

University of Nevada, Reno

**Impact of Incarcerated Youth's Social Relationships on Institutional Misconduct  
and Self-Efficacy to Desist from Crime Post-Detention**

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requirements for the degree of Doctor of Philosophy in  
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by

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## Abstract

Despite significant public investment in juvenile corrections, research suggests that residential placements are only moderately effective in preventing recidivism. The aim of the current study was to test a Social Development Model (Hawkins & Weiss, 1985; Catalano & Hawkins, 1996) predicting youth's institutional misconduct and self-efficacy to succeed post-detention from self-reports about the quality and nature of their relationships with staff and other detained youth. In addition, features of youth programming known to promote positive development (Eccles & Gootman, 2002), including integration of external social supports and provision of a safe, supportive environment were predicted to moderate the links between youth's relationships with staff and peers and detention outcomes. Data were collected using a cross-sectional survey design with 301 youth from four Nevada detention facilities. The structural equation model had adequate fit (ML  $\chi^2 = 199.83$  (57),  $p < .001$ ; CFI = .93, TFI = .91, RMSEA = .07), and the model was supported over alternative models. Findings indicated that youth who reported positive interactions with prosocial staff influences were significantly more likely to report that they perceived they were going to succeed once released from detention, and were less likely to report having broken rules at the facility. Conversely, youth who reported interacting with peers who were engaged in antisocial activities at the facility were less likely to believe they would succeed after release and more likely to break rules at the facility. A lack of physical/psychological safety indirectly, and negatively, affected the positive relationship between staff prosocial influences and post-

detention likelihood of success. Implications of the findings for research, theory, and practice are discussed.

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## Chapter I: Introduction

Despite a significant national trend away from juvenile detention, the United States still places more young people in secure confinement than any other country in the world (Annie E. Casey Foundation, 2013). The social and economic cost of juvenile detention is one of the most pressing policy problems facing the criminal justice system today. In 2012, 57,190 juvenile offenders were held in secure residential placement (Hockenberry, Sickmund, & Sladky, 2015). Nevada has some of the higher juvenile detention rates in the country with 672 youth detained or committed to a residential detention center in 2012 (Hockenberry, Sickmund, & Sladky, 2015). Juvenile detention is one of the most expensive criminal justice programs, and costs, on average, \$148,767 (Justice Policy Institute, 2014). In Nevada, it costs \$195,406 to house a youth in juvenile detention for a year. Despite significant public investment in juvenile corrections, research suggests that juvenile detention is only moderately effective in preventing future crime, with approximately 45% of youth re-offending after release (Lipsey & Wilson, 1998). Among more serious juvenile offenders in Nevada, rates of re-offending are as high as 90% in some counties for all types of sentence structures (National Council of Juvenile and Family Court Judges, 2005).

Over the past 20 years, research efforts to understand how antisocial behaviors develop among adolescents have significantly improved attempts to prevent early delinquent careers (Mulvey et al., 2004). Research guiding decisions about what to do with serious offenders who are *already* in the juvenile justice system, however, is remarkably limited (Mulvey et al., 2004). To date, there is no substantial body of

literature describing the psychological processes or life changes among serious adolescent offenders that promote positive adjustment and desistance from antisocial activity (Steinberg & Cauffman, 2000; Laub & Sampson, 2001; Losel & Bliesener, 1990). Even less is known about how the detention experience itself impacts youth's likelihood of recidivism (Trulson, 2007), their psychosocial development (Steinberg & Cauffman, 2000), or if detention has any long-term impact on youth at all (Loughran et al., 2009). A recent longitudinal follow-up study of incarcerated youth found that length of stay in a detention facility did not significantly increase or decrease youth's rates of re-arrest (Loughran et al., 2009). In fact, youth with the lowest levels of self-reported offending actually raised their likelihood of offending by a small, but statistically significant amount following stays in institutions. A clearer understanding of how and under what circumstances detention affects youth's recidivism and psychosocial development is of central theoretical, empirical, and policy importance (Loughran et al., 2009).

This study bridges two theories of action to elucidate the factors that promote or deter rehabilitation among detained youth. The Social Development Model (SDM; Hawkins & Weiss, 1985; Catalano & Hawkins, 1996) provided a guiding mechanism for understanding how relationships with deviant peers and relationships with prosocial staff might relate to two strong predictors of recidivism during detention: (1) perceived likelihood of post-detention success; and (2) institutional misconduct. Additionally, this study utilized Eccles and Gootman's (2002) framework about the factors known to promote positive youth development in community programs to enhance the model. In

line with Eccles and Gootman's (2002) work, this study examined two primary indirect effects on the relationship between Peer Antisocial Influences and Staff Prosocial Influences and detention outcomes. Specifically, how well family and home support was integrated into the detention setting, and how physically and psychologically safe youth felt in the program. The data was collected through a one-time survey administered to 301 youth detained at two state and two county facilities in Nevada .

In essence, the SDM provides a theoretical approach to understanding the impact of relationships and socialization on behavior (Catalano & Hawkins, 1996; Hawkins & Weis, 1985). The SDM model integrates social learning (Akers, 1998; Bandura, 1977), social control (Hirschi, 1969; Hirschi & Gottfredson, 1995), and differential association theories of crime (Sutherland, 1973; Thornberry & Krohn, 1997) as well as research on risk and resiliency (e.g. Compas, 1998; Freitas & Downey, 1998) to explain how youth actively select and form relationships with individuals from whom they ultimately learn behaviors, attitudes, and skills. One important contribution of the theory is that it acknowledges that youth *are* exposed to both prosocial and antisocial influences throughout their life, presumably even during their juvenile detention stays. The types of behaviors, attitudes, and norms youth adopt is the direct result of the strength of the bond they form with the prosocial or antisocial influences in their life.

In the SDM model, there are two identical socialization pathways, a prosocial path and an antisocial path (Catalano et al., 2005). On each pathway, youth form bonds with individuals through four processes: (1) they perceive opportunities for involvement in activities and interactions with others; (2) they become involved in prosocial or

antisocial activities and relationships; (3) they develop skills to participate in these activities and relationships; and (4) they receive reinforcement for engaging in these activities and relationships (Hawkins, Catalano, & Arthur, 2002). When individuals have the opportunity and skills to be involved in a prosocial or antisocial activity, and their performance is rewarded, a social bond develops between the individual and the socializing unit (Catalano et al., 2005). The bond consists of an attachment or emotional connection and commitment to the group or socializing unit. Once strongly established, the social bond has power to affect behavior independent of the above four processes. The social bond influences behaviors, because individuals are motivated to maintain the bond by conforming to the norms and values of the person with whom they selected to socialize. It is hypothesized that an individual's behavior will be prosocial or antisocial depending on the predominant behaviors, norms, and values held by the groups or individuals with whom youth bond. To summarize, the SDM model predicts that individuals weigh the relative advantages and disadvantages to bonding with various socializing agents to determine whether they will adopt prosocial or antisocial behaviors, norms, and beliefs.

Although the SDM provides a general structure for understanding why youth may be attracted to antisocial influences or prosocial influences, the theory itself does not specify what types of rewards youth might respond to in their decisions to pursue prosocial or antisocial endeavors. Further, although the SDM suggests that youth's relative involvement and opportunities to bond with prosocial or antisocial influences

affects their decisions to engage in antisocial or prosocial behaviors, it does not specify what involvement and opportunities might be available to youth in a detention setting.

This study therefore relies on Eccles and Gootman's (2002) framework for describing the critical features of positive developmental programs as a basis for understanding how youth approach detention settings, what are the relative rewards they might perceive for engaging in prosocial or antisocial behaviors while detained, and how facilities might best structure youth's time in detention to ensure more positive developmental outcomes for youth.

Eccles and Gootman (2002) reviewed an extensive body of literature on community programs to help identify eight features of community programs that are critical to facilitating youth's positive development and the acquisition of assets that will improve their overall functioning (see Table 1.1).

Table 1.1

*Eight Critical Features of Positive Developmental Settings (Eccles & Gootman, 2002)*

Program Feature	Questions to Assess Presence or Absence of Feature in Detention Settings
<i>1. Physical and Psychological Safety</i>	Do youth feel safe? Are peer interactions monitored?
<i>2. Appropriate Structure</i>	Are rules clear, consistent, and understood by youth?
<i>3. Supportive Relationships</i>	Are relationships with staff positive and engaging?
<i>4. Opportunities to Belong</i>	Are youth given opportunities for meaningful inclusion?
<i>5. Positive Social Norms</i>	Are positive social norms emphasized and negative social norms minimized?
<i>6. Support for Efficacy and Mattering</i>	Are youth given opportunities for autonomy and skill-building?
<i>7. Opportunities for Skill-Building</i>	Are there opportunities to build social/cultural capital?
<i>8. Integration of Family, School, &amp; Community</i>	Is there communication with family, school, community? Are there opportunities for youth to practice program skills in these settings?

According to Eccles and Gootman's (2002) recommendations and synthesis of relevant literature, community programs for youth should rely on a developmental framework that supports youth's acquisition of personal and social assets. Although these eight features are powerful predictors of the effectiveness of out-of-school time programming on a wide range of outcomes, no research to date has examined whether the Eccles and Gootman's features also predict youth's outcomes within an institutional setting. The SDM, which theorizes why youth follow prosocial or antisocial pathways of behavior, is used as the guiding structural model to predict how these eight critical features might interact within the context of a juvenile detention center to impact youth's rule-breaking behaviors and forecasts about their future success after they are released.

While detained, youth may be exposed to both positive social norms and supportive relationships with staff as well as negative social norms fostered by other deviant youth. This study attempts to determine how prosocial and antisocial influences interact during detention to predict whether youth's rule-breaking behavior and self-efficacy to succeed after release from detention. Features of youth programming known to promote positive development, including integration of external social supports (family, friends, romantic partners) within facility programming and provision of a safe, supportive environment are predicted to moderate the links between their relationships with staff and peers and detention outcomes.

This study has the potential to elucidate why juvenile detention causes some youth to stop engaging criminal behaviors, and reinforce previous patterns of delinquent behaviors for other youth. By using a well-validated integrated model of delinquency and

incorporating research about features of youth programs that promote positive development, this study may help facilities improve outcomes among detained youth.

## **Chapter II: Review of the Literature**

### **History of Juvenile Detention in the United States**

Proportionately to the population of juvenile delinquents, a relatively small number of juvenile delinquents are sentenced to out-of-home placements each year (MacKenzie, 1999). Youth in this “deep-end” of the system (Mulvey et al., 2004, p. 215), though small in number, are responsible for committing a substantial proportion of all crimes committed by minors (Snyder & Sickmund, 1999). They are also the population that is more difficult to rehabilitate (Florsheim, Shotorbani, Guest-Warnick, Barratt, & Hwang, 2000), and the most likely to become chronic adult offenders (Schumacher & Kurz, 2000). Detention marks one of the most severe sanctions for juvenile delinquents and is usually reserved only for youth who may pose a threat to their community and/or youth who require intense, multi-faceted rehabilitative treatment to reduce their likelihood of recidivism.

Since the beginning of the juvenile court movement at the turn of the 19<sup>th</sup> century, juvenile offenders in the United States have been afforded greater protection and leniency than adult offenders. The less rigorous standards applied to juveniles often meant that sanctions for youth emphasized rehabilitation rather than punishment. However, in the past two decades, the juvenile justice system has become increasingly more punitive, blurring the once well-defined lines between adult and juvenile justice systems. From the

mid-1980s through the early 1990s, there was a widely publicized increase in violent delinquency - and particularly juvenile homicides - that resulted in a series of reactive policies that have had a dramatic impact on the practices applied to juvenile justice populations in the United States (Howell, 2003). As a result of this increase in crime, damaging depictions of young offenders as *superpredators*, caused policy makers to “get tough on crime” (McCollum, 1996). Critics of the rehabilitative juvenile justice paradigm believed that it had not been effective in reducing youth crime, and that if the system been less lenient on young offenders, fewer would have gone on to commit serious crimes. Thus, increasingly punitive measures were enacted to help remove these “dangerous” youth from the streets and restore public safety and order (Steinberg, Chung, & Little, 2004).

Several researchers have since re-analyzed this “increase” in violence among juvenile delinquents, and found that only a slightly larger proportion (8-10%) of juveniles committed serious violent acts, but overall, the number of juveniles who committed violent acts did not increase (Howell, 2003). Further, it appears that the increase in violent crimes primarily occurred within gangs rather than in the broader population of juveniles (Howell, 1998). Since a peak in detention of juveniles in 2001, these rates have steadily declined, and between 1994 and 2004, the juvenile arrest rate for violent crimes fell 49% to a historic low from its 1994 peak (Sickmund & Puzzanchera, 2014).

Concerns over the supposed increase in juvenile crime resulted in a number of policy and practice shifts that have dramatically altered the way juveniles are treated in the criminal system, particularly those in the “deep end” of the system. Large numbers of

juvenile offenders have been removed from the juvenile justice system and placed in the criminal justice system. Rehabilitation is emphasized far less, and punitive measures are more frequently utilized. New laws have designated more juveniles as serious offenders, brought more minor offenders into the system, and lengthened the amount of time youth spend in juvenile correctional facilities (Stahl, 2000). Although the number of juvenile arrests for violent offences has decreased substantially in the past two decades, the total number of referrals to juvenile courts has increased (Stahl, 2000). As a result, juvenile court intake and probation caseloads are overwhelming, and detention centers and correctional facilities have grown increasingly overcrowded, particularly with minor offenders. These changes in policies have a substantial impact on youth in the juvenile justice system today, with tens of thousands of youth still receiving out-of-home placements, despite limited research supporting its positive impact on recidivism, or promoting positive youth development.

Researchers have increasingly demonstrated that punitive sanctions are less effective at reducing crime than are rehabilitative responses (Lipsey & Wilson, 1998; Juvenile Detention Alternatives Initiative, 2007), including by providing evidence that adolescents who are prosecuted as adults are 30% more likely than those who are processed in the juvenile justice system to be rearrested, both sooner and for more serious offenses (Bishop, Frazier, Lanza-Kaduce, & Winner, 1996; Fagan, 1995). Thus, contrary to popular belief and current policy trends, a punitive orientation to crime neither reduces recidivism nor preserves public safety (Fagan, 1990). Unfortunately, there is a remarkable dearth in the literature about what types of programming do work with

adolescents in this deep-end of the system (Mulvey et al., 2010). Further, there is a notable divide between criminological theories, and theories on how to promote positive youth development. Loeber and LeBlanc (1990) argue that most theories in criminology do not adopt a developmental perspective and most juvenile justice tend to be focused on corrections, rather than the promotion of positive, normative, youth development processes. This is unfortunate, as both fields of literature have unique, and important, contributions to inform juvenile justice programming. The next sections will describe the field of criminology researchers' current understanding of how youth react to the juvenile detention experience, and will then describe the developmental model proposed for this study.

### **Importation Theory vs. Deprivation Models of Incarceration Adjustment**

Researchers have relied on two primary theories to guide predictions of incarceration adjustment and the impact of incarceration on recidivism: importation theory and deprivation theory. According to importation theory, an individual's pre-detention characteristics, including their prior social norms, interpersonal skills, emotional and mental health, and previous incarceration history largely determine adjustment to incarceration and later recidivism (Berg & DeLisi, 2006; Gover et al., 2000). In contrast, the deprivation model suggests that factors related to the experience of incarceration itself, including social isolation and structure and organization, impact adjustment to detention and later recidivism (Innes, 1997; Poole & Regoli, 1983).

Both importation and deprivation theories are supported by research. For example, inmates who are gang members, have prior histories of violence and those who

have been incarcerated before are often more difficult to manage during incarceration (Berg & DeLisi, 2006; Gover et al., 2000; Kuanliang et al., 2008; Poole & Regoli, 1983). Youth offenders at the time of intake to juvenile detention, on average, are significantly more likely to report poorer interpersonal coping skills, lower intelligence, higher impulsivity, poorer family relationships, poorer mental and physical health, and lower social support than non-detained youth in community samples (Howell, 2005). All of these factors have subsequently predicted higher likelihood of post-detention recidivism, institutional misconduct, and adjustment to detention, even while controlling for variables related to the detention experience, like overcrowding and social isolation (Tasca, Griffin, & Rodriguez, 2010).

In contrast, deprivation measures typically include type of institution, length of confinement, victimization, amount of outside contact, security level, and amount of freedom in an institution (Edgar & O'Donnell, 1998; Gover et al., 2000; Harer & Steffensmeier, 1996; Kuanliang et al., 2008; Lahm, 2009). For example, prisons with higher security levels that allow for little or no activity or treatment tend to amplify stress among inmates, which can lead to aggressive behavior and poor adjustment (Gover et al., 2000; Harer & Steffensmeier, 1996). Other measures of deprivation include staff-to-inmate ratio, overcrowding, and strictness of rule enforcement (Gover et al., 2000; Harer & Steffensmeier, 1996; Kuanliang et al., 2008).

How youth respond to their detention experience and develop forecasts about their post-detention success is the result of some combination of their prior life experiences and the characteristics of the detention facility itself, an integrated approach taken and

supported by a number of researchers (e.g. Camp, Gaes, Langan, & Saylor, 2003). In line with the importation theory, youth who report poor family functioning (e.g. low quality communication, warmth, clear rules and roles, etc.) are less likely to believe that they will desist from crime after release from detention (Marsh & Evans, 2009). In contrast, youth who feel highly engaged in institutional programming tend to report a higher perceived likelihood of post-detention success (Marsh & Evans, 2010). This finding may relate to both the quality of programming offered as well as youth's self-efficacy and motivation for self-improvement.

Although these two theoretical models are dominant in the adult prison literature, relatively few studies have used this social psychological approach when examining juvenile inmates (Tasca, Griffin, & Rodriguez, 2010). Thus, the current literature on juvenile detention is relatively limited in its ability to guide juvenile justice administration on when, how, and how long to incarcerate young offenders (Mulvey et al., 2004). Use of grounded theory related to adolescent development, delinquency, desistance, and recidivism are all necessary to understand both the impact of the detention experience on adolescents' delinquency trajectories, and when detention might be beneficial or harmful for youth.

### **Social Development Model (SDM) of Delinquency**

Social science researchers have increasingly attempted to combine, connect, and synthesize existing theoretical knowledge to produce integrated theories capable of explaining and predicting complex human behaviors. Efforts to integrate theories often occur in response to criticisms of traditional, single-theory or single-explanations of

events that are often limited in their range of application and their ability to explain multiple outcomes in multiple contexts. The trend away from using single theories and towards using more integrated theories is particularly prominent in the field of criminology, which, prior to the 1970's and 1980's, was a topic studied by psychologists, sociologists, anthropologists, and a multitude of other professionals, few of whom collaborated or read each others' work (Farrington, 2005).

Traditionally, criminological theories have focused on explaining static, between-individual differences in offending (Farrington, 2005). Thus, many sociologists (e. g. Agnew, 1992 in Farrington, 2005) developed a number of theories to explain the strong relationship between socioeconomic status and rates of crime, while psychologists developed theories to explain why individual characteristics, like high impulsivity or low IQ, predicted higher crime rates. As Loeber (2005, in Farrington, 2005), notes, however, these single theories do not adequately account for the processes that describe individuals' escalation from minor to serious forms of delinquency, their de-escalation from serious to minor delinquency, or why many youth desist from crime altogether after reaching adulthood. Certainly not every teenager born with a lower IQ later becomes delinquent, nor do all teenagers who live in a low socioeconomic neighborhood develop criminal careers. Thus, integrated theories of crime often attempt to explain how interactions between environmental and individual factors predict a range of criminal trajectories, from escalation to chronic offending to adult offending to desistance. The integration of theories offers some promise in helping bridge pathways between disciplines and helping to describe a broader and more complex range of criminal

outcomes. In spite of some limitations and general concerns about the use of integrated theories in the field of criminology (Bernard, 1990), many integrated theories, like the Social Development Model, have demonstrated some impressive predictive utility above and beyond the capacity of single theories.

In a longitudinal study tracking 1,040 third and fourth graders through middle school, the Social Development Model (Catalano & Hawkins, 1996; Hawkins & Weiss, 1985), accounted for 49% of the variation in middle school antisocial behavior, which suggests that the model has strong potential to guide prevention programming. The SDM model fits other empirical data well, and explains between 9 and 45 percent of the variance in outcomes as broad as adolescent substance use (Catalano et al., 1996), alcohol misuse, and violence (Lonczak et al., 2001; Abbott, Hawkins, Kosterman, & Catalano, 2002), as well as various forms of antisocial behavior in childhood (Catalano, Kosterman, Hawkins, Newcomb, & Abbott, 1996).

Figure 2.1 below provides a conceptual model of the key components of the SDM, described more fully in the narrative following the figure.

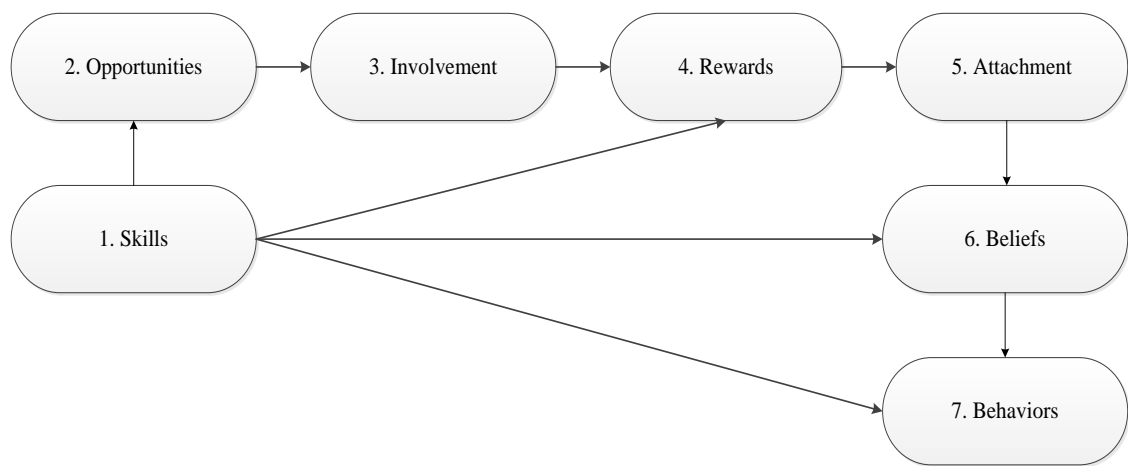


Figure 2.1 Social Development Model of Delinquency (Catalano et al., 1999)

As noted earlier, youth are exposed to antisocial and prosocial pathways throughout their lives (Catalano et al., 2005). On each pathway, youth form bonds with individuals through four processes: (1) they perceive opportunities for involvement in activities and interactions with others; (2) they become involved in prosocial or antisocial activities and relationships; (3) they develop skills to participate in these activities and relationships; and (4) they receive reinforcement for engaging in these activities and relationships (Hawkins, Catalano, & Arthur, 2002). When individuals have the opportunity and skills to be involved in a prosocial or antisocial activity, and their performance is rewarded, a social bond develops between the individual and the socializing unit (Catalano et al., 2005). From there on, they are motivated to adopt either prosocial or antisocial norms, beliefs, and behaviors that align with those of the individuals with whom they have bonded.

To further illustrate the SDM model (SDM processes are italicized to provide clarity; modeled after example in Catalano et al., 1999), consider the case of two youth sentenced to a six month term of detention at one of two detention facilities. Both youth have a similar set of risk factors that, according to research, place them at higher-than-average risk to recidivate. Their fathers were also incarcerated, they were involved in gangs, and they dropped out of high school early. On the resilient pathway, one youth has a single protective factor that dramatically alters his likelihood of recidivating. He has the *opportunity* for prosocial interaction because he is sentenced to a facility that provides high-quality, evidence-based programming, which leads to his *involvement* in prosocial activities (he is enrolled in a credit recovery program so he can finish school). Through

his involvement, he develops *skills for prosocial behavior* (he learns good study habits and receives career advice). The child receives *rewards* for his prosocial behaviors (detention staff praise his motivation to complete school) which leads to *prosocial bonding* (the youth is *attached* to his teachers, he is *committed* to completing his education, and he adopts staff *beliefs* that he can stay out of trouble and complete his degree after leaving the facility). This exposure also increases his odds for further prosocial exposures, and reduces his likelihood of exposure to other risk factors. One of his teachers writes him a strong letter of recommendation to attend a special technology internship opportunity after release. His participation in the technology internship program helps keep him away from negative social networks and motivates him to pursue a career in web design.

On the non-resilient pathway, the youth attends a juvenile detention facility with limited rehabilitative programming. He also has an additional *opportunity* for antisocial interaction (his cell mate belongs to a gang) which leads to *involvement* in antisocial behavior (he becomes involved with other members of the gang in the facility), and *skills* for antisocial behavior (he learns the gang processes) which lead to *rewards* for antisocial behavior (he now has a group of older friends in the facility to protect him) which lead to *antisocial bonding* (he becomes good friends with the gang members). He is also at higher risk for exposure to other antisocial influences and activities in the future. When he leaves the facility, he becomes involved in the local chapter of the gang (*antisocial behavior*), increasing his odds of recidivating. Thus, according to the SDM model, youth face a series of antisocial (risk) and prosocial (protective) influences over the course of

their development, and through bonding processes, increase their likelihood of continuing to engage in prosocial or antisocial activities in ways that ultimately affect their future prosocial or antisocial outcomes.

The integration of social control, differential association, social learning, and risk/resiliency theories in the SDM offers several advantages to single theory models of antisocial behavior. For example, empirical tests of control theory have shown that when individuals are strongly attached to family, school, conventional others, and beliefs in the legal order they are also less likely to commit crimes (Hirschi, 1969; Hirschi & Gottfredson, 1995). Control theory acknowledges that some social influences have more of an impact on attitudes and behaviors than others, and describes how weak emotional ties and commitments to conventional others free individuals to use deviant means to obtain what they want (Catalano & Hawkins, 1996). However, control theory does *not* specify how such bonds to conventional others develop (Catalano & Hawkins, 1996), nor does it acknowledge individuals' often strong motivation to bond with *non*-conventional others (Dodge, Dishion, & Lansford, 2006).

Similarly, social learning theory and differential association theories posit that individuals weigh the relative rewards and costs associated with adopting the norms and behaviors of a given socializing agent or group, thereby describing the process by which individuals learn behaviors. The theory also extends differential association and social learning theory by asserting the importance of bonding in shaping behavior. Differential association theory suggests that it is mere exposure or involvement with a group or socializing agent that predicts behavior. However, the SDM hypothesizes that because

individuals are more willing to adopt norms and behaviors of certain groups and individuals and not others, there must be some stronger bonding force motivating youth to select whose norms to follow. This addition to differential association theory is supported by research suggesting that adolescents are more sensitive to reinforcement by others with whom they strongly identify and view as high-status (Dishion, Spracklen, Andrews, & Patterson, 1996).

The SDM offers several advantages for explaining some of the most well-accepted research findings regarding chronic, serious offenders in the “deep end” of the juvenile justice system. Some of these major findings are as follows. First, serious offenders are far more likely to have multiple risk factors for delinquency and engage in multiple forms of delinquent behaviors (Capaldi & Patterson, 1996; Piquero, 2000). Most serious and chronic offenders engage in problem behaviors earlier and continue to engage in crime later, than less serious offenders (Farrington, 2004). A small fraction of youth commit a large fraction of all crimes (Farrington & West, 1993), but the majority of delinquent adolescents, even the most serious offenders, ultimately desist from crime during adulthood (Farrington, 1992; Steinberg, Cauffman, & Monahan, 2015). Finally, serious, chronic offenders are often the most resistant to intervention (Florsheim, Shotorbani, Guest-Warnick, Barratt, & Hwang, 2000). Research on juvenile offending suggests that youth start to engage in antisocial behaviors during early adolescence, engage in the majority of offenses in late adolescence, and then gradually reduce their rates of offending as they begin to enter adulthood (Farrington, 2004).

