suggested to occur in previous research and in practitioner statements (Hammer et al., 2002; Levine, 1952). Lastly, group-based trajectory modeling allows for the researcher to test the



gendered nature of runaway behavior by assessing differences between genders in their runaway frequency over time.

Hypotheses

Building upon previous research, this study aims to address the limitations of previous research by utilizing a large, longitudinal data set to examine the group-based trajectories of runaway youth from a gendered perspective. Furthermore, this study will also identify variables that predict group adherence based upon frequency of runaway events. Lastly, based on the risk amplification model, past research, and classical and feminist criminology perspectives, this study aims to identify gender-specific relationships between runaway risk factors and chronic runaway behavior. Specifically, the following hypotheses will guide this study.

 $\mathbf{H_{1a}}$: Distinct homogeneous groups of runaways, based upon frequency of runaway events, exist within the larger population of youth runaways.

Previous studies have statistically examined the grouping of runaways based upon environmental variables such as motivation for running, bonds with friends, school, and family, self-esteem, delinquency, and self-control (Brennan et al., 1978; Brennan; 1980, Dunford & Brennon; 1976; Zide & Cherry, 1992); however, examination of group adherence based upon frequency of running away had yet to be assessed prior to this study. The literature on runaway youth suggests that frequency of running away from caregivers shapes the risk for victimization, offending, and other negative outcomes for the youth (Courtney & Zinn, 2009; Tucker, Edelen, Ellickson, & Klein, 2011; Tyler & Bersani, 2008; Whitbeck & Simmons, 1993; Windle, 1988). For example, Windle (1988) found that as frequency of running away increases, deviance increases as well. This was also supported in Whitbeck and Simmon's (1993) study of



adolescents using shelter services in the Midwest. However, evidence of frequency of running away and increase in risk of offending, victimization, and psychological distress is limited (Bowden & Lambie, 2015; Courtney & Zinn, 2009; Tucker et al., 2011; Whibeck & Simmons, 1993). This hypothesis has the potential to assess the presence of distinct groups of runaways based upon frequency of runaway behavior and serves as a first step in assessment of chronic runaway behavior and risk.

H_{1b}: Distinct trajectories for runaways will vary by gender

Researchers have identified specific needs/risks based upon gender for runaway youth (Cauce et al., 2000; Chapple et al., 2004; Chesney-Lind, 1973; Finkelhor et al., 1990; Hammer et al., 2002; Hockenberry & Puzzanchera, 2017; Kaufman & Widom, 1999; Kempf-Leonard & Johansson, 2007; Tyler et al., 2001; Whitbeck & Simmons, 1993; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999). The use of separate, gender-based trajectories has the ability to isolate differences in runaway behavior based on the gender of the youth. If gender differences exist, this has the potential to address an aspect of runaway youth yet to be assessed. For example, although research has examined the differences in prevalence of runaway events based on gender (Hammer et al., 2002; Kempf-Leonard & Johansson, 2007; Hockenberry & Puzzanchera, 2017), exploration of the complexity of runaway behavior by gender has yet to be assessed. Furthermore, research suggests that female runaways may experience victimization and offending differently while under caregiver supervision and on the streets (Cauce et al., 2000; Finkelhor et al., 1990; Whitbeck & Hoyt, 1999), which has the potential to shape how often they run away from home. A gendered perspective to this topic has the capability to provide information for practitioners that may aid in how they interact with runaways based on gender.



H_{2a}: Known risk factors are associated with high frequency (chronic) runaway group adherence.

High frequency running from caregivers may increase a youth's propensity to commit crimes and experience victimization (Courtney & Zinn, 2009; Tucker et al., 2011; Tyler & Bersani, 2008; Whitbeck & Simmons, 1993; Windle, 1988). Previous research has examined outcomes and risks associated with being a repeat runaway (Courtney & Zinn, 2009; Tyler & Bersani, 2008; Windle, 1988) however, the risk factors for being a high frequency runaway has yet to be established empirically. Identification of variables that are related to chronic runaway experiences have the ability to aid in understanding the nature of running from caregivers. In addition, markers that suggest the potential for becoming a high frequency runner can help practitioners with early intervention, in order to prevent an increase in the frequency of running from home. Variables that may be related to high frequency running and will be assessed in this study include: a history of offending, early onset of running away, abuse in the home, having a history of out of home placement, psychological disorder/distress, substance use/abuse, family dysfunction, deviant peer association, and school problems. These factors, based upon previous literature, are the most salient factors associated with risk of running away from caregivers; however, their relationship with chronic runaway behavior has yet to be established.

 \mathbf{H}_{2b} : Risk factors that are associated with high frequency (chronic) group adherence will vary by gender

Considering the amount of data that suggest that runaways have different risk and needs based upon their gender (Cauce et al., 2000; Chapple et al., 2004; Chesney-Lind, 1973; Finkelhor et al., 1990; Hammer et al., 2002; Hockenberry & Puzzanchera, 2017; Kaufman &



Widom, 1999; Kempf-Leonard & Johansson, 2007; Tyler et al., 2001; Whitbeck & Simmons, 1993; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999), it is reasonable to assume that variables that are associated with chronic runaway group adherence may vary by gender as well. First, in order to assess this, the sample will be disaggregated by gender. Subsequently, the relationship between the variables outlined in H_{2a} and chronic runaway group adherence are assessed.



CHAPTER FOUR:

METHODOLOGY

This chapter serves as an overview of the data collection process, the sample characteristics, and the operationalization of the variables utilized to perform the statistical analyses. In addition, this section outlines the coding scheme and rationalizations for the use of each of the variables needed to address the hypotheses discussed in Chapter three. Lastly, the analytic strategy is delineated.

Data Sources and Sample

The data was obtained from two sources: Clearwater Police Department (CPD) and the Florida Department of Juvenile Justice (FDJJ). Clearwater, Florida is unique in that it is a moderately large metropolitan city (population approximately 100,000) known for its high rate of tourism due to access to beaches and recreational activities (U.S. Census Bureau, 2010). High rates of tourism, several public beaches, and the year round warm climate may lend to a more favorable context for youth who are running away from caregivers.

The sample of youth runaways, information regarding each runaway event throughout their adolescence, demographic characteristics for the sample, and factors related to running away were all obtained from CPD records. Next, the runaway youth's offending history, additional victimization experiences, mental health status, school status, peer bonds, family/parental problems, and alcohol and drug use were obtained via official and self-report



records from FDJJ. Data obtained from both sources were then linked to each youth runaway and merged to create one large data set encompassing variables related to non-delinquent and delinquent runaway youth.

The author worked in conjunction with a juvenile specialist at CPD over the course of three semesters in order to obtain the data. The juvenile specialist works exclusively and directly with all youth runaways (and their family members) that come into contact with CPD, either through running away from or being recovered in the city of Clearwater, Florida. Each time a youth runaway case or recovery occurs, the juvenile specialist creates a file on the youth, through which the sample of youth runaways was obtained. First, all runaway and runaway recovery cases in Clearwater, Florida that occurred in the 2012 calendar year were included in the data collection process. The year 2012 was purposively chosen, in order to obtain longitudinal panel data related to the runaway youth. Each case from 2012 was reviewed in conjunction with the juvenile specialist, which entailed running each name through the CPD record system. This allowed for the exclusion of cases that were recoveries and had never lived in the city of Clearwater during a runaway event or were incorrectly coded as runaways (i.e. truants). The sample does not include youth who identify as homeless. This resulted in a final sample size of 295 youth runaways.

Via CPD records, all runaway events for each youth in the final sample and the corresponding dates on which they occurred are included. In addition to frequency and corresponding dates, information regarding experiences during the runaway event(s) were also collected from CPD. Age at first runaway, living arrangements at first runaway, and participating in group runaway events were also collected. Furthermore, demographic information (race and gender) for the sample was obtained from their CPD records as well. Lastly, a history of reported



mental health problems, substance use/abuse, non-familial victimizations and gang membership were also collected via CPD resources.

Next, the sample of youth runaways obtained from CPD were then run through the FDJJ system to identify those had contact with FDJJ (e.g., referred for committing a crime). Approximately 60% of the sample were referred to FDJJ at some point during their adolescence (178 out of the 295 youth). When a youth commits a crime that is serious enough to enter the juvenile justice system in the state of Florida, they are given a risk/needs assessment called the Positive Achievement for Change Tool (PACT). The PACT, administered via face-to-face interview by a trained professional, covers 12 domains of the youth's life, ranging from abuse and offending history to school difficulties, family dynamics, substance use/abuse, mental health issues, and peer and community involvement. The PACT outlines a youth's risk and protective factors and generates an overall risk-level score for the youth. Self-reported offenses and victimizations are combined with official records from DJJ and the Department of Children and Families (DCF) to obtain an overall score for relevant variables. The PACT has been validated for use with juveniles (Schwalbe, 2007; Skeem, Scott, & Mulvey, 2014), and has demonstrated predictive validity (Baglivio & Jackowski, 2013; Baird et al., 2013; Winokur-Early, Hand, & Blankenship, 2012).

The following variables were obtained from the PACT and utilized in this study for youth with a history of offending: history in the foster care system, age at first offense, non-violent felonies and misdemeanors, crimes against persons, school difficulties, gang membership, mental health problems, family incarceration, parental problems, drug and alcohol use, histories of physical and sexual abuse, witnessing violence, neglect, and experiencing trauma. The next section outlines the operationalization of the variables according to this study's hypotheses.



Operationalization of Variables by Hypotheses

H_{1a}: Distinct homogeneous groups of runaways based upon frequency of runaway events exist within the larger population of youth runaways.

The purpose of this hypothesis is to identify if typologies of youth runaways can be derived based on frequency of runaway behavior. Previous studies have generated typologies of runaway youth; however, most do not use statistical methods of generate groups of runaways (English, 1973; Homer, 1973; Jones, 1988; Levy, 1972; Orten & Soll, 1980; Shellow, et al., 1967). This hypothesis builds upon previous typology/classification research by utilizing longitudinal data and advanced statistical methods to assess group adherence based on runaway frequency.

 H_{1a} assesses how the youth in the sample group together based upon their frequency of runaway behavior over time. In order to address H_{1a} , assessment of how frequent the youth experienced a runaway event at each time of assessment (monthly) is quantified so that youth exhibiting similar runaway behavior throughout the time period are grouped together. Runaway event frequency ranged from one incident to 66 incidents, extending over a 14 year period (2002-2016). The dependent variable for this hypothesis is *runaway frequency* (a count variable), as the youth may not have run away from caregivers in the previous month, or they ran away at least once in the previous month. In order to create a uniform time frame for assessment of the dependent variable, runaway behavior for 48 months 2012-2015 is assessed. This results in 48 data points for this hypothesis¹, or monthly assessments encompassing the years of 2012, 2013, 2014, and 2015.

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¹ Several analyses were conducted in order to obtain the optimal time based assessment of runaway behavior. The trajectory analyses were limited by sample size and the limited nature of adolescence, thus making yearly and quarterly assessments impossible. In order to account for this, monthly runaway behavior was assessed as the next

H_{1b}: Distinct trajectories for runaways will vary by gender

This hypothesis utilizes the feminist criminology theoretical perspective to assess the presence of gender-specific groups of runaway youth. If unique groups of runaways exist and vary based upon gender, this finding would support the need for a gendered theoretical perspective to the study of runaway youth. In order to address the potential gendered nature of the runaway trajectories, separate trajectory analyses were conducted for the female youth and male youth in the sample. The dependent variable remains the same (*runaway frequency*), as a count of the runaway incidents that occurred for each youth in the calendar year. The 48 time based data points (assessments at each month of the four year period) also remain the same.

H_{2a}: Known risk factors are associated with high frequency (chronic) runaway group adherence.

This hypothesis examines the relationship between known risk factors for running away and chronic runaway status. H_{2a} allows for the identification of significant relationships between risk factors and chronic runaway status, in order to identify what factors may be most salient in the lives of chronic runaway youth. For this hypothesis, empirically relevant variables that are related to the propensity to run away from caregivers are assessed as to their relationship with being a chronic runaway youth. Since there are two separate data sources, with some youth receiving the PACT assessment (delinquent youth) and some who did not, many variables only relate to those who experienced FDJJ intervention. In addition, youth with an offending history may have unique experiences and relationships, compared to non-offing youth (Becker, 1963; Bernberg et al., 2006; West & Farrington, 1977; Johnson et al., 2004; Mahoney, 1974).

optimal time frame. This method also allows for the identification of changes in behavior during seasonal periods, which has been supported in academic studies and highlighted in practitioner interviews (Hammer et al., 2002; Levine, 1952).



Approximately 60% (n= 178) of the sample that entered the FDJJ system and are included in this subsample. After accounting for missing data via listwise deletion (see Peugh & Enders, 2004), the offending subsample of runaway youth consists of 170 youth.

Full Sample (Non-Delinquent and Delinquent Youth) Variables

The dependent variable for the assessment of this hypothesis is *chronic runaway*, which is a dichotomous variable, where the youth could either be a chronic runaway or not. Chronic runaway is defined as running away from caregivers on at least six occasions. Previous research has not assessed chronic runaway behavior, but does consider repeat runaway status, which includes high frequency runaway youth and is defined as two or more runaway events (Baker et al., 2003; Thompson & Pillai, 2006; Windle, 1988). This study aims to identify the factors that relate not just to being a repeat runaway, but a high frequency (i.e. chronic) runaway, so further differentiation was needed. Since this is a novel assessment of chronic runaway behavior, reliance on the results of group-based trajectory modeling to identify both the presence and criteria associated with chronic runaway behavior was utilized².

After examination of the trajectory analyses, six runaway events was selected as the optimal operationalization for chronic runaway status. This means that a chronic runaway youth runs away from caregivers six or more times throughout the data collection period. This variable is dichotomized as "0" for not being a chronic runaway youth and "1" for being a chronic

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² In order to identify the actual reflection of chronic runaway behavior found in natural settings, the researcher relied on group-based trajectory modeling to identify the latent presence of chronic runaway behavior within the sample. Next, identification of the cutoff point of chronic runaway behavior was utilized to obtain the definition of this variable. In the event that trajectories were ineffective in generating the required definition, chronic runaway behavior was operationalized and tested in the following ways: above the mean of runaway behavior, one standard deviation above the mean, and top 25% of runaway behavior; however, these operationalizations were deemed unnecessary for this study. See the discussion for an in-depth review of the implications of this method.

runaway youth. Approximately 34% of the sample has run away from caregivers at least 6 or more times. The remaining variables are all independent variables.

CPD independent variables. All the variables utilized in the full sample analyses are presented in Table 2. Studies have found that youth may behave differently based upon gender and race (Bailey et al., 1990; Benoit-Bryan, 2011; McMorris et al., 2002; NLSY; Thrane et al., 2006); therefore, their relationship with chronic runaway group adherence is assessed in this study. *Gender* of the youth in this sample is a dichotomous variable, where female is "0" and male is "1." The sample is nearly equal on gender, with approximately 51% female youth runaways and 49% male youth runaways. Some research suggests that girls comprise the majority of runaway samples (Baker et al., 2003; Benoit-Bryan, 2011; Tyler & Bersani, 2008). Alternatively, other studies report equal rates of runaway behavior for boys and girls (Hockenberry & Puzzanchera, 2017; Thompson, Zittel-Palamara, & Maccio, 2004; Windle, 1988). This sample contain nearly equivalent groups of girls and boys, thus supporting equal rates of running away by gender. *Race* is coded as "0" for White (non-Hispanic) and "1" for non-White/minority³. Non-White includes African American (35%), Hispanic (10.5%), and Other (1%).

In addition, problems in the home, as well as psychological distress and offending are related to running away from caregivers (Cauce et al., 2000; Hammer et al., 2002; Kaufman & Widom, 1999; Tyler & Bersani, 2008; Yoder et al., 1998; Whitbeck, & Hoyt, 2001). Considering this relationship, several variables that capture family problems, delinquency, and psychological distress are included in this study. Being in the *foster care* system is a dichotomous variable where "0" represents no history of placement in the foster care system and "1" represents a

³ Sensitivity analyses were performed to assess differences between categorical and dichotomous coding of this variable, which resulted in a dichotomous coding scheme.

history of at least one foster care intervention. The majority of the sample has no history of foster care intervention (79%). Since the researcher did not have information regarding the family dynamics of the non-offending sample, foster care status serves as a proxy to measure family problems that resulted in DCF intervention and at least temporary removal from the home.

Table 2. Full Sample Descriptives (n=295)

Variable Name	Coding Scheme	F (%)	Range
Chronic Runaway	0: Less than 6 runaway events	196 (66)	1-66
	1: 6 or more runaway events	99 (43)	
Gender	0: Female	150 (51)	
	1: Male	145 (49)	
Race/Ethnicity	0: White	158 (54)	
	1: Black, Hispanic, or Other	137 (46)	
Foster Care	0: No	235 (79)	
	1: Yes	61 (21)	
Living Arrangement at	0: Home	233 (76)	
First Runaway	1: Residential facility or runaway shelter	72 (24)	
Psychological	0: No Baker Acts or reported mental illness	159 (54)	
Problems	1: At least 1 Baker Act or history of mental illness	136 (46)	
Gang Affiliation	0: Not a gang member or associate	261 (88)	
	1: A gang member or associate	35 (12)	
Age at First Runaway	Years	14.57 (1.90)	6-17
Ran Away with Others	0: No	244 (82)	
·	1: Yes	52 (18)	
Non-Familial	0: No reported history	217 (25)	
Victimization	1: At least one non-familial victimization	72 (75)	
Delinquency	0: No DJJ intervention	118 (40)	
	1: At least one referral to FDJJ	178 (60)	

A living arrangement at first runaway event variable is also included and coded dichotomously to reflect where the youth was residing at their initial officially recorded runaway event. This variable suggests potential problems in the home prior to the runaway event. In addition, previous studies have found that youth are more likely to be runaways if they do not reside with long term caregivers, such as being in temporary foster care or living with friends/other family members (Bowden & Lambie, 2015); therefore, this variable was included in this study to account for the potential relationship between residence and chronic runaway



status. For this variable, "0" denotes home as the first place the participant ran from, "1" refers to the first run occurring while the youth was residing at any other location, such as a residential facility (long term group runaway facility) or a temporary runaway shelter. Approximately 76% of the sample were residing at their permanent residence for their first official runaway experience.

Psychological problems is assessed in the CPD data by enactment of the Baker Act on the youth or reported mental health problems. An officer can employ the Baker Act⁴ on a youth when they exhibit strong psychological distress and/or suggest that they may be of harm to themselves or others (Florida Mental Health Act, 1971). This variable is dichotomous ("0" for no history of Baker Act enactment or reported mental health problems, "1" for at least one Baker Act or reported mental health problems) and approximately 46% of the sample have a history of experiencing involuntary confinement due to a Baker Act enactment or have a reported mental illness in their related case files.

In order to account for delinquent peer affiliation, a *gang member or affiliation* variable was obtained from CPD records. Youth are considered gang associates if they are found to spend time with known gang members, and/or admit to being a gang associate (Criminal Gang Prevention Act, 2008). Youth are defined as gang members if they meet two of the following criteria: admit to gang membership, is identified as one by a parent/guardian or reliable informant, dresses similar to that of a gang member, use gang related hand signals, has gang related tattoos, is observed in the company of gang members on at least four occasions, or has

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⁴ All officers employed in Pinellas County, Florida undergo Crisis Intervention Training (CIT), which trains officers on de-escalation tactics and best practices to successfully interact with mentally ill individuals. CIT aims to improve the treatment of mentally ill individuals and decrease arrests for individuals who need mental health treatment. This training, which is not mandatory in all police departments, may have an effect on the prevalence of Baker Acts within this sample.

committed an offense or activity while representing the gang (Criminal Gang Prevention Act, 2008). Sensitivity analyses were performed to assess the coding scheme for this variable (e.g. separating gang associate from gang member). Upon assessment, a dichotomous coding, where "0" denotes no official gang membership or association, and "1" refers to official classification as a gang member or associate was selected. The majority (88%) of the sample is not a gang member or associate according to official records.

Age at first runaway ranges from early childhood (six years old) and well into the youth's adolescence (17 years old). This variable is a frequency variable, with a range of 6 to 17. The average age at first runaway is 14 years old. Similar to youth offending perspectives, studies have found a relationship between early runaway behavior and increased risk for future negative life events, such as delinquency and substance use/abuse (Windle, 1988). For this reason, age at first runaway is included in the subsequent analyses. A novel application to the literature is the inclusion of a group runaway variable. Having a history of running away with others may suggest a reliance on, or strong bonds with, deviant peers. This variable is assessed in this study through group runaway behavior, or running away with at least one other person on at least one occasion. Run away with others is a dichotomous variable where "0" indicates no history of running away as a group or with another youth and "1" indicates at experiencing least one runaway event where multiple youth run from caregivers together. The majority of the sample are solitary runners (82%).

Since previous research supports the notion that delinquency and running from caregivers are closely tied together, a measure of delinquency is also included. *Delinquency*, is operationalized as committing a crime serious enough to enter the FDJJ system at least once.

This variable is dichotomized as "0" for no delinquency and "1" for committing at least one



offense that resulted in entrance into the FDJJ system. Over half of the sample (60%) are associated with committing at least one crime that resulted in their entering the FDJJ system. This is consistent with previous studies, as delinquency and violence in runaway samples range from 30%-97% (Biehal & Wade, 1999; Crawford et al., 2011; Tyler & Bersani, 2008).

Subsample: Delinquent Youth Only

The same dependent variable is utilized in this section of analyses as well. *Chronic runaway* is a defined in the same manner as previous delineated, where it is a dichotomous variable where "0" is not a chronic runaway youth and "1" is a high frequency/chronic runaway youth. Approximately 42% of the delinquent subsample ran away at least six times.

According to previous studies, demographic characteristics, runaway characteristics, psychological problems, delinquency, school troubles, abuse (physical and sexual), neglect, problems with parents, and substance use increase a youth's likelihood of running away from home (Cauce et al., 2000; Hammer et al., 2002; Kaufman & Widom, 1999; Thrane & Chen, 2010; Tyler & Bersani, 2008; Tyler et al., 2011; Yoder et al., 1998; Whitbeck, & Hoyt, 1999). In addition to the variables discussed below, the demographic, situational, and runaway experience variables outlined in the previous section are also included in this analysis. In order to prevent redundancy, the previously discussed independent variables that are operationalized the same as the full model are not included here. The associated prevalence for those variables in the delinquent subsample can be found in Table 3. To explore the relationship between empirically relevant risk factors and chronic runaway behavior, the following additional variables are included⁵: mental health problems, school problems, gang membership or affiliation, physical

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⁵ Access to additional information in the PACT resulted in a new operationalization of the mental health problems and gang membership or association variables.

abuse⁶, sexual abuse, neglect, parental problems (such as offending or substance use/abuse), drug and/or alcohol use, felony and misdemeanor convictions, and violent convictions. All of the variables related to the subsample of delinquent runaway youth are outlined in Table 3.

Table 3. Delinquent Youth Variable Descriptives (n=170)

Variable Name	Coding Scheme	F (%)	Range
Chronic Runaway	0: 14 or fewer runaway events	99 (58)	6-66
	1: 15 or more runaway events	71 (42)	
Gender	0: Female	72 (42)	
	1: Male	98 (58)	
Race/Ethnicity	0: White/non-Hispanic	89 (52)	
-	1: Black, Hispanic, Other	81 (48)	
Living Arrangement at First	0: Home	119 (70)	
Runaway	1: Other	61 (30)	
Age at First Runaway	Years	14.31 (1.85)	6-17
Ran Away with Others	0: No	138 (81)	
-	1: Yes	32 (19)	
Non-Familial Victimization	0: No	119 (72)	
	1: Yes	47 (28)	
Mental Health Problems	0: No	69 (41)	
	1: Yes	101 (59)	
Gang Member or Associate	0: Not a gang member or associate	138 (81)	
	1: A gang member or associate	32 (19)	
School Problems	0: None	91 (54)	
	1: At least one	79 (46)	
Substance Use/Abuse	0: No	120 (71)	
	1:Yes	50 (29)	
Abuse by a Caregiver(s)	0: No	108 (64)	
	1: Yes	62 (36)	
Neglect	0: No	98 (58)	
_	1: Yes	72 (42)	
Trauma	0: No	100 (59)	
	1: Yes	70 (41)	
Witnessing Violence	0: No	82 (48)	
_	1: Yes	88 (52)	
Caretaker Incarceration	0: None	99 (42)	
	1: One or both parents/caretakers	71 (58)	
Parental Problems	0: No	131 (77)	
	1: Yes	39 (23)	
Non-Violent Offenses	0: None or 1	51 (33)	
	1: Two	32 (19)	
	2: Three or more	81 (48)	
Violent Offenses	0: None	81 (48)	
	1: At least one violent offense	65 (38)	
	2: Two or more violent offenses	24 (14)	

⁶ Additional variables on familial abuse for the offending youth resulted in the inclusion of several abuse variables as well as the exclusion of the Foster variable from the full sample, as to negate redundancy.



Mental health problems, is operationalized as having a diagnosed mental illness, reported mental problems via CPD records, or having a Baker Act enacted upon the youth. Within the PACT is a variable that assesses the presence of a diagnosed mental illness. To account for this additional mental health variable, a new variable is created to capture the presence of a diagnosed mental health illness in addition to Backer Act history and reported mental health problems found in CPD records. This is a dichotomous variable where "0" is no history of a mental health problem or Baker Act and "1" is having a mental health problem or experiencing a Baker Act. Approximately 59% of delinquent youth have a diagnosed or reported mental health problem, or have experienced a Baker Act.

In regards to delinquent peers, a *gang affiliation* variable is created from both CPD official gang membership status and FDJJ self-reported gang membership or affiliation. Since FDJJ records allowed for youth to disclose gang membership, this variable includes CPD official status as a member or associate and self-disclosed membership from the PACT assessment. Gang member is a dichotomous variable where "0" refers to no self-report or official record of gang membership or association and "1" refers to self-reported or official record of gang membership or affiliation. Approximately 19% of the sample (32 youth) are gang members or affiliates according to self-reported status or CPD records. Again, assessment of the coding of the variable was conducted to ensure that the inclusion of gang associates and members as one variable did not alter the relationship between the independent variable and chronic runaway behavior.

School problems is a dichotomous variable where "0" denotes either good behavior or no school problems and "1" denotes school problems reported by teachers, calls made to parents, and actions that required calls to the police. Approximately 46% of the sample have school problems that resulted in calls made to police or parents or problems reported by teachers.



Lastly, *substance use* is operationalized as self-reported current alcohol or drug use and is a dichotomous variable where "0" denotes no current drug use and "1" is currently using drugs or alcohol. The majority of the subsample do not report current substance use, as only 29% of the sample report current substance or alcohol use.

Family dynamics variables. Since sexual abuse by a family member is reported in a very small portion of the sample, sexual and physical abuse by a caregiver are combined into one caregiver abuse variable. Caregiver physical abuse consists of self-reported and DCF documented physical abuse committed by a parent, family member, or caregiver in a foster or group home. This resulted in a dichotomous variable where "0" denotes no history of physical or sexual abuse by a caregiver or family member and "1" refers to at least one physical abuse or sexual abuse victimization by a caregiver, parent, or family member. The majority of the subsample (64%) do not report a history of caregiver abuse. *Neglect*, which refers to selfreported and/or DCF documented experiences of neglect by a caregiver or parent, is also a dichotomous variable coded as "0" for no neglect and "1" for experiencing neglect by a caregiver. Approximately 42% of the sample report a history of neglect. In addition, experiencing trauma is self-reported experience of trauma during one's youth that can also include the presence of flashbacks. This variable is dichotomous, as youth either reported no history of trauma "0," or a history of experiencing trauma "1". Similarly, 41% of the subsample report experiencing trauma. Witnessing violence in the home is also a self-reported variable, coded dichotomously to reflect "0" as not witnessing violence in the home and "1" referring to witnessing violence in the home. A slight majority (52%) of the subsample report witnessing violence in their home.



In addition to abuse, trauma, and neglect, other parental/familial variables are included. *Caretaker incarceration* refers to a history of having either one or both parents/caretakers incarcerated (jail or prison) at some point in the youth's adolescence. This variable suggests troubles in the home, as well as a weakening of the parental bond, as one or both of the parents has spent time out of the home and incapacitated. This variable is dichotomous, where "0" refers to no history of a parent/caretaker experiencing incarceration, "1" refers to having a history of at least one parent/caretaker incarcerated. Of this subset, 58% report a history of parents/caretakers in jail/prison at some point during their adolescence. *Parental problems* consists of the youth's perception of their parent(s) having a problem with alcohol, drugs, or a mental health problem. Parental problems is also a dichotomous variable, where "0" refers to no reported parental psychological or substance use problems and "1" stands for a reported parental mental health or substance use problem. Approximately 23% of the sample have parents/caretakers who have substance abuse, alcohol, or mental health problems.

Offending variables. In order to identify the potential relationship between delinquency and chronic runaway behavior, two variables are assessed. All delinquency variables include offenses that result in diversion, adjudication, adjudication withheld, deferred prosecution, or referrals to adult court. First, *non-violent offenses* refers to both misdemeanors and felonies that were not committed against an individual (non-violent). For example, this includes crimes such as loitering or shoplifting (misdemeanors) and burglary, drug possession, and grand theft (felonies). This offense variable is a categorical in nature with "0" referring to zero or one misdemeanors or felonies, "1" for two misdemeanors or felonies, and "2" for three or more non-

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⁷ The PACT assessment codes non-violet misdemeanor offenses in a less than optimal method of "0" as none or one non-violent misdemeanor. Considering this coding scheme, the operationalization of this variable reflects the 0 or 1 offense combination.

violent misdemeanors or felonies. Approximately 33% of delinquent youth have none or one misdemeanor, 19% have two non-violent misdemeanors or felonies, and 48% have three or more non-violent misdemeanors or felonies. Next, *violent offenses* are against-person referrals for both misdemeanor and felonies that involve crimes perpetrated against a person, including offenses such as: sexual assault, indecent exposure, harassment, and aggravated assault or battery. The violent offenses variable is coded as a categorical variable where "0" denotes no against person referrals, "1" refers to at least one against-person referral, and "2" refers to two or more violent offenses. Approximately 47% of the sample do not have a history of violent offenses, 39% have at least one, and 14% have two or more violent misdemeanors or felonies in their history.

H_{2b}: Risk factors that are associated with high frequency group adherence will vary by gender

Similar to H_{1b} , this hypothesis tests the utility of a feminist criminology theoretical perspective with the study of runaway youth. Previous studies have examined relationships between risk factors and runaway status in gender exclusive samples (Tyler et al., 2001; Whitbeck et al., 1999; Whitbeck & Hoyt, 1999); however, the direct application of a gender-based theoretical perspective has yet to be applied to runaway youth. To address this limitation, unique gender-specific relationships between risk factors and chronic runaway status is examined. In order to assess this hypothesis, this sample is stratified by gender and analyses are performed for each group. The independent and dependent variables remain the same as H_{2a} . The relationship between gender and the independent variables is assessed in order to determine if gender uniquely affects the association between the risk factors and chronic runaway status. Statistically significant relationships between variables that are inconsistent across genders



suggest that certain independent variables have a stronger relationship with chronic runaway behavior for boys or girls. See Tables 4 and 5 below, which describe the independent variables related to the gender disaggregated models as well as bivariate comparisons between genders.