The SDM model explains how, through increased interaction with antisocial risk factors over the course of their development, opportunities to engage in prosocial activities become increasingly limited, such that involvement in antisocial activities provides more opportunities to meet other antisocial individuals and develop antisocial skills, and reduces opportunities to meet prosocial individuals and develop prosocial skills. For example, the SDM postulates that children who do not have early developmental experiences with caregivers that promote attachment and commitment to family are more likely to have social skills deficits upon entering elementary school, including increased aggression and poor conflict resolution skills, a finding well-supported by research (Farrington, 2004).

This early onset of antisocial behavior (e.g. aggression in the elementary school classroom), causes these early onsetters to encounter fewer prosocial opportunities, and, because of their social skill deficits, they are hypothesized to be less skilled in taking advantage of prosocial opportunities that they do encounter. These individuals do not have developmental experiences that build commitment or attachment to prosocial individuals or activities to protect them from antisocial involvement when they enter middle and high school and other, similarly deviant peers begin to appear in the school context. During adolescence, the patterns of antisocial involvement are strengthened by antisocial peer involvements.

Antisocial behavior is more normative during adolescence both in the sense that youth engage in them more frequently and because society is more lenient with them when they engage in these behaviors (Farrington, 2004). As people mature into their 20's,

smaller proportions commit offenses because approval of offending decreases. The SDM posits that the social rewards for antisocial involvement in adolescence is greater than in young adulthood and the consequences for offending in adulthood are much worse. However, the SDM predicts that because only a small minority of individuals do not have access to many prosocial opportunities, skills, reinforcement, and bonding over the course of the development, those who do, offend early and often, in line with findings that suggest that a very small fraction of the population commits a large fraction of all crimes. Further, chronic exposure to risks and antisocial influences are hypothesized to have a cumulative effect on youth's likelihood of delinquency, explaining why serious chronic offenders are least likely to respond to rehabilitative intervention. Thus, the SDM substantiates many of the most accepted findings regarding serious and chronic offenders, underlining its possible merits for use with an incarcerated sample. Another benefit of the SDM is that it incorporates the concept of resilience by highlighting that youth have regular opportunities to engage in prosocial activities, suggesting that even highly at-risk youth can alter their life trajectory at any time.

### **Resiliency Theory**

Resiliency theories study how individuals overcome adversity and succeed in spite of their life circumstances. Resilience focuses on providing the developmental supports and opportunities (protective factors) that promote success, rather than on eliminating the factors that promote failure. Much of the research on resilience has focused on the risk factors that contribute to problem behaviors rather than on the factors that promote positive development (Smokowski, 1998). Although information on risk is

important from a theoretical perspective, developing interventions focused on changing the risks for delinquent youth may not be the most effective approach. Knowledge that delinquent youth are at increased risk for recidivism because they live in a disadvantaged neighborhood or have a history of abuse does not provide researchers and practitioners sufficient information to develop effective rehabilitative programming because these risk factors are not easily amenable to change (McKnight & Loper, 2002). In contrast, knowledge that good interpersonal and coping skills and involvement in prosocial activities often result in positive outcomes in the face of adversity does provide some guidance on how to develop programs that target variables that *are* more amenable to change (e. g. Lipsey, Wilson, Cobern, 2000).

Resiliency is particularly important to the study of interventions with incarcerated youth because it acknowledges youth's capacity to develop and utilize internal skills and assets to desist from crime, often in spite of long histories of criminal behaviors, immense childhood trauma and victimization, and poor social capital. Focusing on positive developmental factors rather than negative risk factors has become increasingly popular among practitioners and policy-makers as it seems to offer hope in the face of what often seems like an overwhelming confluence of risk factors many children and families face in their daily lives.

In line with the trend towards using more resiliency models among high-risk populations, a number of researchers in the field of criminology have advocated for increased research on why youth stop engaging in problem behaviors, rather than why they continue to recidivate (Mulvey et al., 2004). A number of commentators and

researchers have noted that what would be most beneficial to criminologists is not what got youth into trouble in the first place, but how to get them out of trouble once they are in the deep end of the system (Farrington, Ohlin, & Wilson, 1986; Loeber & LeBlanc, 1990). There is an increasingly large body of evidence that many youth eventually mature out of criminal trajectories during adulthood (Farrington, 1992). However, there is little to no research on what life events or cognitive processes impact youth's decision to lead more productive lifestyles (Uggen & Piliavin, 1998). Identifying ways that the juvenile justice system can facilitate these natural tendencies to "age out" of juvenile detention could dramatically enhance its effectiveness.

Resiliency theory is also important in that it recognizes that, with the right exposure to positive social forces, even the most serious chronic offenders have the capacity to right much of the negative developmental forces that led them towards delinquent trajectories. These findings are in line with research suggesting that bonding with positive social influences during juvenile detention can have a significant impact on youth's self-efficacy to desist from crime post-detention (Marsh & Evans, 2009), and the effectiveness of some types of correctional rehabilitation programs on youth recidivism (Lipsey & Wilson, 1998). The SDM is particularly important to the study of how juvenile detention affects youth's likelihood of recidivism and institutional misconduct in this dissertation study, because it provides a theoretical explanation for why some youth benefit from juvenile detention and become less likely to recidivate and others continue offending. The theory may suggest that exposure to rehabilitative programming while detained improves skills that allow youth to bond with prosocial influences upon release

and exposes youth to prosocial institutional influences (detention staff) that might make them more willing to adopt the more prosocial norms and behaviors of society. In contrast, youth who are exposed to deviant peers during juvenile detention may enhance their skills to engage in antisocial activities, which might explain why some youth continue to reoffend. Thus, the SDM has potential in this study to elucidate some of the processes within the “black box” of juvenile corrections that impact youth’s likelihood of recidivism for which we currently have little understanding.

This is of particular interest to practitioners who develop programs that can help lead youth out of delinquent trajectories, even in the face of a seemingly insurmountable number of risk factors that increase their probability of re-offending. The SDM provides guidance for rehabilitative and prevention programming by specifying the factors most amenable to change that can be targeted for intervention even among the most serious offenders. These include teaching youth the skills necessary (e. g. conflict resolution strategies) to help them to bond with prosocial individuals and providing them with opportunities to become involved in prosocial activities (e. g. providing vocational opportunities upon release, exposing them to positive detention influences). Further, it provides guidance on how to structure programs to reduce opportunities for exposure to antisocial influences (e. g. by increasing monitoring of peer activities to reduce deviancy training between inmates) and opportunities to engage in antisocial activities (e. g. structuring security to minimize fighting between inmates).

## **Promoting Positive Youth Development in Youth Programs**

Eccles and Gootman (2002) also rely upon a resiliency model to define the eight positive features of community program that increase the healthy development and well-being of adolescents and facilitate a successful transition from childhood to adulthood. These eight features were developed through a synthesis of research on the factors in community programs known to support youth's acquisition of personal and social assets through activities and interaction with program staff. Although the eight features have not yet been systematically applied to the study of what makes juvenile detention programming more or less effective for promoting criminal desistance among youth, the research presented here may suggest that the Eccles and Gootman (2002) framework presents an opportunity for identifying features detention centers can support to improve the success rate of detained youth.

**Physical and psychological safety.** At the most basic level, youth must first feel that they are both physically and psychologically safe in their program environment. Programs must be free from violence and unsafe health conditions and youth must feel confident that their physical and psychological well-being will be secured. This includes increasing safe peer group interaction and decreasing the likelihood of unsafe interactions with peers or staff. This is the most basic pre-requisite in any program whose intention is to promote positive youth development.

For some youth, juvenile detention marks one of the few times they will have access to medical help, treatment for mental health conditions, and basic vocational and life skills training (Howell, 2003). Unfortunately, for many other youth, juvenile

detention can exacerbate prior mental health or emotional problems by increasing youth's social isolation and boredom, and placing them at higher risk for bullying and victimization by other inmates (Brown & Ireland, 2006). For example, in spite of increased measures to enhance the security of detained adolescents in recent years (Howell, 2003), youth report frequent fears of being bullied, attacked, or victimized while incarcerated (Sedlak & McPherson, 2010).

Bullying is a serious but understudied problem within young offender samples. While in custody, bullying may take various forms including physical assault, theft, verbal abuse, threats, intimidation, and indirect forms of aggression such as gossiping and ostracizing (Ireland & Archer, 1996). According to a 2010 Office of Juvenile Justice and Delinquency Prevention report on the conditions of juvenile confinement, roughly one-third of the more than 2,000 youth detained in a correctional facility reported that they feared attack by someone, with 25% fearing attack by another resident, and 22% fearing attack by a staff member (Sedlak & McPherson, 2010). Rates of self-reported bullying during juvenile detention range from 20% to 70% and victimization to range from 30% to 75% (Ireland, 2002). This generally appears higher than reported rates among adult offenders (Ireland, 1999), and is often higher than rates among adolescents in school settings (King et al., 1996; Nansel et al., 2001).

The high prevalence of prison bullying and violence may be attributable to both the high concentration of individuals with past records of aggressive behavior an inmate subculture that promotes antisocial behaviors (Ireland, 2002). Experiencing bullying during juvenile detention appears to have a strong link with poor psychosocial outcomes.

Bullies, victims, and those who are bullies and victimized themselves are significantly more likely than other offenders to report suicidal ideation and attempts (Viljoen, O'Neil, & Sidju, 2005; Blaauw et al., 2001), and symptoms of depression and anxiety, including self-harming (Viljoen, O'Neil & Sidju, 2005; Biggam & Power, 1999).

Psychological well-being while incarcerated is important for program engagement and reduction of recidivism. In a five-year follow-up study with 600 detained youth, females who reported high stress, continued victimization post-detention, and depression and anxiety were significantly more likely to recidivate than females who did not report high levels of stress, depression or anxiety (Benda, 2005). In contrast, males who were depressed did not have a higher likelihood of recidivism. Rather for males, continued interactions with delinquent peers and high levels of anger and aggression were significantly predictive of recidivism. Despite the clear need to understand the factors that influence youth's adjustment to juvenile detention, little research has focused on who is most and least at-risk for psychological distress while incarcerated (Hochstetler, Murphy, & Simons (2004).

**Clear and consistent structure.** Eccles and Gootman (2002) also highlight the need for a clear and consistent structure with appropriate adult supervision and clear expectations for behavior. Research on youth programs has shown that, across program setting and type, adolescents benefit from experiencing clear rules, discipline, and consistently enforced rules (Connel and Wellborn, 1991; Dryfoos, 1990; Roth and Brooks-Gunn, 2000).

Research suggests that some youth benefit from the safety and structure juvenile detention provides, particularly those who have previously been previously victimized outside of detention (Warren, Hurt, Loper, & Chauhan, 2004). For example, Bradley and Davino (2002) found that incarcerated women who had previously been victimized reported that they felt significantly safer in prison than they had during childhood and during adulthood. Further, in a qualitative study with male youth about their juvenile detention experiences, a number of respondents felt that detention prevented them from getting into further trouble (Peterson-Badali & Koegl, 2002). Research on institutional violence suggests that inmate violence is most likely to occur in areas that were not well monitored by staff (Atlas, 1982). Conversely, exposure to other deviant youth during detention may decrease youth's likelihood of post-detention success. For example, research suggests that programs that permit detained youth to interact with each other often results in youth increasing delinquent behaviors post-detention, rather than reducing them (Ashkar & Kenny, 2008; Dishion & Piehler, 2009; National Research Council & Institute of Medicine, 2001).

**Supportive relationships.** Supportive relationships with positive adults are perhaps one of the most often cited factors predicting youth success in a program. In a large-scale study of urban after-school programs, Hirsch (2005) found that the relationships between youth and staff are the most fundamental strength of the program and the primary reason for youth's continued participation. McLaughlin (2000) has similarly argued that guidance and support from frontline youth workers are two of the most important predictors of long-term success for youth involved in programs. Positive

relationships with older, prosocial role models have been found to counteract the negative effects of placing delinquent youth with other youth offenders (Dodge, Dishion & Lansford, 2006). Youth may develop resiliency to negative peer pressures if a connection can be made with an attentive, nurturing adult, even if that adult is not a parent or caretaker (Burns, 1996). In one of the few studies to link youth's perceptions of their relationship with staff and their perceived self-efficacy to succeed after detention, Marsh and Evans (2009) found that youth in detention who rated the quality of their relationship with a staff member as high in trust, positive affect, and closeness, and felt that staff member was effective at problem-solving were significantly more likely to have positive forecasts about their post-release outcomes. Although research on the impact of positive youth-staff relationships within detention settings is limited, one study found that psychologically distressed incarcerated youth reported they would like more emotional and practical support from staff and other residents and that poor relationships with staff were most predictive of youth's distress, depression, and anxiety during juvenile detention (Biggams & Power, 1998).

Unfortunately, poor youth-staff relationships are normative for many youth in juvenile residential facilities (Sedlak & McPherson, 2010). A majority of youth in detention say punishments are unfair, while more than one-third feel that staff use unnecessary force (Sedlak & McPherson, 2010). Similarly, one-third of youth do not know how to file a complaint or they fear retribution if they do so. Poor relationships with institutional staff may predict higher bonding with other inmates and also negatively impact youth's willingness to engage in institutional programming. Work by Miller and

Ohlin (1985) suggests that when youth feel they are treated fairly they are more likely to cooperate with staff and to refrain from violence.

**Opportunities to belong.** Research suggests that youth who feel a sense of connection to programs and other settings have more positive outcomes than youth who do not feel connected. Youth who feel connected to their schools report lower levels of emotional stress, violent behavior, and substance abuse than youth who feel alienated or rejected by their teachers and school (Blum & Rinehart, 1997; Fine, 1991; Roderick, 1991). A sense of belonging has been found to decrease the likelihood of involvement in high-risk behaviors, and increase a sense of responsibility and self-competence (Bambone & Arbretton, 1997).

As the Social Development Model suggests, individuals tend to adopt the beliefs and behaviors of the people and organizations with whom they feel closest. Marsh and Evans (2010) highlight this phenomenon in finding that incarcerated youth who felt a sense of belonging to their rehabilitative programming reported significantly higher self-efficacy to succeed post-detention. Thus, the extent to which staff in a detention facility can promote youth's sense of belonging, the more likely they will be to take advantage of the rehabilitative programming offered.

**Positive social norms.** The importance of peer affiliations for adolescents' delinquent behaviors and psychosocial adjustment has also been well established (Kupersmidt & Dodge, 2004). Peers provide a context in which adolescents can explore new roles, experiment with different identities, and learn about intimate relationships outside of the family (Sharp, Coatsworth, Darling, Cumsille, & Ranieri, 2007). Although

peers provide many positive opportunities for development and self-growth, several studies have shown that affiliation with problem-prone friends is one of the strongest predictors of a youth's own involvement in antisocial behaviors (Pratt & Cullen, 2000; Warr, 2002; Agnew, 2009). Adolescents are at particular risk for associating with delinquent peers when they have been rejected by non-delinquent peers (Dishion, Patterson, Stoolmiller, & Skinner, 1991; Thornberry & Krohn, 1997).

Geldman et al. (1983) identified several factors that mitigate deviant peer group effects, including staff experience and relying on theory to drive programming. In this study, during all-deviant peer group sessions, high-risk boys who had been placed with inexperienced therapists became increasingly antisocial over time and fared the most poorly, whereas experienced therapists were able to keep high-risk participants from becoming more antisocial. Second, the theoretical basis for the treatment had a large impact in tempering the adverse effect of all-deviant peer groups. The authors concluded that the high degree of structure in the behavioral groups dampened deviancy training effects.

In spite of the highly structured schedule within juvenile facilities, research does suggest that deviancy training occurs among inmates, although the conditions under which detained youth adopt the deviant behaviors of other inmates have not been well-studied (Dodge, Dishion, & Lansford, 2006). In a meta-analysis of findings from 500 rehabilitative programs for delinquent youth, Sherman et al. (1998) found that the common link between all ineffective delinquency prevention programs was the aggregation of deviant youth. Further, in a sample of 15,000 detained youth in Florida,

researchers found a statistically significant tendency for youth to acquire the delinquent behaviors of other youth in their residential placement, and to engage in those behaviors post-detention (Bayer, Pintoff, & Pozen, 2003). Lipsey, Wilson, and Cohearn's (2000) meta-analysis of counseling for delinquent youth that were administered to deviant peer groups were 33% less effective than one-on-one counseling.

Juveniles who are in units with young adults are more than twice as likely to be exposed to inmates whose most serious career offense is murder. According to a report on conditions of confinement among youth detained across the United States, one-fifth of offenders in juvenile facilities are in living units with others who are three or more years older than they are, which risks exposing younger youth to peers with longer and more serious criminal histories (Sedlak & McPherson, 2010). Further, research by Dodge, Dishion, and Lansford (2006) suggest that younger youth with shorter histories of problem behaviors are the most likely to acquire the deviant habits of older peers. Thus, in spite of burgeoning body of research suggesting that aggregating antisocial youth in detention facilities has deleterious effects on recidivism, many incarcerated youth may still risk exposure to deviant peers while incarcerated.

Dodge, Dishion, & Lansford (2006) identify a number of deficits in our current understanding of deviancy training within juvenile justice settings, including which youth are most at-risk for peer influence while incarcerated, whether deviancy training diminishes over time, and what the minimum dosage and exposure effects are. In addition, because youth may engage in a range of institutional programs during juvenile detention, there is little information regarding combined effects during juvenile detention,

particularly if some programs aggregate youth while others do not. This study has the potential to significantly increase current understanding of deviancy training within an institutional setting by collecting some of the first comprehensive data on frequency of peer exposure, and impact of exposure to deviant peers across a range of institutions and youth backgrounds.

**Support for efficacy and mattering.** Self-efficacy is defined as “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances...it is concerned not with the skills one has but with judgments of what one can do with whatever skills one possesses” (Bandura, 1986, p. 391). Self-efficacy has been shown to predict a range of behaviors, and is highly correlated with behavior change and goal attainment (Grusec, 1992; Koestner et al., 2006). A study by Caprara, Barbarnelli, Pastorelli, and Cervone (2004), for example, demonstrated that students who initially judged themselves as more capable of avoiding negative peer pressure and attaining good grades during high school had significantly lower levels of problem behavior, higher grades, and greater popularity among their peers two years later than youth who reported low self-efficacy to avoid peer pressure and achieve high academic achievement. Further, self-efficacy was significantly more effective in predicting outcomes in this study than a range of other well-substantiated measures of static personality traits. These and other findings from studies of self-efficacy provide clear evidence of the long-term impact of self-efficacy beliefs on diverse developmental outcomes (Bandura, 1997). As Eccles and Gootman (2002) note, “positive development is not something that adults do to young people, but rather something that

young people do for themselves with a lot of help from parents and others” (p. 103). As such, it is critical that detention centers provide youth with opportunities to learn new skills and feel challenged to push themselves to achieve goals. To the extent possible, this should teach them the skills they will need to succeed post-detention.

**Opportunities for skill-building.** Several detention programs that provide youth with education and vocational opportunities have been found to have a positive impact on youth outcomes post-detention. In a qualitative study of detained youth, Ashkar and Kenny (2008) found that detainees who participated regularly in education and employment skill programs reported that the opportunity to attend educational and vocational services had significantly improved their self-efficacy to find work after release, and appeared to provide detainees with a sense of achievement, improved self-esteem, and a variety of practical skills to enable them to work within the community. In addition, although evidence was mixed on whether all vocational or employment programs reduced recidivism, Lipsey, Wilson, and Cothorn (2000) reported that some correctional programs focusing on teaching youth vocation skills had a significant, positive impact on recidivism after detention.

Although evidence on whether programs which teach *specific* vocational skills are effective, Lipsey, Wilson, and Cothorn’s (2000) meta-analysis did find that teaching youth general social and emotional skills were generally among the most effective in reducing recidivism. Specifically, two types of treatment showed relatively large, statistically significant mean effect sizes on recidivism among institutionalized youth: interpersonal skills programs (involving training in social skills and anger control) and teaching family

homes (community-based, family-style group homes). These findings suggest that programs targeting youth's interpersonal skills and family functioning may be some of the most powerful and positive ways to improve youth's post-detention outcomes.

Placement in residential facilities removes adolescents from home settings that might promote antisocial activity and can provide them with alternative networks and opportunities for involvement in activities that did not exist in their home environment. Certain treatments may capitalize on youth's separation from negative networks at home by helping youth identify prosocial and antisocial influences and teaching them how to avoid negative patterns of behavior. For example, multi-systemic therapy and functional family therapy are specifically aimed at changing the juvenile's family and peer contexts and have had some of the strongest and well-evaluated positive impacts on youth's psychosocial outcomes and likelihood of recidivism (Howell, 2003). The more that facilities can teach youth new social and life skills within a structured context that minimizes the risk of exposure to antisocial activities the more likely it is that they will have a positive impact on youth.

**Integration of family, school, and community.** Finally, programs must have strong links between families, schools, and broader community resources. Even in the face of multiple risk factors, positive and supportive personal relationships can have an enormous impact on predicting improved outcomes in the face of adversity (Taylor & Brown, 1988). Positive attachments to family, school, peers, and informal support networks can also help to facilitate a successful transition back to the community after detention (Smith, Lizotte, Thornberry, & Krohn, 1994).

Unfortunately, not all detention facilities facilitate youth's continued relationships with friends and family from home. A total of 92% of youth in the OJJDP study say that since arriving at their facility, they have had some contact with their families, either through phone calls or visits (Sedlak & McPherson, 2010). However, only 61% of youth in corrections reported having in-person visits with their families compared to community-based juvenile justice programming. Thirty-nine percent of corrections and camp youth have family contact less than once a week, compared with 20 percent of youth in other programs. While the United States Supreme Court has affirmed that individuals have a right to visitation (*Overton v. Bazzetta*, 2003), many facilities can restrict the frequency of the visits, and whom youth are allowed to visit. Other facilities are also extremely far away from families, with youth in the OJJDP study indicating that visiting hours and distance are the primary barriers to visitation, followed by the costs associated with travel and calling long-distance. The majority of youth in the study (59% said it would take their families an hour or longer to visit the facility, and for almost a fourth of youth, it would take their families three hours or longer to visit them.

Research on adult populations has found that visitation is strongly associated with a reduction in recidivism. A study by Bales and Mears (2008) found that the odds of recidivism were 30.7% lower than the odds for those who had never been visited. Further, each visit resulted in a 3.8% reduction in recidivism. Visitation that occurred closer to the time of release from prison was more strongly associated with reduced recidivism than visitation that occurred further earlier in their stay. These positive impact of visitation held particularly true for individuals with longer histories of incarceration.

For youth in custody, continued support and contact with family may be particularly critical, though the impact of visitation on youth has not been well-studied. Research has found that parental supportiveness is related to a host of positive developmental outcomes, including higher self-esteem and social competency skills, and lower rates of depression and behavior problems (Kerns, Klepac, & Cole, 1996; Robertson & Simons, 1989). Conversely, high levels of parent–child conflict are associated with more aggression, hostility, and depression, and a negative worldview (Sentse, Veenstra, Lindenberg, Verhulst, & Ormel, 2009). Youth who have experienced family maltreatment and weak social support report significantly lower levels of self-efficacy to succeed post-detention (Brown, Killian, & Evans, 2003). In addition, children of uncaring parents tend to spend more time with their peers (Dekovic & Meeus, 1997), which may increase their susceptibility to negative peer pressure. Finally, parents also model and teach children how to cope with major life stressors, with research finding a robust relationship between parent coping behaviors and children coping behaviors (Dankoski, et al., 2006).

Not only are familial relationships critical to youth's positive development, but establishing and maintaining supportive friendships appears to have similar implications for adolescents' psychosocial development. Peers provide a context in which adolescents can explore new roles, experiment with different identities, and learn about intimate relationships outside of the family (Sharp, Coatsworth, Darling, Cumsille, & Ranieri, 2007). Friendships characterized as high in social support, help, and acceptance have been associated with lower levels of internalizing and externalizing problems in both

childhood and adolescence (Hartup & Stevens, 1995; Parker & Asher, 1993; Gaertner, Fite, & Colder, 2010). Although the individual importance of parents and friends has been established (Khaleque & Rohner, 2002; Rubin, Bukowski, & Parker, 2006), less is known about how support in the two relationship contexts work together or interact in relation to adolescents' behavior problems (Sentse & Laird, 2010).

Also overlooked in the developmental literature is the impact of support within adolescent's *romantic* relationships, which some studies have indicated play an even larger role in both the development of antisocial behaviors as well as desistance to crime during later adolescence than even the influence of peers and adults combined (Lonardo, Giordano, Longmore, & Manning, 2009). Adolescent's romantic partners also have a strong impact on youth's coping skills and emotional health. Studies suggest that even short-lived, transitory relationships, can have a transformative effect on the health and well-being of adolescents (Bouchey & Furman, 2003) and are often critically related to individuals' self-concept, self-worth, and general competence (Connolly & Konarski, 1994; Hartner, 1999; Kuttler, LaGreca, & Prinstein, 1999), as well as social identity, social status, and peer belonging (Florsheim, 2003). Romantic relationships are the most common causes of strong positive and strong negative emotions among adolescents, even more so than friendships, relationships with parents, or school (Wislon-Shockley, 1995). Thus, support by romantic partners may have a positive impact on youth's adjustment to facility, just as parents or friends might.

Unfortunately, in addition to isolation from possible family supports while away from home, detained youth have even fewer opportunities to build prosocial peer or

romantic relationships because many facilities only permit visits from family members. With limited opportunity for positive peer socialization or romance, incarcerated adolescents are effectively precluded from one of the most important sources of social development during the adolescent period (Patterson, Capaldi, & Bank, 1991). Some ethnographic work suggests that the contact with and support from female friends and romantic partners significantly strengthens male young adult offenders' motivation to desist from crime after release (Hughes, 1998).

In spite of a burgeoning recognition of the importance of romantic partners' on adolescent delinquency and emotional health, research on romantic partners and their influence is much less developed than the body of research that has focused on peer and familial relationships. The inclusion of romantic partners as a separate influence on youth's detention experience in this study represents an important first step towards understanding how similarities and differences in parent, peer, and partner relationships may exacerbate youth risk for recidivism or increase their resilience against negative social pressures while incarcerated.

While the previous sections provided a basis for understanding the mechanisms that support positive youth outcomes both in and out of juvenile detention settings, the next sections will describe the literature on two strong predictors of post-detention success: self-efficacy to desist from crime post-release, and rule-breaking behaviors within a detention setting.

### **Self-Efficacy to Avoid Recidivism after Release**

Research suggests that the majority of adolescent offenders typically desist from crime once they reach adulthood (Farrington, 1992). Unfortunately, there is little understanding about *why* youth ultimately decide to pursue more prosocial lifestyles and desist from criminal behaviors. In essence, desistance refers to a decline in antisocial behaviors over time and requires conscious commitment to avoid old habits and maintain new ones (Mulvey et al., 2004). In the case of serious adolescent offenders, this might mean youth decide to avoid certain peers and places or attempt to build their own prosocial skills by finishing school or forming new more positive friend or romantic relationships. To make these life changes, individuals must have a sense of personal agency to effect change over their activities the groups with whom they choose to socialize. Although quantitative studies of why young offenders ultimately decide to desist from crime are limited (Mulvey et al., 2004), several qualitative studies have suggested individuals experience different stages of determination to desist, with many starting from an adverse experience, like juvenile detention, which results in a desire to engage in new, more positive behaviors (Fagan, 1989; Kiecolt, 1994; Maruna, 2001). Although a variety of life events may initiate the desistance process, research suggests that individuals seem to experience a cognitive shift about who they are and what they need to do to reach their desired future outcomes (Giordano, Cernkovich, & Rudolph, 2002). In the case of serious adolescent offenders, juvenile detention may represent a time when youth can make decisions to try to improve their trajectories while they are removed from their usual social networks and behaviors.