Table 4. Full Sample: Independent Variables by Gender

Variable Name	Femal (n=15	_	Male (n=14:	Bivariate Results	
	F (%)	F (%) Range I		Range	t / χ ²
Chronic Runaway	57 (38)	1-52	42 (29)	1-66	2.699
White	73 (49)		85 (59)		2.937†
Foster Care	36 (24)		25 (17)		2.053
First Run from Home	110 (74)		112 (77)		0.464
Psychological Problems	68 (45)		68 (47)		0.073
Gang Member or Associate	5 (3)		30 (21)		21.240**
Age at First Runaway	14.64 (1.78)	7-17	14.48 (2.01)	6-17	0.712
Ran Away with Others	28 (19)		23 (16)		0.406
Non-Familial Victimization	49 (33)		23 (16)		11.338**
Delinquency	76 (51)		102 (70)		11.930**

[†]p < .10; *p < .05; **p<.01

 Table 5. Delinquent Youth Only: Independent Variables by Gender

Variable Name	Femal (n=72	-	Male (n=98	Bivariate Results	
	F (%)	Range	F (%)	Range	t/χ^2
Chronic Runaway	39 (54)	1-52	32 (33)	1-66	7.898**
White	33 (46)		56 (57)		2.128
First Run from Home	47 (65)		72 (73)		1.326
Age at First Runaway	14.26 (1.81)	7-17	14.34 (1.89)	6-17	-0.253
Group Runaway	17 (24)		15 (15)		1.874
Non-Familial Victimization	28 (39)		19 (20)		7.563**
Mental Health Problems	46 (64)		55 (56)		1.038
Gang Affiliate or Member	4 (6)		28 (29)		14.389**
School Problems	25 (36)		42 (41)		8.320*
Substance Use/Abuse	19 (26)		31 (32)		0.550
Abuse by Caregiver(s)	36 (50)		26 (27)		9.867**
Neglect	27 (38)		45 (46)		1.205
Trauma	30 (42)		40 (41)		0.012
Witnessing Violence	39 (54)		49 (50)		0.289
Caretaker Incarceration	43 (60)		56 (57)		0.114
Parental Problems	15 (21)		24 (24)		0.314
Three or More Non-Violent Offenses	23 (34)		58 (59)		-3.058**
Three or More Violent Offenses	13 (18)		11 (11)		0.683

[†]p < .10; *p < .05; **p<.01



Analytic Strategy

This section overviews the analytic strategy for this dissertation and is organized around each hypothesis described in Chapter four. The chosen statistical method undertaken to assess the presence of latent strata within the full sample and the gender exclusive subsamples is described. Subsequently, the data analysis method utilized to evaluate relationships between the risk factors and chronic runaway behavior is reviewed.

Group-Based Trajectory Modeling

First, H_{1a} and H_{1b} refer to the assessment of the presence of distinct homogeneous groups of runaways, based on frequency of runaway behavior. In addition, since runaway behavior often varies according to a youth's gender (Tyler et al., 2001; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999), separate gender-based trajectories are conducted. The goal of this assessment is to identify distinct latent strata within a larger sample of youth, based on their associated runaway behavior over time. In addition to identification of latent strata, this analysis is used to identify the criteria, or cut-off point, for chronic runaway behavior, which is used as the dependent variable in subsequent analyses.

In order to test the presence of distinct groups, semi-parametric group-based modeling is utilized. Group-based trajectory modeling assesses the ways in which an outcome varies over time (Jones & Nagin, 2012; Nagin, 1999; Nagin & Tremblay, 2001; Nagin, 2005). Group-based modeling assumes that homogenous groups with distinct trajectories exist within a population, but are unobserved at the individual level (Land, McCall, & Nagin, 1996; Nagin & Land, 1993; Nagin & Tremblay, 2001). This method, based on mixture modeling, can identify the shape and trajectory of each distinct group within a population of interest (Nagin & Tremblay, 2001). This



statistical method has been utilized to successfully assess group behavior based upon adult and adolescent offending and victimization experiences (Higgins, Jennings, Tewksbury, & Gibson, 2009; Jones & Nagin, 2007; Nagin, 1999; Tewksbury & Jennings, 2010). However, the application of group-based trajectories has yet to be applied to runaway samples. Semi-parametric group-based modeling has the ability to identify distinct groups of runaways, based upon frequency of runaway behavior, within the sample of runaway youth. The gendered nature of runaway behavior will also be assessed with this method via gender-exclusive modeling.

Considering the count based dependent variable (runaway frequency), a zero-inflated Poisson method is appropriate. In order to ensure consistent time periods to observe the variations in runaway frequency, a 48 month time period (2012-2015) of assessment of runaway behavior is selected for the cohort of runaway youth. In order to perform these evaluations, STATA 13 is employed for the above stated analyses, as well as the analyses described below.

Chronic Runaway Logistic Regressions

Full sample analyses. Next, H_{2a} and H_{2b} encompass assessing the risk factors that are related to chronic runaway status. Analyses are performed with both the full sample and the delinquent only sample. The full sample analyses utilize the chronic runaway status as the dependent variable, which is operationalized based upon the results of the trajectory analyses where youth with six or more runaways are considered chronic runaways. Since this dependent variable is dichotomous, (chronic runaway status or not), logistic regression is appropriate. The independent variables for the full sample consist of the CPD variables outlined in the previous section. Next, the full sample is disaggregated by gender and separate logistic regressions are



performed for each gender, in order to identify relationships that are unique or more salient to male and female runaway youth.

Delinquent-exclusive analyses. Prior to evaluating chronic runaway status in the delinquent only youth, it is first necessary to identify potential differences between the non-offending and offending youth through the use of logistic regression. For this analysis, the dependent variable is delinquency status (dichotomous) and the independent variables are those obtained from CPD. Results indicating significant differences between the offending and non-offending youth suggest the need for additional gender-exclusive analyses. In addition, the delinquent youth are associated with access to additional risk factors, which provide the ability to further explore factors related to chronic runaway status.

For this delinquent only group, the same dependent variable (chronic runaway status) is utilized, along with variables obtained from CPD and FDJJ. Again, separate gender specific logistic regressions are performed on the offending youth sample, in order to assess potential gender differences in chronic runaway behavior for the male offenders and female offenders. Lastly, in order to assess whether or not the risk factors differ for boys or girls, equality of coefficients will be assessed for all statistically significant variables across genders. Assessing equality of coefficients allows for the researcher to identify the interactive effects of gender and the independent variables of interest (Paternoster, Brame, Mazerolle, & Piquero, 1998) while also highlighting which variables are most salient for male and female chronic runaway behavior.



CHAPTER FIVE:

RESULTS

This chapter overviews the results of this study in accordance with the previously described hypotheses. First, results of group-based trajectory modeling are presented, and presence of latent groups of runaways are discussed. The results of the gender specific trajectories are also reviewed and support for H_{1a} and H_{1b} is outlined. Next, variables related to trajectory group adherence are delineated. Moving to H_{2a} and H_{2b}, a review of the differences between the delinquent and non-delinquent sample is provided. The ensuing results of separate delinquent and non-delinquent analyses are reviewed, with special attention paid to significant relationships and gender differences. Further exploration of gender differences results in an assessment of the findings related to equality of coefficients analyses.

Group-Based Trajectory Modeling

First, H_{1a} (distinct homogeneous groups of runaways based upon frequency of runaway events exist within the larger population of youth runaways) is assessed via semi-parametric group-based trajectory modeling. Since the data consist of a count based runaway frequency variable, along with an excess of zeros, a zero-inflated Poisson model is utilized. Initially, the full sample, including both genders, is assessed as to group adherence based upon runaway frequency. The optimal group selection for this model is assessed based upon the Bayesian Information Criteria (BIC) and posterior probabilities, in order to identify the best model fit (Jones & Nagin, 2007). Next, assessments of linear, quadratic, and cubic forms were conducted.



Results, based upon the above stated criteria, indicated that a two-group linear model for the full sample fit the data best. In addition, posterior probabilities, presented in the table below, were assessed to ensure high probabilities of group membership. Posterior probabilities indicate appropriate group membership for the individuals in the sample (Jones & Nagin, 2007). For example, the mean posterior probabilities in Table 6 highlight that on average, the members of Group 1 in the full model are highly similar in runaway behavior to fellow Group 1 members, and very dissimilar in runaway behavior to members in Group 2.

Table 6. Mean Posterior Probabilities for Group Assignment

Trajectory Group	G1	G2
Full (n=295)		
G1: (81.58%)	0.979(.06)	0.021(.06)
G2: (18.42%)	0.052(.11)	0.948(.11)
Girls (n=150)		
G1: (78.53%)	0.979(.07)	0.021(.07)
G2: (21.47%)	0.042(.11)	0.958(.11)
Boys (n=145)		
G1: (97.93%)	0.994(.00)	0.014(.00)
G2: (2.07%)	0.013(.00)	0.993(.00)

Results indicate the presence of two latent groups of runaway youth, based upon frequency of runaway behavior. Group 1, comprises nearly 82% of the sample and reflects a relatively consistent low level of runaway behavior over the 48 month period. Next, Group 2 represents a much smaller percentage of the sample (approximately 18%) of youth who run away from caregivers at a consistently higher rate than Group 1, and are labeled the chronic runaway group. Interestingly, although base-level frequency of running away is different, both groups experience an increase in runaway frequency during the fall to early winter months (roughly



September through December). This suggests that although frequency of runaway behavior varies between groups, similar seasonal patterns are exhibited (see Figure 1). Another interesting aspect to this trajectory analysis is that both groups exhibit a declining trend in runaway behavior over time, suggesting that as time passes, runaway behavior decreases, no matter the type of runaway.

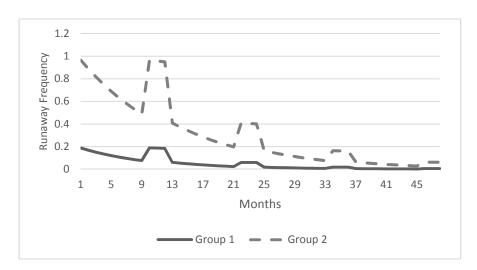


Figure 1. Trajectories of Youth Runaway Behavior (n=295)

Next, in order to test H_{1b} and the theoretical perspective that female and male youth runaways exhibit unique runaway behavior, single gender group-based models were tested. For female youth, results of both BIC and posterior probability assessments indicate a two group linear model (see Table 6 for posterior probabilities of female youth trajectories). The exclusive female youth trajectory modeling greatly resembles that of the full model (see Figure 2). Both models highlight two latent strata, a low frequency runaway group (Group 1) and a chronic runaway group (Group 2). Similar seasonal increases in runaway behavior are also seen in this female youth exclusive model. It is worth noting that the girls-only model reports a larger



percentage of youth in the higher runaway frequency group, with Group 2 comprising approximately 21% of the girls-only analysis and only 18% of the sample in the full model.

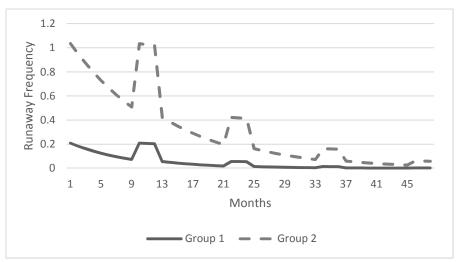


Figure 2. Female Youth Trajectories of Runaway Behavior (n=150)

Lastly, an exclusively male youth analysis is conducted to assess the presence of latent groups within a boys-only sample, while also identifying gender based differences. Table 6 again reflects a two-group linear trajectory model, with low level and chronic runaway groups. First, before discussing the results, it is necessary to note that the chronic group in this model reflects only 2.07% of the sample, which means that very few male youth comprise this group. As seen in Figure 3, the trajectories for the exclusively male sample are starkly different than the full and female youth only models. Group 1 is associated with relatively stable runaway behavior over the 48 months, with almost no seasonal increase. Next, the Group 2 trajectory shows an increase in runaway behavior over time, at a much higher rate than the other models. In addition, a reverse (declining) runaway behavior is seen during fall/early winter for each year, suggesting a very different behavioral pattern for Group 2 chronic runaway boys. Furthermore, although the trajectory of Group 1 resembles that of Group 1 for the full and female youth models, the



seasonal effect is much weaker for the male only model. These results suggest uniquely different groups and trajectories of runaway behavior for female youth and male youth.

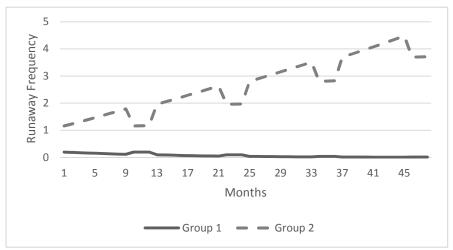


Figure 3. Male Youth Trajectories of Runaway Behavior (n=145)

Next, a logistic regression is performed to assess the relationship between the factors obtained from CPD records and trajectory group adherence⁸. For this analysis, the relationship between trajectory group adherence and the following independent variables were included: gender, race, foster care history, psychological problems, age at first runaway, a history of running away with others, location at first runaway, gang member or gang associate status, non-familial victimizations, and delinquency status. The results of the analysis are presented below in Table 7.

Results indicate significant relationships between trajectory group adherence and several independent variables. Interestingly, there is no significant difference between genders for group adherence. This could be because there is little variation in the male-exclusive sample. Foster

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⁸ Both of the chronic groups for the gender exclusive models were associated with small percentages of the total sample, thus restricting the author's ability to perform statistical analyses with the gender exclusive models. Considering this, analysis for this section include only the full model.

care status (β =2.674, p=.001) increases the odds of being a chronic runaway by a factor of 14.50. Next, as age at first runaway increases, youth are significantly less likely to be in the chronic runaway group (β =-0.332, p=.001). Having a history of running away with others is significantly associated with chronic runaway adherence (β =1.055, p=.02), where youth with a history of running away with others are 187% more likely to be in the chronic runaway group. Lastly, youth who have experienced non-familial victimization are 134% more likely than their counterparts to be in the chronic runaway group (β =.85, p=.04). This finding is consistent with previous literature, in that victimization rates are higher in repeat runaway samples, compared to one-time runners. All other relationships are non-significant.

Table 7. Distinct Trajectory Groups on Risk Factors (n=295)

Variables	β	se	exp(β)
Female	-0.285	(.43)	0.752
White	-0.156	(.41)	0.855
Foster	2.674**	(.60)	14.494
Living Arrangement at First Run	-0.777	(.62)	0.460
Psychological Problems	0.470	(.42)	1.600
Gang Member or Associate	0.021	(.62)	1.021
Age at First Runaway	-0.332**	(.10)	0.718
Ran Away with Others	1.055*	(.46)	2.872
Non-Familial Victimization	0.850*	(.42)	2.339
Offender Status	0.233	(.47)	1.262
Model Diagnostics			
$x^2 =$	78.260		
-2 Log Likelihood=	-93.801		
Nagelkerke R ² =	0.294		

†p < .10; *p < .05; **p<.01

Trajectory group adherence is based not just on frequency of runaway behavior over time, but also on how the youth in the sample behave in comparison to each other. Since this criteria of similarities and differences is only relevant to this particular sample, additional steps are taken to assess chronic runaway behavior that is applicable to other samples. Furthermore,



the methodological steps to generate data capable of group-based trajectory modeling is often difficult to obtain; therefore, creation of a chronic runaway variable that is not sample dependent can greatly enhance utility for practitioners. In order to achieve this goal, group-based trajectory modeling is used to identify the cutoff point for chronic runaway status, which is determined to be six runaway events. This operationalization of chronic runaway behavior is utilized in subsequent analyses dedicated to the assessment of relationships between chronic runaway status and relevant runaway risk factors. However, before additional models and gender disaggregation can occur, it is first necessary to test for differences between the delinquent and non-delinquent youth within the sample. These analyses are reviewed below.