This cognitive shift is likely related to changes in youth's self-efficacy, or their overall belief that they can achieve desired goals (Bandura, 1992). Self-efficacy has been found to strongly predict future behaviors. For example in a study of 470 youth released from boot camp, Benda (2001) found that general self-efficacy was one of the strongest predictor variables in models differentiating youth who recidivated, violated parole, and non-recidivists. Further, research has shown that offender perceptions and expectations about returning home often correlate with actual reentry experiences (Mulvey et al., 2004). For example, one study of adult offenders found that individuals who held negative self-perceptions or feelings of stigma and shame after exiting prison were more prone to isolating themselves from people, services, and their overall environments upon their return home (Rose & Clear, 2003). Another study of returning adult offenders in Chicago found that those who anticipated finding employment in their neighborhoods located and sustained jobs significantly longer than those who perceived their communities as lacking in work opportunities (54% versus 21%; Visser & Farrell, 2005). This study also found that offenders who perceived their neighborhoods as safe had lower recidivism levels than those who perceived their environment as unsafe (22% versus 52%).

Thus, it is believed that choices made during the period of juvenile detention, including decisions to engage in rehabilitative programming or participate in deviant behaviors *while* incarcerated will ultimately affect youth's self-efficacy to avoid negative influences and engage in prosocial activities after detention.

## **Institutional Misconduct**

Institutional misconduct refers to all of the various write-ups, rule infractions, incidents, and disciplinary tickets an inmate might receive within an incarceration or juvenile detention setting (Trulson, 2007). Penologists have studied prison misconduct extensively for more than half a century (Berg & DeLisi, 2006), both because it is often an important indicator of inmate maladjustment in correctional settings (Trulson, 2007) and because it is an immense burden on time and institutional resources. Rule infractions also cost untold resources (Lovell & Jemelka, 1996), as they often lead to longer sentences, changes in housing, and increased administrative and legal burdens (Cao, Zhao, & Van Dine, 1997). Findings suggest that institutional misconduct may also predict future problems including post-release maladjustment and a higher likelihood of post- detention recidivism (Huebner, Varano, & Bynum, 2007; Lattimore, MacDonald, Piquero, Linster, & Visser, 2004; Trulson, 2007).

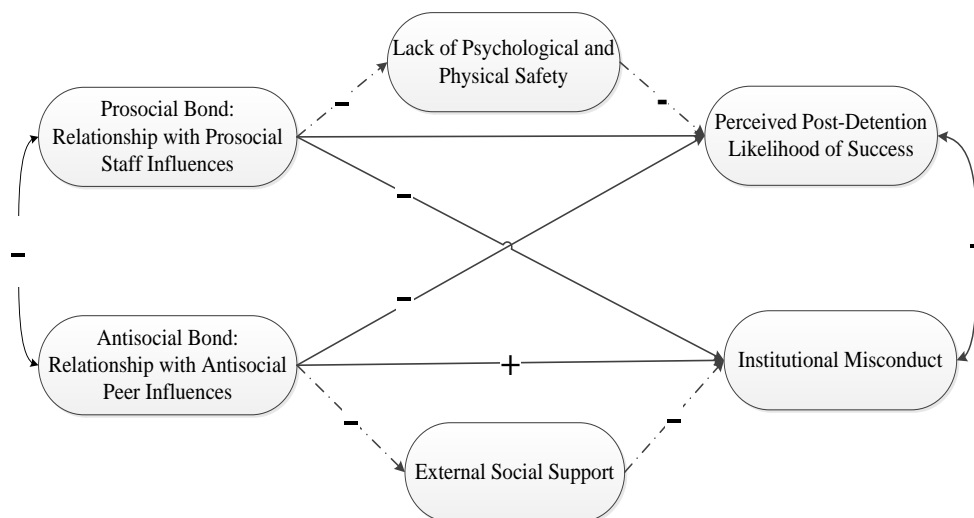
However, limited research has examined factors that lead to increased institutional misconduct among incarcerated youth or how institutional misconduct relates to self-efficacy to improve their future. In fact, according to Trulson (2007), only one study has been conducted between 1987 and 2007 on the factors related to institutional misconduct among youth. Involvement in institutional misconduct can lead to numerous short- and long- term negative consequences for institutional populations (Trulson, DeLisi, Caudill, Belshaw, & Marquart, 2010). A study of 140 female incarcerated youth revealed that more than one-third of incarcerated youth engaged in at least one instance of physical aggression towards staff or another inmate while

incarcerated (Blackburn & Trulson, 2010). More minor rule violations, (e.g. disrupting programs, failing to follow staff instructions, etc.) occurred at even higher rates, with 93.5% of incarcerated youth cited for committing at least one minor rule violation (Blackburn & Trulson, 2010).

In addition to institutional consequences such as restricted housing and decreased access to rehabilitative programming, continued offending by youth during juvenile detention can lead to numerous larger system consequences such as lengthened periods of detainment and additional delinquent or criminal sanctions for offenses committed while incarcerated (Trulson et al., 2010). A better understanding of the determinants of institutional rule violating behavior seems especially important not only for institutional prevention and intervention efforts, but also to help ensure post-release success.

### **Overview of Model Proposed**

As this summary of the literature has demonstrated, there remain several critical gaps in our understanding of why serious adolescent offenders desist from criminal activity after release from juvenile detention and others continue to recidivate well into adulthood. To answer some of these questions and to provide detention facilities with some clearer guidelines on what factors promote youth's positive development while detained, this study will test the structural equation model proposed in Figure 2.2.



*Figure 2.2.*

Overview of Proposed Model. General model representing antisocial and prosocial pathways of influence through which staff relationships, detained peer relationships, external social support, and psychological/physical safety predict institutional misconduct and post-detention likelihood of success. Dotted lines indicate indirect effect along the two pathways. Ellipses represent latent constructs. Plus sign (+) indicates a positive relationship between variables. Negative sign (-) indicates a negative relationship between variables.

This study will use the SDM as a guide for modeling the impact that incarcerated youth's social relationships have on important predictors of recidivism, including their: (1) rates of institutional misconduct; and (2) perceived likelihood of post-detention success. This study also examined two indirect effects. The first indirect effect predicts that perceptions of physical and psychological safety will mediate the relationship between staff relationships and post-detention likelihood of success. The second indirect effect predicts that perceptions of social support received by family and friends will mediate the relationship between peer relationships and institutional misconduct.

In essence, the model is a modified version of the SDM model in which an antisocial pathway and prosocial pathway result in the fostering of prosocial attitudes (higher self-efficacy to avoid recidivating after release) or the continuation of antisocial

behaviors while detained (engaging in institutional misconduct). Eccles and Gootman's (2002) work on the features of youth programming known to promote positive development guide the selection of indicators for both the latent constructs of the Prosocial Bond with Staff construct and Antisocial Bond with Peer construct as well as the two indirect effects identified (Physical/Psychological Safety and External Social Support). The model predicts that when youth rate detention staff as effective in providing them with *opportunities* to engage in prosocial activities, *involving* them in programming that fosters prosocial skills and assets, and *rewarding* them for demonstrating prosocial norms, the more youth will want to align their beliefs and behaviors with those promoted by staff. As a result, they will engage in less institutional misconduct and report a higher perceived likelihood of post-detention success. In contrast, if youth perceive that other detained peers provide ample *opportunities* to engage in antisocial activities at the facility, actively try to *involve* youth in these activities, and effectively *reward* them for engaging in antisocial behaviors and holding antisocial attitudes while detained, youth will want to align their beliefs and behaviors with those of the deviant peer group.

The SDM model also hypothesizes that youth must have the skills necessary to participate in antisocial or prosocial activities. If, for example, youth are emotionally unstable throughout their detention experience or are preoccupied with concerns for their safety, they may lack the capacity to form bonds with staff, engage in institutional programming, and maintain a positive outlook about their post-detention success. As Eccles and Gootman (2002) suggest, physical and psychological safety is the most

fundamental component of all youth programming. If youth feel as though staff not do not adequately secure their safety, they may seek emotional and physical protection from other detained peers. If youth do feel safe, they may be more inclined to rate staff's ability to engage them in prosocial activities more highly. Youth's perception of their physical and psychological safety is included as an indirect effect in the relationship between youth's relationship with staff and their post-detention likelihood of success on research suggesting that youth tend to act out during detention when they are fearful for their safety (Brown & Ireland, 2006).

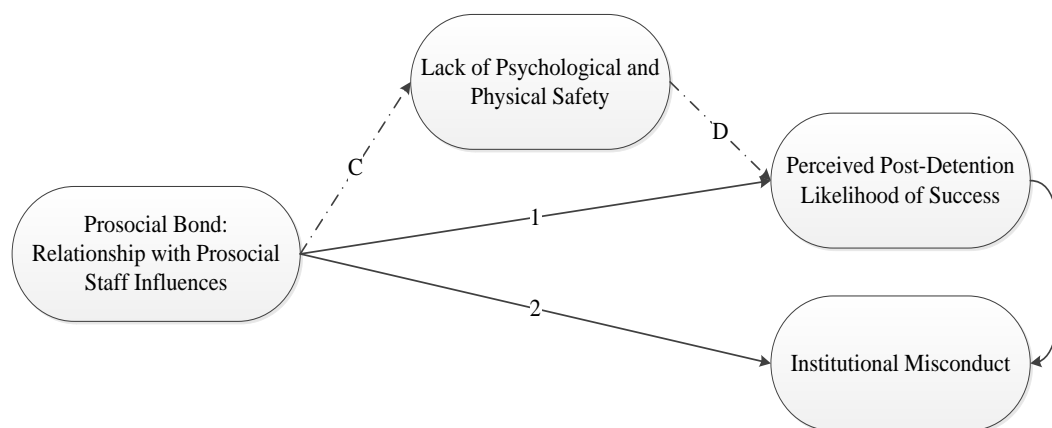
Finally, Eccles and Gootman (2002) also highlight the importance of a program's successful integration of family, friends, and community, which enables youth to have a positive transition from the program to home and provides youth with an additional sense of social support while detained. Research on visitation policies at detention centers also indicates that youth who receive visits from home, even if they have poor relationships with their parents, adjust more quickly to detention than youth who do not receive visits (Monahan, Goldweber, & Cauffman, 2011). Although prior studies have only looked at youth's continued contact with parents while incarcerated, this study will also attempt to determine whether youth continue to receive support from friends and romantic partners in addition to support from parents. In the model proposed, external social support is included as an indirect effect between relationships with antisocial peer influences and post-detention likelihood of success. In contrast, if youth have relationships with peers in the facility that reinforce their antisocial beliefs but perceive that the social support from

their external support networks at home supports their rehabilitation, they may be less likely to break rules at the facility than they would without such support.

## Hypotheses

The primary research question of this study is whether an SDM-based structural equation model successfully predicts youth's institutional misconduct and self-efficacy to succeed post-detention from their relationships with staff, youth, external social support networks, and their self-reported physical and psychological safety while detained.

Figures 2.3 (prosocial pathway) and 2.4 (antisocial pathway) detail the specific pathways to be tested in this study. Hypotheses describing these pathways follow each figure, along with relevant research supporting their inclusion.



*Figure 2.3.*

Prosocial Pathway. General model representing prosocial pathways of influence through which staff relationship and psychological/physical safety predict institutional misconduct and post-detention likelihood of success. Dotted lines indicate indirect effect along the prosocial pathway. Letters represent indirect pathway, numbers indicate direct pathway. Ellipses represent latent constructs.

**Prosocial pathway hypotheses.**

*Hypothesis 1a:* Youth reporting a higher prosocial bond with staff will report higher perceived likelihood of post-detention success than youth with a lower prosocial bond with staff.

Pathway “1”: (PROSOCIAL BOND → PDLs)

Marsh and Evans (2009) found that incarcerated youth who had a relationship with a staff member characterized by trust, positive affect, and closeness, and felt that staff member was effective at problem solving were significantly more likely to maintain a positive forecast about their ability to succeed post-detention than youth who did not have this prosocial bond.

*Hypothesis 1b:* Youth reporting a higher prosocial bond with staff will report lower rates of institutional misconduct than youth with a lower prosocial bond with staff.

Pathway “2”: (PROSOCIAL BOND → INSTITUTIONAL  
MISCONDUCT)

The SDM predicts that youth who form a prosocial bond are motivated to maintain that bond by engaging in behaviors that they believe the prosocial peer group would support through praise or other rewards (Catalano et al., 2005). Given that detention center staff are primarily tasked with maintaining a clear and consistent structure in the facilities, it is hypothesized that youth’s prosocial bond will result in their decision to follow the rules staff communicate to them.

*Hypothesis 1c:* Youth's perception of their physical and psychological safety will have a negative indirect effect on the link between their prosocial bond with staff and their post-detention likelihood of success.

Pathways "C" and "D": (PROSOCIAL BOND → (E) PHYSICAL AND PSYCHOLOGICAL SAFETY → (F) PDLs)

Youth in custody who report high distress have been found to have poorer outcomes post-detention than youth who are not distressed during juvenile detention (Brown & Ireland, 2006). Youth who do not feel safe at the facility may resent staff for failing to protect them and may decrease the likelihood that they engage in rehabilitative programming. Research on school violence suggests that when youth are preoccupied with their own safety while at school, they may have a more difficult time concentrating and may even avoid school (Bowen & Bowen, 1999). Thus, if youth fear victimization while they are incarcerated, they may not have the skills or emotional well-being necessary to form bonds with prosocial staff or engage in the positive institutional programming offered. They may also act out in an attempt to protect themselves from harm (Edgar & O'Donnell, 1998; Lahm, 2009).

As the SDM hypothesizes, youth's antisocial pathway follows the same basic processes as proposed in the prosocial pathway. Conversely, bonds with other delinquent inmates may predict higher institutional misconduct and lower perceived likelihood of post-detention success. Figure 2.4 depicts this antisocial pathway.

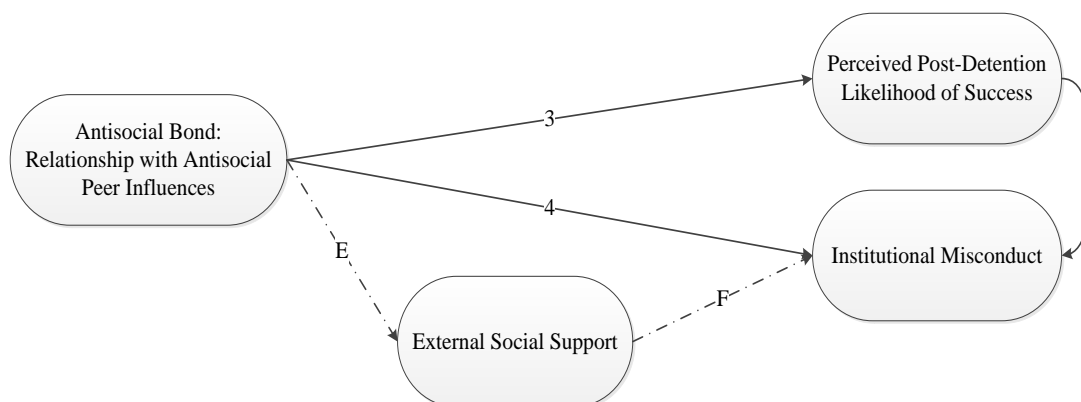


Figure 2.4

General model representing antisocial pathways of influence through which peer relationships, external social support, and psychological/physical safety predict institutional misconduct and post-detention likelihood of success. Dotted lines indicate indirect effect along the antisocial pathway. Letters represent indirect pathway, numbers indicate direct pathway. Ellipses represent latent constructs.

### Antisocial pathway hypotheses.

*Hypothesis 2a:* Youth reporting a higher antisocial bond with peers will have higher rates of institutional misconduct than youth who have a lower antisocial bond with peers.

Pathway “3”: (ANTISOCIAL BOND → INSTITUTIONAL MISCONDUCT)

Affiliation with problem-prone friends is one of the strongest predictors of a youth’s own involvement in problem behaviors (Warr, 2002). Research has found that adolescents are particularly motivated to associate with peers who are high on the social hierarchy, provide access to resources, and increase their dominance over others, and are therefore more willing to engage in behaviors they perceive as desirable by those groups

(Prinstein, Meade, & Cohen, 2003; Rancourt & Prinstein, 2010). Research on the reasons youth affiliate with gangs and other antisocial peers while detained suggest that they are rewarded with social support, social status, and access to contraband (Kalnich & Stojkovic, 1985; Scott, 2001). As a result, youth may perceive higher social and emotional rewards for affiliating with peers who might provide additional safety and social status, even if they may be supportive of further delinquent behavior.

*Hypothesis 2b:* Youth reporting a higher antisocial bond will report a lower perceived likelihood of post-detention success than youth who have a lower antisocial bond.

Pathway “4”: (ANTISOCIAL BOND → PDLs)

Dishion and colleagues (1999) have demonstrated that antisocial norms are learned and reinforced when large groups of youth demonstrating deviant behaviors are grouped together for intervention. Thus, it is predicted that youth who report a higher antisocial bond will report a lower likelihood of post-detention success than youth who bond with staff promoting more positive post-detention outcomes.

*Hypothesis 2c:* Satisfaction with external social support will positively mediate the relationship between having an antisocial bond with peers and institutional misconduct.

Pathway “E” and “F”: (ANTISOCIAL BOND → EXTERNAL SOCIAL SUPPORT → PDLs)

Marsh (2007) found that when youth perceived that parents, staff, peers, friends, and other adults cared about them, they reported significantly higher likelihoods of post-detention success than youth who did not have similar levels of social support. Parent relationships, friendships, and romantic relationships characterized as high in social support, help, and acceptance have been associated with lower levels of internalizing and externalizing problems in both childhood and adolescence (Cohen & Wills, 1985; Hartup, 1996; Kupersmidt & Coie, 1990; Parker & Asher, 1993). Social support is also a strong protective factor against negative outcomes among youth who have experienced trauma (McNally, Bryant, & Ehlers, 2003). Thus, it is hypothesized that social support received from external sources could provide a strong buffering effect against antisocial norms that may be present among youth in the facility and may help youth adjust to detention more quickly. It is expected that high satisfaction of support from friends, family, and special persons from home will buffer against the negative influence antisocial peers have on rule-breaking behaviors.

*Hypothesis 3a:* Youth reporting a higher prosocial bond staff influences will have a lower antisocial bond with peers.

Pathway “6” (not shown in diagram): (PROSOCIAL BOND → ANTISOCIAL BOND)

Research suggests that youth who adopt more antisocial or more prosocial norms and behaviors are subsequently more likely to affiliate with groups with similar norms and behaviors (Catalano et al., 2005). As a result, once strong bonds with antisocial or prosocial groups form, they are often resistant to change, as several longitudinal tests of

the SDM have demonstrated. Catalano et al. (1996) found that SDM predict various forms of antisocial behavior in childhood as well as substance abuse (Catalano et al., 1996) and violence (Huang, Kosterman, Catalano, Hawkins, & Abbott, 2001) at age 18.

In addition, experimental research has revealed that adolescents are more likely to engage in peer-approved behaviors and endorse deviant-related attitudes if they believe that doing so was been endorsed by high-status peers (Cohen & Prinstein, 2006). If adolescents are led to believe that these same deviant-related attitudes are endorsed by low-status peers, adolescents demonstrate anti-conformity, adopting opposite-valenced attitudes (Cohen & Prinstein, 2006). These findings suggest that once youth affiliate with whichever group they perceive as “high-status”, they are highly motivated to conform to those beliefs and reject the beliefs of the group they believe is “low-status.” For youth forming a prosocial bond with staff, this may mean rejecting peers’ attempts to pressure them into breaking rules. For youth forming antisocial bonds with staff, this may involve rejecting the rules staff provide and their attempts to engage them in prosocial activities at the facility.

*Hypothesis 3b:* Youth reporting lower post-detention likelihood of success will report higher institutional misconduct.

Pathway “5”: (PDLIS → (D) INSTITUTIONAL MISCONDUCT)

The SDM suggests that once youth have formed a bond with either a prosocial or negative social influence, they are subsequently more likely to adopt the norms and

behaviors of that person and group. Catalano et al. (2005) found that youth who bonded with prosocial influences (teachers, parents) were more likely to adopt belief in the moral order, which subsequently inhibited their antisocial behaviors. In contrast, youth who bonded with antisocial influences (deviant peer group) were more likely to hold antisocial values and beliefs than youth without the antisocial bond. They were also significantly more likely to engage in antisocial behaviors than youth who had stronger bonds with prosocial influences. Thus, it is predicted that youth with a high antisocial bond will have lower PDLs and higher institutional misconduct and youth with a high prosocial bond will have higher PDLs and lower institutional misconduct.

In light of the current lack of empirical research on how detention impacts youth's likelihood of recidivism, this dissertation study aims to provide some clarity to how and under what circumstances juvenile detention may benefit or harm serious adolescent offenders. Data collected using a cross-sectional survey design with approximately 300 youth from four detention facilities will help to determine, from a youth perspective, the aspects of juvenile detention most likely to promote or impede their likelihood of success after release. Should the model find empirical support, the results of this study may have important implications for the development of juvenile detention programming and the advancement of social psychological theory.

### **Chapter III: Study Preparation and Pilot Study**

#### **Institutional Review Board Process**

The researchers spent considerable time consulting with the University of Nevada, Reno legal department and staff at UNR's Institutional Review Board (IRB) to determine an appropriate consent process and procedure for this study. Two main concerns were raised by the IRB, which were resolved through multiple meetings with UNR's legal department and UNR's IRB: (1) whether the IRB would require expedited or full board review because the study might qualify as "prison research" which has more rigid review requirements; and (2) whether a passive parental consent process should be used. In regard to the first issue, UNR's legal department concluded that Nevada Revised Statutes make a clear legal distinction between penal institutions that house adults and detention facilities that house youth. As such, the IRB determined that the protocol for this study likely would not require the typical measures to ensure the protection of prisoners in research (e.g. full board review, inclusion of a prisoner representative on the review panel). Further, the IRB and legal team determined that, contrary to UNR IRB's past precedent conducting research with detained youth, Nevada Revised Statute 159.0805 "Approval of court required before guardian may consent to certain treatment of or experiment on ward" also did not apply to this research project. The UNR legal team determined that detention facilities must determine whether or not court approval is required before research can be conducted on youth in their facilities and that it was not the obligation of the research team to pursue court approval. That said, the researchers did ultimately have to obtain a letter of approval from two judges (one left the position

while the IRB application was under development), District Judge Egan Walker and Judge Francis Doherty, because Jan Evans Detention Center, the site for the pilot, did require court approval. Letters of support for the full study were also obtained from all directors of the participating facilities.

In regard to the issue of parental consent, the IRB ultimately agreed with the research team that a waiver of signed parental consent for both the pilot and full study was acceptable for the following reasons: (1) while detained, judges are allowed to grant temporary custody over youth detained in facilities; (2) mailing out parental consent forms poses a substantial burden on facilities who would have to provide mailing addresses and track which youth; (3) providing mailing addresses to researchers undermines the anonymity of the survey process; and (4) mailing and tracking parental consent forms poses a substantial barrier to conducting the research, as it would substantially reduce the sample size, parents of these higher risk youth can be highly transient. Because questions asked in this survey were not sensitive in nature, the IRB for the full study ultimately required an expedited review procedure. The letter of approval from the IRB is attached in Appendix B.

### **Pilot Study**

Prior to administering the survey to youth at the four long-term facilities, a pilot of the instrument and procedure was completed with nine male and female youth ages 12-18 from Jan Evans Detention Facility in Reno, Nevada. The purpose of the pilot was to assess whether the items included in the survey were written at a developmentally appropriate reading level, assess initial reliability statistics for each scale included, and to

identify any problematic items or skip patterns before the full study. Additionally, the researcher asked youth a series of questions about their relationships with staff in the facility, other youth at the facility, the system of rules at the facility, and the frequency and quality of contact they had had with friends, family, and romantic partners since being detained. The purpose of these latter questions was to determine both whether the terms used in the survey matched the terms youth used during interviews and to determine whether the survey questions adequately covered the main features of youth's experiences during detention. A test of reading comprehension was run on the original survey prior to disseminating it to youth. Microsoft Word's Flesch Reading Ease scored the survey with a 74.9 and a Flesch-Kincaid Grade Level of 5.5.

During the pilot, youth were first asked to complete the entire survey to the best of their abilities to determine roughly how long the survey took youth to finish. Youth were then directed to go back through the survey and mark in the margins: (1) any words they had difficulty understanding; (2) any items they found confusing; (3) any directions they found confusing; (4) any questions they thought should have been included that were not; (5) any items they thought did not apply to their setting; and (6) any other suggestions or notes they had for improving the survey.

Once youth finished making their notes, they were asked to participate in a one-on-one, 45 minute interview with the researcher to discuss their notes and talk about how to improve the survey further (see Appendix C for moderator guide). First, youth were asked to provide their initial reactions to the overall survey, with probes to determine whether they thought the questions were important to ask, whether they felt uncomfortable responding to the items, and what they would want outsiders to know

about their facility experience, including how to make it more beneficial for youth. Second, youth were asked to discuss what they think the most important factors are that affect whether they break rules at the facility as well as the factors that affect how they feel about their likelihood of success after they are released. Third, youth were asked to talk about whether they thought the items were easy to understand and provide any notes from their survey about items they thought were confusing or that they did not know how to answer. Fourth, youth were asked to discuss whether they thought any items should be added or omitted from the survey. Finally, because base rates of how frequently youth maintain romantic relationships while they are detained are relatively unknown, youth were asked to talk about the frequency with which they have had contact with their external social support networks, whether they currently were currently involved in a romantic relationship, and how much emotional support they typically received from their romantic partners versus their friends and family members.

Between August 6th and August 28th, 2013, a total of nine interviews and nine surveys were completed with youth detained at Jan Evans Detention Center in Reno, Nevada. Youth and their parent/guardian were provided an introductory letter at intake or during visiting hours explaining the study. Jan Evans staff maintained a list of youth who had received a recruitment letter and emailed the investigator when they had received tentative agreement from the child to participate to set up an interview appointment. All interviews were conducted at 9 am on weekdays. Interviews were conducted individually in visiting rooms at Jan Evans. The guard on duty waited outside in the holding area to ensure the investigator's safety but was not visible to either the investigator or the participating child. For the assent process, the investigator first provided an overview of

what participants' involvement would entail emphasizing that their participation was entirely optional. If the child indicated interest in participating during the overview, the investigator then conducted an in-depth assent process that involved first having the child read the assent form, and then highlighting key points with the study investigator to ensure the child fully understood their rights and that their involvement in the study had no relationship with their case or their stay at Jan Evans. The assent and recruitment process typically took between 5-10 minutes to complete. Of the 14 youth who were scheduled for interviews, nine gave their assent to participate. Two youth were released from detention before the interviewer could conduct the study with them; two youth declined to participate; and one youth could not participate for medical reasons.