Delinquent Youth Compared to Non-Delinquent Youth

Next, in order to assess the relationship between empirically relevant risk factors and chronic runaway status, differences between the non-offending and offending groups are addressed first. In order to accomplish this goal, a logistic regression is performed. For this analysis, the dependent variable is the presence of a history of offending/FDJJ intervention and the independent variables remain the same as the previous analysis, with the addition of chronic runaway status. As seen in Table 8, being female increases a youth's odds of having an offending history by a factor of 2.378 (β =0.866, p=.005). Chronic runaway status shows trending significance, in that youth who have ran away from caregivers are 88.5% more likely to have an offending history (β =.634, p=.073). Next, youth with histories of psychological problems are 238% more likely to have an offending history (β =1.219, p=.001). Lastly, being a gang member or associate is associated with an increase in the odds of being an offender by a factor of 15.553 (β =2.744, p=.010). These results indicate unique relationships with the independent variables and



chronic runaway status for youth with offending histories, thus supporting additional delinquentexclusive analyses.

Table 8. Offender Status on Runaway Risk Factors (n=295)

Variables	β	se	exp(β)
Female	0.866**	(.31)	2.378
Chronic Runaway	0.634†	(.35)	1.885
White	0.146	(.30)	1.157
Foster Care	0.378	(.54)	1.460
Living Arrangement at First Run	0.792	(.52)	2.208
Psychological Problems	1.219**	(.30)	3.383
Gang Member or Associate	2.744**	(1.06)	15.553
Age at First Runaway	-0.059	(.09)	0.942
Ran Away with Others	-0.313	(.43)	0.731
Non-Familial Victimization	0.394	(.35)	1.483
Model Diagnostics			
$x^2 =$	81.330		
-2 Log Likelihood=	-152.656		
Nagelkerke R ² =	0.210		

[†]p < .10; *p < .05; **p<.01

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Chronic Runaway Behavior and Risk Factors of Running Away

This next section serves as a test of hypotheses H_{2a} and H_{2b} , which assess the variables related to chronic runaway status. First, a logistic regression is performed with the full data set, with results described in Table 9. Variables that are significantly related to chronic runaway status are delineated in detail below. First, youth with a history of being in foster care are 305% more likely to be chronic runaways (β =1.398, p=.001). Since this variable serves as a proxy for familial dysfunction and/or abuse/neglect, this finding supports previous research that finds a relationship between running away and abuse/neglect in the home (Thompson & Pillai, 2006; Windle, 1988). Furthermore, this finding supports the work of Thompson & Pillai (2006) that finds a relationship between foster care history and running away from caregivers. Next, for every one-year increase in age of first runaway, youth are at decreased odds of being a chronic runaway by a factor of 0.657 (β = -0.436, p=.001). This suggests that youth who begin their

runaway behavior later in adolescence are at decreased odds of being a chronic runaway. Being victimized by someone outside of the family unit also increases a youth's odds of being a chronic runaway (β =0.818, p=.014), compared to youth without a reported extra-familial victimization history. Lastly, youth who have a criminal record are 101% more likely to be chronic runaways (β =0.697, p=.047). This finding supports previous studies that find significant relationships between being a runaway and offending behavior (Tyler & Bersani, 2008; Windle, 1988).

Next, in order to assess unique gender-specific relationships between the outlined independent variables and chronic runaway status, separate analyses were performed for the male and female youth in the sample. Similar to the full model, results indicate that a history of being in foster care increases the odds of being a chronic runaway for both male and female youth. However, the relationship between foster care history and chronic runaway status has a stronger effect on male youth (β =1.850, p<.029), compared to female youth (β =1.268, p<.066), but is not significantly different upon equality of coefficient assessment⁹ (z=0.532). Similarly, both female youth (β = -0.532, p=.001) and male youth (β = -0.346, p=.003) who run away from caregivers later in their adolescence are significantly less likely to be chronic runaways, compared to those who begin their runaway behavior earlier in adolescence. Additional assessment determined that the relationship between chronic runaway status and age a first runaway is not significantly different for the genders (z= -0.9682).

Female youth with psychological problems are 159% more likely to be chronic runaways (β =0.950, p=.049); however, this relationship is not significant for male runaway youth.

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⁹ Equality of coefficient computations were conducted according to Paternoster and colleagues' (1998) method. This resulted in the utilization of the following formula: $Z=(\beta_1-\beta_1)/\sqrt{(se_1^2)+(se_2^2)}$.

Table 9. Chronic Runaway Status on Runaway Risk Factors

Variables	Full (n=295)			Female (n=150)			Male (n=145)			Equality of Coefficients
, W. 140.225	β	se	<i>exp</i> (β)	β	se	<i>exp</i> (β)	β	se	<i>exp</i> (β)	Z
Female	-0.487	(.33)	0.615							
White	-0.041	(.32)	0.960	-0.307	(.44)	0.736	0.233	(.50)	1.263	
Foster	1.398**	(.50)	4.048	1.268†	(.69)	3.553	1.850*	(.85)	6.358	0.532
Living Arrangement at First Run	-0.246	(.50)	0.782	0.526	(.68)	1.692	-1.05	(.85)	0.351	
Psychological Problems	0.522	(.32)	1.686	0.950*	(.48)	2.585	0.246	(.46)	1.278	
Gang Member or Associate	0.150	(.48)	1.169	0.765	(1.24)	2.148	-0.130	(.60)	0.878	
Age at First Runaway	-0.436**	(.09)	0.657	-0.532**	(.15)	0.587	-0.364**	(.12)	0.695	-0.968
Ran Away with Others	0.601	(.41)	1.824	0.323	(.59)	1.382	0.999	(.62)	2.691	
Non-Familial Victimization	0.818*	(.33)	2.267	0.696	(.45)	2.007	0.860	(.53)	2.354	
Offending History	0.697*	(.35)	2.007	0.721	(.47)	2.056	0.522	(.54)	1.685	
Model Diagnostics										
$x^2 =$	84.820			58.930			30.670			
-2 Log Likelihood=	-140.907			-67.251			-70.009			
Nagelkerke R ² =	0.231			0.305			0.180			

[†]p < .10; *p < .05; **p<.01



This finding is in conjunction with previous literature that reports increased likelihood and expression of psychological distress/disorder in female runaways (Whitbeck & Hoyt, 1999; Whitbeck et al., 1999). Results suggest unique gender-based relationships between several risk factors and chronic runaway status. In addition, both genders also show similar relationships for many variables, suggesting both gender symmetry and disparity, depending on the risk factor at hand.

Next, the assessment of the factors related to chronic runaway behavior in a sample of exclusively offending youth is performed. Since previously outlined results indicate that certain risk factors are more salient for youth with offending histories, an additional offender exclusive analysis is necessary. This section will test the relationship between being a chronic runaway and several risk factors obtained from both CPD records and FDJJ. Remaining consistent with the gender based theoretical perspective, separate gender exclusive analyses are performed. Results of these analyses can be found in Table 10.

First, in the offending youth model including both genders, several variables are significantly related to chronic runaway status. Female youth offenders are 65% less likely to be chronic runaways than male youth offenders (β = -1.042, p=.022). Next, as age at first runaway increases, the odds of being a chronic runaway decreases by a factor of 0.688 (β = -0.404, p=.002). Alternatively, experiencing non-familial abuse greatly increases a delinquent youth's odds of being a chronic runaway, in that victimized youth are 294% more likely to be a chronic runaway (1.375, p=.002).

When examined with gender-exclusive models, age at first runaway remains consistent for both genders. Specifically, as age at first runaway increases, the odds of being a chronic



runaway decreases by a factor of 0.401 for girls (β = -0.914, p=.009) and 0.739 for boys (β = -0.303, p=.049).



Table 10. Chronic Runaway Status on Runaway Risk Factors with Youth Offenders

Variables	Full (n=170)			Female (n=72)			Male (n=98)			Equality of Coefficients
	β	se	exp(β)	$\overrightarrow{\beta}$	se	exp(β)	$\overrightarrow{\beta}$	se	exp(β)	Z
Female	-1.042*	(.45)	0.349							
White	-0.012	(.44)	0.988	-0.160	(.74)	0.852	0.067	(.69)	1.070	
Living Arrangement	0.607	(.48)	1.834	2.450*	(.99)	11.592	-0.081	(.75)	0.922	
Gang Member or Associate	0.303	(.55)	1.354	0.706	(1.63)	2.026	0.237	(.16)	1.267	
Age at First Runaway	-0.404**	(.13)	0.668	-0.914**	(.33)	0.401	-0.303*	(.84)	0.739	-0.677
Ran Away with Others	0.256	(.55)	1.291	-0.270	(.99)	0.763	0.102	(.73)	1.108	
Substance Use	-0.013	(.48)	0.987	-0.242	(.94)	0.785	-0.612	(.59)	0.542	
Mental Health Problems	0.288	(.42)	1.333	0.641	(.77)	1.898	0.383	(.36)	1.467	
School Problems	0.288	(.25)	1.334	-0.786	(.51)	0.456	0.656†	(.71)	1.926	
Parental Problems	0.785	(.25)	2.193	1.599†	(.60)	4.947	0.549	(.66)	1.731	
Parents Incarcerated	-0.146	(.44)	0.864	-1.339*	(.94)	0.262	1.219†	(.76)	1.919	-2.116*
Caregiver Abuse	0.081	(.48)	1.085	1.647†	(.91)	5.189	-1.182	(.65)	0.307	
Non-Familial Abuse	1.375**	(.46)	3.937	0.831	(.79)	2.296	1.378†	(.60)	3.968	
Neglect	0.375	(.44)	1.454	0.942	(.81)	2.564	0.158	(.74)	1.172	
Trauma	0.069	(.43)	1.071	-0.202	(.83)	0.817	-0.050	(.60)	0.952	
Witnessing Violence	-0.390	(.50)	0.677	-0.913	(.92)	0.401	-0.175	(.74)	0.840	
Non-Violent Offending	0.259	(.27)	1.296	0.913*	(.52)	3.282	-0.029	(.38)	1.030	
Violent Offending	-0.033	(.34)	0.968	-0.871	(.61)	0.419	0.770	(.55)	2.160	
Model Diagnostics										
$\chi^2 =$	45.280			37.910			24.310			
-2 Log Likelihood=	-90.049			- 30.084			-48.571			
Nagelkerke R2=	0.201			0.372			0.190			

[†]p<.10; *p<.05; **p<.01



Again, an equality of coefficients assessment did not find significant differences between the strength of the relationship for these variables by gender (z= -0.677). Although results are similar, it is worth noting that the relationship between age and chronic runaway status is stronger for female youth offenders than male youth. Unique to female youth offenders is the relationship between location of first runaway and chronic runaway status. Female offenders who did not reside in the family home when they first ran away are at increased odds of being a chronic runaway by a factor of 11.59 (β =2.450, p=.012).

Also unique to delinquent girls is that of parental problems, in that girls who report having a parent who struggles with mental health or substance abuse problems are 395% more likely to be chronic runaways (β =1.599, p=.078); however, it is important to note that this relationship shows only trending significance. Parental incarceration also shapes a female offender's odds of being a chronic runaway, where a history of parental incarceration decreases a youth's likelihood of being a chronic runaway by a factor of 0.262 (β =-1.339, p=.045). Lastly, the relationship between chronic runaway status and non-violent offenses is significant for female offending youth (β =.99, p=.029), where a one unit increase in non-violent offenses is associated with an increase in the odds of being a chronic runaway by a factor of 3.282.

There are also several relationships unique to male youth offenders. First, male youth reporting school problems are 92.6% more likely to be chronic runaways (β =0.656, p=.042). Interestingly, the inverse relationship between parental incarceration and runaway behavior is found for male youth offenders. Having an incarcerated parent shows trending significance for chronic runaway status for male offenders, where the odds of being a chronic runaway increase by 91.9% when the youth's parent(s) have a history of incarceration (β =1.219, p=.09). Equality of coefficient analysis reveals statistically significant differences between the coefficients related



to incarcerated parents and chronic runaway status for the male and female delinquent youth models (z= -2.116). This finding highlights the unique effects of incarcerated parents on male and female delinquent runaways. Lastly, male youth offenders who have experienced non-familial victimization are 297% more likely to be chronic runaways (β =1.378, p=0.054), which shows trending statistical significance. Results of the gender specific analyses for the offending youth support the notion of gender-based theoretical perspectives and support the proposed hypotheses.

This chapter presented the results of group-based trajectory modeling and logistic regressions in order to test the previously discussed hypotheses. Overall, results lend support for H_{1a}, where the presence of distinct groups of youth based upon frequency of runaway behavior is found within the sample. In addition, H_{1b} is also supported, as groups of youth are found in the gender-exclusive models, with varied runaway behavioral patterns over time. In regards to H_{2a}, results indicate significant relationships between several risk factors and chronic runaway status, thus supporting this hypothesis. H_{2b} refers to unique gender-based relationships between independent variables and chronic runaway status. Results indicate partial support for this hypothesis, where differences between genders are most prominent for within gender models, as opposed to across gender models. When significant relationships exist for both genders, these relationships are typically similar in nature. However, unique relationships between variables and chronic runaway status are found for girls and boys, indicating gender-specific associations. The next chapter discusses the results and their application to the hypotheses and theoretical perspectives in detail.



CHAPTER SIX:

DISCUSSION

The primary purpose of this study was to examine chronic runaway behavior by exploring several facets of the youth runaway experience. This endeavor included identification of distinct groups of runaway youth based upon runaway frequency, the examination of risk factors related to chronic runaway behavior, and the application of a feminist criminology perspective throughout. In order to achieve these goals, group-based trajectory modeling was implemented on a sample of youth runaways from the state of Florida. Next, relying on previous research, the risk amplification model, and classical and feminist criminology theoretical perspectives, a series of logistic regressions were performed to identify how known runaway risk factors are related to chronic runaway status. Runaways are a profoundly at-risk population of youth (Thrane et al., 1999; Whitbeck & Simmons, 1993; Whitbeck et al., 1999; Whitbeck & Hoyt, 1999), and repetitive running from caregivers may further exacerbate these known risks. This study aimed to be a first step into the exploration of chronic runaway behavior and related risks for this subpopulation. Overall results supported all of the hypotheses outlined in the previous chapters. This section serves as an overview of the findings related to each of the previously outlined hypotheses, theoretical implications, limitations, policy implications, and suggestions for future researchers.



Summary of Results

This study tested several hypotheses related to the youth runaway experience. First, it was proposed that distinct subgroups of runaway youth exist within a larger sample of youth, when frequency of runaway behavior was examined over time. Next, utilizing a feminist criminology perspective as well as prior research (including traditional criminology theories and the risk amplification model), it was proposed that female youth and male youth would be associated with varied runaway behavioral patterns over time. The subsequent hypotheses centered on assessment of the relationship between known runaway risk factors and chronic runaway youth. This was examined with both the full sample and the delinquent only sample, in order to account for differences between non-delinquent and delinquent youth. Lastly, remaining consistent with a feminist criminology perspective, differences between chronic runaway status and risk factors were examined by gender. The next section reviews the results as they relate to the previously outlined hypotheses.