After youth signed their assent, they were handed a survey and a pencil and told to take as much time as necessary to complete the survey. They were also instructed to make notes throughout the survey if they thought any words or directions were confusing. The majority of surveys were completed in 15-25 minutes, although one child took approximately 45 minutes to complete the survey. Note, however, that the investigator waited in the lobby for the youth to participate for the majority of the appointments, so it was somewhat unclear how much time youth took to complete the survey versus how long it took guards to notify the investigator that the child had completed his/her survey. In addition, that child wrote a substantial number of notes and comments in the margins of the survey, and may have taken more time with his/her suggestions than other youth.

For the interview component of the pilot, the investigator collected each child's survey and checked two items of the emotional stability scale to determine if the child was at imminent risk of harming him or herself (responded "quite a bit" or "very much")

to either of these two items: 1) how often have you had thoughts of ending your life; and 2) how often have you had urges to injure or harm someone else). No youth provided these responses and all nine participants were allowed to participate in the interview portion of the study.

Youth were then provided with a blank copy of the survey to discuss so that they would not feel uncomfortable providing their feedback using their actual data. Using the moderator guide in Appendix C, the investigator conducted a semi-structured interview with youth for between 15 to 45 minutes with the objective of identifying any issues related to comprehension, readability, and coverage of items in the survey.

Although interviews were not audio-recorded to help protect the anonymity of youth's responses, the interviewer did maintain detailed written notes for each interview. All youth were first asked to provide an overview of their emotional reaction to the survey. Overall, youth reported feeling comfortable responding to the items and did not indicate having any difficulties responding to the majority of items. That said, a few youth identified some items that seemed repeated (most were not actually repeated, but were similar enough that a few youth confused them), and several youth commented that they did not know how to respond to the items asking about whether their friends and romantic partners had provided them with support since they had been detained. They explained that they were confused by the latter items as the facility did not allow them to contact friends or romantic partners.

When asked whether there were some staff that youth liked more than others, all agreed that there were. Most youth indicated that they liked staff who were slightly more lenient with rules, who spent time talking to them about their lives, and who did not seem

like “they were just there to collect a paycheck.” Two youth believed that staff who had been there longer and who had seen “everything” tended to be less strict with the rules. When asked whether staff cared about how they were doing there, and whether they seemed to care about how they did once they left there, most youth said that some seemed to care. For example, one youth mentioned that staff helped youth figure out ways to increase their positive behavior reports so they would look more favorable to the judge overseeing their case. Another youth noted that staff at Jan Evans had managed to find funding for him to attend a substance abuse rehabilitation clinic, which he thought would have a substantial impact on his likelihood of success as he mentioned that he had been detained multiple times for drug offenses.

Although several youth mentioned having reached out to staff for help or advice, no youth mentioned reaching out to other youth at the facility for assistance. In fact, the majority of youth said they had no interest in making friends with other youth at the facility. Part of this may be due to the short amount of time youth spend at the facility, as many youth indicated that they did not try to make friends there since they would only be there for a few days. Additionally, many rules at the facility surround youth’s interactions with their peers, which probably inhibited youth’s willingness to form relationships with other youth. For example, youth described that they were not allowed to talk to other youth while in line waiting for meals or talk to youth sitting at other tables. There were also limits placed on what youth could discuss, including past, current, or future crimes. One youth mentioned that residents were also not allowed to write down the contact information of youth at the facility when they were released, making it difficult to stay in touch with youth they met at the facility.

Youth frequently mentioned how difficult it was to be away from their family, friends, or romantic partners while at the facility. In fact, when asked what they would want to change about the facility, or what the most difficult aspect of detention was, the majority of youth said it was very difficult to be away from home. Many mentioned that they did not like the limitations placed on whom they could talk to from the outside, and how often. As discussed previously, the visitation policy at Jan Evans limits phone contact to parents only, and limits in-person visits to parents only once every three days. During interviews, it emerged that outside of the facility, sought support from friends, romantic partners, siblings, and other adults and relatives, all of whom they were prohibited from having contact with while they were detained. Some youth noted that it cost \$15 to make a single phone call home, and if a family had not left a credit card on file, they could not afford to call their parents. Two boys mentioned that it was incredibly difficult to be separated from their girlfriends, although both indicated that they had arranged to have their girlfriend get on the phone with them at their parents' house to bypass the limit on contacting non-family members while detained. No youth indicated that they had received emails, texts, letters, or any other form of contact besides in-person or phone calls while detained.

The other primary hardships youth discussed were social isolation and boredom. As several youth described, although they could be out of their cell most of the day within the housing unit, the primary punishment for rule-breaking was having to spend time alone locked in their cell. One youth estimated he spent all but 2-3 hours a day inside his cell, although most indicated they were out of their cell all day except for bed checks or for sleeping at night. All youth interviewed reported that having to spend time

locked in their cell was extremely difficult, with many noting that there was nothing to do in the cell except read. Youth complained that they were only allowed one book in their cell at a time, unless it was a “religious book” or “self-help” book. Another complained that she had already read most of the books in the library. One youth thought the selection of books was good.

When asked about the frequency of rule-breaking at the facility, the majority of youth indicated that they had not seen many instances of youth breaking the rules, perhaps because few of them had spent much time at the facility. In general, they commented that the rules were strictly enforced by staff, and it was difficult to break rules with such extensive monitoring. That said, when asked why they thought some youth broke rules, common responses were that those youth: 1) were “trying to be funny” or “show-off”; 2) already had received their longer-term detention sentence (at Caliente or Nevada Youth Training Center, etc.) and did not believe breaking the rules would have any impact on their sentences; and 3) wanted to avoid having to do group activities.

Based on the survey and pilot interviews, few major revisions to the survey were required. Overall, there was limited missing data on items, nor were there any major psychometric concerns with most scales, including ceiling or floor effects, or poor Cronbach alphas, though the sample size for the pilot was small. Seven out of nine youth reported having committed some institutional misconduct even during their short dispositions, indicating that youth felt comfortable responding to potentially sensitive questions in the survey. On average, youth spent between 15-25 minutes to complete the survey.

That said, survey data and interviews indicated a few key revisions were needed for the full dissertation study. First, all skip patterns were removed from the survey to enhance clarity. Second, during discussions with detention staff while waiting for youth to complete the survey, several commented that youth who were in gangs tended to be more likely to follow the rules in the facility, since they had more experience acquiescing to authority. A question about gang involvement seemed critical to understanding youth's background and immersion in criminal activity.

Two more major edits were needed for the full study based on youth's feedback. First, as noted in both the interviews and on the surveys, Jan Evans had restrictions on the visitation and contact policies that limited both who and how often youth could talk to friends and family from home. These restrictions made it difficult for youth to answer questions related to the quality of support provided by people from the outside, with some skipping the questions, and others responding positively or negatively to all items in spite of not having had contact with anyone from home since detention. Originally, the social support measure was going to only use a target measure, in which youth would be asked to rate one person of importance and the support provided. Another concern mentioned by youth in relation to these items was that some critical people in their support network did not easily fall into the category of "parent", "close friend", or "romantic partner." For example, one youth had a "father figure" in her life that she relied on more than her actual father. Further, one youth who was very close to his romantic partner mentioned during the interview that she was his best friend, and that he had answered both the close friend and romantic partner questions thinking about her.

The challenge with skip patterns in the Special Person Social Support scale suggested that it might be beneficial to add a general social support scale to the survey to ensure that if youth had not had any interaction with family and friends while detained, information about their social support networks could still be incorporated into the model. This general social support scale is what ultimately was utilized in the full study. Further, several more questions about visitation barriers were added to the survey to help provide context for understanding youth's responses to other questions about social support from home. Further, because information about the nature of youth's relationships in detention are sparse, several questions were added after the pilot study to better understand the nature and type of relationships youth maintain while they are in the facility and outside of the facility and who they sought out for which types of purposes.

The second issue that required detention center directors to provide some insight was that during interviews youth mentioned several rules that were commonly broken in the facility that were not mentioned in the list of rules on the survey. Following the pilot, superintendents were asked to specifically examine the list of rules included in the survey to determine whether they sufficiently covered the primary rules at their facility. Overall, superintendents did indicate that the list of rules was sufficient, but recommended adding an “other” option at the end to cover any rules not included in the original list.

## **Chapter IV: Full Study Procedures**

### **Data Collection Procedures**

All data collection for the study occurred between August 19<sup>th</sup>, 2014 and September 2<sup>nd</sup>, 2014. Three staff from the University of Nevada Cooperative Extension's Las Vegas office provided assistance at two of the four data collection sites. Three UNCE staff helped with data collection at the Department of Juvenile Justice Services Detention Center, and two UNCE staff provided support at Spring Mountain Youth Facility. At all sites, a staff member from the detention center was assigned to coordinate the data collection. Facility staff were all explicitly asked to sit in the back of the classroom or lunchroom to minimize any undue influence on youth's responses. All facilities preferred that the research be conducted Monday through Friday as more staff are typically on duty during the work week and additional guards could be spared to help coordinate the research study.

Two state facilities were included in this sample: Caliente Youth Center (140 youth at maximum capacity, mixed gender, Caliente, NV); Nevada Youth Training Center (160 male youth at maximum capacity; Elko, NV). In addition to these two state facilities, Nevada also has two county-based detention facilities in the Las Vegas area: Spring Mountain Youth Camp and the Las Vegas Juvenile Detention Center. Spring Mountain Youth Camp, located in Clark County, houses male youth between the ages of 12 and 18 who have been adjudicated for delinquent acts by a juvenile court judge. The facility has a capacity of 100 youth and the average length of stay is approximately six months. The Department of Juvenile Justice Services Juvenile Detention Center has

up to 150 youth of both genders and is located in Las Vegas, NV. Facility stays at DJJS tend to be shorter in length, and is the central location in Southern Nevada in which youth await their dispositions or assignments to other detention locations or programs.

Table 4.1 below reports the response rates for the survey at each of the four detention facility sites. Overall, there were a handful of youth who declined to participate at each facility after hearing about the study. Although declined participation reduces the sample size, it does indicate that youth understood that the survey was not a required component of their detention, and may indicate that youth were more honest about their detention experiences because they were certain it would not affect their sentences.

Prior to survey administration, the researchers asked the superintendent at each facility for a final count of how many youth were residing in the facility the day of data collection. These numbers are represented in the column in Table 4.1 below. There were various reasons why youth missed the opportunity to participate in the study. At DJJS in particular, youth often had to leave for court or for meetings with social workers, counselors, health care personnel, etc. At Spring Mountain Youth Facility, a football game had unintentionally been scheduled in the afternoon, and sixteen youth left to attend the game.

Table 4.1

*Participation Rates at Four Detention Facilities*

Facility	Date of Survey	Youth Residing in Facility	Youth Declined Participation	Youth	
				Missed Data Collection	Total Surveys Received
DJJS	8/19/14	125	9	35	81
NYTC	8/28/14	34	0	1	33
Spring Mtn.	8/29/14	93	6	16	71
Caliente	9/2/14	121	5	7	116
<b>Total (%)</b>		<b>373</b>	<b>20 (5.4%)</b>	<b>59 (15.8%)</b>	<b>301 (80.7%)</b>

Of the 301 surveys returned, 252 (83.7%) were from males, and 49 (16.3%) were from females. Youth ranged in age from 12 to 18, and the average age of participants was 16.24 years old. The majority of youth were non-white, with 30.4% of youth indicating they were African American/Black and 24.1% of youth reporting that they were Hispanic/Latino. An additional 22.7% of youth indicated that they were of more than one race/ethnic category. Demographics of youth are described in further detail in the results section.

Data was collected through survey-based self-report. The decision to obtain self-reports, rather than using official records was made for several reasons. First, the literature on institutional misconduct and inmate bullying and victimization suggests that

the use of “official records” (e.g., documented injuries or citations for misbehavior) as a primary data source is inadequate. Official records tend to underestimate these problems because inmates are reluctant to report incidents due to fear of retaliation from peers or beliefs that staff will not follow up on their concerns (Leschied, Cunningham, & Mazaheri, 1997). In addition, linking official records with individuals’ survey responses increases the ethical risk of the study, and some youth may be less willing to answer honestly if they know the survey will be tied to official records. Finally, this study focuses on how juvenile detention is perceived by youth, particularly as it relates to their own self-efficacy to avoid recidivism post-detention. How events are interpreted and construed by young people while in custody is an important determinant of their behavior and of the meaning that they ultimately attach to the experience, whether or not they are supported by reality.

Following the pilot study, the researchers submitted a new research study application to UNR's IRB and received approval (see Appendix B). A series of calls with the two state and two county detention facilities helped to establish the protocol that would be appropriate for each facility. To help support facilities with information important to their programming and self-improvement, the researchers provided reports back to each facility summarizing the key findings from the study, as well as the results of questions that facilities requested be added to the survey. Example questions added by the facilities included questions about a Ropes Course program at one of the facilities designed to improve social skills, several questions about a guest speaker program

designed to expose youth to positive community role models, and questions about the fairness of the behavior rewards system implemented at one of the facilities.

Data collected for the fully study was collected during a two-week period. The researcher first collected data from DJJS in Las Vegas, NV, with support from three employees of the UNCE Cooperative Extension Department in Las Vegas. Data collection at the remaining three facilities were collected in a three-day period one week later. The research team was available to help youth with any items with which they might be struggling, and explain any items to the whole class in the event that multiple youth appear to be struggling with the same items. Youth were asked to close their survey when complete and sit quietly until everyone else had finished. The research team then picked up all surveys and placed them in a manila envelope before excusing youth to their next class or activity.

To reduce the possibility that youth could be identified from the study, they were not required to sign the assent form; rather, they were asked to check a box if they were willing to participate in the study. Youth were informed that they could raise their hands to ask a question about the survey and were strongly encouraged to ask for help if they had questions, rather than simply fill in an answer. After DJJS survey data was collected, the researchers examined completed surveys determine where youth struggled with the survey, indicated by the fact that they had skipped questions, had inconsistent responses, or had written notes in the margins about the questions ("e.g. "I already finished school so what do I say to the question about whether I will try to finish school once I leave the facility?"). At all other facilities, the researchers pre-empted questions and concerns about

the survey before survey administration began, explaining difficult terms or terms they may not be used to (e.g. “Youth”, “disapproval”) or that had been asked about at DJJS. The following section provides more extensive details about the data collection procedures at each facility.

**Department of Juvenile Justice Services, Las Vegas, NV.** DJJS contained five “blocks” of youth, who according to detention staff, were separated by age, gender and offense. Each block contained detention cells as well as two classrooms. Research staff went to each cell block separately and administered the survey in the classrooms. The lead researcher first explained the study to youth, and then passed out the assent form. After the assent process was complete, the researcher moved to the second classroom to repeat the assent process while UNCE staff helped coordinate the rest of the survey process (passing out surveys, answering questions from youth, collecting surveys). At DJJS, nine youth refused to participate in the study. Youth who refused to participate were escorted back to their cell until the other youth were done. Additionally, several youth in each block were missing from the survey collection because they were in court or had a meeting with their probation officer, psychologist, counselor, social worker etc. The probation officer coordinating the survey was the only non-research team adult present during the data collection.

**Nevada Youth Training Center, Elko, NV.** A total of 34 youth were residing at Nevada Youth Training Center the day of the survey administration. Three sets of youth were surveyed during their first and second period classrooms at the middle/high school of Nevada Youth Training Center. One guard or one teacher was present during each of

the three administration periods. Please note, typically NYTC has 125 to 150 youth residing in the facility and has a total capacity of 160 youth. However, approximately one month prior to data collection, Judge William O. Voy ordered that all Clark County offenders be removed from NYTC after allegations that staff were “hog-tying” youth emerged (Thevenot, 2014). As a result, the remaining population at NYTC represented primarily Washoe County youth who had not been removed from the facility, and represented roughly a quarter of NYTC’s typical population.

**Spring Mountain Youth Facility, Spring Mountain, NV.** Youth at Spring Mountain are divided into five smaller “cottages” with 15-20 youth each. Youth take their regular classes in their dorm facility and have hour long periods. Researchers traveled to each of the five cottages during regular school hours to have youth complete the survey. Dorms at Spring Mountain are divided into two levels and youth each have their own cubicle containing a small desk and bed. Youth completed the survey at the desk in their cubicle. Researchers conducted the assent process from the bottom floor of the facility while youth lined up at the front of their dorm room to hear the instructions. While youth completed the survey, researchers walked between cubicles asking if youth had any specific questions about the survey. The guard on duty in each dorm room was present during the data collection process as well as two additional UNCE staff. Staff notified the researchers that some youth would miss the data collection process because of a football game in California was scheduled for that day. Further, two youth declined participation because they had already completed the survey at DJJS the week prior.

**Caliente Youth Facility, Caliente, NV.** A total of 120 youth were residing at Caliente Youth Facility the day of the survey administration. Youth live in small cottages on the large campus of the Caliente facility, separated by gender, age, and offense type. Youth were brought into the main cafeteria one cottage at a time, resulting in three rounds of data collection with 30-40 youth each. The first group was comprised entirely of girls, while the remaining two groups were comprised of all boys. The detention manager and two additional guards were present in the room during the data collection procedures and helped pass out materials. However, all completed surveys were picked up by the researcher to ensure that youth felt comfortable that their results would not be shared with any facility staff.

## **Measures**

Table 4.2 provides an overview of the key measures for this study, sample items, and how they relate to the two theoretical models utilized. The development of these items and the reasoning behind their selection are described in greater detail following the table.

Table 4.2

*Operationalization of Theoretical Constructs, including Scale name and Sample Items.*

Theoretical Constructs	Scale Name	Sample Items
<u>Social Development Model: Prosocial Pathway</u>		
Opportunities	Program Structure that Promotes Belonging scale (Hartje et al., 2008).	“Staff provide lots of opportunities to do activities that interest me”, “Staff do a good job making sure youth feel important at this facility”
Involvement	Modified Skill-Building Opportunities scale (Hartje et al., 2008)	“Staff at this facility challenge me to do my best in all activities”, "Staff in this facility only accept my best effort."
Rewards	Modified Perceived Rewards for School Involvement scale (2002; Communities that Care Survey)	“Staff at this facility praise me for following the rules”, “Staff at this facility notice when I work hard in my classes or activities.”
<u>Social Development Model: Antisocial Pathway</u>		
<i>Opportunities</i>	Deviancy Training in Afterschool Activities (Denault & Poulin, 2012)	“Youth in this facility tend to misbehave more than participating seriously in activities”
<i>Involvement</i>	Modified version of Antisocial Influences in Alcohol Treatment Settings (Leve & Chamberlain, 2004)	“I spend a lot of time here with youth who misbehave”
<i>Rewards</i>	Rewards for Prosocial Activities scale (Arthur, Hawkins, Pollard, Catalano, & Baglioni, 2002)	<i>(Reverse coded for latent construct)</i> “How much do youth at this facility approve or disapprove of you...making a commitment to stay away from

<i>Peer Involved in Prosocial Activity</i>	Developed for this study based on Rewards for Prosocial Activities scale (Arthur, Hawkins, Pollard, Catalano, & Baglioni, 2002)	drugs and alcohol after leaving the facility.” (Reverse coded for latent construct) “Think about youth you spend the most time with at this facility. how many of them have... made a commitment to stay away from drugs and alcohol after leaving the facility.”
<u>Behaviors</u>	Institutional Misconduct Scale (developed for this study)	“How many times have you done any of the following behaviors since you have been at this program, ‘Damaged or stolen property’, ‘Used foul language’
<u>Attitudes</u>	Post-Detention Likelihood of Success Scale (Evans, Brown, Killian, 2002)	“After leaving here, I will hang out with old friends”; “I will spend more time with adults or family members who will help me avoid trouble”
<u>Eccles and Gootman (2002)</u>		
<i>Physical/Psychological Safety</i>	Fear of Victimization Scale (Ireland, 2002)	“How often are you afraid that someone will make fun of you, call you names, or insult you at this facility?”
<i>Appropriate Structure</i>	Modified Program Structure that Promotes Belonging Scale (Hartje et al., 2008)	“Staff provide lots of opportunities to do activities that interest me”, “Staff do a good job making sure youth feel important at this facility”
<i>Supportive</i>	Multidimensional Scale of	"This special person cares

<i>Relationships</i>	Perceived Social Support (Zimet et al., 1988)	about my feelings", "I can talk about my problems with my friends."
<i>Opportunities to Belong</i>	Sense of Belonging Scale (Anderson-Butcher & Conroy)	"I am accepted at this program", "I feel comfortable at this program"
<i>Positive Social Norms</i>	Rewards for Prosocial Activities scale (Arthur, Hawkins, Pollard, Catalano, & Baglioni, 2002)	"How many of your friends at the facility have made a commitment to say away from drugs or alcohol after leaving this facility"
<i>Support for Efficacy and Mattering</i>	Modified Perceived Rewards for School Involvement scale (2002; Communities that Care Survey)	"Staff at this facility praise me for following the rules", "Staff at this facility notice when I work hard in my classes or activities."
<i>Opportunities for Skill-Building</i>	Modified Skill-Building Opportunities scale (Hartje et al., 2008)	"Staff at this facility challenge me to do my best in all activities"
<i>Integration of Family School Community</i>	Multidimensional Scale of Perceived Social Support (Zimet et al., 1988)	"Since I have been at this facility, my family has really tried to help me."

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This section describes the measures used for the study, with the corresponding question number for the survey in parentheses (see Appendix A for survey used in full study). Table 5.12 in the next chapter reports the psychometric properties of these scales. Scales that help comprise latent constructs to be tested in structural equation model analyses are represented as figures.

**Dependent variables.** Two dependent variables were examined in this study: (1) youth's perceived post-detention likelihood of success; and (2) youth's self-reported rates of institutional misconduct.

***Post-detention likelihood of success (Q12).*** In line with the argument that perceptions about one's future can be as powerful a predictor as actual behaviors, Evans, Brown, and Killian (2002) developed the Post-Detention Likelihood to Succeed Scale (PDLSS) as a measure of detained youth's self-efficacy to avoid recidivism post-detention. The PDLSS assesses youth's self-reported likelihood to engage in prosocial activities, maintain positive and avoid negative social networks, avoid substance abuse/reoffending, and engage in successful conflict reduction. Items selected for the scale align closely with research suggesting that substance abuse and reentering antisocial networks increase the likelihood of delinquency, whereas reducing conflict in interpersonal relationships and increasing participation in prosocial activities is associated with a decreased likelihood of delinquency (Brown et al., 2003; Evans et al., 2002; Lattimore, Visher, & Linster, 1995).

Two items assess involvement in prosocial activities (e.g., "After leaving here, I will complete high school"). Five items assess social networks (e.g., "After leaving here, I will hang out with old friends"). Four items assess substance abuse and reoffending (e.g., "After leaving here, I will return to detention"). Two items assess conflict reduction (e.g., "After leaving here, I will work at not getting into fights with other youth"). Respondents rate each statement on a five-point scale with 1 = *Strongly Disagree* and 5 = *Strongly Agree*. The average of item responses created a score of perceived likelihood of

success on release that could range from 1 to 5, with higher scores representing more positive forecasts. Prior research with incarcerated youth suggests the measure has strong internal consistency with an alpha of .87 (Brown et al., 2003; Evans et al., 2002). A comparable alpha of .85 was obtained on the pretest. Figure 4.1 below displays the latent construct that will be created from the four subscale means.

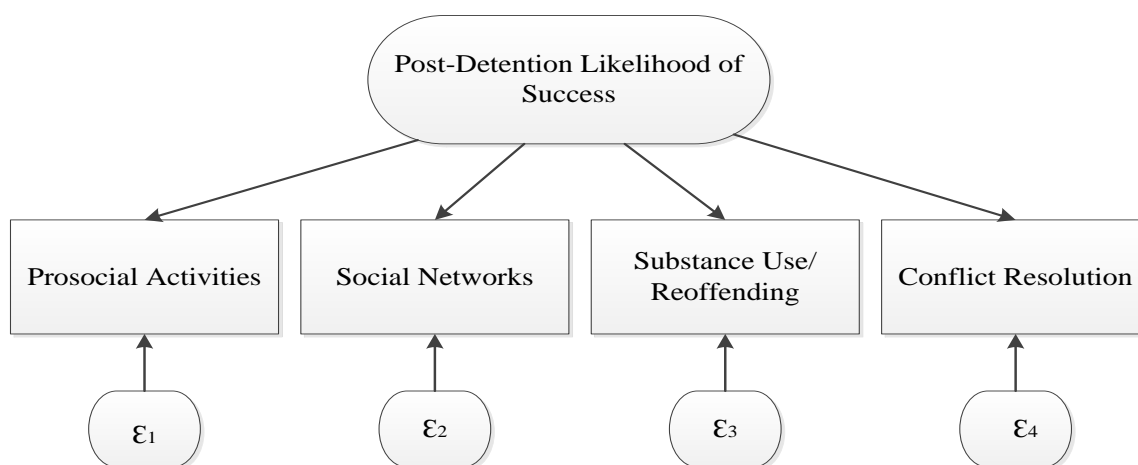


Figure 4.1  
Post-Detention Likelihood of Success latent construct with indicators and error terms. Indicators will be created from means of each scale.

***Institutional misconduct (Q14).*** Youth's institutional misconduct was measured through self-report. Official records of inmate violence often under-estimates the actual proportion of violence that occurs inside correctional facilities (Wolff et al., 2007). In addition, staff may not be aware or want to formally cite youth for all rules they might break. As a result, youth's own self-report of their rule-breaking behavior may be both a more accurate estimate of its frequency and an indicator of their overall commitment to pursuing antisocial or prosocial pathways after release.

For this study, a composite measure of youth's rule violations since admission will be calculated as per Jiang and Winfree (2006). Two steps will be used to form this variable. First, youth will be asked to report on how many of 22 possible types of rule violations they have committed since they have been detained. The 22 rule violations were pulled from the handbook from the Jackson Family Court Detention Center (2006) and include drug or alcohol violations, assaults against staff and other inmates, attempted escapes, and other major and minor violations.

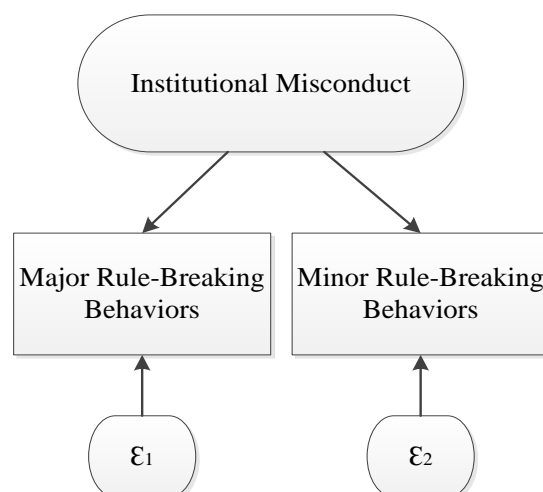


Figure 4.2  
Institutional Misconduct latent construct comprised of two indicators of rule-breaking behaviors: Sum of all self-reported major rule-breaking behaviors (see Table 5.10 for list) and sum of all minor rule-breaking behaviors (see Table 5.11 for list).

**Independent variables.** Two latent variables, Prosocial Bond with Staff and Antisocial Bond with Peers will be constructed and tested for this study based on the Social Development Model.

***Prosocial bond with staff (Q15-17).*** The Social Development Model identifies three critical components that determine whether an individual will bond with a prosocial

or antisocial influence, and, subsequently, adopt their attitudes and behaviors: (1) availability of opportunities to engage in activities with that person or group; (2) the extent of involvement in those activities; and (3) the quality and extent of rewards perceived for engaging in those activities with that person or group. Eccles and Gootman's (2002) framework also highlights how important program staff are critical to involving and engaging youth in prosocial opportunities, and making them feel as though they belong and can succeed in prosocial activities. Staff are responsible for ensuring that the rules of the facility are clear and that the structure of programming is consistent over time. Staff may facilitate youth's involvement and engagement in positive activities by noticing and praising youth for their positive behaviors. The higher youth rate detention staff's ability to provide them with *opportunities* to engage in prosocial activities, *involve* them in programming that fosters prosocial skills and assets, and *reward* them for demonstrating prosocial norms, the more youth will want to align their beliefs and behaviors with those promoted by staff. Figure 4.3 below identifies these three scale indicators and corresponding latent variable of "Prosocial Bond with Staff" proposed for this study.

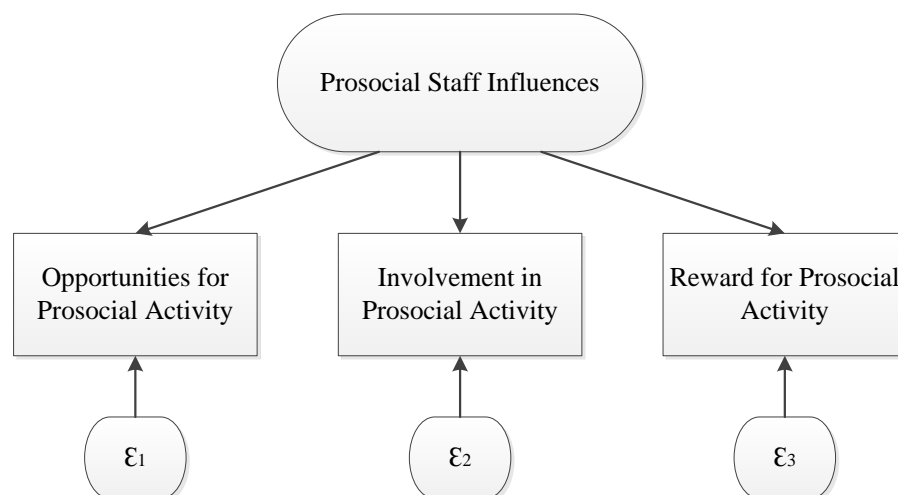


Figure 4.3

Bond with Prosocial Staff Influences latent construct comprised of three indicators and their error terms: 1) Opportunities provided to youth to engage in prosocial activities; 2) Involvement of youth in prosocial activities; 3) Rewards given to youth for engaging in prosocial activities. Each rectangle represents a composite score from items on three separate scales.

***Opportunity for prosocial activity (Q15).*** Youth's perceptions about whether they have the opportunity to engage in prosocial activities at the facility will be measured using a modified version of the Program Structure that Promotes Belonging scale from Hartje et al. (2008). Hartje et al. (2008) developed a 27-item scale to measure youth's workers self-reported competency to promote positive development of youth at participating in their program based on the eight critical features of positive youth programs (Eccles & Gootman, 2002). The scale originally consisted of six items that measured whether youth workers felt competent in their ability to engage youth in programming and follow the rules of the organization. This scale was modified for this study so that *youth* could instead report on staff's ability to engage them in programming, and was adapted to a more developmentally appropriate reading level. Youth rated the items along a five point Likert-style scale with 1 = Strongly Disagree and 5 = Strongly Agree. Sample items include, "Staff do a good job making sure feel like an important part

of the facility here”, "Activities at this facility are interesting to lots of different youth", and "Staff always make sure that facility rules are followed by youth." The average score on these items will represent one of the three indicators of youth's relationship with prosocial staff. A higher score on this scale indicates youth perceive staff provide them with opportunities for prosocial activities at the facility. Reliability for this scale was .76 in the full study. The average score on this scale will comprise the first of three indicators in the overall Prosocial Staff Influences latent variable.

***Prosocial activity involvement (Q16).*** Whether youth feel like staff involve them in opportunities to develop positive skills and self-efficacy will be measured using a modified version of Hartje et al.'s (2008) Skill-Building Opportunities subscale. The original scale consists of six items that measures whether youth workers feel competent in their ability to help youth build important skills and challenge them to achieve positive outcomes. Items were again adapted so that youth rate staff's competency to engage them in skill-building opportunities along a five-point Likert-scale. Sample items include, "Staff at this facility give me lots of feedback about my behavior" and "Staff at this facility only accept my best effort", and "Staff at the facility teach me how to make better decisions." Cronbach alpha was .89 in the full study. Again, mean scores on this scale will comprise one of three indicators in the overall Staff Prosocial Influences latent variable.

***Rewards for prosocial involvement (Q17).*** Perceived rewards for involvement with staff at the facility will be measured using a modified version of the three-item Perceived Rewards for School Involvement scale from the Communities that Care Youth

Survey, a broad assessment of risk and protective factors designed for administration at schools. Items measure whether youth perceive that that school staff notice and praise them for positive behavior at school (Arthur, Hawkins, Pollard, Catalano, & Bagliatoni, 2002). These items were modified for use at a detention center. Agreement to each item is rated along a five-point scale with 1 = Strongly Disagree and 5 = Strongly Agree. Sample items include, “Staff at this facility praise me for following the rules”, and “Staff at this facility notice when I work hard in my classes or activities.” Cronbach alpha in the full study was .91. A mean score on this scale will comprise the third indicator in the overall Prosocial Staff Influences latent variable.

*Antisocial pathway: Associations with deviant peer inmates (Q18-21).* The latent construct of Antisocial Peer Influences will be developed from three indicators, each of which are mean scores from three separate scales representing the three critical components of the SDM bond: opportunities to participate in antisocial activities, involvement in antisocial activities, and rewards for participating in antisocial activities (see Figure 4.4).

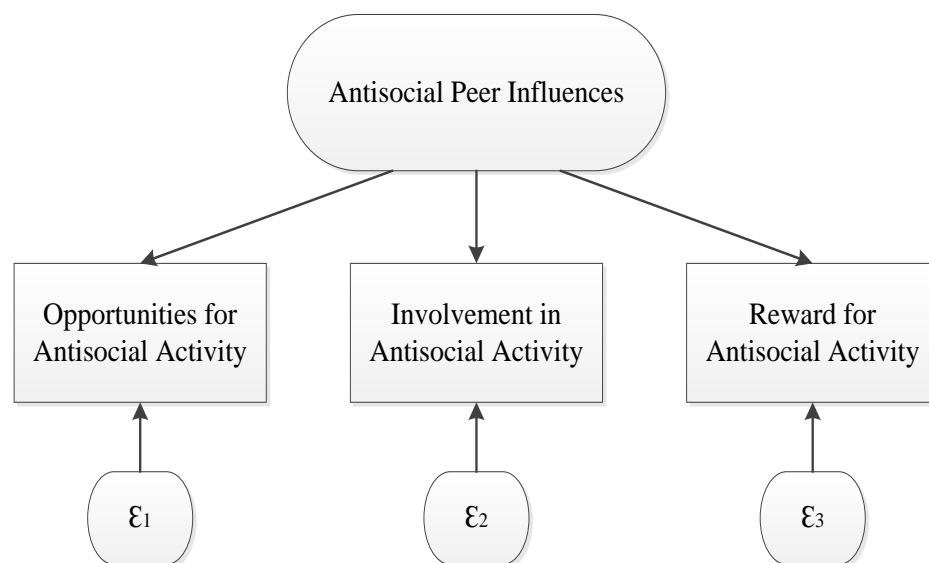


Figure 4.4

Bond with Antisocial Peer Influences latent construct comprised of three indicators and their error terms: 1) Opportunities provided to youth to engage in antisocial activities; 2) Involvement of youth in antisocial activities; 3) Rewards given to youth for engaging in antisocial activities. Each rectangle represents a composite score from items on three separate scales.

***Opportunity for antisocial activity (Q18).*** Youth’s opportunities to engage in deviant behavior while detained will be measured using a 4-item modified version of the deviancy training in afterschool activities scale (Denault & Poulin, 2012). In their original study, youth were asked to think about a specific activity conducted in an afterschool program and rate how much rule-breaking or illicit behavior occurred during the program. The measure was significantly associated with antisocial behaviors. For this study, youth will be asked to think about youth in their facility generally. Youth’s agreement with each statement is measured along a five-point scale with 1 = Strongly Disagree, 2 = Disagree; 3 = Neither Agree nor Disagree; 4 = Agree; 5 = Strongly Agree. Sample items include “Many youth in this facility try to disobey the rules and misbehave” and “Some youth in this facility have offered me alcohol or drugs.” In the

original scale, alpha was low (.69), but acceptable for a pilot measure. In the full study, alpha was .70. A mean score on this scale will represent one of the three indicators used to construct the latent variable of Antisocial Peer Influences.

*Antisocial activity involvement (Q19).* Research suggests that when youth in juvenile justice programming have less structured time to interact with other youth, the possibility of deviancy training is much greater (Osgood, Anderson, & Shaffer, 2004). Higher staffing ratio and a high degree of structure for youth's interactions tends to decrease the likelihood that youth will be negatively influenced by antisocial peers. Youth's involvement with antisocial peers will be measured using a four-item scale adapted from Leve and Chamberlain (2004) which originally assessed the extent to which youth interacted with antisocial peers in an alcohol intervention setting. The items were modified for use in juvenile detention. The four items included, "I spend a lot of time with other youth here who misbehave", "I spend a lot of time here with other youth who follow the rules staff set (reverse code)", "I spend a lot of time here with peers who will work hard to stay out of trouble once they are released (reverse code)" and "I spend a lot of time here with other youth who will probably get in more trouble once they are released." Items were assessed along a five-point Likert scale with 1 = Strongly Disagree; 2 = Disagree; 3 = Neither Agree nor Disagree; 4 = Agree; and 5 = Strongly Agree. Alpha was somewhat low in the full study at .65. Higher scores indicate a higher degree of involvement with deviant peers. A mean score on this scale will represent the second of the three indicators used to construct the latent variable of Antisocial Bond with Peers.

***Rewards for antisocial activity involvement (Q21).*** Rewards received for breaking rules at the facility and for continuing to engage in delinquent behavior post-detention were assessed using a scale adapted from the Communities that Care Youth Survey (Arthur, Hawkins, Pollard, Catalano, & Baglioni, 2002). Youth were asked to think about whether their four closest friends (the friends they feel closest to) at the facility would approve or disapprove of various behaviors. Sample items include “Participating in activities at this facility”, and “Committing to stay drug and alcohol free after leaving the facility.” Items were rated along a five-point Likert-scale with 1 = Strongly Disapprove and 5 = Strongly Approve, and 6 = I do not spend time with other youth at this facility. Responses of "6" were coded as missing data in the final model, but provide valuable information about the proportion of youth who do not feel connected to any youth at the facility. In a study assessing the reliability and validity of all items in the Communities that Care Survey instrument, Arthur, Hawkins, Pollard, Catalano, and Baglioni (2002) found that the measure had strong internal consistencies of between .82 and .93 across the six population groups included in the study (approximately 10,000 male and females from the 6<sup>th</sup>, 8<sup>th</sup>, and 11<sup>th</sup> grades in a state-wide sample). In the full study, alpha was .83. A mean score on this scale will represent the third indicator used to construct the latent variable of Antisocial Bond with Peers.

***Peers involved in prosocial activities (Q20).*** To assess whether youth believed their peers were taking advantage of the prosocial opportunities in the facility, an additional scale was added to the survey that was not intended for inclusion in the full model. This scale was also adapted from the Communities that Care Survey instrument,

and asked youth to rate what proportion of youth they spent the most time with at the facility had engaged in prosocial opportunities using the following response options (1 = None; 2 = Some; 3 = About Half; 4= Most; 5 = All and 6 = I do not spend time at this facility). Alpha in the full study was .77. Again, responses of "6" were coded as missing data.

**Indirect effects: Social support from external networks (Q23 and Q31).**

Petersilia (2003) suggests that housing inmates away from family and limiting contact (e.g., exceptional expenses for phone calls, limits on minutes, failure to provide an adequate number of phones) negatively impacts inmates' adjustment to juvenile detention. Recent work with adult prisoners has found that social support and social ties to the community are an important part their adjustment and are associated with less institutional misconduct (Bales & Mears, 2008; Jiang, Fisher-Giorlando, & Mo, 2005). Eccles and Gootman (2002) identify integration of family, peers, and the community as a strong moderator of the impact of after school programming on positive youth outcomes. Not only does involving these critical support networks help reduce youth's distress during juvenile detention, it may help to ensure a positive transition from detention to home upon release. For purposes of this study, a latent variable of Satisfaction with External Social Support was identified. This variable was comprised of three scale indicators, perceived support from family, perceived support from close friends, and perceived support from a special person.

Researchers have operationalized social support in a variety of ways. Some studies have examined density of social networks (e.g. how many people are available to

provide support; Geckova et al., 2003), some have examined specific types of support (e.g. support from parents), and some have examined frequency or duration of social support (Collarossi & Eccles, 2003). Social support from external networks will be assessed in this study using a slightly modified version of the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988).

The scale was designed to assess the perceived adequacy of support from the following three sources: family, friends, and a special person. The MSPSS assesses perceived social support, which tends to be a better predictor of psychological status than actual social support (Sarason et al., 1983). Thus, the MSPSS may have important implications for how well youth adjust to the stressors of the facility. Coefficient alphas for the subscales and scale as a whole ranged from .85 to .91 in the original study with young adults (Zimet et al., 1988), indicating good internal reliability, with test-retest reliability ranging from .72 to .85, indicating good stability. Adequate construct validity was further demonstrated in significant correlations between the MSPSS subscales and a host of well-validated depression and anxiety scales (Zimet et al., 1990). The psychometric properties have been supported in urban adolescent samples as well, supporting their use for this project (Canty-Mitchell & Zimet, 2000). Alpha in this study was .92 for the family subscale, .88 for the friend subscale, and .93 for the special person subscale.

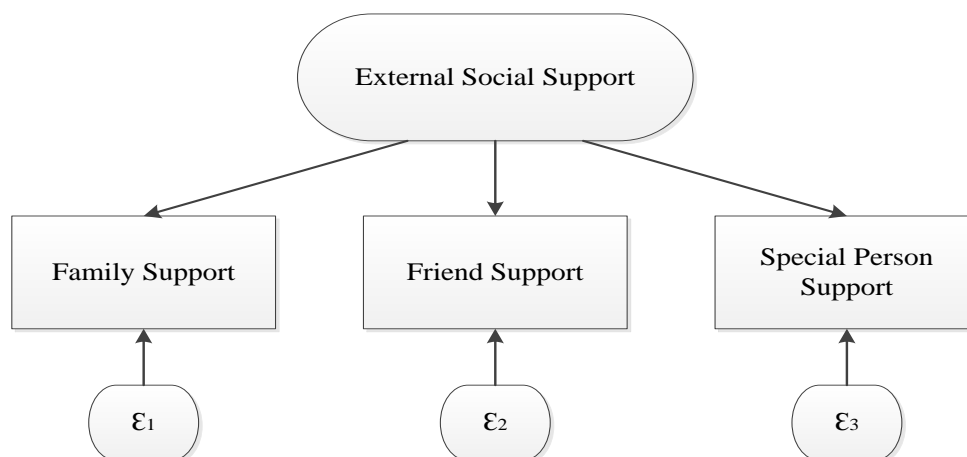


Figure 4.5

External Social Support latent construct comprised of three indicators: 1) Mean scores on Family Support Scale, 2) Mean scores on Friend Support Scale; and 3) Mean scores on Special Person Social Support Scale.

The Special Person Support subscale (Q31) was asked separately from the Family and Friend Support Scale (Q23). To gain a better understanding of who youth received support from outside of the facility, youth were first asked to identify a target person about whom to respond. Youth were first asked to think about someone from home that they were most likely to go to when feeling stressed or upset and then to think about that person as they answered a series of questions about the support and contact they had had from that person while detained. Youth could select from a list that paralleled the list about outside-facility supports in Question 26 and 27. They were then asked to rate the social support provided by this person using the items described below. Response options on all three subscales ranged on a 7-point scale from 1 = Very Strongly Disagree to 7 = Very Strongly Agree. Items are listed below. Note that the Special Person (SP) items were asked in a survey section separate (Q31) from the section (Q23) in which the questions about family and friends were asked.

*Since you have been at this facility, how much do you agree or disagree with these statements about people in your life...*

1. This special person is around when I am in need (SP).
2. This special person is someone with whom I can share my joys and sorrows (SP).
3. My family really tries to help me (Family).
4. I get the emotional help and support I need from my family (Family).
5. This special person is a real source of comfort to me (SP).
6. My friends really try to help me (Friends).
7. I can count on my friends when things go wrong(Friends).
8. I can talk about my problems with my family (Family).
9. I have friends with whom I can share my joys and sorrows (Friends).
10. There is a special person in my life who cares about my feelings (SP).
11. My family is willing to help me make decisions (Family).
12. I can talk about my problems with my friends (Friends).

**Indirect effects: Physical and psychological safety (Q21-22).** Physical and psychological safety will be comprised of two indicators: frequency of victimization while detained, fear of victimization while detained and overall emotional stability (Figure 4.6).

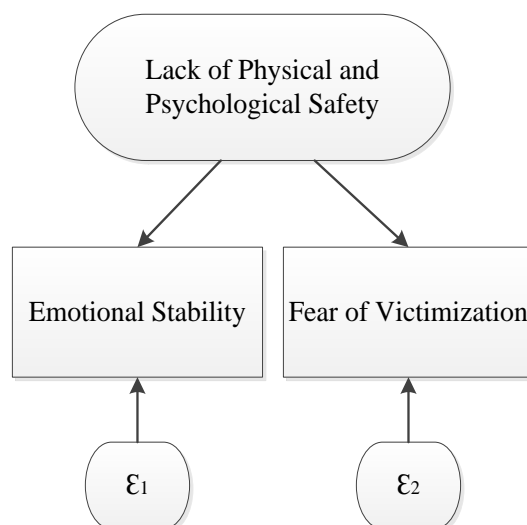


Figure 4.6  
Physical and Psychological Safety latent construct comprised of two indicators: Mean scores on Emotional Stability scale and mean scores on Fear of Victimization scale.

***Fear of victimization (Q21).*** Fear of victimization while detained was assessed using a modified version of the Brief Measure of Fear of Victimization developed by Ireland (2002). The original measure asked adult prisoners to report their fear that each of 7 behaviors would occur to them during their detention stay. The measure read as follows:

“Even if none of these have happened to you since you have been at the facility, how much do you fear that”....:

1. Someone will make fun of you, call you names, or insult you?
2. Someone will spread rumors about you?
3. Someone will threaten you with harm?
4. Someone will push you, shove you, trip you, or spit on you at this facility?

5. Someone will try to make you do things you do not want to do, for example, give them money or other things?
6. Someone will leave you out of activities on purpose?
7. Someone will destroy your property on purpose?

Response options range from 1 = Not at all, 5 = Very much. A mean of these items forms the measure of fear of victimization, with higher scores indicating higher fear of victimization. Ireland (2002) reports the measure had strong internal consistency (alpha = .90) with a sample of 200 adult male prisoners. Language was modified for a more developmentally appropriate reading level (e.g. “Excluded you from activities on purpose” became “Left you out of activities on purpose”). Alpha in the full study was .93.

***Emotional stability (Q22).*** Emotional stability involves the degree to which various emotional problems and concerns have bothered the youth during the last thirty days (e.g., feeling blue or sad). Emotional stability consisted of seven items measuring the degree to which various emotional problems and complaints have bothered respondents during the past 30 days (e.g. feeling blue or sad; Evans & Skager, 1992; alpha = .80). Alpha in this study was .82. Response items include 1 = Not at all, 2 = Very little, 3 = Somewhat, 4 = Quite a bit; 5 = Very much. The mean of these seven items will be used to comprise the “Emotional Stability” indicator. The specific items asked include:

"How often do you have the following thoughts or emotions..."

1. Feeling blue (sad).
2. Feeling others are to blame for most of your problems.
3. Thoughts of ending your life.

4. Urges to injure or harm someone else.
5. Difficulty making decisions.
6. Nervousness or shakiness inside.
7. Not feeling liked or respected by others.

**Demographics (Q1-11).** Additional demographic information likely to co-vary with other key variables in the model were also collected. Covariates included age, gender, ethnicity, and time in relationship (i.e., time in program). Age will be measured through an open-ended response to the probe, “What is your age (in years only)?” Gender and ethnicity will be measured categorically. Other covariates included in this study that may impact youth’s forecasts about their future and their detention behaviors included: offense type, highest grade completed, expected stay, number of prior detention stays, family background (e.g., with whom does youth live), and whether they were involved in a gang.

**Additional questions on youth social networks (Q24 - Q29).** Several questions were added after the pilot study to better understand the nature and type of relationships youth maintain while they are in the facility and outside of the facility. However, because literature on the relationships youth maintain within the facility is extremely sparse, and because the items were not piloted prior to inclusion in the final survey version, they will not be included in the final model. These items were intended to provide important contextual information about the variables that were included in the final model. The first two questions asked about youth's relationships inside the facility and read as follows, "Of the following people inside the facility, who do you go to most often when you feel

sad or anxious? (check one; Q24)" and "Of the following people inside this facility, who do you go to most often for advice or help? (check one; Q25)." Response options were as follows:

1. Guard
2. Counselor
3. Teacher
4. priest/rabbi/other religious staff person
5. Probation officer
6. Social worker
7. Resident in my unit
8. Other (Please describe)
9. I do not go to anyone in this facility when I feel sad or anxious
10. I have not felt sad or anxious/needed help or advice since I have been at this facility.

These same questions were asked about who youth went to outside of the facility for these same reasons. The two questions read "Of the following people outside of this facility, who have you most wanted to talk to when you felt sad or anxious (check one; Q26)" and "Of the following people inside of this facility, who have you most wanted to talk to for advice or help with something (check one; Q 27)? Response options were as follows:

1. Mother/Father/Guardian
2. Brother/Sister/Sibling

3. Another family member like an aunt, uncle, or cousin
4. Boyfriend/Girlfriend
5. Teacher/Counselor/Coach/Another Adult
6. Friend
7. Other person (please describe)
8. I do not usually to talk anyone when I need advice or help/when I'm sad or anxious.

One final question was asked about social networks, "Of all the people inside and outside this facility, who are you most motivated to make positive changes for? (check one; Q28). Response options included all of the staff and peers used for the inside-facility items described above as well as all of the people from home included for the outside-facility items. Two questions about romantic partners were asked in order to assess whether youth reported having these relationships ("Do you currently have a boyfriend or girlfriend outside of this facility?"; Q29) and how long these relationships typically were ("How many months have you been with your boyfriend or girlfriend?"; Q29, open-ended).

**Additional questions on visits from home while detained (Q30, 32- 34).** The last set of questions asked youth about the quality of the visits they had received from home, whether they had been able to visit with the person they were closest to from home, how they had stayed in contact with this person and how often. Youth were first asked to select a target person (see Social Support section above), and then asked how many times they had been visited by this person, how many times they had spoken to

them on the phone, and how many times they had received an email, text, or letter from this person since they had been detained. One final question was asked about what barriers made it difficult to see or talk to people from home while they were detained. These items were drawn from the Youth in Confinement survey (Sedlak & McPherson, 2010). The barrier options were as follows:

1. The facility only allows certain people to visit.
2. The facility visiting hours are not at convenient times.
3. The facility visiting hours are not long enough.
4. Your friends, family, and other people in your support network are not trying to visit you enough.
5. The facility is too far away from home.
6. Your friends, family or other people from home cannot afford to visit.
7. You do not want to talk or visit with people in your close support network.
8. Your friends, family or other people from home do not like to visit me here.
9. You do not have family, friends, or other people from home who would visit you here.
10. Other (please explain).

### **Data Analysis Plan**

The analytic process consisted of structural equation modeling, along with associated descriptive statistics, bivariate analyses, and measurement models. Survey data was data-entered by the researcher. During the data-entry process, responses were scanned to determine if any surveys need to be discarded because of errors or odd

patterns (e.g. youth did to not take the survey seriously, large sections of questions skipped etc.). Items were reverse coded as needed. Initial screening of the observed indicators for the latent constructs helped reveal any characteristics that compromised the ability to estimate confirmatory factor analytic models (e.g., multicollinearity of indicators, bimodality, skewness/kurtosis of item distributions). Problematic indicators were omitted from the proposed measurement models in order to eliminate any issues likely to negatively impact the validity of the model. An overview of the data analysis plan is provided in Table 4.3.

Table 4.3

*Data Analysis Plan for Survey Results*

Research Question and Hypotheses	Analyses Used
<i>Research Question 1:</i> Are there significant differences among facilities that warrant multi-level analyses to account for facility's impact on outcomes?	ANOVAs, Intraclass Correlation to test differences among facilities on key measures (staff relationships, peer relationships, PDLs, Institutional Misconduct, and Safety)
<i>Research Question 1:</i> Does the model proposed adequately fit the data?	Structural Equation Modeling and Confirmatory Factor Analysis
<i>Hypothesis 1a:</i> Youth reporting a higher prosocial bond with staff will report higher perceived likelihood of post-detention success than youth with a lower prosocial bond.	SEM Direct Effects Model
<i>Hypothesis 1b:</i> Youth reporting a higher	SEM Direct Effects Model

prosocial bond with staff will report lower rates of institutional misconduct than youth with a lower prosocial bond.

*Hypothesis 1c:* Youth's perception of their physical and psychological safety will have a negative indirect effect on the link between their prosocial bond with staff and their post-detention likelihood of success.

SEM Test of Indirect Pathway

*Hypothesis 2a:* Youth reporting a higher antisocial bond will have higher rates of institutional misconduct than youth who have a lower antisocial bond.

SEM Direct Effects Model

*Hypothesis 2b:* Youth reporting a higher antisocial bond will report a lower perceived likelihood of post-detention success than youth who have a lower antisocial bond.

SEM Direct Effects Model

*Hypothesis 2c:* Satisfaction with external social support with partially mediate the relationship between having an antisocial bond with peers and institutional misconduct.

SEM Test of Indirect Pathway

*Hypothesis 3a:* Youth reporting a stronger prosocial bond staff influences will have a lower antisocial bond with peers.

SEM Direct Effects Model

*Hypothesis 3b:* Youth reporting a lower post- SEM Direct Effects Model  
detention likelihood of success will report  
higher institutional misconduct.

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## Chapter V: Results

### Participants

Table 5.1 below reports the key demographics of youth in the facility. As reported earlier, the majority of youth were male (83.7%). Youth ranged in age from 12-18, though nearly 60% of youth were 16 to 17 years old (mean of 16.2 years old). Youth came from a wide range of race/ethnicities, though most were non-White. Almost a third (30%) of all detained youth were African American/Black. The high proportion of Multi-Racial youth may represent a comprehension issue, as several youth indicated they were from 3-4 different races in open-ended explanations about their multi-racial responses. Multi-racial responses recoded to the other categories when youth were obviously one race/ethnicity and likely not multi-racial (e.g. German and Irish), but less clear responses "American Indian, Irish, German, and Portuguese" were left as Multi-Racial.

The majority of youth (76.8%) reported that they had been at their current facility six months or less (mean 3-4 months). The majority of youth thought they would be at the facility less than 6-7 months longer. Responses to this item were as follows: Less than one week left (11.7%), 1-4 weeks (15.7%), 1 month (10.6%), 2 months (14.0%), 3 months (12.7%), 4-5 months (17.6%), 6-7 months (10.7%), 8-9 months (2.3%), 10-11 months (1.3%), one year (1.7%), two years (.7%), and more than two years (.2%). Table

5.2 reports the length of time youth had spent at the facility at the time of data collection and the length of time they had left at the facility before release.