The Grouping of Runaway Youth

First, group-based trajectory modeling was used to assess latent strata of youth based upon runaway frequency over time. Upon examination, two distinct groups of youth were found, based upon frequency of runaway behavior, in both full and gender-exclusive analyses. For the full model, Group 1, encompassing the majority of the youth, exhibited low level runaway behavior that decreased over the 48 month data period. Next, a second, smaller group was associated with chronic runaway behavior that also decreased over the four year period. This finding supports that of H_{1a} , as latent strata within the larger sample of runaway youth was identified. Interestingly, both trajectories showed seasonal increases in runaway behavior during



fall to early winter months. Practitioners and researchers have found evidence of a seasonal effect to runaway behavior, where youth are less likely to be officially reported as runaways during summer months due to school being out of session (Hammer et al., 2002; Levine, 1952). The results of this study supports that notion, in that runaway behavior increased temporarily at the start of each school year, for the four years included in the study.

When examined by gender, two distinct, linear groups of runaways were found for both genders, and the trajectories of these groups varied greatly, supporting the second half of hypothesis one. The exclusively female youth analysis showed groups that greatly resembled that of the full model, with a higher number of youth comprising the chronic runaway group, compared to the full and male youth models. Interestingly, the exclusively male youth trajectories were noticeably different from the full and female models. First, the low level runaway group exhibited only slight increases in running away at the beginning of the school year. Next, the chronic male runaway trajectory is associated with a decrease in runaway frequency during September-December of each year. Since motivation for running away was not assessed in this study, identification of why this occurs with the male youth sample is unknown. However, studies suggest that male youth are treated differently by formal controls (Hagan et al., 1979), compared to female youth, which may partially explain why their trajectories are starkly different. Lastly, the chronic male runaway trajectory is comprised of a very small (approximately 2%) proportion of the total sample of male youth, which exhibited a relatively steady increase in runaway frequency during the 48 months.

These findings suggest unique gender-specific trajectories of runaway behavior, thus supporting H_{1b} and the theoretical perspective that youth (particularly runaway youth) behave differently based upon gender (Chesney-Lind & Shelden, 2013). This finding supports the



necessity of gender-based theoretical perspectives in studying runaway youth. Considering this (and the results outlined below), future studies should consider a feminist criminology perspective to the study of runaway youth. Interestingly, all but one trajectory supports an overall decline in runaway behavior over time. Trajectories highlighted that runaway behavior declines in frequency for nearly all youth in this sample, thus supporting the notion that running away may be a limited behavior, even in the restricted adolescent timeframe. However, this finding could also suggest that perhaps caregivers are less likely to report repetitive runaway behavior, as the youth may be deemed incorrigible. Considering this, future studies should aim to identify the factors related to official reporting of runaway youth and possible causes for decreased runaway behavior over time.

As a small proportion of male youth exhibited an increase in runaway frequency over time, and future studies should aim to identify the factors related to the increase in runaway behavior for the male-only group. Results highlight a seasonal nature to runaway behavior, which may suggest that reporting of runaway behavior is less likely to occur without the additional controls associated with the school setting, thus a social bond perspective to future analyses may be beneficial. Future studies should aim to identify what factors are related to the increase in reported runaways during the September-December months, as well as the inverse relationship found with the male chronic runaway group.

The author considered several operationalizations of the chronic runaway variable, and determined that reliance on natural occurrence within the data as opposed to artificial subjective determination was the preferred method. Group-based trajectory analysis was used to identify the cut-off point for chronic runaway behavior. Analyses indicated that youth who were associated with at least six runaway events met criteria for Group 2 inclusion (chronic runaway status).



Utilization of a non-sample dependent operationalization of chronic runaway behavior has the potential to allow future researchers and practitioners to examine chronic runaway behavior without performing trajectory analyses. However, it is possible that this definition of chronic behavior is artificial or unique to this sample only. Considering that this is the first assessment of chronic runaway behavior, future researchers should endeavor to replicate the assessment of chronic runaway behavior in other samples of youth.

Chronic Runaway Analyses

Family dysfunction and victimization. Analyses with the full sample of runaway youth highlight several variables that strongly affect the likelihood of chronic runaway status, which supports H_{2a}. First, as previous literature has highlighted, family dynamics greatly affect how a youth behaves (Cauce et al., 2000; Dedel, 2010; Famularo et al., 1990; Hammer et al., 2002; Haynie et al., 2009; Kaufman & Widom, 1999; Sullivan & Knutson, 2000; Thrane, et al., 2006; Tyler & Bersani, 2008; Whitbeck et al., 1999; Whitbeck, & Hoyt, 2001; Yoder et al., 1998), which was supported in this study as well. For example, a history of being in foster care had the strongest relationship with chronic runaway status. This finding was supported in gender specific models as well. This means that no matter a youth's gender, familial dysfunction and instability are profoundly detrimental to a youth's successful development. This study did not have access to family dynamics and abuse rates for all youth, and future studies should aim to obtain detailed records on participants in order to identify what factors related to family dynamics are the most salient in predicting chronic runaway status. Building on this perspective, practitioners should aim to identify and ameliorate dysfunctional family dynamics, as this may greatly reduce the likelihood of chronic runaway status and possibly further negative experiences for the youth.



Non-familial victimization, encompassing both violent and non-violent victimizations, was also significantly related to chronic runaway status. This relationship also supports previous literature that reports higher rates of victimization in runaway samples; however, familial abuse is almost exclusively discussed in previous studies (Tucker et al., 2011; Whitbeck et al., 1997). The results of this study suggest that other forms of victimization and victimization by non-family members are also salient in a youth's development. Although temporal order could not be established for this variable, this finding suggests that any form of victimization, not just familial abuse, increases the odds of being a chronic runaway and may detrimentally effect a youth's development. Considering this, practitioners should aim to consider and identify potential opportunities for victimization experiences in the youth's life beyond that of family/caregivers.

Early runaway behavior. Youth who began to run away from caregivers at earlier ages were significantly more likely to be chronic runaways. This was also consistent across genders and in the delinquent-only analyses. These early runaway youth may simply have more time during their adolescence to run away, since they started the behavior early. On the other hand, early runaway behavior may suggest serious and severe problems, thus propelling a youth out of the home during early adolescence, and on a trajectory of chronic runaway behavior, which has been found in previous research (Thrane et al., 2006). Furthermore, this runaway behavior may increase problems within the family, as well as negative labeling by family members and formal judicial outlets (Brennan et al., 1978; English, 1973). This labeling of youth early in their adolescence may subsequently increases the likelihood of becoming a chronic runaway. Results indicate that early runaway behavior should be seen as a precursor to chronic runaway status (no matter the gender of the youth) and steps to curtail this behavior should be taken immediately.



Delinquency. Also of interest was the relationship between offending and chronic runaway status. Although temporal order was not established in this study, being an offender was significantly related to chronic runaway status. Previous studies have found that labeling can lead to additional offending behavior (Becker, 1963; Jennings, 2011; Kelly, 1985; Lemert, 1967; Stewart, 1986; Tannenbaum, 1938). Labeling of runaway youth as a delinquent may also perpetuate running away from caregivers; however, this was not tested in this study. This finding necessitates that future research considers assessing temporal order for offending behavior of runaway youth.

Results indicate that delinquent runaway youth have unique risks/needs that need further exploration. Specifically, being a female runaway increased the odds of being a delinquent youth. This means that being a runaway may have stronger detrimental effects for female youth and lead to increased reliance on deviant subsistence strategies or delinquent peers. This finding is consistent with previous studies that suggest unique pathways to delinquency for female youth (Chesney-Lind & Shelden, 2013). However, this study was unable to establish temporal order for these variables; therefore, it is unknown whether running away leads to offending or vice versa. This finding may also support the research that finds that female youth experience the labeling process differently than male youth (Bartusch & Matsueda, 1996; Jennings, 2011; Lanctot et al., 2007). Overall, this is especially relevant to both feminist criminology and labeling perspectives. In order to further explore this labeling perspective, future studies should endeavor to identify the temporal order of runaway behavior and delinquency. Gang membership or associate status also increased the odds of being a delinquent runaway youth, supporting the theoretical perspectives of both labeling and social bond theory. This finding may also support the pathway



to offending perspective proposed by Whitbeck and colleagues (1999) in the risk amplification model and should be examined in future studies.

Although being a female youth increased the odds of being a delinquent youth, delinquent girls were at decreased odds of being chronic runaways. This means that, although more likely to be a delinquent than male youth, the runaway frequency of female delinquents is less than their male counterparts. This suggests that running away from caregivers just a few times may suggest a much larger problem for female youth. In addition, infrequent running from caregivers may intensify the likelihood of offending for female youth. This finding supports the need for a feminist criminology perspective to chronic runaway behavior, as pathways to offending for female runaways may be similar to the gender-specific pathways to offending in non-runaway studies (Belknap & Holsinger, 2006; Chesney-Lind, 1973; Daly & Chesney-Lind, 1988).

Gender Similarities and Differences for Runaway Youth

First, initial overview of the demographics in this study supports the findings of several studies that report equal rates of male youth and female youth in runaway samples. As previously discussed, some studies find that girls are more likely to be runaway youth and are more likely to experience formal law enforcement intervention for running way from caregivers, compared to male youth (Bailey et al., 1998; Baker et al., 2003; Benoit-Bryan, 2011; Kempf-Leonard & Johansson, 2007; McKinney, 2014; McMorris, Tyler et al., 2002; Sanchez et al., 2006; Thrane, et al., 2006). However, several studies have also found that girls and boys run away from caregivers at equal rates (Hockenberry & Puzzanchera, 2017; Thompson et al., 2004; Windle, 1988). This study supports the finding that boys and girls run away from caregivers at equal rates, even when official records are utilized. However, it is possible that this is due to the



location where the sample was obtained or the practices of the CPD. Future studies should aim to assess the prevalence of runaway behavior via official reports in other locations, in order to examine location based differences in runaway behavior.

Full sample results. Examination of bivariate relationships suggests both unique and similar experiences for male and female runaway youth. First, full sample bivariate results indicate significant differences between girls and boys for gang membership or association, non-familial victimization, and delinquency. These findings suggest significantly different levels of gang membership/association, non-familial victimization, and delinquency, thus suggesting exacerbated risk for these experiences when gender is considered. However, significant relationships for these variables and chronic runaway status at the multivariate level were not supported. In addition, several (six) variables remained non-significant for both variables. For example, there were no significant differences between the boys-only and girls-only groups (at the bivariate level) for psychological problems, foster care status, and group-runaway experiences, suggesting similar relationships between these variables across genders.

Next, multivariate analyses with the full sample girl-exclusive model, psychological problems were significantly related to chronic runaway status, which was not found in the boysonly analysis. Considering this, female youth who struggle with psychological distress are at elevated risk for being chronic runaways, compared to boys. This finding is similar to pervious research that found increased rates of psychological distress for female runaways, when compared to male youth and non-runaways (Cauce et al., 2000; Whitbeck & Hoyt, 1999; Whitbeck et al. 1999). Policies related to runaway youth should consider the relationship between psychological distress/disorder and chronic runaway status, as a history of psychological distress/disorder may further exacerbate runaway behavior.



Next, several variables were similar across genders. For example, being in foster care (the proxy for abuse or neglect by a caregiver), significantly increased the odds of being a chronic runaway for both girls and boys. The effects for this variable were also stronger for boys than girls. There are a few reasons as to why this variable is related to chronic runaway status. First, being in the foster care system may exacerbate the likelihood of official reporting of runaway behavior, as foster care families and group homes are often more likely to report a youth missing immediately (Bowden & Lambie, 2015). Alternatively, youth with a history of being in foster care may be reacting to unstable home environments or abuse and neglect by caregivers, which has been found in several previous studies (Dedel, 2006; Thrane & Chen, 2010; Whitbeck & Hoyt, 1999; Whitbeck et al., 1999). Similarly, this type of relationship was also found for early runaway behavior, which may also suggest family problems or abuse (Whitbeck et al., 1997). These findings suggest that foster care status and early runaway behavior are linked to increases in runaway behavior for both genders and serve as a general risk factor for these at-risk youth. Overall results indicate both similar and unique relationships with chronic runaway status based on gender. However, when examining the delinquent-only sample, additional factors that are unique to male and female youth become salient.

Delinquent youth results. Results indicate that delinquent youth have both similar and different relationships between risk factors and chronic runaway status when examined by gender. First, on a bivariate level, chronic runaway status, non-familial victimization, gang membership/association, abuse by a caregiver, and frequency of non-violent offenses occur at significantly different rates for female and male runaway youth. This suggests significantly different rates of occurrence for these variables when examined by gender. However, when examined with multivariate analyses, only non-familial abuse and gender remains significant.



The remainder of the bivariate analyses indicate no significant differences between genders of the remaining variables, suggesting gender symmetry for these variables at the bivariate level.

Alternatively, multivariate results suggest both gender symmetry and unique genderspecific relationships between risk factors and chronic runaway status. A total of six risk factors
indicated unique relationships for either girls or boys, but not both genders. Multivariate results
indicate that female delinquent youth are more likely to be chronic runaways when their first
runaway experience occurred out of the permanent home. This suggests that instability in
childhood may be especially detrimental for female delinquents by serving as a catalyst for
chronic runaway behavior. Practitioners should consider out of home placement as a risk factor
for chronic runaway status for girls.

Interestingly, parental incarceration affects delinquent youth differently based upon gender. Female delinquents are at decreased odds of being a chronic runaway if they have had an incarcerated parent(s); however, male delinquents are at increased odds of being chronic runaways. In addition, equality of coefficients analysis indicated significantly different relationships for this variable when examined by gender, highlighting a unique relationship between having an incarcerated parent and being a chronic runaway for male and female youth. It is possible that an incarcerated parent reduces a youth's odds of being a chronic runaway because the desire to leave a tumultuous home environment is ameliorated when a parent is incarcerated. On the other hand, this finding could also support the notion that the female delinquent's runaway behavior is not being reported by the parent who is not incarcerated.

This finding may also suggest the unique gendered roles in society that are often applied to youth. Female youth may be required to aid in the household or parenting process with siblings more so than males (Chesney-Lind & Shelden, 2013). This may be exacerbated when



one or both parents are out of the home due to incarceration, which may result in the finding that female youth are less likely to be chronic runaways when their parent(s) have a history of incarceration. In regards to male delinquents, the increase in the odds of chronic runaway status may suggest that the youth is responding negatively to the loss/weakening of the parental bond while the parent is incarcerated. This parental bond relationship may serve as a stronger bond for male youth (see Thrane and Chen, 2013), and when weakened, result in negative behaviors such as running away. This study was unable to identify the casual mechanisms that generate this relationship, or the motivations that shape runaway behavior for these youth and future studies should endeavor to further investigate this finding.

This finding also serves to highlight the notion that protective factors are not just the opposite of risk factors. Having a parent incarcerated decreased the odds of being a chronic runaway for female youth, but parental incarceration does not then serve as a protective factor for girls. Nor could this variable, when interpreted for female youth, be a suggested implementation to reduce runaway behavior. This finding highlighted the need to further explore the relationships between bonds as opposed to direct inverse operationalizations of variables to create protective factors.

Having a parent with a substance use or mental health problems, living away from home at first runaway event, being abused by a caregiver, and increased non-violent offending behavior all significantly increased the odds of being a chronic runaway for female youth only. These findings suggest that these variables, many of which relate to family dynamics may exacerbate runaway behavior for female youth. School problems significantly increased the odds of chronic runaway status for male delinquents only. This result suggests that perhaps the school



bond is stronger for male delinquent youth. Future studies should aim to identify the unique needs of the male delinquent in relation to school experiences.