Table 5.1

*Demographic Characteristics of Youth Participants*

Demographic Characteristic	Number (%)
<b>Gender</b>	
Male	252 (83.7%)
Female	49 (16.3%)
<b>Age</b>	
12	3 (1%)
13	8 (2.7%)
14	12 (4.0%)
15	54 (17.9%)
16	81 (26.9%)
17	93 (30.9%)
18	46 (15.3%)
<b>Race/Ethnicity</b>	
African American/Black	91 (30.4%)
Asian American / Pacific Islander	7 (2.3%)
Caucasian / White	57 (19.1%)
Latino / Mexican / Hispanic	72 (24.1%)
Native American / Alaskan Native	3 (1.0%)
Multi-ethnic / Multi-racial	69 (23%)

*Note:* Numbers may not add up to 301 or 100% because youth skipped question.

Table 5.2

*Youth's Self-Reported Time Spent in Facility and Length of Time Remaining in Dispositions*

Length of Time Spent in Facility	Number (%)
< 1 week	21 (7.0%)
1 week to a month	58 (19.4%)
1-2 months	65 (21.7%)
3-4 months	52 (17.4%)
5-6 months	35 (11.7%)
7-8 months	25 (8.4%)
9-10 months	23 (7.7%)
11-12 months	15 (5.0%)
One year	3 (1.0%)
2 years	1 (0.3%)
More than 2 years	1 (0.3%)
Length of Time Remaining at Facility	Number (%)
< 1 week	35 (11.7%)
1 - 4 weeks	47 (15.7%)
1 month	32 (10.7%)
2 months	42 (14.0%)
3 months	38 (12.7%)
4-5 months	53 (17.7%)
6-7 months	32 (10.7%)
8-9 months	7 (2.3%)

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10-11 months	4 (1.3%)
One Year	5 (1.7%)
Two Years	2 (.7%)
More than Two Years	2 (.7%)

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*Note:* Numbers may not add up to 301 or 100% because youth skipped question.

Youth were also asked to report, from a list of options, with whom they lived outside of the detention facility. Responses were as follows: Mother Only (32.2%), Mother/Stepmother (18.3%), Both biological parents (16.4%), Grandparents (12.3%), Father Only (8.3%), None of the Above (5.3%), Father/Stepmother (4.0%), Guardian (3.0%), Foster parents (3.0%), and Other Adult or Relative (2.3%). The majority of youth who indicated Other or None of the Above either reported that they lived with a significant other or a friend or that they had emancipated themselves. Other youth indicated that they were homeless or runaways or that they lived with their “pimp.”

Youth were also asked how many times they had been detained at this or another facility through an open-ended question that read, “How many times have you been detained (include your current stay)?” Responses ranged from 0 to 100, with a median of 4 and a mean of 5.39. All “zero” responses were combined with “1’s”, as youth had likely misunderstood that they were supposed to include their current stay (all youth should have responded with at least a one if they were including their current stay). Only 26.3% of all youth indicated that this was the first time they had ever been detained at a facility. Finally, just over half of all youth (50.5%) indicated that they were in a gang.

## **Institutional Misconduct**

Youth's self-report of the frequency with which they had broken rules at the facility was asked in two ways to help provide a better understanding of how youth think about and understand their rule-breaking habits. At the beginning of the survey, all youth were asked a single open-ended question that read, "How many times have you been written up for breaking a rule at this facility?" Youth's responses to this question varied considerably and required substantial recoding. While some youth gave very specific numbers (e.g. 0 to 15), 10 youth responded with answers like "a lot", "a lot of times", "many" or "too many." Three youth responded with impossibly high numbers including 100, 1000, and 5000. For simplicity and as a basic gauge with which to assess the validity of youth's responses to free responses were recoded into five possible options: 0 times (36.2%), 1 to 5 times (41.2%), 6 to 10 times (8.3%), 11 to 20 times (5.3%), 21 or more times (5.6%), and missing data (e.g. "a lot", 3.0%).

Institutional misconduct was asked about in more detail via a series of frequency ratings in which youth were asked to indicate how often they had broken major or minor rules at the facility since they had been detained. Table 5.3 (Minor Institutional Misconduct behaviors) and Table 5.4 (Major Institutional Misconduct behaviors) below describe the frequency of each of these self-reported behaviors. These ratings originally had 7 possible response options ranging from never to more than 12 times. For ease of interpretation in the table below, response options were collapsed into four categories. However, as described in the section on scale psychometrics properties, both major and minor variables were included in the final SEM as continuous variables. A total of 287

youth responded to the major scale items and 290 responded to the minor behavior items. Given the potential sensitivity of these items, and their length, the fact that only 11-13 youth chose not to answer them is a positive indicator of their statistical merit.

Youth were more likely to report having broken minor rules, and roughly 90% of all youth reported having broken at least one minor rule at the facility. Far fewer youth said they had never broken rules in the more detailed questions than in the original open-ended question asked in the beginning of the survey. The most commonly broken rule was using foul language, reported by 89.5% of youth at least one time, followed by talking to another resident when they were not supposed to (78.6%). The more major behaviors, as expected, were less commonly reported, although just under half (48%) reported that they had broken at least one major rule while at the facility. Roughly 48% of youth reported having grabbed, shoved, punched, or kicked another resident, and almost a third (31.2%) reported having gotten into a physical fight with another resident.

Table 5.3

*Number and Percentage of Times Youth Report Having Broken Minor Rules at Facility (N = 298)*

<i>How many times have you...</i>	<u>Never</u>		<u>1 to 6</u>		<u>7 to 12</u>		<u>More than 12</u>	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
Made tattoos, pierced ears, or made scratches on yourself or another resident.	258	87.2%	97	32.9%	34	11.5%	1	0.3%
Failed to clean your room when you were supposed to.	238	80.7%	33	11.1%	4	1.4%	2	0.7%
Had someone enter your room or entered someone else's room when you were not supposed to.	231	78.6%	56	19.0%	5	1.7%	2	0.7%
Written or drawn something on the walls of your room when you were not supposed to.	218	73.9%	62	21.0%	4	1.4%	11	3.7%
Taken pencils, games, cards or other property into your room when you were not supposed to take them.	218	73.4%	51	17.3%	4	1.4%	6	2.0%
Not been dressed the way you were supposed to be	181	61.8%	102	34.8%	4	1.4%	5	1.7%

dressed.

Been written up for any other reason not listed above.	175	58.9%	125	42.4%	35	11.9%	15	5.1%
Cursed at, threatened, or made fun of a staff member.	162	54.5%	110	37.3%	36	12.2%	26	8.8%
Not cooperated with staff when they asked me to do something.	104	35.3%	68	22.9%	5	1.7%	38	12.9%
Cursed at, threatened, or made fun of another resident.	86	29.0%	28	9.5%	2	0.7%	52	17.5%
Talked to another resident when you were not supposed to.	75	25.4%	121	40.7%	38	12.8%	74	25.1%
Talked about a crime you or someone you know committed.	70	23.7%	82	27.6%	27	9.1%	65	22.0%
Used foul language (swearing, non-respectful language).	31	10.5%	96	32.3%	11	3.7%	133	45.1%

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Table 5.4

*Number and Percentage of Times Youth Report Having Broken Major Rules at Facility (N = 298)*

How many times have you...	<u>Never</u>		<u>1 to 6</u>		<u>7 to 12</u>		<u>More than 12</u>	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Threatened a <u>staff member</u> with a weapon.	285	96.6%	7	2.4%	1	0.3%	2	0.7%
Had sexual contact (kissing, touching, sex) with any other residents.	277	94.2%	10	3.4%	2	0.7%	5	1.7%
Threatened <u>another resident</u> with a weapon.	274	92.3%	17	5.7%	3	1.0%	3	1.0%
Gotten into a physical fight with a <u>staff member</u> .	273	91.9%	20	6.7%	1	0.3%	3	1.0%
Grabbed, shoved, punched or kicked a <u>staff member</u> .	262	88.5%	28	9.5%	2	0.7%	4	1.4%
Damaged or stolen property.	217	74.1%	55	18.8%	9	3.1%	12	4.1%
Gotten into a physical fight with <u>another resident</u> .	205	68.8%	75	25.2%	6	2.0%	12	4.0%
Grabbed, shoved, punched or kicked <u>another resident</u> .	154	52.0%	108	36.5%	14	4.7%	20	6.8%

### Scale Analyses

Scales were created by calculating the mean, and allowing youth two skip up to two items in a scale before a mean scale score would not be generated. Several analyses were conducted on all of the scales in the survey to assess assumptions of normality (see Tables 5.6 - 5.8 below). Cronbach alpha analyses were run to determine whether the items within scales had adequate internal consistency (i.e. youth responded similarly to items within a scale). As the table below indicates, nearly all scales had robust reliability (Cronbach alphas of .80 or higher). The remaining four scales that had less than .8 reliability were still, by most standards fairly robust (Kline, 1999), and only two scales fell within the “acceptable” range, with .65 reliability ("Peers Involve Youth in Antisocial Activity") and .70 ("Peers Provide Opportunities for Antisocial Activity"). However, no scale modifications to improve alpha levels were suggested by SPSS, and all items were kept as originally written in both scales. It is important to note that although the four individual subscales of the Post-Detention Likelihood of Success did not, by themselves, have reliability coefficients of .8 or higher, the full 13-item scale did have high reliability (.84). Thus, all items were kept as is. One scale edit was made to improve the "Staff Involve Youth in Prosocial Activities" scale, and the removal of one item (“Staff at this facility do a good job connecting what I learn here to life outside the facility”) improved reliability from .73 to .89. Another edit was offered to alter the Staff Opportunities for Prosocial Activity to improve the .76 alpha level. However, the item seemed integral to the meaning of the scale (“Staff set high expectations about how well I will do when I leave this facility.”). As a result, this scale was left as is.

Skew and kurtosis statistics were calculated to examine the shape and normality of the scale probability distributions. Skewness quantifies how symmetrical the distribution is (i.e. a large proportion of item responses do not cluster towards the top or bottom of the response scale), whereas kurtosis quantifies how “peaked” the distribution is (i.e. a too large or too small proportion of responses cluster towards the mean of the distribution). Typically, skew statistics greater than or less than zero signify a non-symmetrical distribution, whereas kurtosis statistics greater than or less than three typically indicates a concern with kurtosis. Aside from the Institutional Misconduct scales, skew statistics for the scales ranged from a low of -1.64 (Special Person Social Support Scale) to a high of .97 (Emotional Stability). Only one scale fell outside of the -1 to +1 cutoff, the Special Person Social Support Scale. This scale was ultimately dropped from the latent construct of External Social Support for other reasons. Namely, that many youth selected family members as the Special Support target, which would have overlapped with the Family Social Support Scale. Thus, the skew issue was not of concern as it was not included in the final model anyway. Skew and kurtosis were a concern with the Major Institutional Misconduct variable, likely because these behaviors were more rare. An inverse of the Major Institutional Misconduct scale was taken, which did improve kurtosis (reduced to a kurtosis of -1.70). Both transformed and non-transformed Institutional Misconduct variables were tested in the latent variable of the structural equation model, and it was found that the transformed variable did not impact the model at all. For ease of interpretability, the un-transformed version of the Institutional Misconduct scale was used in the final structural equation models.

Exploratory factor analyses were also run on all key scales to ensure that they loaded appropriately prior to inclusion in the confirmatory factor analysis. This was done because for the structural equation model, only scale means were used as indicators, and it was therefore critical to identify any reliability or validity issues prior to collapsing the scales to their means. Principal Component Analyses with varimax rotation were run on all scales selected for inclusion in the structural equation model. All items in the scales should have load on only one factor except for the Post-Detention Likelihood of Success scale, which should load onto four factors, representing the four subscales (prosocial activities, conflict resolution, positive social networks, and substance use/recidivism). All factor loadings on the individual items in the scales were greater than .5, and most ranged from .6-.8, indicating that they met the minimum criteria for a factor loading (Tabachnick & Fidell, 2001). All items loaded substantially higher on a single factor, except for the post-detention likelihood of success items, which only loaded on three of the four proposed factors. Seven items loaded onto Prosocial Activity/Conflict Resolution Factor, four items loaded onto a Recidivism/Substance Use Factor, and two items loaded onto a School Completion Scale. However, because all factor loadings were high and previous research supports the use of four subscales rather than three, the original scale constructions were maintained for the latent construct.

Table 5.6

*Scale Statistics for Independent Variables (Staff Prosocial Influence Indicators and Peer Antisocial Influence Indicators)*

	<u>Staff Prosocial Influences</u>			<u>Peer Antisocial Influences</u>			
	Staff Opportunities for Prosocial Activity	Staff Involve Youth in Prosocial Activity	Staff Reward Youth for Prosocial Activity	Peers Provide Opportunities for Antisocial Activity*	Peers Involve Youth in Antisocial Activity*	Peers Reward Youth for Antisocial Activity	Peers Are Involved in Antisocial Activity
# of Items	6	4	7	4	4	6	6
Alpha	0.76	0.89	0.91	0.70	0.65	0.83	0.77
N	295	295	295	297	287	287	290
Scale	1 to 5	1 to 5	1 to 5	1 to 5	1 to 5	1 to 5	1 to 5
Mean	2.86	3.10	2.83	2.52	2.91	2.45	2.86
Median	2.80	3.20	2.83	2.50	3.00	2.33	2.75
SD	1.06	1.13	1.10	0.79	0.85	0.83	0.59
Skew	0.14	-0.18	0.03	0.76	-0.12	0.51	0.19
Kurtosis	-0.76	-1.00	-0.91	1.28	-0.08	0.52	-0.10

\*Not included in final Structural Equation Model

Staff Opportunities for Prosocial Activity: 1 = Not at all true; 5 = Totally true for me (5 = more prosocial opportunities)

Staff Involve Youth in Prosocial Activity: 1= Not at all true; 5 = Totally true for me (5 = more involvement in prosocial activities)

Staff Reward Youth for Prosocial Activity: 1= Not at all true; 5 = Totally true for me (5 = more rewards for prosocial activities)

Peers Provide Opportunities for Antisocial Activity: 1= Strongly Disagree; 5 = Strongly Agree (5 = more antisocial opportunities)

Peers Involve Youth in Antisocial Activity: 1= Strongly Agree; 5 = Strongly Disagree (5 = more involvement in antisocial activities)

Peers Reward Youth for Antisocial Activity: 1= Strongly Approve; 5= Strongly Disapprove (5 = more rewards for engaging in antisocial activity)

Peers Involved in Antisocial Activities Themselves: 1= All; 5 = None (5 = most peers not engaged in prosocial activities)

Table 5.7

*Scale Statistics for Indirect Effect Variables (Social Support, Fear of Victimization, Emotional Stability)*

	<u>External Social Support</u>			<u>Physical/ Psychological Safety</u>	
	Social Support from Family	Social Support from Friends	Social Support from Special Person*	Fear of Victimization	Emotional Stability
Items	4	4	4	6	7
Alpha	0.92	0.88	0.93	0.93	0.82
N	292	292	289	292	292
Scale	1 to 7	1 to 7	1 to 7	1 to 5	1 to 5
Mean	5.30	4.37	5.83	2.17	2.06
Median	5.75	4.50	6.33	1.83	1.86
SD	1.71	1.67	1.51	1.22	0.94
Skew	-0.91	-0.33	-1.64	0.91	0.97
Kurtosis	-0.07	0.68	2.31	-0.21	0.28

\*Not included in final Structural Equation Model

Social Support from Family: 1 = Very Strongly Disagree; 7 = Very Strongly Agree (7 = higher perceived support)

Social Support from Friends: 1 = Very Strongly Disagree; 7 = Very Strongly Agree (7 = higher perceived support)

Special Person Social Support: 1 = Very Strongly Disagree; 7 = Very Strongly Agree (7 = higher perceived support)

Fear of Victimization: 1 = Not at All; 5 = Very Much (5 = higher fear of victimization)

Emotional Stability: 1 = Not at all; 5 = Very Much (5 = higher emotional instability)

Table 5.8

*Scale Statistics for Outcome Variables (PDLs, Institutional Misconduct)*

	<u>Post-Detention Likelihood of Success<sup>1</sup></u>				<u>Institutional Misconduct</u>	
	Prosocial Activities	Substance Use/ Recidivism	Conflict Resolution	Social Networks	Major	Minor
Items	2	4	2	5	8	12
Alpha	0.63	0.62	0.61	0.63	0.75	.82
N	291	288	290	281	286	289
Scale	1 to 5	1 to 5	1 to 5	1 to 5	1 to 12	1 to 12
Mean	4.16	3.76	3.73	3.30	3.29	18.9
Median	4.33	3.67	3.67	3.25	1.00	16.0
SD	0.79	.85	0.82	0.81	5.88	14.2
Skew	-1.23	-0.48	-0.73	-0.12	3.55	.80
Kurtosis	1.79	-0.32	0.83	-0.14	16.1	.02

<sup>1</sup>Although subscales for Post-Detention Likelihood of Success had a moderate Cronbach alpha level, the full 13-item scale had an alpha level of 0.84. This indicates it will have sufficient factor loadings in the SEM.

PDLs Response Options: 1= Strongly Disagree; 5 = Strongly Agree (5 = higher self-efficacy to succeed post-detention)

Institutional Misconduct Response Options: 1 = Never; 13 = More than 12 Times (13 = more frequent rule-breaking)

**Correlations between Key Study Variables**

Tables 5.15 and 5.16 below reports the correlation statistics between the key study variables. The highest correlations between study variables were found among the three staff scales, with correlations ranging as high as .81, .77 and .76 among the three scales. However, according to Kline (2005), only correlations greater than .85 tend to be problematic. And in fact, a regression predicting post-detention likelihood of success from all of the independent scales indicate no Variance Inflation Factors greater than 10 (Kutner, Nachtsheim, & Neter, 2004). These findings indicate that multi-collinearity does not appear to be a major concern with the data collected.

Table 5.8

*Correlations among Key Study Variables*

	1	2	3	4	5	6	7	8	9	10	11
1. Staff Opportunities	1.00										
2. Staff Involvement	.76**	1.00									
3. Staff Rewards	.77**	.81**	1.00								
4. Peer Opportunities <sup>1</sup>	.01	.05	.09	1.00							
5. Peer Involvement <sup>1</sup>	-.44	-.37**	-.45**	0.01	1.00						
6. Peer Rewards <sup>1</sup>	-.40**	-.43**	-.40**	0.09	.38**	1.00					
7. Peer Disapproval <sup>1</sup>	-.31**	-.25**	-.33**	0.04	.61**	.37**	1.00				
8. Fear of Victimization <sup>1</sup>	-.28**	-.18**	-.18**	.27**	-0.02	.09	.09	1.00			
9. Emotional Stability <sup>1</sup>	-.30**	-.24**	-.20**	.16**	-0.05	.17**	.04	.48**	1.00		
10. Family Social Support	.16**	.16**	.20**	0.07	-.21**	-.17**	-.10	0.06	.00	1.00	
11. Friend Social Support	.06	.12*	.11	-0.02	-.22**	-.14*	-.17**	0.00	.00	.42**	1.00

Table 5.8

*Correlations among Key Study Variables Continued*

	1	2	3	4	5	6	7	8	9	10	11
12. PDLS: Prosocial	.37**	.41**	.38**	-0.03	-.32**	-.33**	-.36**	-.18**	-.09	.18**	.13*
13. PDLS: Recidivism	.27**	.33**	.27**	0.01	-.24**	-.45**	-.24**	-0.04	-.05	.05	-.07
14. PDLS: Conflict	.34**	.42**	.35**	0.03	-.27**	-.34**	-.25**	-0.01	.02	.06	.06
15. PDLS: Networks	.38**	.43**	.36**	0.03	-.34**	-.47**	-.22**	0.00	-.01	.19**	-.10
16. Major I.M. <sup>2</sup>	-.33**	-.26**	-.23**	.21**	.18**	.37**	.27**	.19**	.16**	.07	.12*
17. Minor I.M. <sup>2</sup>	-.35**	-.23**	-.20**	.14*	.16**	.50**	.21**	.22**	.22**	-.01	.03
18. Gender <sup>3</sup>	-.07	-.07	-.05	0.07	-.14*	.06	-.16**	.16**	.32**	-.06	-.09
19. Time in Facility	-.10	-.08	.06	.18**	-.03	.17**	.06	.20**	.14*	.09	-.01
20. Time Left in Facility	-.09	-.07	-.02	-.10	.02	.01	.03	.09	.08	.02	.10
21. Times Detained <sup>4</sup>	-.13*	-.07	-.03	.06	-.04	.08	.00	.09	.19**	-.07	.02
22. Gang Involvement <sup>5</sup>	-.09	-.09	-.10	-.01	.15*	.26**	.21**	.01	-.04	.00	-.01
23. Age	.02	.01	.06	.08	-.15**	-.12*	-.14*	-.01	-.02	-.08	.09

\*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ . <sup>1</sup>Higher numbers on these scales indicate more antisocial influence, more fear of victimization, and more emotional instability. <sup>2</sup>I.M. = Institutional Misconduct. <sup>3</sup>Dummy-coded variable with Male = 0 and Female = 1. <sup>4</sup>Times previously detained in this or any other detention facility. <sup>5</sup>Dummy-coded variable with Involvement in Gang = 1, No Involvement = 0.

Table 5.9

*Correlations among Key Study Variables Continued*

	12	13	14	15	16	17	18	19	20	21	22	23
12. PDLs: Prosocial	1.00											
13. PDLs: Recidivism	.45**	1.00										
14. PDLs: Conflict	.48**	.54**	1.00									
15. PDLs: Networks	.47**	.61**	.54**	1.00								
16. Major I.M. <sup>2</sup>	-.20**	-.21**	-.24**	-.24**	1.00							
17. Minor I.M. <sup>2</sup>	-.23**	-.33**	-.27**	-.36**	.60**	1.00						
18. Gender <sup>3</sup>	.04	.09	.09	.00	-.04	.04	1.00					
19. Time in Facility	-.08	-.09	-.04	-.07	.20**	.38**	.01	1.00				
20. Time Left in Facility	-.13*	-.22**	-.06	-.18**	.06	.03	-.02	.03	1.00			
21. Times Detained <sup>4</sup>	-.10	-.17**	-0.03	-.06	.07	.14*	-.02	.10	.14*	1.00		
22. Gang Involvement <sup>5</sup>	-.10	-.31**	-.21**	-.18**	.18**	.24**	-.10*	.04	.09	.10	1.00	
23. Age	.00	-.01	.08	.03	-.01	.03	.04	.14*	0.09	.00	-.09	1.00

\*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ . <sup>1</sup>Higher numbers on these scales indicate more antisocial influence, more fear of victimization, and more emotional instability. <sup>2</sup>I.M. = Institutional Misconduct. <sup>3</sup>Dummy-coded variable with Male = 0 and Female = 1. <sup>4</sup>Times Previously detained in this or any other detention facility. <sup>5</sup>Dummy-coded variable with Involvement in Gang = 1 and No Involvement = 0.

## Facility Differences

When data is nested within different locations, as is the data in this study, there can be a negative impact on the standard errors of regression coefficients, such that they will be underestimated and lead to an overstatement of statistical significance. As such, it is critical to account or control for the nested nature of data. There are essentially three ways of handling nested data to reduce the impact on standard errors: 1) ignore it (not recommended as it can produce inaccurate results); 2) use a fixed effect model and treat facility as a covariate, which essentially averages the impact of facility differences to make broad assumptions of how facility type affects outcomes rather than looking at each facility's independent contribution to outcomes; or 3) conduct a multilevel model to estimate the proportion of variance in outcomes explained by each individual facility on measures of interest.

Several analyses were completed to determine whether substantive differences existed between the four facilities, both in terms of the characteristics of its youth residents and their perceptions of the facility. These analyses were used to determine whether fixed (covariate) or random (multilevel) modeling of facility differences would be appropriate. Table 5.10 below reports the key demographic differences among youth respondents at each of the four facilities. Overall, demographics of youth were fairly similar across sites, although youth at DJJS, a county-run facility, appeared to have much shorter time left in their stay than other youth. Youth at DJJS also tended to have spent much less time at the facility than youth at the other three locations at the time of data collection. Almost 18.5% of youth at DJJS had been at the facility less than a week, with

much smaller proportions of new residencies occurring at the other three facilities. While most youth believed they had roughly three months left until they were released, youth at DJJS reported only having between 1- 4 weeks left at the facility.

Youth at Nevada Youth Training Center (NYTC) tended to be slightly older than youth at Spring Mountain and DJJS. Youth from Spring Mountain, however, were almost twice as likely to report being in a gang than youth at the other facilities. Youth at NYTC were also much less likely to have had visits from home, with almost two-thirds of youth indicating that they had not been visited by anyone from home since they had been at the facility.

Table 5.10

*Demographic Differences among Detained Youth*

				Median				
	Mean			Median	% At	Median	Times	% Zero
Youth	Age	% Female	% in Gang	Months in Facility	< 1 Month	Left in Stay	Detained in Past	Visits from Home
Caliente	16.5	29.3%	46.5%	4-5 mos.	12.1%	3 mos.	4	56.5%
DJJS	15.9	17.3%	43.2%	1-4 wks.	59.3%	1-4 wks	4	30.7%
NYTC	17.2	0.00%	36.4%	4-5 mos.	15.6%	3 mos.	2	62.5%
Spr. Mtn	15.8	0.00%	72.5%	3-4 mos.	17.1%	3 mos.	3.5	32.2%
<b>Total</b>	<b>16.2</b>	<b>16.3%</b>	<b>50.5%</b>	<b>3-4 mos.</b>	<b>26.4%</b>	<b>2 mos.</b>	<b>4</b>	<b>44.9%</b>

Although frequencies indicate there are differences in the characteristics of the youth detained at the facility, these characteristics may not necessarily have an impact on the key outcomes of this study. A one-way ANOVA was run with facility type predicting means on all key subscales. Because of the number of analyses run increases the likelihood of a Type I error, a Bonferonni correction was completed to control for family-wise error rates ( $1 - (.05 \text{ alpha level} / 14 \text{ analyses conducted}) = p \text{ value of } < .004$  required to indicate statistical differences among facilities. Table 5.11 and Table 5.12 below report the means on all key scales by facility, with asterisks indicating where statistically significant differences exist.

Overall, there were few significant differences among facilities on the key scales of interest. Interestingly, ratings of staff were relatively consistent across facilities, but ratings of exposure to antisocial peer influences did vary significantly among the facilities. Specifically, youth at Spring Mountain were significantly more likely to report that peers at the facility had broken rules, misbehaved, or offered alcohol or drugs (“Peer Opportunities for Antisocial Activities”) than youth at DJJS and NYTC,  $p < .001$ . Caliente youth were also less likely than youth at Spring Mountain to believe that others approved of them engaging in antisocial activities (“Peer Rewards Youth for Antisocial Activity”),  $p < .004$ . Youth at Caliente and DJJS were less likely than Spring Mountain youth to think that peers were not engaging fully in rehabilitative programming at the facility (“Peers Involved in Antisocial Activities Themselves”) than youth at Caliente,  $p < .001$ .

Table 5.11

*Means of Staff Prosocial Influence Scales and Peer Antisocial Influence Scales by Facility**Type*

	Staff		Peers		Peers	Peers	Reward
	Staff	Involve	Staff	Provide	Involve	Youth	Peers Are
	Provides	Youth in	Rewards	Anti-	Anti-	Anti-	Involved in
	Prosocial	Prosocial	Prosocial	Social	Social	Social	Anti-Social
	Opps.	Opps.	Activity	Opps.	Opps.	Activity	Activity
Caliente	2.81	3.13	2.85	2.61	2.89	2.66**	2.33**
DJJS	2.91	2.90	2.82	2.31**	2.74	2.95	2.35*
NYTC	3.24	3.52	3.06	2.16**	2.79	2.86	2.43
Spg Mtn.	2.72	3.10	2.77	2.78**	2.93	3.37**	2.83**
<b>Total</b>	2.86	3.10	2.83	2.52	2.91	2.86	2.45

Opps = Opportunities. Differences between facilities statistically significant at \* $p < .004$ , \*\* $p < .001$ .

Table 5.12 below reports the differences among facilities on the remaining key scales. Again, there were only few significant differences between facilities. First, youth at NYTC were significantly more likely to feel as though they belonged at the facility,  $p < .001$ . Second, youth at Caliente were significantly more likely to fear that they would be bullied, teased, or otherwise victimized while at the facility compared to youth at DJJS (“Fear of Violence”),  $p < .001$ .

Table 5.12

*Means of Post-Detention Likelihood of Success (PDLS), Social Support, Fear of Violence at Facility, Emotional Stability, and Major and Minor Institutional Misconduct (IM) Scales by Facility Type*

	Special		Fear of		Emotional Stability	Major IM	Minor IM
	Social PDLS	Person Support	Victim-ization				
Caliente	3.68	5.02	5.94	2.50**	2.29	3.82	21.37
DJJS	3.89	4.58	5.63	1.81**	1.94	1.96	15.82
NYTC	3.68	4.67	5.62	1.85	1.94	2.59	18.27
Spg Mtn	3.62	4.92	6.00	2.21	1.89	4.34	20.18
<b>Total</b>	<b>3.72</b>	<b>4.84</b>	<b>5.83</b>	<b>2.17</b>	<b>2.06</b>	<b>3.30</b>	<b>19.28</b>

Differences between facilities statistically significant at \*  $p < .004$ , \*\*  $p < .001$

The ANOVAs described above do provide some preliminary evidence that there are a few significant differences in the major model variables by facility, though no significant differences were found on the major outcome variables. These findings suggest that facility type should be included in the model either as a covariate or as a level-2 variable in a multilevel structural equation model. Ultimately, the researchers decided to include the facility in which students were detained as a covariate, rather than conduct a multilevel model. This was done for two main reasons: 1) the sample size of youth detained at the facilities was not large enough to run a multilevel model; and 2) intraclass correlation coefficients did not indicate that there were large facility differences when predicting Post-Detention Likelihood of Success, Major Institutional Misconduct,

or Minor Institutional Misconduct from the 10 independent variables (three Staff Prosocial Influence Scales, three Peer Antisocial Influences scales, two Safety scales, and two Social Support scales).

Although multilevel modeling is the preferred method for analyzing nested data, multilevel modeling require large sample sizes to have adequate power to calculate level-1 (predictor variables) by level-2 (facility type) interactions, particularly when using structural equation modeling (Preacher, 2009). Some researchers argue that at least 30 level-2 units are required to run multi-level structural equation models (Maas & Hox, 2001). Researchers also estimate there needs to be a minimum of 10-20 cases per level-1 predictor. Thus, to test one hypothesis with one predictor at level-1, level-2, and the cross-interaction of level 1 - 2, a researcher would need at least 60 cases, and this study had four predictor variables. Additionally, MLM models using structural equation modeling are most accurate when there is a balanced number of level-1 units (i. e. detained youth) at each level-2 unit (i.e. facility). Unfortunately, the sample sizes at each of the facilities varied substantially, from as few as 32 youth to as many as 116.

An intraclass correlation coefficient (ICC) was computed to calculate the proportion of variance in relationship scores attributable to facility location. If the ICC is zero, then the nested nature of the data will not have an impact on the variables of interest and a fixed effect, covariate methods of analysis can be used across facility sites. Stata's mixed model and estat post-estimation functions were used to measure the impact of facility type on the models proposed. The first mixed model predicted Post-Detention Likelihood of Success from the six independent variable scales (Staff Opportunities for

Prosocial Involvement, Staff Encouragement of Prosocial Activities, and Staff Involvement of Youth in Prosocial Activities, Peer Disapproval of Prosocial Activities, Peer Involvement in Antisocial Activities, Fear of Victimization, Emotional Stability, and Family Support and Friend Support). Note that these are the variables that were ultimately used for inclusion in the SEM (see Confirmatory Factor Analysis results and why these scales were used later in this chapter). The Intraclass Correlation Coefficient for this model was .03 (standard error = .03, Wald Z-test (9) = 145.09,  $p < .001$ ). This model suggests that less than 4% of the variance in PDLIS using the model proposed was due to facility differences. Together, the findings of the ICC, the ANOVAs, and the literature on the sample size required to run multi-level structural equation models do not indicate multi-level is warranted or appropriate. However, because there is some evidence that facility differences might have an impact on the model, facility type was included as a covariate in one of the alternative structural equation models tested.

### **Structural Equation Model Results**

#### **Missing Data**

Analyses of missing data were conducted through Stata to determine whether the data required imputing before use in the structural equation model, and to determine whether there were any non-random patterns in the missing data. Table 5.13 below reports the frequency of missing data for each of the key variables in the structural equation model. Between 1% and 6.7% of cases were missing data on each variable. Variables with the most missing data included the two peer antisocial influence scales and the major behavior data. A total of 85% of all cases had complete data on all fifteen

scales used in the model. Analyses of the missing data patterns did not indicate any particularly noticeable patterns of missing data. In total, there were 21 distinct data patterns in which scales were missed by youth, but only 2% of the youth with missing data had identical missing data patterns (they skipped the same items), and there were no obvious reasons why those patterns existed (e.g. items skipped were not at the end, nor were the missed items sensitive in nature which are the more common reasons for skipping questions). Given that the patterns were not associated with any particular reason (meeting the requirements of Missing at Random), full-information maximum likelihood (FIML) estimation was used in the structural equation modeling process.

Research supports the use of FIML over other missing data handling techniques including multiple imputation (Allison, 2012) and especially listwise deletion (Arbuckle, 1996). Whereas listwise deletion removes entire cases if a data point is missing, FIML, on the other hand, uses as much information from observations missing values to complete its estimation. FIML is also preferred over multiple imputation because it does not require that the imputation model be identical to the analysis model, but rather uses all available data to impute missing data, including covariates like gender, gang involvement, facility type, and length of time in the facility, as used for this study.

Table 5.13

*Percentage of Cases Missing in Key SEM Variables*

Variable	Number of Missing Cases	Proportion of Missing Data
Staff Provide Prosocial Opportunities	6	2.0%
Staff Involve Youth in Prosocial Activities	6	2.0%
Staff Reward Prosocial Opportunities	6	2.0%
Peer Involvement in Antisocial Activities	14	4.7%
Peer Disapproval of Prosocial Activities	20	6.6%
Fear of Victimization	9	3.0%
Emotional Stability	9	3.0%
Family Social Support	7	2.3%
Friend Social Support	8	2.7%
Major Institutional Misconduct	14	4.7%
Minor Institutional Misconduct	11	3.7%
Prosocial PDLs	4	1.3%
Substance Use PDLs	4	1.3%
Conflict PDLs	3	1.0%
Social PDLs	9	3.0%

**Sample Size**

SEM is considered a large sample technique in that it is only appropriate if the sample size is not too small for the estimation method chosen. Power analysis in SEM remains a highly contested area, and unlike other forms of statistical analysis, no

established conventions for estimating power have been widely accepted by researchers in the field. This is at least partially attributable to the complex range of factors that influence power in SEM, which include, reliability and convergent validity of a latent construct's indicators, the level of discriminant validity between constructs and their indicators, degree of sampling error, and degree of model misfit. To determine whether power is adequate, in practice, it is most important that the data provides a sufficiently strong representation of the population to calculate a variance/covariance matrix and indicator means that reflect the population (Little & Card, 2009). Anecdotal figures in this field suggest that a sample size of roughly over 100 is usually an acceptable number for a single group model (Little & Card, 2009). Another rule of thumb is that the minimal sample size should be no less than 200, and preferably no less than 400 when the observed variables are not normally distributed. The sample size here was 301 cases, well over the minimum given that the variables were fairly well normally distributed in this study. Other sources indicate that the minimum sample size should be 5-20 times the number of parameters to be estimated (e.g. Kline, 2005, pp. 111, 178). In this study, there are 16 parameters to be estimated (8 paths, 2 curves, 2 exogenous variables, and 4 endogenous variables = 16 unknowns). Using the higher end of the 5-20 rule of the thumb would require a sample size of 320, very close to the sample size used here (301).

Once the data was cleaned, structural equation modeling techniques were used to test the overarching research questions as well as the primary hypotheses of the study. An initial confirmatory factor analysis (CFA) was performed with each latent construct predicting its proposed manifest indicators. CFAs essentially evaluate the quality of the

measurements proposed and have two major strengths over other measurement models like Exploratory Factor Analysis: (a) it is able to measure latent constructs with multiple indicators (and these measures need not be based on the same scaling values), and (b) it separates shared variance among the indicator variables from their respective error variances. These two important strengths of CFA allow for improvement in measurement reliability.

Whereas EFA is a procedure that allows for the extraction of factors from an existing data set. EFA, unlike CFA, does not involve an a priori specification of a factor structure, but allows for exploration within the data. Given the research discussed earlier, there are clear hypotheses about which indicator variables selected will be predictive of the underlying latent constructs that align strongly to the Social Development Model. Hence, CFA is the appropriate measurement method for this study.

Structural equation modeling techniques generally follow a five-step process which includes: model specification, model identification, model estimation, model testing, and model modification (Schumacker & Lomax, 2004). The present study followed this five-part statistical method to determine the extent to which relationships with staff and peers predict institutional misconduct and self-efficacy to succeed post-detention as well as the mediation model, in which external social support and safety mediate the relationships between in-facility relationships and youth outcomes.

### **Measurement Model Specification**

Model specification involves the selection of constructs, parameters, and relationships in a model, drawing upon relevant theory, research, and information in the development of the theoretical model. The model proposed for this study has been discussed at length throughout this dissertation. Successful specification is indicated by significant factor loadings of each indicator, and correlations among constructs that are aligned with the model proposed in Chapter 2.

### **Measurement Model Identification**

Prior to estimation of the model parameters, it must be determined whether a model is identified. Assessments of model identification levels entail a determination of whether a unique set of parameter estimates can be ascertained on the basis of the data contained in the sample variance-covariance matrix and the theoretical model implied by the population variance covariance-matrix (Bollen, 1989). Each latent construct was defined by 2-4 indicators. For all indicators except for Institutional Misconduct, which used a sum score, standardized mean scores of measured survey items were computed first and then used to create indicators. Higher scores reflect more of the indicated construct. Note that with the Peer Antisocial Influence, Physical and Psychological Safety, and Institutional Misconduct latent constructs, higher means indicated that youth were more often exposed to antisocial peer influences, felt less safe, and engaged in more institutional misconduct, respectively. Thus, within the SDM theory, higher means on these variables are “worse” for youth’s outcomes and should have negative associations with prosocial influences and positive outcome variables like Prosocial Staff Influences,

PDLS, and External Social Support.

All latent constructs had two indicators except for Staff and PDLS, which each had four. Originally, the Peer latent construct was expected to have three indicators to adequately describe the three components of the Social Development Model of Antisocial Influences: Opportunities for Antisocial Influences, Involvement with Antisocial Influences, and Rewards from Antisocial Influences. Chapter 4 describes the factors included of each of these four latent constructs in more detail.

The two dependent variables, Institutional Misconduct and PDLS had correlated error terms. For all other factors, the error indicators were uncorrelated with one another, and each indicator loaded onto only a single factor. Peer Antisocial Influences and Staff Prosocial Influences were both fixed to one to reduce the number of free parameters.

### **Measurement Model Estimation**

Full Information Maximum Likelihood estimation was used to estimate the model. Stata's structural equation modeling (SEM) program was used to test the proposed model. This software assesses SEM compared to a proposed hypothetical model with a set of actual data and the similarity of the hypothetical model to the observed model is evaluated with goodness-of-fit indices. The adequacy or "fit" of the structural model can be assessed using three types of "fit indices" (Jaccard & Wan, 1996): absolute, relative, and parsimony measures. Absolute and parsimony measures were used to assess the soundness of the model while relative fit indices were used to compare alternative conceptual models. including the comparative fit index (CFI), the maximum likelihood chi-square, and the root mean square error of approximation (RMSEA). The CFI

indicates the proportion of improvement in the overall fit of the hypothesized model relative to a null model in which all covariances between variables are zero. CFI values of .90 or greater are desirable. Parsimony fit indices, like the root mean square error (RMSEA), are fit indices that adjust model fit for lack of parsimony. The RMSEA is a measure of lack of fit per degrees of freedom, which means that it controls for sample size. Values less than .06 typically indicate a close-fitting model, although researchers have increasingly suggested that values less than .08 are acceptable (Acock, 2014). Specifically, after the structural model was fitted, absolute fit indices indicated whether the remaining unexplained variance was of substantial concern. The relative chi-square is less sensitive to sample size, and equals the chi-square index divided by the degrees of freedom. The criterion for acceptance varies across researchers, ranging from less than 2 (Ullman, 2001) to less than 5 (Schumacker & Lomax, 2004). Similar to CFA, a non-significant chi-square also indicates a good model fit, while a goodness of fit index (GFI) value greater than .90 also represent a good fitting structural model.

### **Model Testing**

Model testing occurred in two phases: (1) measurement model testing to assess the quality of factor loadings of indicators (2) structural equation model to examine the regression coefficients among variables and assess model fit. The final measurement model test came after a slight alteration to one of the latent constructs. A first run of the confirmatory factor analysis indicated that two of the three indicators for Peer Antisocial Influences (Antisocial Opportunities and Involvement with Antisocial Influences) had low factor loadings (.33 and .45, respectively). A closer examination of these two scales

suggests that very few youth reported the events in the questions (i.e. “Some youth in this facility have offered me alcohol or drugs”), which may be why the scales did not load onto the latent construct as well as the Rewards for Antisocial Influences, which assessed whether peers *disapproved* of youth engaging in prosocial activities at the facility, like school and therapy. This is likely because the facilities had very strict enforcement of the rules, such that it would be incredibly difficult for youth to obtain illicit substances. However, anticipating that these two scales might have low occurrence rates, a fourth scale was included in the survey that assessed how much youth believed their peers were themselves engaged in prosocial activities at the facility (reverse coded to represent “Peers Involved in Antisocial Activities”). A new latent construct with “Rewards for Antisocial Activity” and “Peer Involvement” was tested, and as Table 5.14 demonstrates, had adequate factor loadings to warrant their inclusion in the measurement model.

All factor loadings were significant ( $p < .001$ ) and in the expected direction. Standardized factor loadings report the proportion of explained variance, and ideally, a CFA model should explain the majority of variance in each indicator so that standardized factor loadings are greater than or equal to .70. As Table 5.21 indicates, most (11 out of 15) factor loadings were greater than or equal .70, and all were above .63, indicating they sufficiently described the latent construct.

All factor loadings were significant and in the right directions, and most indicators accounted for a similar amount of the variance within the individual constructs with a few exceptions. Within the PDLS latent construct, social networks accounted for a slightly higher proportion of the PDLS variance, and engagement in prosocial activities slightly less variance. “Peer Not Involved” accounted for a much smaller proportion of

the variance in the Peer Reward Antisocial Activities. Minor Behavioral misconduct contributed slightly higher total variance in the Behavior latent construct than did Major Behaviors, perhaps because more youth reported minor rule-breaking than major. Family and friend support contributed equally to the Social Support construct, as did the three scales included as indicators of the Staff Prosocial construct. Fear of Victimization had a slightly lower factor loading on the overall Safety construct in comparison to Emotional Stability. Taken together, these findings confirm that the measurement model was adequately specified.

CFAs help confirm whether the measurement model and the relationships among the latent and manifest variables are adequate to test the full structural equation model. Once the measurement model is confirmed, a structural equation model in which the relationship between supportive relationships with staff and institutional misconduct and post-detention likelihood of success was tested. All observed variables predict the intervening variables and also directly predict the outcomes following the MacCallum (1986) procedure. Thus, this model tests the direct effects of relationships with staff and detention center peers on institutional misconduct and self-efficacy to succeed post-detention. This model also tests the indirect effects of these detention center relationships through the mediating factors of perceptions of physical and psychological safety and support received from interpersonal relationships that exist outside of detention. Table 5.14 below reports the results of the measurement model. An unstandardized factor loading of exactly 1.00 in Table 5.14 means that that indicator was used to set the scale for that construct.

Table 5.14

*Measurement Statistics for Original Model (Unstandardized Coefficients, Standard Errors, Standardized Coefficients, and R-squared Value)*

	<i>b</i>	S.E.	$\beta$	$R^2$
<b>Staff Prosocial</b>				
<i>Staff Opportunities</i>	1.00	0.02	0.86	0.74
<i>Staff Rewards</i>	1.10	0.02	0.89	0.80
<i>Staff Involvement</i>	1.07	0.02	0.90	0.80
<b>Peer Antisocial</b>				
<i>Peer Not Involved</i>	1.00	0.05	0.90	0.81
<i>Peer Reward</i>	0.75	0.05	0.68	0.47
<b>Safety</b>				
<i>Fear of Victimization</i>	1.00	0.08	0.64	0.41
<i>Emotional Stability</i>	2.06	0.09	0.75	0.57
<b>External Support</b>				
<i>Family Support</i>	5.30	0.09	0.65	0.42
<i>Friend Support</i>	4.37	0.09	0.65	0.42
<b>PDLS</b>				
<i>Prosocial Activities</i>	1.00	0.04	0.63	0.40
<i>Substance Use</i>	1.24	0.04	0.73	0.53
<i>Conflict</i>	1.18	0.04	0.72	0.52
<i>Social Relationships</i>	1.27	0.03	0.79	0.62
<b>Institutional Misconduct</b>				
<i>Major Behavior</i>	1.00	0.06	0.72	0.19

<i>Minor Behavior</i>	2.80	0.06	0.83	0.19
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$\beta$  = standardized regression weight; S.E. = standardized error; b = unstandardized regression weight. All factor loadings were significant, with  $p$ -values < .001

Figure 5.1 below reports the results of the direct effect structural equation model, in which staff support for prosocial activities ("Staff Prosocial influences") and peer encouragement of antisocial activities ("Peer Antisocial Influences") predict the two dependent variables: youth's post-detention likelihood of success ("Post-Detention Likelihood of Success") and youth's self-reported behavioral misconduct ("Institutional Misconduct"). Youth's Physical and Psychological Safety ("Lack of Physical and Psychological Safety") and Perceptions of Family and Friend Social Support ("External Social Support") indirectly affected the relationship between Peer Antisocial Influences and Staff Prosocial Influences, with Safety mediating the relationship between Staff Prosocial Influences and PDLs and External Social Support mediating the relationship between Peer Antisocial Influences and Institutional Misconduct.

Fit indices for the direct effect model were acceptable: ML  $\chi^2 = 199.83$ ,  $p < .001$ ; CFI = .931, TFI = .91, RMSEA = .07. All direct effect pathways were statistically significant except for the Peer Antisocial Influences to Institutional Misconduct pathway. The chi-square was significant, indicating that the model did not have "perfect" fit. However, many researchers disregard this index if both the sample size exceeds 200 or so and other indices indicate the model is acceptable.

For this model, the relative chi-square was  $199.83/75 = 2.66$ , which is both close to Ullman's (2001) criteria and well below Schumacker & Lomax's (2004) suggested criteria. According to Marsh, Balla, and McDonald (1988), the TFI is relatively

independent of sample size, and again values over .90 or over .95 are considered acceptable (e.g. Hu & Bentler, 1999).

Figure 5.1 reports the standardized coefficients of the pathways between variables, as well as their significance levels. The individual pathways are discussed in greater detail in this section of narrative.

**Peer antisocial influences and staff prosocial influences.** The relationship between Peer Antisocial Influences and Staff Prosocial Influences was significant,  $p < .001$ , such that youth who reported that they had positive associations with prosocial staff were significantly less likely to report having associations with antisocial peers.

**Staff prosocial influences, peer antisocial influences, external social support and institutional misconduct.** The relationship between Social Support from home and Institutional Misconduct was not significant, nor was the relationship between Peer Antisocial Influences and Institutional Misconduct. That is, youth who reported strong social support from their friends and families were not significantly more or less likely to engage in Institutional Misconduct. However, the relationship between Staff and Institutional Misconduct was significant,  $p < .001$ . That is, the more youth positively associated with prosocial staff influences, the less likely they were to engage in Institutional Misconduct. These findings were nearly identical to the original model.

**Prosocial staff influences, antisocial peer influences, safety, and PDLS.** The relationship between Lack of Safety and youth's perception of their post-detention likelihood of success was significant,  $p < .05$ , such that youth who reported feeling less emotionally and physically safe at the facility were actually *more* likely to report feeling

positive about their likelihood of post-detention success. The relationship between Peer Antisocial Influence and PDLs was also significant,  $p < .05$ , such that when youth interacted with antisocial youth influence, the less likely they were to feel positive about their post-detention likelihood of success. The relationship between Staff Prosocial Influences and PDLs was also significant,  $p < .001$ , such that youth who associated with positive staff influences were more likely to report post-detention likelihoods of success.

**PDLs and institutional misconduct.** The relationship between PDLs and Institutional Misconduct was negative,  $p < .001$ , indicating that youth who had reported engaging in institutional misconduct were less likely to believe they were going to succeed once they were released from detention.

**Peer antisocial influence and social support.** The relationship between Peer Antisocial Influence and Social Support was significant and negative ( $p < .001$ ), indicating that youth who associated with antisocial peers, the less likely they were to report having strong social support mechanisms at home and with their friends.

**Indirect effects.** To calculate the indirect effects in the model, several ratios and proportions were calculated using the direct, indirect, and total effect function in STATA. Results are standardized coefficients.

**Staff prosocial influences to PDLs through safety.** The total effect of Staff Prosocial Influences on PDLs was .468. The direct effect (effect found if indirect effect did not exist) for staff relationships was .535,  $p < .001$  which was significant, as noted above, and nearly identical to the total effect, suggesting that safety does not substantially mediate the relationship between staff relationships and behaviors. The indirect effect of

staff prosocial relationships that passes through safety was negative and equal to  $-.067$ ,  $p < .05$ , which was statistically significant. The following ratio calculations help determine the exact size of the indirect effect of Safety on this relationship.

- Proportion of total effect mediated is the indirect effect/ total effect:  $-.067/.468 = .143$
- Ratio of indirect to direct: indirect effect/direct effect:  $-.067/.535 = .125$
- Ratio of total to direct effect:  $.468/.535 = .807$

The proportion of the total effect that was mediated is almost .143 or just about 15%. The ratio for the indirect effect to the direct effect was about .125, or just over 12% of the size of the direct effect. Thus, while the indirect effect was significant, it only accounted for a small proportion of the total effect of staff relationships on Post-Detention Likelihood of Success. To summarize, the positive influence of having Prosocial Staff Influences at the facility on youth's perception of their likelihood of success after release was significantly diminished when youth felt less safe at the facility.

***Peer antisocial influence and institutional misconduct through external social support.*** The total effect for Antisocial Peer Influences on Institutional Misconduct is .051, which was non-significant, the effect found if there were no indirect effect in our model. The direct effect for Antisocial Peer Relationships was .116, which was not significant. The indirect effect of peer relationships that passes through social support was  $-.065$ , also not significant. External Social Support did not have a significant indirect effect on the relationship between Antisocial Peer Influences and Institutional Misconduct.

Overall, 19% of the variance in Institutional Misconduct, and 37% of the variance in Post-Detention Likelihood of Success was explained by this model.

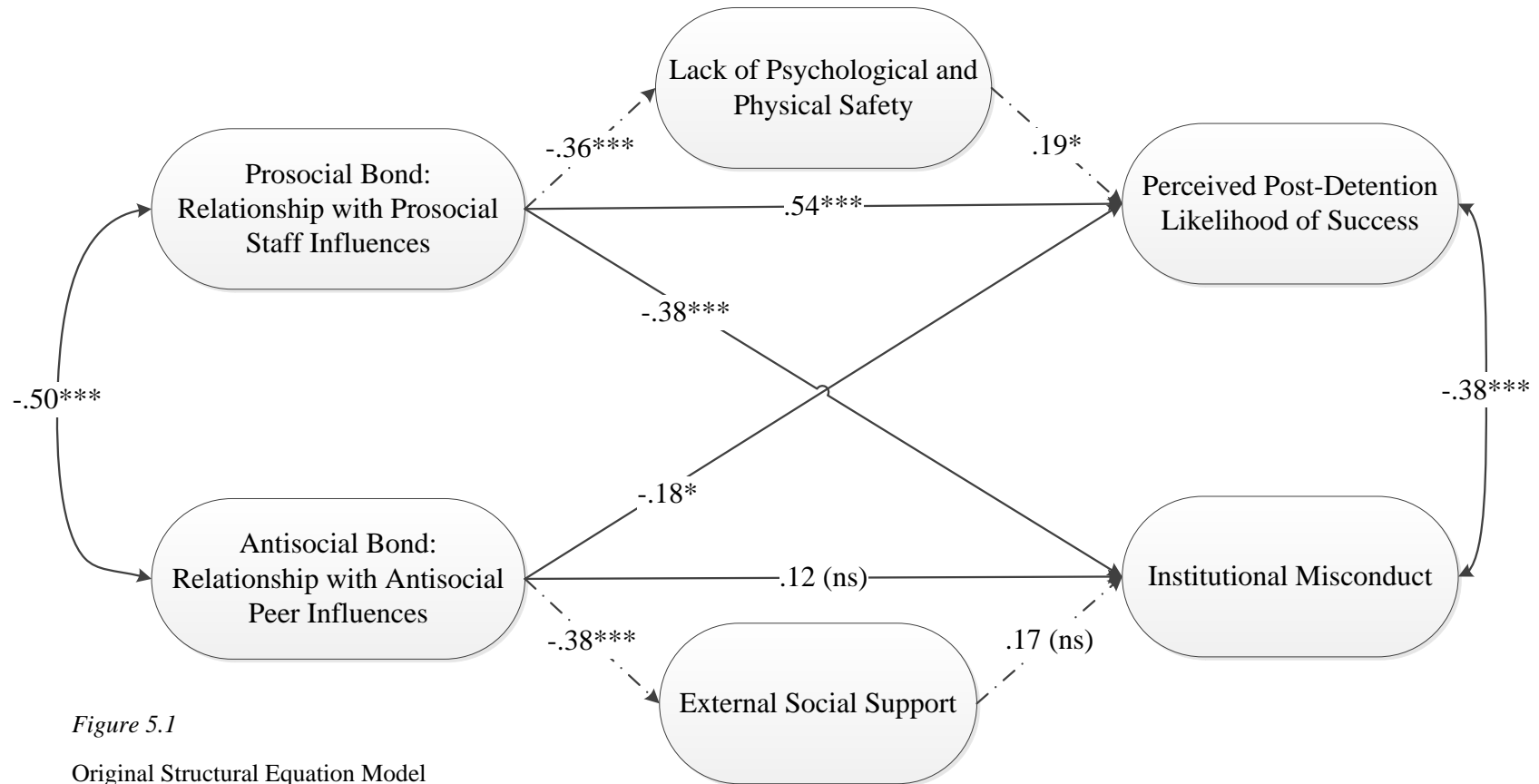


Figure 5.1

Original Structural Equation Model

Dashed lines indicate indirect effect, solid lines indicate direct effects.

All coefficients are standardized.

Model fit statistics were as follows:  $\chi^2$  (df) = 199.83 (57) CFI = .931; TLI = .910, RMSEA = 0.07

\*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , ns = non-significant.