It is important to note that several variables suggest similar relationships with chronic runaway status for both genders, suggesting gender symmetry for several variables. This suggests that risk factors for chronic runaway youth may be shared across genders and serve as general risk factors for this at-risk group of youth. Overall, the inclusion of additional variables for youth with offending histories allowed for a more in-depth understanding of the factors related to chronic runaway status. Future studies should aim to obtain variables related to multiple aspects of a youth's life, in order to obtain a full perspective of a youth's life experiences.

Summary of gender-specific findings. Results suggest unique associations between several risk factors and chronic runaway status for female and male youth. On the other hand, many experiences have the same effect on chronic runaway status, no matter the gender, suggesting gender symmetry for several risk factors. Overall gender-based results suggest differences within gender models, as opposed to across gender models. This means that when significant relationships were found for both genders, they generally were not exacerbated for male or female youth, suggesting gender symmetry. However, six relationships between risk factors and chronic runaway status are unique to one gender only. Taken as a whole, results indicate that some experience are more strongly associated with chronic runaway status for girls or boys. For example, full model analyses indicated that psychological problems significantly increases the odds of chronic runaway status for female youth only. However, foster care history and early runaway experiences increase likelihood of chronic runaway status for both genders, suggesting that these variables effect the youth similarly. Also, remaining variables were non-



significant for both genders, suggesting similar experiences for both male and female youth. For delinquent youth, within group differences were found for six risk factors, with only two across group differences. Delinquent-only analyses indicated stronger and varied gender differences, suggesting that those with offending histories may experience more pronounced gender differences, compared to non-offending youth.

Although not encompassing all runaway risk factors, findings highlight that a gender-based perspective of runaway behavior may aid in the contextualization of relationships for several risk factors, similar to that of non-runaway youth research (Belknap & Holsinger, 2006; Chesney-Lind, 1973; Chesney-Lind & Shelden, 2013; Daly & Chesney-Lind, 1988). The findings of this study provide partial evidence for the utility of a gender based perspective to runaway youth behavior, as several facets of a youth's life are uniquely intertwined with their gender. It is important to note that not all variables indicated gender different relationships, suggesting that a gender-based perspective may only be salient when examining certain relationships. Future studies should aim to replicate this study and examine gender differences and gender symmetry in more detail.

Implications for Future Research

Theoretical Implications

The results of this study highlighted the need for a gender-based perspective to runaway youth studies. For example, being a female runaway was associated with increased odds of being a delinquent youth, but not a chronic runaway. This suggests that just a few runaway events may negatively affect girls and set them on a trajectory of delinquency. This unique gender pathway is supported in previous studies (Belknap & Holsinger, 2006; Chesney-Lind, 1973; Chesney-



Lind & Shelden, 2013; Daly & Chesney-Lind, 1988) and results of this study necessitate further application of a feminist perspective to youth runaway behavior. In addition, several factors related to social bonds (school, family, peer) varied by gender, which suggests unique relationships between social bonds and chronic runaway behavior for boys and girls. This study did not directly test labeling theory; however, its application to youth runaway studies has been delineated throughout. In addition, when delinquent-only models were examined, additional gender differences between relationships were found, which may suggest that delinquency may increase the differences in experiences for runaway boys and girls. This finding may be a by-product of the labeling process. Labeling theory may aid in the contextualization of the runaway experience and aid in the explanation of the process that leads to negative life trajectories for these youth. This study found that female youth experience the runaway and delinquency process differently than male youth, as female runaway youth are significantly more likely to be delinquent. Considering this, classical criminology theories that do not take into account gender may be falling short in their explanation of deviant/delinquent behavior for youth runaway samples. Future studies should aim to assess the labeling process within runaway youth samples, especially the gender-specific effects of labeling on runaway youth. Application of this theoretical perspective has the ability to influence how both law enforcement and practitioners interact with runaway youth.

Intersectionality and Runaway Youth

Although modern feminist perspectives consider the intersection between gender, race/ethnicity, class, and sexuality with the criminal and victimization experience (Daly, 1994; Chesney-Lind, 2006), this perspective has yet to be applied to runaway youth samples. While



researchers have examined the gendered nature of the runaway experience, further researched is needed to examine the intersection between gender, race, class, and identification as LBGTQ. Individuals who identify as female minorities may experience both race and class differences that shape their experiences and subsequent risks and needs (Bell, 2013; Crenshaw, 1991; Dottolo & Steward, 2008; Sokoloff & Dupont, 2005; Zinn & Dill, 1996). For example, Bell (2013) examined the effects of race/ethnicity and gender on delinquency with the Philadelphia birth cohort data and found that when race/ethnicity and gender are examined in tandem, likelihood of being an offender varies by dyad. This means that there are differences in likelihood of offending for White, Latino, and African American male and female youth. In addition, Dottolo and Steward (2008) performed qualitative interviews with individuals and found differences in histories of police interactions based upon race, poverty status, and gender.

In relation to sexuality specifically, recent studies have found that identification as LBGTQ is a risk factor for adolescent homelessness and a motivation for running away from caregivers (Durso & Gates, 2012; Keuroghlian, Shtasel, & Bassuk, 2014). In addition, runaway and homeless youth who identify as LBGTQ report high rates of mental distress, suicidality, substance use/abuse, and victimization (Keuroghlian et al., 2014). As sexual orientation was not a variable addressed in this study, future research should examine LBGTQ status as a risk factor for running away as well as becoming a chronic runaway. In addition, exploration of the intersections between gender, race, LBGTQ status, and chronic runaway behavior has the potential to further disentangle the runaway experience and subsequent negative consequences. In addition, intersectionality perspectives applied to runaway youth samples has the ability to identify youth who may have additional risks or needs that are not being assessed in traditional aggregated models.



Policy Implications

Group-Based Behavioral Patterns

The results of this study have potential to aid practitioners and inform policy in several aspects. First, a better understanding of the types of runaway youth, can aid practitioners in identification of the type of youth they may be interacting with. Results of this study indicate a meaningful difference in youth behavior after the sixth runaway event. Generating a variable that assessed chronic runaway status has the ability to aid practitioners in quick identification of chronic runaway youth, as well as potential services needed. Early intervention for runaway youth is paramount, as once they reach the sixth runaway event and graduate to chronic runaway status, they may already be on a trajectory of high frequency runaway behavior.

Seasonal effects were also identified in this study, highlighting the role of school as a factor related to runaway behavior. Findings suggest that youth increase runaway behavior at the beginning of the school semester. Although this finding needs further exploration in subsequent studies, it is possible that youth are escaping the school setting or problems in school by running away from caregivers. Furthermore, family dynamics may change as the school year begins, as youth are required to abide by more parental guidelines and schedules, which may lead to family difficulties and increased runaway behavior. Multivariate results indicate that the school setting may be particularity difficult for male youth runaways. Considering this, policies aimed at reducing school difficulties and the dynamics associated with the commencement of school should be explored. Practitioners should aim to make note of seasonal changes in runaway behavior while also exploring possible problems or difficulties in school that may be exacerbating runaway behavior.



Victimization and Offending Risk

Previous studies have showcased the considerable risks associated with runaway status, but identification of the consequences of being a chronic runaway has yet to be explored. Chronic runaways spend more time away from caregivers, thus increasing opportunity for deviance, exposure to deviant peers, and potential reliance on deviant subsistence strategies. The above stated factors are all associated with increased likelihood of offending and victimization for runaway youth (Whitbeck & Hoyt, 1999; Whitbeck et al., 1999), which may be exponentiated for chronic runaways. Chronic runaway status may serve as a marker for identification of the most at-risk youth. Considering this, further examination of the victimization and offending outcomes of chronic runaway youth is greatly needed. Furthermore, identification of outcomes for chronic runaways has the ability to allow practitioners to triage needs for the chronic runaway youth early, in order to aid in the reduction of runaway behavior and subsequent negative life events.

Risk/Needs Assessment of Chronic Runaways

Knowledge of the factors that are strongly related to chronic runaway behavior can allow practitioners to rapidly identify the most salient risks/needs for the youth and provide tailored services. For example, this study finds that youth who have been in the foster care system or runaway from caregivers early in their adolescence are most at-risk for chronic runaway status. This knowledge can aid practitioners in providing services related to these factors immediately upon initial interaction. Since running away from caregivers is associated with great risk to the healthy development of juveniles, provisions to address the risks/needs of the youth proactively



are paramount. Early intervention for the factors related to chronic runaway behavior may have the ability to curtail the likelihood of deviance and victimization, as well as the plethora of negative experiences associated with runaway behavior. Similar to other samples of juveniles, early/preemptive intervention is needed to reduce likelihood of adverse experiences and delinquent trajectories (Levine, Metzendorf, & VanBoskirk, 1986). Analysis of the factors related to chronic runaway behavior has the potential to produce a risk/needs assessment aimed at early intervention for these youth. Future studies should aim to assess and replicate results from this study in order to create a risk/needs assessment for chronic runaway youth.

Implications Related to the Task Force on Children Exposed to Violence

In 2011, Attorney General Holder created a task force to investigate the outcomes of violence against children, as well as methods to reduce violence (Listenbee et al., 2012). In accordance with the recommendations of Attorney General Holder's National Taskforce on Child Exposed to Violence, there are several policy implications from this study that align well with this initiative to reduce violence against children. Education and training related to the identification of signs of abuse and potential violence in the lives of children has the potential to allow increased intervention on several risk factors related to chronic runaway status. Foster care status, which served as a proxy for family abuse and trauma in the home, greatly increased the odds of a youth's likelihood of being a chronic runaway. Early identification of children with histories of abuse has the potential to curtail or protect against chronic runaway status.

In addition, Holder's initiative recommends a public-wide awareness campaign, in order to involve and educate the public on violence against children and shape how society reacts to violence against children (Listenbee et al., 2012). This has the potential to also help youth



runaways as community members may be more vigilant for youth who may be estranged from caregivers and intervene on youth during the runaway event. A community wide shift in the response to violence and increased awareness of this problem has the potential to aid in the reduction of runaway behavior and the subsequent negative consequences associated with running away. In summation, responses to violence against children may also serve as responses against running away, as the two events are closely aligned and prevention against abuse may hold the key to prevent chronic runaway behavior for many youth.

Gender and Runaway Behavior

Results indicate that runaway behavior as well as some of the risk factors associated with being a chronic runaway vary by gender. Female runaway youth are significantly more likely to be delinquent, which suggests a unique, gender-based risk associated with the runaway experience for female youth. Although temporal order was not established for this variable, policies should consider the elevated risks for female youth who exhibit runaway behavior. Psychological problems may be especially pertinent to girls who run away from caregivers, and policies should aim to identify and treat psychological distress/disorder in female youth runaways especially. Having a parent who was incarcerated was found to be associated with chronic runaway status for both boys and girls; however, the association and strength of the relationship varied by gender. Male youth are especially at-risk for chronic runaway behavior if one or both of their parents have a history of incarceration. Considering this, policies should aim to provide services tailored to the needs of male youth who have incarcerated parent(s). Overall, results indicate that policies and practitioners need to consider the gendered nature of a youth's



life experiences, in order to provide services that are most needed, depending on the gender and history of the youth at hand.

Overall Study Limitations

Although a contribution to the literature in several facets, there were limitations within this study that are worth noting. First, the trajectories only assessed four years of the youth's adolescence; therefore, the entire scope of their runaway behavior was not assessed. This means that additional runaway behavior during the youth's lifetime was not included, which has the potential to shape results. Additionally, due to low numbers of youth associated with the gender-based trajectory groups, specific gender-exclusive analyses that assess the relationship between trajectory group adherence and CPD risk factors were unable to be conducted. Future researchers should aim to obtain ample sample sizes of male and female youth in order to ensure adequate participants during disaggregation of data for gender exclusive analyses.

This study utilized group-based trajectory modeling, a statistical method that is not without its limitations (see Skardhamar, 2010); however, there are significant advantages of this method, reviewed in chapter three, which resulted in its utilization. Future researchers should aim to assess the successfulness of this method to assess the presence of latent strata of runaway youth in longitudinal data. In addition, this study only examined youth runaway behavior in one county within one state, thus the results are not generalizable to other samples of juveniles. It may be that there are unique risk/needs for youth residing in the area that data collection occurred. For example, the lack of cold weather may increase a youth's ability to maintain runaway behavior during winter months and may offer increased opportunity to run away from caregivers. Also, this study examined youth in an urban setting, and previous studies have found



variation in runaway behavior based upon residential location (Thrane et al., 2006), which suggest that results are not applicable to youth residing in rural areas. Another factor that limited this study was the absence of temporal order for the majority of variable, which limits causal inferences. Future studies should aim to establish temporal order between the independent variables and chronic runaway behavior, as to provide a clearer understanding of the relationships between risk factors and chronic runaway status. Identification of the variables that lead to chronic runaway status has the potential to greatly aid practitioners in determining the most beneficial early intervention methods.

This study utilized secondary data from two government agencies, which limited the ability to add additional risk factors or explore motivations for runaway behavior. Future researchers should consider the mixed method approach of combining both qualitative and quantitative research methods, in order to assess motivations for runaway behavior as well as account for the host of risk factors that may shape runaway behavior. Qualitative research has been conducted with runaway youth, with results suggesting higher rates of abuse within runaway samples, as well as insight into the perceptions and motivations for runaway behavior (Schaffner, 1998; Shellow et al., 1967). Qualitative methods may be particularly relevant to variables that assess bond to parents, school, and peers. For example, this study aimed to assess the relationship between school bonds and chronic runaway behavior. Unfortunately, the use of secondary data allowed for only limited access to variables assessing this construct. In addition, motivations for poor school bonds were not assessed; therefore, motivations surrounding school problems were unable to be determined. The use of a mixed method approach has the ability to obtain motivation for running away and estimate the dark figure of runaway behavior and victimization, while also allowing for the use of advanced statistical methods. In summation,



future research should consider the utility of a mixed method approach to the study of runaway youth.

There were also limitations associated with one of the known risk factors of running away, which was utilized in this study. First, substance use/abuse was only assessed in the delinquent youth subsample. This means that the relationship of this variable with chronic runaway status was unable to be assessed within the full sample. In addition, only the youth's current substance use/abuse was assessed, thus it is possible that previous substance use/abuse behavior was missed with this operationalization. Lastly, the relationship between protective factors and runaway behavior was not assessed in this study. Protective factors have the ability to prevent as well as curtail adverse behaviors of youth (Carr & Vandiver, 2001; Edinburgh et al., 2013; Lightfoot et al., 2011; Loeber & Farrington, 2000; Saewyc & Edinburgh, 2010; Stouthamer-Loeber, et al., 2002; Thrane & Chen, 2010; Werner, 1989). The assessment of protective factors within the runaway youth population has the ability to aid practitioners in identification of factors that decrease propensity to run away or become chronic runaways. Furthermore, researchers who include protective factors in analyses may be able to identify why some youth do not become chronic runaways. Moreover, the assessment of protective factors within runaway research is limited, and future studies should aim to include protective factors in order to better assess the needs of the youth at hand.

Conclusions

Results of this study indicate that chronic runaways exist within a larger sample of youth runaways, providing support for H_{1a} . The runaway behavior of these groups also varied by gender, supporting H_{1b} . In addition, several runaway risk factors are salient for chronic runaway



status, thus supporting H_{2a} . These results indicate that some factors may have a stronger impact on runaway behavior and propel youth on a trajectory of repetitive runaway behavior which may open the door to increased risks of delinquency and victimization. Variability in the relationships between several risk factors and chronic runaway status for female and male youth supports the theoretical standpoint that the study of runaway youth necessitates a gender-based perspective, which is consistent with H_{2b} . Results indicate that the use of a feminist criminology perspective with youth runaways (and delinquent youth runaways in particular) can aid in the contextualization of variation in results. In summation, these results support the need for further research on chronic runaway behavior as well as the creation of risks/needs assessment specifically aimed at runaway youth.



REFERENCES

- Baglivio, M.T., & Jackowski, K. (2013). Examining the validity of a juvenile offending risk assessment instrument across gender and race/ethnicity. *Youth Violence and Juvenile Justice*, 11(1), 26-43.
- Bailey, S., Camlin, C., & Ennett, S. (1998). Substance use and risky sexual behavior among homeless and runaway youth. *Journal of Adolescent Health*, *23*(6), 378-388.
- Baird, C., Healy, T., Johnson, K., Bogie, A., Dankert, E. W., & Scharenbroch, C. (2013). *A comparison of risk assessment instruments in juvenile justice*. Madison, WI: National Council on Crime and Delinquency.
- Baker, A. J., McKay, M. M., Lynn, C. J., Schlange, H., & Auville, A. (2003). Recidivism at a shelter for adolescents: First-time versus repeat runaways. *Social Work Research*, *27*(2), 84-93.
- Bartusch, D.J. & Matsueda, R.L. (1996). Gender, reflected appraisals, and labeling: A cross-group test of an interactionist theory of delinquency. *Social Forces*, 75(1), 145-177.
- Becker, Howard. (1963). *Outsiders: Studies in the sociology of deviance*. New York, NY: Free Press.
- Bell, K. E. (2012). Young adult offending: Intersectionality of gender and race. *Critical Criminology*, 21(1), 103-121.
- Belknap, J., & Holsinger, K. (2006). The gendered nature of risk factors for delinquency. *Feminist Criminology, 1*(1), 48-71.



- Benoit-Bryan, J. (2011). *The runaway youth longitudinal study*. The National Youth Switchboard. Chicago, IL.
- Berger, I., & Schmidt, R. (1958). Results of child psychiatric and psychological investigations of spontaneous and reactive runaways. *Child Psychiatry*, 7, 206-210.
- Bernburg, J. G., Krohn, M. D., & Rivera, C. J. (2006). Official labeling, criminal embeddedness, and subsequent delinquency: A longitudinal test of labeling theory. *Journal of Research in Crime and Delinquency*, 43(1), 67-88.
- Biehal, N., & Wade, J. (1999). Taking a chance? The risks associated with going missing from substitute care. *Child Abuse Review*, 8(6), 366-376.
- Bowden, F., & Lambie, I. (2015). What makes youth run or stay? A review of the literature on absconding. *Aggression and Violent Behavior*, 25(2), 266-279.
- Brakenhoff, B., Jang, B., Slesnick, N., & Snyder, A. (2015). Longitudinal predictors of homelessness: Findings from the National Longitudinal Survey of Youth. *Journal of Youth Studies*, *18*(8), 1015-1034.
- Brennan, T., Huizinga, D., & Elliott, D. (1978). *The social psychology of runaways*. Lexington, MA: Lexington Books.
- Brennan, T. (1980). Mapping the diversity among runaways: A descriptive multivariate analysis of selected social psychological background conditions. *Journal of Family Issues*, 1(2), 189-209.
- Burgess-Proctor, A. (2006). Intersections of race, class, gender, and crime: Future directions for Feminist criminology, *Feminist Criminology*, 1(1), 27-47.
- Carr, M. B., & Vandiver, T. A. (2001). Risk and protective factors among youth offenders. *Adolescence*, *36*(143), 409.



- Caspi, A., Bem, D. J., & Elder, G. H. (1989). Continuities and consequences of interactional styles across the life course. *Journal of Personality*, *57*(2), 375-406.
- Cauce, A. M., Paradise, M., Ginzler, J. A., Embry, L., Morgan, C. J., Lohr, Y., & Theofelis, J.
 (2000). The characteristics and mental health of homeless adolescents: Age and gender differences. *Journal of Emotional and Behavioral Disorders*, 8(4), 230-239.
- Chapple, C. L., Johnson, K. D., & Whitbeck, L. B. (2004). Gender and arrest among homeless and runaway youth: An analysis of background, family, and situational factors. *Youth Violence and Juvenile Justice*, *2*(2), 129-147.
- Chen, X., Thrane, L., Whitbeck, L. B., Johnson, K. D., & Hoyt, D. R. (2007). Onset of conduct disorder, use of delinquent subsistence strategies, and street victimization among homeless and runaway adolescents in the Midwest. *Journal of Interpersonal Violence*, 22(9), 1156-1183.
- Chen, X., Thrane, L., & Adams, M. (2012). Precursors of running away during adolescence: Do peers matter?. *Journal of Research on Adolescence*, 22(3), 487-497.
- Chesney-Lind, M. (1986). Women and crime: The female offender. *Signs: Journal of Women in Culture and Society*, 12(1), 78-96.
- Chesney-Lind, M. (1987). Girls and violence: An exploration of the gender gap in serious delinquent behavior. In D. Crowell, I, Evans, & C. O'Donnell (Eds.), *Childhood Aggression and Violence*. New York: Plenum.
- Chesney-Lind, M. (1989). Girls' crime and woman's place: Toward a feminist model of female delinquency. *Crime & Delinquency*, *35*(1), 5-29.
- Chesney-Lind, M. (2006). Patriarchy, crime, and justice: Feminist criminology in an era of backlash. *Feminist Criminology*, *I*(1), 6-26.



- Chesney-Lind, M., & Pasko, L. (2004). *The female offender: Girls, women, and crime*. Belmont, CA: SAGE.
- Chesney-Lind, M., & Okamoto, S. K. (2001). Gender matters: Patterns in girls' delinquency and gender responsive programming. *Journal of Forensic Psychology Practice*, 1(3), 1-30.
- Chesney-Lind, M., & Shelden, R. G. (2013). *Girls, delinquency, and juvenile justice*. New York, NY: John Wiley & Sons.
- Clark, H. B., Crosland, K. A., Geller, D., Cripe, M., Kenney, T., Neff, B., & Dunlap, G. (2008).

 A functional approach to reducing runaway behavior and stabilizing placements for adolescents in foster care. *Research on Social Work Practice*, *18*(5), 429-441.
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic masculinity: Rethinking the concept. *Gender & Society*, 19(6), 829-859.
- Courtney, M. E., & Zinn, A. (2009). Predictors of running away from out-of-home care.

 Children and Youth Services Review, 31(12), 1298-1306.
- Crawford, D. M., Whitbeck, L. B., & Hoyt, D. R. (2011). Propensity for violence among homeless and runaway adolescents: An event history analysis. *Crime & Delinquency*, 57(6), 950-968.
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241-1299.
- Criminal Gang Enforcement and Prevention Act. Florida Public Law, Chapter 974. §§ 874.03 (2008).
- Daly, K. (1992). Women's pathways to felony court: Feminist theories of lawbreaking and problems of representation. *Review of Law & Women's Studies*, 2, 11-52.



- Daly, K. (1994). Gender and punishment disparity. In M. Myers & G. Bridges (Eds.), *Inequality, crime, and social control* (pp. 117-133). Boulder, CO: Westview.
- Daly, K., & Chesney-Lind, M. (1988). Feminism and criminology. *Justice Quarterly*, *5*(4), 497-538.
- Dedel, K. (2010). Juvenile Runaways. *Problem-Oriented Guides for Police Problem-Specific Guide Series* (Guide No. 37). Washington, DC: U.S. Department of Justice.
- Development Services Group (DSG), Inc. (2015). "Status Offenders." Literature review.

 Washington, D.C.: Office of Juvenile Justice and Delinquency Prevention. Retrieved from: http://www.ojjdp.gov/mpg/litreviews/Deinstituionalization_of_Status_
 Offenders.pdf.
- Dottolo, A.L. & Stewart, A.J. (2008). "Don't ever forget now, you're a black man in America": Intersections of race, class, and gender in encounters with the police. *Sex Roles*, *59*(5-6), 350-364.
- Dunford, F. W., & Brennan, T. (1976). A taxonomy of runaway youth. *Social Service Review*, 50(3), 457-470.
- Durso, L.E. & Gates, G.J. (2012). Serving our youth: Findings from a national survey of service Providers working with lesbian, gay, bisexual, and transgender youth who are homeless or at risk for becoming homeless. Los Angeles, CA: The Williams Institute with True Colors Fund and The Palette Fund.
- Edinburgh, L.D., Harpin, S. B., Garcia, C. M., & Saewyc, E. M. (2013). Differences in abuse and related risk and protective factors by runaway status for adolescents seen at a US child advocacy center. *International Journal of Child and Adolescent Resilience*, *1*(1), 4.



- Englander, S.W. (1984). Some self-reported correlates of runaway behavior in adolescent Females. *Journal of Consulting and Clinical Psychology*, *52*(3), 484-485
- English, C. J. (1973). Leaving home: A typology of runaways. Society, 10(5), 22-24.
- Famularo, R., Kinscherff, R., Fenton, T., & Bolduc, S. M. (1990). Child maltreatment histories among runaway and delinquent children. *Clinical Pediatrics*, *29*(12), 713-718.
- Finkelhor, D., Hotaling, G., Lewis, I., & Smith, C. (1990). Sexual abuse in a national survey of adult men and women: Prevalence, characteristics, and risk factors. *Child Abuse & Neglect*, *14*(1), 19-28.
- Florida Mental Health Act of 1971. Florida Public Law Chapter 394, §§ 394.455 (2016).
- Greene, J. M., Ennett, S. T., & Ringwalt, C. L. (1999). Prevalence and correlates of survival sex among runaway and homeless youth. *American Journal of Public Health*, 89(9), 1406-1409.
- Greene, J.M., Sanchez, R., Harris, J., Cignetti, C., Akin, D., & Wheeless, S. (2005). Incidence and prevalence of homeless and runaway youth. Department of Health and Human Services. Washington, DC.
- Hagan, J, Simpson, J.H., & Gillis, A.R. (1979). The sexual stratification of social control: A gender-based perspective on crime and delinquency. *The British Journal of Sociology*, 30(1), 25-38.
- Hammer, H., Finkelhor, D., Sedlak, A.J. (2002). *Runaway/thrownaway children: National estimates and characteristics*. U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention.



- Haynie, D. L., Petts, R. J., Maimon, D., & Piquero, A. R. (2009). Exposure to violence in adolescence and precocious role exits. *Journal of Youth and Adolescence*, 38(3), 269-286.
- Herrenkohl, T. I., Huang, B., Tajima, E. A., & Whitney, S. D. (2003). Examining the link between child abuse and youth violence: An analysis of mediating mechanisms. *Journal of Interpersonal Violence*, *18*(10), 1189-1208.
- Higgins, G.E., Jennings, W.G., Tewksbury, R., & Gibson, C. L. (2009). Exploring the link between low self-control and violent victimization trajectories in adolescents. *Criminal Justice and Behavior*, *36*(10), 1070-1084.
- Hirschi, T. (1969). Causes of delinquency. Berkeley, CA: University of California.
- Hockenberry, S. & Puzzanchera, C. (2017). *Juvenile Court Statistics 2014*. Pittsburgh, PA: National Center for Juvenile Justice.
- Homer, L. (1973). Community based resource for runaway girls. *Social Casework*, *54*(8), 473-479.
- Huizinga, D., Lober, R., & Thornberry. T.P. (1995). *Urban Delinquency and Substance Abuse:Initial Findings*. Washington, D.C.: U.S. Department of Justice, Office of JusticePrograms, Office of Juvenile Justice and Delinquency Prevention.
- Humphrey, A. (2004). The criminalization of survival attempts: Locking up female runaways and other status offenders. *Hastings Women's Law Journal*, *15*, 165-182.
- Jennings, W.G. (2011). Sex disaggregated trajectories of status offenders: Does CINS/FINS status prevent male and female youth from becoming labeled delinquent?. *American Journal of Criminal Justice*, 36(2), 177-187.



- Johnson, L. M., Simons, R. L., & Conger, R. D. (2004). Criminal justice system involvement and continuity of youth crime: A longitudinal analysis. *Youth & Society*, *36*(1), 3-29.
- Johnson, K.D., Whitbeck, L.B., & Hoyt, D.R. (2005). Substance abuse disorders among homeless and runaway adolescents. *Journal of Drug Issues*, *35*(4), 799-816.
- Jones, L. P. (1988). A typology of adolescent runaways. *Child and Adolescent Social Work Journal*, *5*(1), 16-29.
- Jones, N. J., Brown, S. L., Wanamaker, K. A., & Greiner, L. E. (2014). A quantitative exploration of gendered pathways to crime in a sample of male and female juvenile offenders. *Feminist Criminology*, *9*(2), 113-136.
- Jones, B. L., & Nagin, D. S. (2007). Advances in group-based trajectory modeling and a SAS procedure for estimating them. *Sociological Methods & Research*, *25*(4), 542-571.
- Jones, B. L., & Nagin, D. S. (2012). *A Stata plugin for estimating group-based trajectory models*. [Seminar]. Retrieved from http://ssrc.indiana.edu/seminars/wimdocs/2013-03-29_nagin_trajectory_stata-plugin-info.pdf.
- Kaufman, J. G., & Widom, C. S. (1999). Childhood victimization, running away, and delinquency. *Journal of Research in Crime and Delinquency*, *36*(4), 347-370.
- Kelley, T. M. (1983). Status offenders can be different: A comparative study of delinquent careers. *Crime & Delinquency*, *29*(3), 365-379.
- Kempf-Leonard, K., & Johansson, P. (2007). Gender and runaways: Risk factors, delinquency, and juvenile justice experiences. *Youth Violence and Juvenile Justice*, *5*(3), 308-327.
- Keuroghlian, A. S., Shtasel, D., & Bassuk, E. L. (2014). Out on the street: A public health and policy agenda for lesbian, gay, bisexual, and transgender youth who are homeless.

 *American Journal of Orthopsychiatry, 84(1), 66-72.



- Kim, H., Chenot, D., & Lee, S. (2015). Running away from out-of-home care: A multilevel analysis. *Children & Society*, 29(2), 109-121.
- Kingree, J.B., Braithwaite, R. & Woodring, T. (2001). Psychosocial and behavioral problems in relation to recent experience as a runaway among adolescent detainees. *Criminal Justice and Behavior*, 28(2), 190-205.
- Kipke, M. D., Montgomery, S. B., Simon, T. R., & Iverson, E. F. (1997). Substance abuse disorders among runaway and homeless youth. *Substance Use & Misuse*, *32*(7-8), 969-986.
- Kurtz, P. D., Kurtz, G. L., & Jarvis, S. V. (1991). Problems of maltreated runaway youth. *Adolescence*, 26(103), 543.
- Lanctôt, N., Cernkovich, S. A., & Giordano, P. C. (2007). Delinquent behavior, official delinquency, and gender: Consequences for adulthood functioning and well-being. *Criminology*, 45(1), 131-157.
- Land, K. C., McCall, P. L., & Nagin, D. S. (1996). A comparison of Poisson, negative binomial, and semiparametric mixed Poisson regression models with empirical applications to criminal careers data. *Sociological Methods & Research*, *24*(4), 387-442.
- Lemert, Edwin. (1967). *Human deviance, social problems and social control*. Englewood Cliffs, NJ: Prentice-Hall.
- Levine, R. S., Metzendorf, D., & VanBoskirk, K. A. (1986). Runaway and throwaway youth: A case for early intervention with truants. *Children & Schools*, 8(2), 93-106.
- Levy, E. Z. (1972). Some thoughts about patients who run away from residential treatment and the staff they leave behind. *Psychiatric Quarterly*, 46(1), 1-21.



- Lightfoot, M., Stein, J. A., Tevendale, H., & Preston, K. (2011). Protective factors associated with fewer multiple problem behaviors among homeless/runaway youth. *Journal of Clinical Child & Adolescent Psychology*, 40(6), 878-889.
- Loeber, R., & Farrington, D. P. (2000). Young children who commit crime: Epidemiology, developmental origins, risk factors, early interventions, and policy implications.

 *Development and Psychopathology, 12(4), 737-762.
- Mahoney, A. R. (1974). The effect of labeling upon youths in the juvenile justice system: A review of the evidence. *Law & Society Review*, 8(4), 583-614.
- McKinney, S. (2014). Runaway youth: A research brief. *The Status Offense Reform Center*. Washington, DC: The Vera Institute of Justice
- McMorris, B. J., Tyler, K. A., Whitbeck, L. B., & Hoyt, D. R. (2002). Familial and "on-the-street" risk factors associated with alcohol use among homeless and runaway adolescents. *Journal of Studies on Alcohol*, 63(1), 34-43.
- McGarvey, E. L., Keller, A., Brown, G. L., DeLonga, K., Miller, A. G., Runge, J. S., & Koopman, C. (2010). Parental bonding styles in relation to adolescent males' runaway behavior. *The Family Journal*, *18*(1), 18-23.
- Milburn, N. G., Rosenthal, D., Rotheram-Borus, M. J., Mallett, S., Batterham, P., Rice, E., & Solorio, R. (2007). Newly homeless youth typically return home. *Journal of Adolescent Health*, 40(6), 574-576.
- Miller, J., & Mullins, C. W. (2006). The status of feminist theories in criminology. In F. T. Cullen, J. P. Wright, & K. R. Blevins, *Taking stock: The status of criminological theory* (pp. 217-249). New Brunswick, NJ: Transactions Publishers.



- Mitchell, K. J., Finkelhor, D., & Wolak, J. (2010). Conceptualizing juvenile prostitution as child maltreatment: Findings from the National Juvenile Prostitution Study. *Child Maltreatment*, *15*(1), 18-36.
- Moffitt, T. E., & Caspi, A. (2001). Childhood predictors differentiate life-course persistent and adolescence-limited antisocial pathways among males and females. *Development and Psychopathology*, *13*(2), 355-375.
- Nagin, D. S., & Land, K. C. (1993). Age, criminal careers, and population heterogeneity: Specification and estimation of a nonparametric, mixed Poisson model. *Criminology*, 31(3), 327-362.
- Nagin, D.S. (1999). Analyzing developmental trajectories: A semi-parametric, group-based approach. *Psychological Methods*, *4*(2), 139-157.
- Nagin, D.S. & Tremblay, R.E. (2001). Analyzing trajectories of distinct but related behaviors:

 A group-based method. *Psychological Methods*, 6(1), 18-34.
- Nagin, D.S. (2005). *Group based modeling of development*. Cambridge, MA: Harvard University Press.
- Nagin, D. S., & Odgers, C. L. (2010). Group-based trajectory modeling in clinical research. *Annual Review of Clinical Psychology*, 6, 109-138.
- National Runaway Safeline (NRS) (2012). *Crisis hotline and online service statistics*. State of Florida Reporting Statistics.
- Nye, F. I., & Edelbrock, C. (1980). Some social characteristics of runaways. *Journal of Family Issues*, 1(2), 147-150.



- Office of Juvenile Justice and Delinquency Prevention. (2012). Report of the attorney general's national task force on children exposed to violence. (Grant No. 2011-DD-BX-K037). Washington, DC.
- Orten, J. D., & Soll, S. K. (1980). Runaway children and their families: A treatment typology. *Journal of Family Issues*, 1(2), 249-261.
- Paternoster, R., Brame, R., Mazerolle, P., & Piquero, A. (1998). Using the correct statistical test for the equality of regression coefficients. *Criminology*, *36*(4), 859-866.
- Patterson, G. R. (1982). Coercive family processes. Eugene, OR: Castilia.
- Patterson, G. R., Dishion, T. J., & Bank, L. (1984). Family interaction: A process model of deviancy training. *Aggressive Behavior*, 10(3), 253-267.
- Peugh, J.L. & Enders, C.K. (2004). Missing data in educational research: A review of reporting practices and suggestions for improvement. *Review of Educational Research*, 74(4), 525-556.
- Powers, J. L., Eckenrode, J., & Jaklitsch, B. (1990). Maltreatment among runaway and homeless youth. *Child Abuse & Neglect*, *14*(1), 87-98.
- Reiss, A. (1951). Delinquency as the failure of personal and social controls. *American Sociological Review*, *16*(2), 196-207.
- Reckless, W.C. (1961). The crime problem. *American Sociological Review*, 26(1), 42-51.
- Robins, L. N., & O'neal, P. (1959). The adult prognosis for runaway children. *American Journal of Orthopsychiatry*, 29(4), 752.
- Robey, A. (1964). The runaway girl. In O. Pollack and A. Friedman. *Family Dynamics and Female Sexual Delinquency* (pp. 121-132). Palo Alto, CA: Science and Behavior Books.



- Rosenwald, R. J., & Mayer, J. (1967). Runaway girls from suburbia. *American Journal of Orthopsychiatry*, 37(2), 402-403.
- Rohr, M.E., James, R. (1994). Runaways: Some suggestions for prevention, coordinating services, and expediting the reentry process. *The School Counselor*, 42(1), 40-47.
- Rotheram-Borus, M. J., Mahler, K. A., Koopman, C., & Langabeer, K. (1996). Sexual abuse history and associated multiple risk behavior in adolescent runaways. *American Journal of Orthopsychiatry*, 66(3), 390.
- Saewyc, E. M. (2010). Restoring healthy developmental trajectories for sexually exploited young runaway girls: Fostering protective factors and reducing risk behaviors. *Journal of Adolescent Health*, 46(2), 180-188.
- Salisbury, E. J., & Van Voorhis, P. (2009). Gendered pathways: A quantitative investigation of women probationers' paths to incarceration. *Criminal Justice and Behavior*, *36*(6), 541-566.
- Sanchez, R. P., Waller, M. W., & Greene, J. M. (2006). Who runs? A demographic profile of runaway youth in the United States. *Journal of Adolescent Health*, 39(5), 778-781.
- Schaffner, L. (1998). Searching for connection: A new look at teenaged runaways. *Adolescence*, 33(131), 619-627.
- Schwalbe, C. S. (2007). Risk assessment for juvenile justice: A meta-analysis. *Law and Human Behavior*, 31(5), 449.
- Shellow, R., Schamp, J. R., Liebow, E., & Unger, E. (1967). Suburban runaways of the 1960's.

 Monographs of the Society for Research in Child Development, 32(3), iii-51.



- Simpson, S. S., Yahner, J. L., & Dugan, L. (2008). Understanding women's pathways to jail:

 Analyzing the lives of incarcerated women. *Australian & New Zealand Journal of Criminology*, 41(1), 84-108.
- Skardhamar, T. (2010). Distinguishing facts and artifacts in group-based modeling. *Criminology*, 48(1), 295-320.
- Skeem, J. L., Scott, E., & Mulvey, E. P. (2014). Justice policy reform for high-risk juveniles:

 Using science to achieve large-scale crime reduction. *Annual Review of Clinical Psychology*, *10*, 709-739.
- Sokoloff, N.J. & Dupont, I. (2005). Domestic violence at the intersections of race, class, and gender. *Violence Against Women*, 11(1), 38-64.
- Spillane-Grieco, E. (1984). Characteristics of a helpful relationship: A study of empathic understanding and positive regard between runaways and their parents. *Adolescence*, 19(73), 63.
- Status Offense Reform Center (SORC). (2013). *Notes from the field: Florida*. Florida, US: Vera Institute of Justice.
- Stewart, M. J., Vockell, E. L., & Ray, R. E. (1986). Decreasing court appearances of juvenile status offenders. *Social Casework*, 67, 74-79.
- Stouthamer-Loeber, M., Loeber, R., Wei, E., Farrington, D. P., & Wikström, P. (2002).

 Risk and promotive effects in the explanation of persistent serious delinquency in boys. *Journal of Consulting and Clinical Psychology*, 70(1), 111.
- Sullivan, P.M. & Knutso, J.F. (2000). The prevalence of disabilities and maltreatment among runaway children. *Child Abuse & Neglect*, *24*(10). 1275-1288.
- Tannenbaum, Frank. (1938). Crime and community. Boston, MA: Ginn.



- Terrell, N. E. (1997). Street life aggravated and sexual assaults among homeless and runaway adolescents. *Youth & Society*, *28*(3), 267-290.
- Tewksbury, R., & Jennings, W. G. (2010). Assessing the impact of sex offender registration and community notification on sex-offending trajectories. *Criminal Justice and Behavior*, 37(5), 570-582.
- Thompson, S. J., Zittel-Palamara, K. M., & Maccio, E. M. (2004). Runaway youth utilizing crisis shelter services: Predictors of presenting problems. In *Child and Youth Care Forum* (Vol. 33, No. 6, pp. 387-404). New York: NY: Kluwer Academic Publishers-Plenum Publishers.
- Thompson, S. J., & Pillai, V. K. (2006). Determinants of runaway episodes among adolescents using crisis shelter services. *International Journal of Social Welfare*, *15*(2), 142-149.
- Thrane, L. E., & Chen, X. (2010). Impact of running away on girls' sexual onset. Journal of *Adolescent Health*, 46(1), 32-36.
- Thrane, L. E., Hoyt, D. R., Whitbeck, L. B., & Yoder, K. A. (2006). Impact of family abuse on running away, deviance, and street victimization among homeless rural and urban youth. *Child Abuse & Neglect*, *30*(10), 1117-1128.
- Tsunts, M. (1966). Dropouts on the run. *Atlas, 11*, 116-124.
- Tucker, J. S., Edelen, M. O., Ellickson, P. L., & Klein, D. J. (2011). Running away from home:

 A longitudinal study of adolescent risk factors and young adult outcomes. *Journal of Youth and Adolescence*, 40(5), 507-518.
- Turanovic, J. J., Reisig, M. D., & Pratt, T. C. (2015). Risky lifestyles, low self-control, and violent victimization across gendered pathways to crime. *Journal of Quantitative Criminology*, 31(2), 183-206.



- Tyler, K. A., & Bersani, B. E. (2008). A longitudinal study of early adolescent precursors to running away. *The Journal of Early Adolescence*, 28(2), 230-251.
- Tyler, K. A., Hagewen, K. J., & Melander, L. A. (2011). Risk factors for running away among a general population sample of males and females. *Youth & Society*, *43*(2), 583-608.
- Tyler, K. A., Hoyt, D. R., Whitbeck, L. B., & Cauce, A. M. (2001). The impact of childhood sexual abuse on later sexual victimization among runaway youth. *Journal of Research on Adolescence*, 11(2), 151-176.
- Van Leeuwen, J. M., Hopfer, C., Hooks, S., White, R., Petersen, J., & Pirkopf, J. (2004). A snapshot of substance abuse among homeless and runaway youth in Denver, Colorado. *Journal of Community Health*, 29(3), 217-229.
- U.S. Census Bureau (2010). *Quick facts: Clearwater city, Florida*. Retrieved from https://www.census.gov/quickfacts/table/PST045215/1212875.
- Werner, E. E. (1989). High-risk children in young adulthood: A longitudinal study from birth to 32 years. *American Journal of Orthopsychiatry*, *59*(1), 72.
- West, D. J., & Farrington, D. P. (1977). The delinquent way of life: Third report of the

 Cambridge Study in Delinquent Development. London, UK: Heinemann Educational

 Books.
- Whitbeck, L. B., & Simons, R. L. (1993). A comparison of adaptive strategies and patterns of victimization among homeless adolescents and adults. *Violence and Victims*, 8(2), 135-152.
- Whitbeck, L. B., Hoyt, D. R., & Ackley, K. A. (1997). Abusive family backgrounds and later victimization among runaway and homeless adolescents. *Journal of Research on Adolescence*, 7(4), 375-392.



- Whitbeck & Hoyt. (1999). Nowhere to Grow. Hawthorne, NY: Walter de Gruyter, Inc.
- Whitbeck, L. B., Hoyt, D. R., & Yoder, K. A. (1999). A risk-amplification model of victimization and depressive symptoms among runaway and homeless adolescents. *American Journal of Community Psychology*, 27(2), 273-296.
- Whitbeck, L.B., Hoyt, D.R., & Bao, W. (2000). Depressive symptoms and co-occurring depressive symptoms, substance abuse, and conduct problems among runaway and homeless adolescents. *Child Development*, 71(3), 721-732.
- Whitbeck, L. B., Hoyt, D. R., Yoder, K. A., Cauce, A. M., & Paradise, M. (2001). Deviant behavior and victimization among homeless and runaway adolescents. *Journal of Interpersonal Violence*, 16(11), 1175-1204.
- Windle, M. (1988). Substance use and abuse among adolescent runaways: A four-year follow-up study. *Journal of Youth and Adolescence*, *18*(4), 331-344.
- Winokur-Early, K., Hand, G. A., & Blankenship, J. L. (2012). Validity and reliability of the Florida Positive Achievement Change Tool (PACT) risk and needs assessment instrument: A three-phase evaluation (validation study, factor analysis, inter-rater reliability). *Tallahassee, FL: Justice Research Center*.
- Yates, G. L., MacKenzie, R., Pennbridge, J., & Cohen, E. (1988). A risk profile comparison of runaway and non-runaway youth. *American Journal of Public Health*, 78(7), 820-821.
- Yoder, K. A., Whitbeck, L. B., & Hoyt, D. R. (2001). Event history analysis of antecedents to running away from home and being on the street. *American Behavioral Scientist*, 45(1), 51-65.
- Yoder, K. A., Hoyt, D. R., & Whitbeck, L. B. (1998). Suicidal behavior among homeless and runaway adolescents. *Journal of Youth and Adolescence*, *27*(6), 753-771.



- Young, R. L., Godfrey, W., Matthews, B., & Adams, G. R. (1983). Runaways: A review of negative consequences. *Family Relations*, 32(2), 275-281.
- Zide, M. R., & Cherry, A. L. (1992). A typology of runaway youths: An empirically based definition. *Child and Adolescent Social Work Journal*, 9(2), 155-168.
- Zinn, M.B. & Dill, B.T. (1996). Theorizing difference from multiracial feminism. *Feminist Studies*, 22(2), 321-331.



APPENDIX I: IRB APPROVAL



RESEARCH INTEGRITY AND COMPLIANCE

Institutional Review Boards, FWA No. 00001669
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
(813) 974-5638 • FAX(813) 974-7091

6/19/2015

Michelle Jeanis, M.S. Criminology 4202 E. Fowler Avenue Tampa, FL 33620

RE: Full Board Approval for Initial Review

IRB#: Pro00022595

Title: Trajectories of runaway youths: An analysis of offending and victimization risk

Study Approval Period: 6/19/2015 to 6/19/2016

Dear Ms. Jeanis:

On 6/19/2015, the Institutional Review Board (IRB) reviewed and **APPROVED** the above application and all documents outlined below.

Approved Item(s):

Protocol Document(s):

Youth Runaway Protocol

Your study qualifies for a waiver of the requirements for the informed consent process as outlined in the federal regulations at 45CFR46.116 (d) which states that an IRB may approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent, or waive the requirements to obtain informed consent provided the IRB finds and documents that (1) the research involves no more than minimal risk to the subjects; (2) the waiver or alteration will not adversely affect the rights and welfare of the subjects; (3) the research could not practicably be carried out without the waiver or alteration; and (4) whenever appropriate, the subjects will be provided with additional pertinent information after participation.

This research involving children as participants was approved under 45 CFR 46.404: Research not involving greater than minimal risk to children is presented.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an amendment.



We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

John Schinka, Ph.D., Chairperson USF Institutional Review Board