## **Model Modification**

One benefit of utilizing SEM in the analysis of the proposed model is that it enables the comparison of multiple models for the data. In the event that the proposed theoretical model is not as strong as desired, model modification and subsequent testing of the modified model(s) are typically pursued. Although the original model had adequate model fit, it is possible that alternative models may still fit the data better. The decision about which alternative models to test is typically guided by a specification search (Leamer, 1978), which is driven by the overarching purpose of altering “the original model in the search for a model that is better fitting in some sense and yields parameters having practical significance and substantive meaning” (Schumaker & Lomax, 2004, p. 71). Three alternative models were tested, the results of these models are summarized in Table 5.15 and described in more detail below. The first model added several new pathways that had some theoretical basis and produced a fully saturated model. The second model tested all pathways in the opposite direction. The third model tested the impact of four sets of covariates (facility type, gender, gang involvement, and length of time at the facility) on model fit.

Table 5.15

*Fit Statistics for Original Model and All Alternative Models.*

	$\chi^2$			90%	$R^2$	$R^2$
	(df)	CFI	RMSEA	CI	IM	PDLS
Original Model	199.83 (57)	.93	0.07**	.06-.08	.19	.37
Alt. #1 (All Possible)	177.97 (75)	.94	0.06*	.05-.08	.24	.36
Alt. #2 (Reversed)	137.57 (57)	.95	0.07**	.06-.08	--	--
Alt. #3 (Covariate)						
<i>Facility</i>	291.67 (119)	.91	0.07***	.06-.08	.33	.46
<i>Facility, Gang</i>	318.97 (132)	.90	0.07***	.06-.08	.33	.46
<i>Facility, Gang, Gender</i>	356.63 (145)	.89	0.07***	.06-.08	.33	.46
<i>Facility, Gang, Gender, Length</i>	382.97 (158)	.88	0.07***	.06-.08	.33	.46

CFI = Comparative Fit Index, RMSEA = root mean square error of approximation.  $R^2$  I.M. = variance accounted for in Institutional Misconduct by the model;  $R^2$  PDLS = variance accounted for in youth's perceived Post-Detention Likelihood of Success by the model.  $R^2$  not reported for Reversed Direction model, as this model was predicting variance in Peer Antisocial Influences and Staff Prosocial Influences, rather than I.M. or PDLS. Length = length of time in the facility. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**First alternative model ("All Possible").** The first alternate model tested included all potential pathways between study variables (see Figure 5.2). This model had improved model fit over the original (ML  $\chi^2 = 177.97 (75)$ ,  $p < .001$ , CFI = .941, TLI = .917, RMSEA = .064,  $p < .01$ ), and two of the five added pathways were significant. Specifically: (1) there was a significant negative relationship between Antisocial Peer Influences and Perceptions of Safety, such that youth who reported that the youth around them were antisocial influences were actually *more* likely to feel safe at the facility; and (2) there was a positive relationship between Perceptions of Safety and Institutional Misconduct, such that youth who felt less safe at the facility were also more likely to

break rules. However, the relationship between Perception of Safety and External Social Support was not significant, nor was: (1) the relationship between Staff Prosocial Influences and External Social Support; (2) the relationship between External Social Support and Post-Detention Likelihood of Success. The pathways that had previously existed in the original model remained the same (same direction, same level of significance), but all of the coefficients decreased in size. Figure 5.2 shows all pathways, Figure 5.3 shows only the prosocial pathway, and Figure 5.4 shows only the antisocial pathway.

***Indirect effects: Staff prosocial influences to PDLs through Safety and Social Support.*** The total effect for Staff Prosocial Influence on PDLs was .46 which was significant,  $p < .001$ . The direct effect for staff relationships was .54,  $p < .001$  which was significant. The indirect effect of PDLs to staff relationships that passes through safety was -.07, which was not statistically significant (note that safety was a significant indirect effect in the original model). Social Support was not a significant indirect effect between the relationship of Staff Prosocial Influences and PDLs.

***Indirect effects: Staff prosocial influences on Institutional Misconduct through safety and social support.*** The total effect for Staff to PDLs was -.32. The direct effect for staff relationships was -.24,  $p < .001$  which was significant. The indirect effect of Staff Prosocial Influences that passes through safety was -.08, which was significant,  $p < .001$ . That is, when youth felt less safe at the facility, there was an even stronger relationship between Prosocial Staff Relationships and a reduction in rule-breaking.

External Social Support was not a significant moderator of the relationship between Staff Prosocial Influences and Institutional Misconduct.

***Indirect effects: Peer antisocial influence on Institutional Misconduct through safety and social support.*** Neither External Social Support nor Safety had significant indirect effects on the relationship between Peer Antisocial Influences and Institutional Misconduct (both coefficients  $< .03$ ), which was unsurprising given that the relationship between Peer Antisocial Influences and Institutional Misconduct was also not significant.

***Indirect effects: Peer antisocial influences on PDLS through safety and social support.*** The total effect for PDLS to Antisocial Peer Influences was  $-.22$ , which was significant. The direct effect for peer relationships was  $-.19$ ,  $p < .05$  which was significant, and nearly identical to the total effect, suggesting that safety does not substantially mediate the relationship between peer relationships and PDLS. And in fact, the indirect effect of PDLS to peer relationships that passes through safety was  $-.03$  which was not statistically significant. Social Support from home also did not have a significant indirect effect on Peer Antisocial Influences and PDLS.

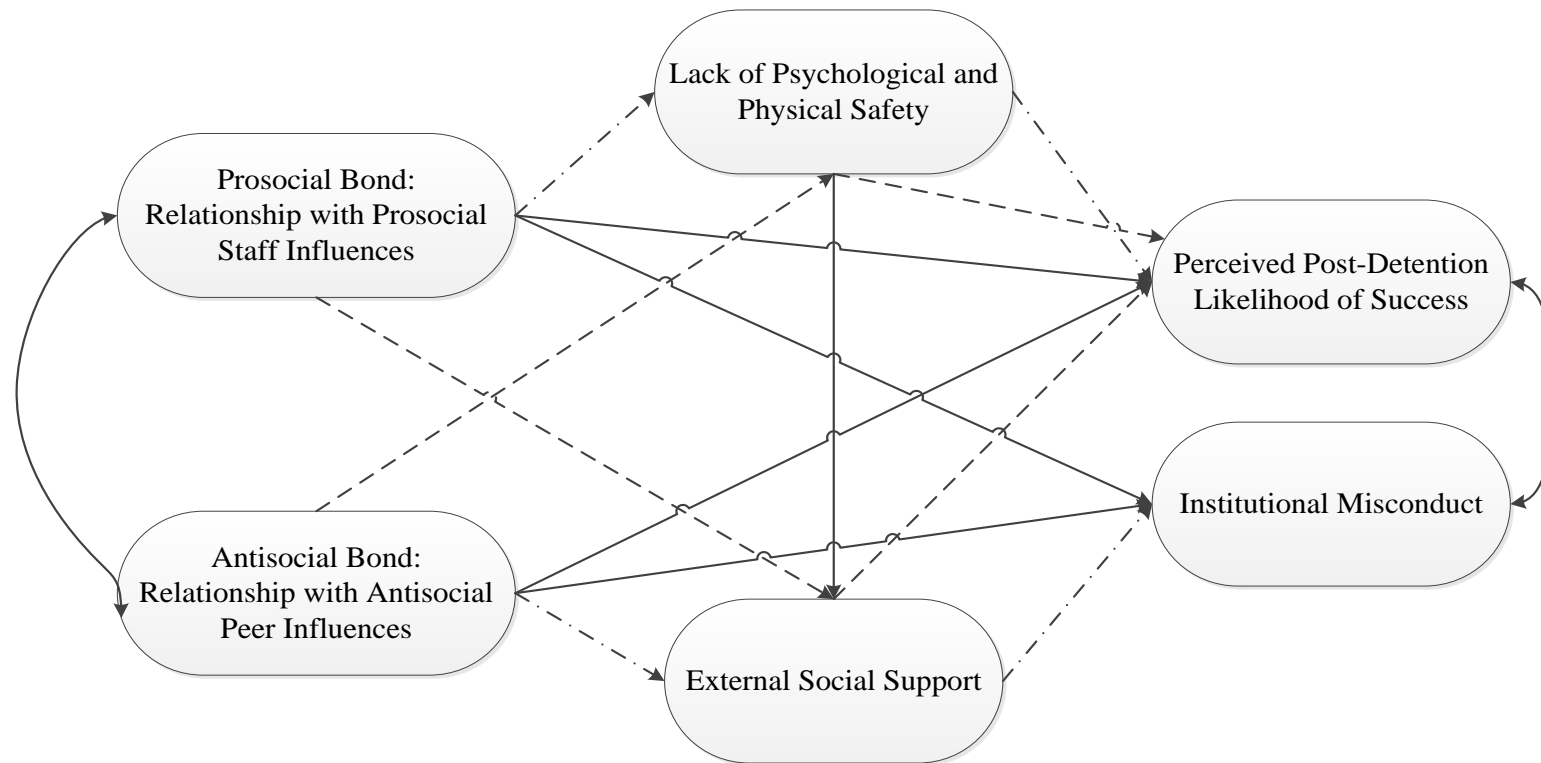


Figure 5.2

First Alternative Model (“All Possible”) with all pathways drawn (see Figure 5.3 and 5.4 for just the prosocial/antisocial pathways with coefficients included)

Dashed lines indicate indirect effect, solid lines indicate direct effects.

Model fit statistics were as follows:  $\chi^2$  (df) = 177.97 (75),  $p < .001$  CFI = .941, TLI = .917, RMSEA = 0.064

\*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , ns = non-significant.

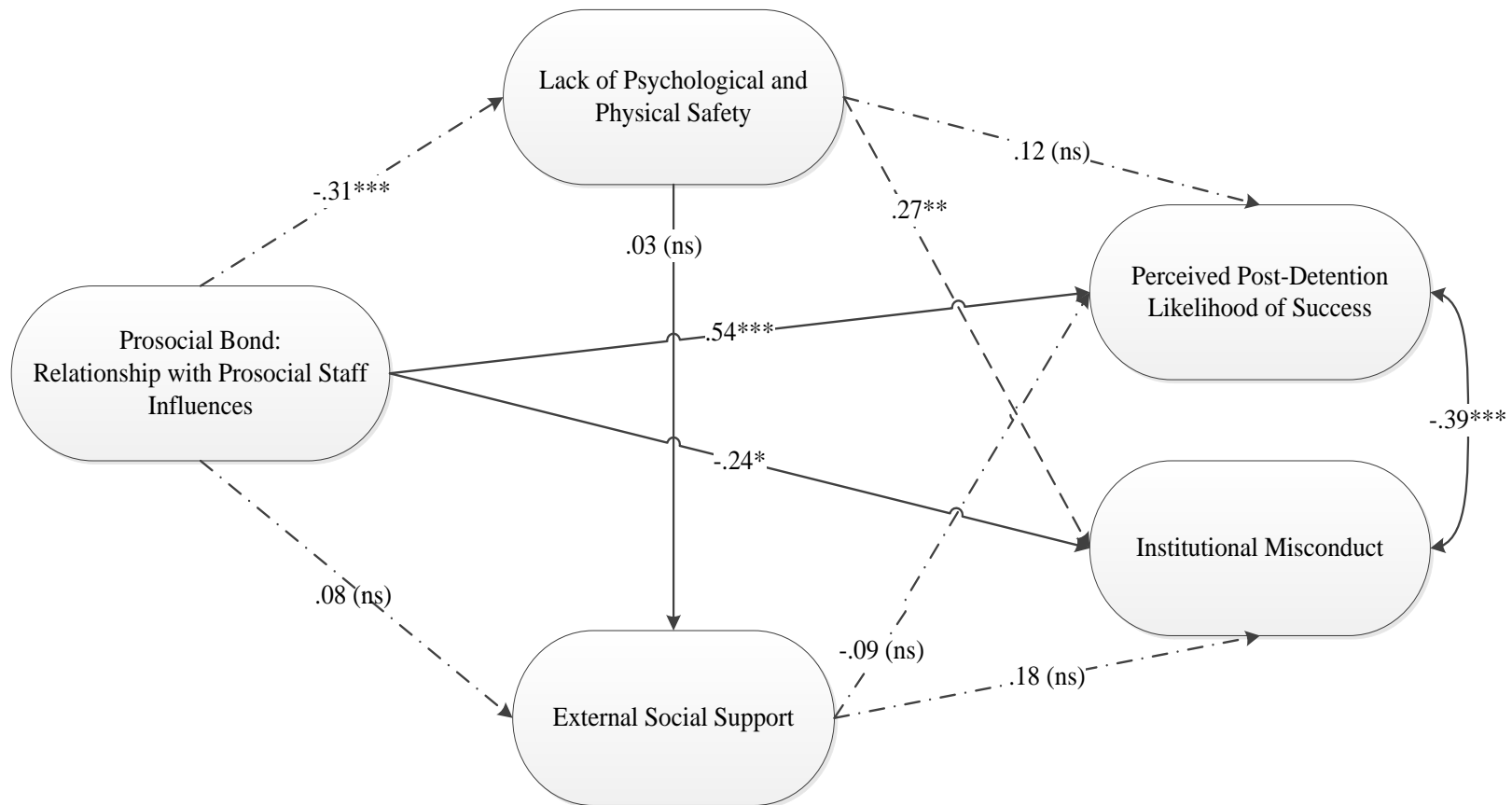


Figure 5.3

First Alternative Model ("All Possible") with only the Prosocial pathways drawn (see Figure 5.4 for the antisocial pathway with coefficients included)

All reported coefficients are standardized.

Dashed lines indicate indirect effect, solid lines indicate direct effects.

Model fit statistics were as follows:  $\chi^2$  (df) = 177.97 (75),  $p < .001$  CFI = .941, TLI = .917, RMSEA = 0.064

\*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , ns = non-significant.

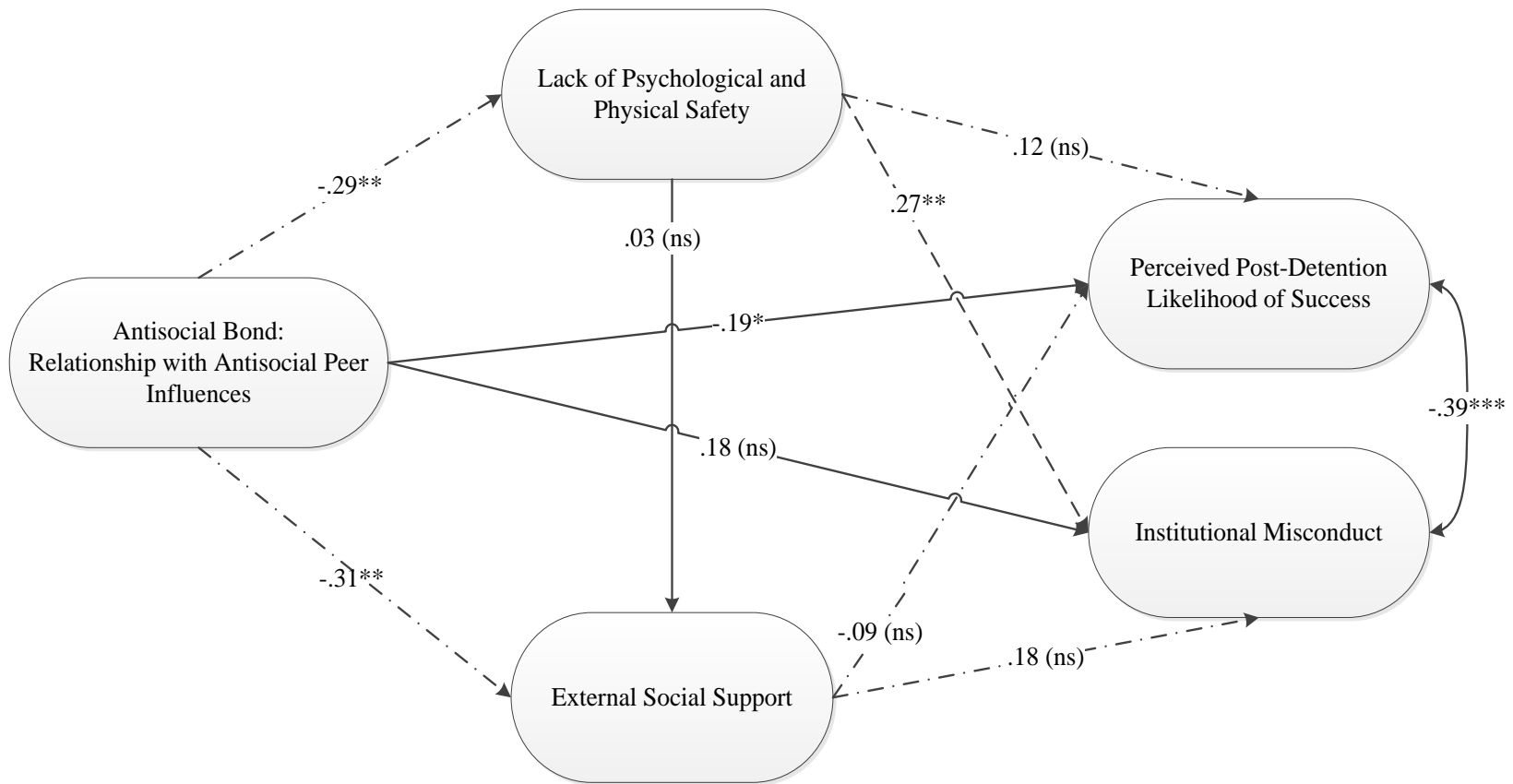


Figure 5.4

First Alternative Model (“All Possible”) with only the Antisocial pathways drawn (see Figure 5.3 for the Prosocial pathway with coefficients included)

All reported coefficients are standardized.

Dashed lines indicate indirect effect, solid lines indicate direct effects.

Model fit statistics were as follows:  $\chi^2$  (df)= 177.97 (75),  $p < .001$  CFI = .941, TLI = .917, RMSEA = 0.064

\*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , ns = non-significant.

**Second alternative model ("Reversed").** The second alternative model tested reversed the direction of all pathways, so that youth's perceived likelihood of post-detention success predicted youth's relationships with staff and peers, and tested an indirect effect between PDLS and staff relationships via perceptions of safety. The external social support construct was omitted from the model, since the original model did not support its inclusion and model convergence could not be obtained with this latent construct included, likely because there is no theoretical support for this directional pathway. Model fit was as follows: ML  $\chi^2 = 137.57(57)$   $p < .001$ , CFI = .950, TLI = .932, RMSEA = .069,  $p < .01$ . The improved model fit is likely a result of the omission of the Social Support latent construct, which was not strongly associated with the majority of the variables in the original model, and was likely worsening model fit. To test this theory, Social Support was also removed from the original model, which did, as predicted, improve model fit (ML  $\chi^2 = 138.41(57)$   $p < .001$ , CFI = .950, TLI = .931, RMSEA = .069,  $p < .01$ ), but decreased the amount of variance in Institutional Misconduct accounted for by the model (15%, down from 33% in the original) and PDLS (37% , down from 46% in the original).

PDLS significantly predicted relationships with Antisocial Peer Influences, such that youth with higher perceptions of post-detention likelihood success were significantly less likely to report that they had been exposed to antisocial peer influences. Institutional Misconduct did not significantly predict Antisocial Peer Influences, nor did Perceptions of Safety predict Antisocial Peer Influences. PDLS also significantly predicted youth's relationships with Prosocial Staff Influences, such that youth who reported higher

perceptions of their likelihood to succeed post-detention also reported that they were more likely to have a prosocial bond with staff at the facility. Institutional Misconduct did not significantly predict Prosocial Staff Influences. Perceptions of safety at the facility also significantly predicted youth's relationships with staff, such that youth who felt less safe at the facility were *less* likely to report having a positive relationship with staff. Overall, the model accounted for 18.1% of the variance in Peer Antisocial Influences, and 42.7% of the variance in Staff Prosocial Influences.

***Indirect effects: PDLs predicting staff prosocial Influences through safety.*** The total effect for PDLs to Staff was .54,  $p < .001$ . The direct effect for staff relationships was .51,  $p < .001$  which was significant, and nearly identical to the total effect, suggesting that safety does not substantially mediate the relationship between staff relationships and PDLs. And in fact, the indirect effect of PDLs to staff relationships that passes through safety was not statistically significant (coefficient = .03; note that safety was a significant indirect effect between Staff Prosocial Influences and PDLs in the original model).

***Indirect effects: PDLs predicting Peer Antisocial Influences through Safety.*** There was not a significant relationship between Safety and Peer Antisocial Influences, nor between PDLs and Safety. Unsurprisingly, the indirect effect of Safety on the PDLs to Peer pathway was not significant.

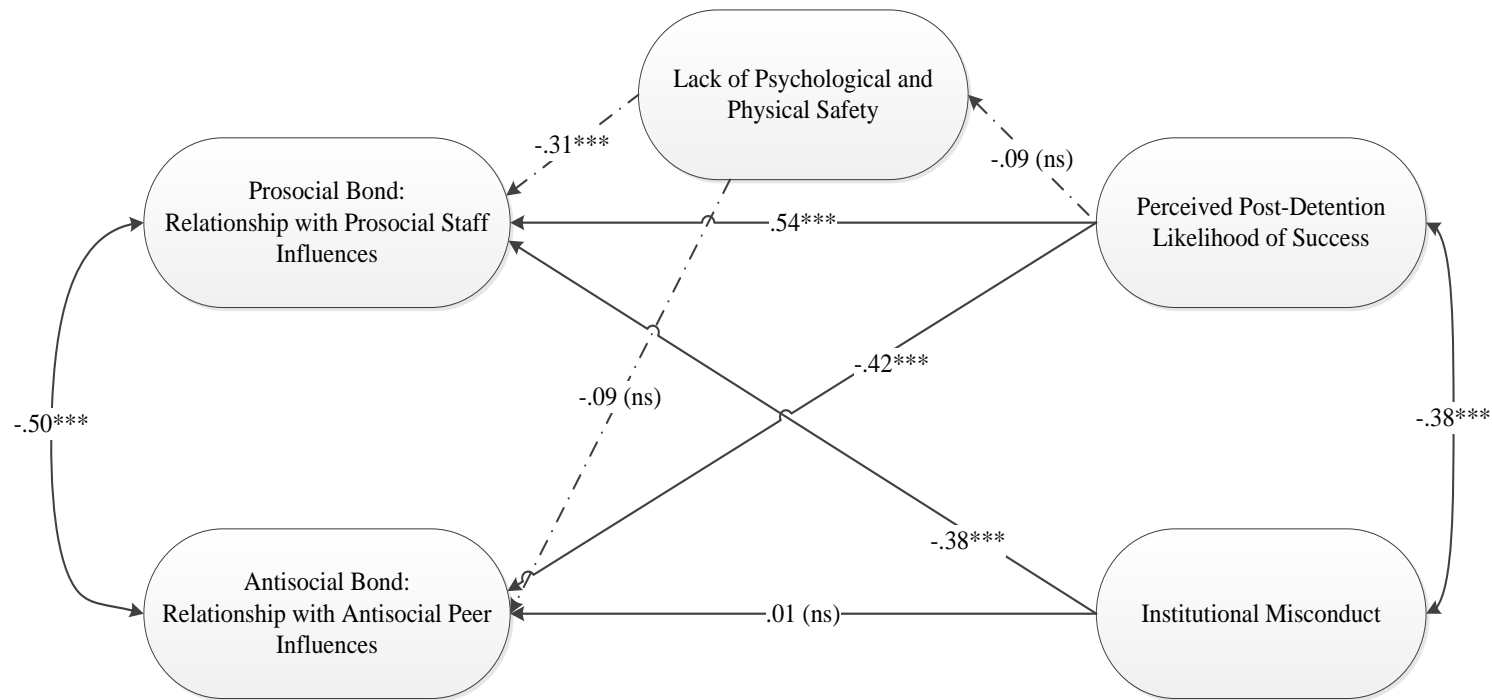


Figure 5.5

Second Alternative Model (“Reversed”) in which PDLS and Institutional Misconduct predict Prosocial and Antisocial Bonds.

All reported coefficients are standardized.

Dashed lines indicate indirect effect, solid lines indicate direct effects.

Model fit statistics were as follows:  $\chi^2$  (df)= 139.14 (57),  $p < .001$  CFI = .950, TLI = .933, RMSEA = 0.069

$***p < .001$ ,  $**p < .01$ ,  $*p < .05$ ,  $ns$  = non-significant.

**Third alternative model ("Covariate").** A third alternative model was tested in which four covariates were included that were both theoretically likely to have an influence on certain variables in the model, and which were supported by the correlation matrix (Table 5.14 - 5.15) and the ANOVAs described earlier (Table 5.18-5.19). Specifically, participant gender (dummy coded with male = 0, female = 1), length of time in the facility, gang membership ("yes" = 1, "no" = 0), and the facility participants at which the youth were held. All facilities were compared against DJJS because the length of time youth resided at the facility was substantially lower than at other facilities, and youth at DJJS varied in their reports of victimization and exposure to peer antisocial influences in the ANOVAs. The Social Support variable was again omitted from this model as previous models indicated that it was not significantly associated with any of the variables in the original model. The results of this model are reported in Figure 5.6.

Covariates were added one at a time to the original model to determine how well each new variable impacted model fit. The covariates all predicted the two outcome variables, Perceived Post-Detention Likelihood of Success and Institutional Misconduct. In the final version with all covariates added, the final model fit was substantially reduced with the addition of the covariates in the model, ML  $\chi^2 = 382.97$   $p < .001$ , CFI = .82, TLI = .89, RMSEA = .07. All of the original significant pathways remained significant. Staff and Peer influences were significantly associated with the two outcome variables. The indirect effect of safety between Staff and PDL was significant. The covarying relationships between the two outcome variables and the Peer and Staff influences also remained significant.

***Covariates and institutional misconduct.*** Length of time in the facility was significantly associated with behavior, with youth residing in the facility longer reporting more Institutional Misconduct. Gang involvement was also significantly associated with Institutional Misconduct, with youth reporting gang involvement also reporting more Institutional Misconduct. Gender was not significantly associated with Institutional Misconduct. Overall, this model accounted for 32.9% of the variance in Institutional Misconduct and 45.7% of the variance in Post-Detention Likelihood of Success.

***Covariates and post-detention likelihood of success.*** Length of time at the facility was not significantly associated with Post-Detention Likelihood of Success, nor was gender. Gang involvement was significantly associated with Post-Detention Likelihood of Success, with youth who were involved in gangs reporting less likelihood of post-detention success. There were significant differences among the different facilities in youth's post-detention likelihood of success. Specifically, youth residing at Caliente and Nevada Youth Training Center were significantly less likely to report feeling like they would have success post-detention in comparison to youth from DJJS. Youth from Spring Mountain did not significantly differ in their PDLs.

***Indirect effects: Staff prosocial influences on PDLs through safety.*** The total effect of Staff Prosocial Influences on Post-Detention Likelihood of Success was .54,  $p < .001$ . The direct effect was .47,  $p < .001$ , and the indirect effect of Safety was again significant and negative in this model,  $-.07$ ,  $p < .05$ , as it was in the original. That is, when youth felt unsafe at the facility, the strength of the positive relationship between Staff Prosocial Influences and PDLs diminished.

***Indirect effects: Peer to institutional misconduct through social support.***

Because the relationship between Social Support and Institutional Misconduct was not significant, nor the relationship between Peer Antisocial Influences and Institutional Misconduct was not significant, the indirect effect of Social Support could not be tested.

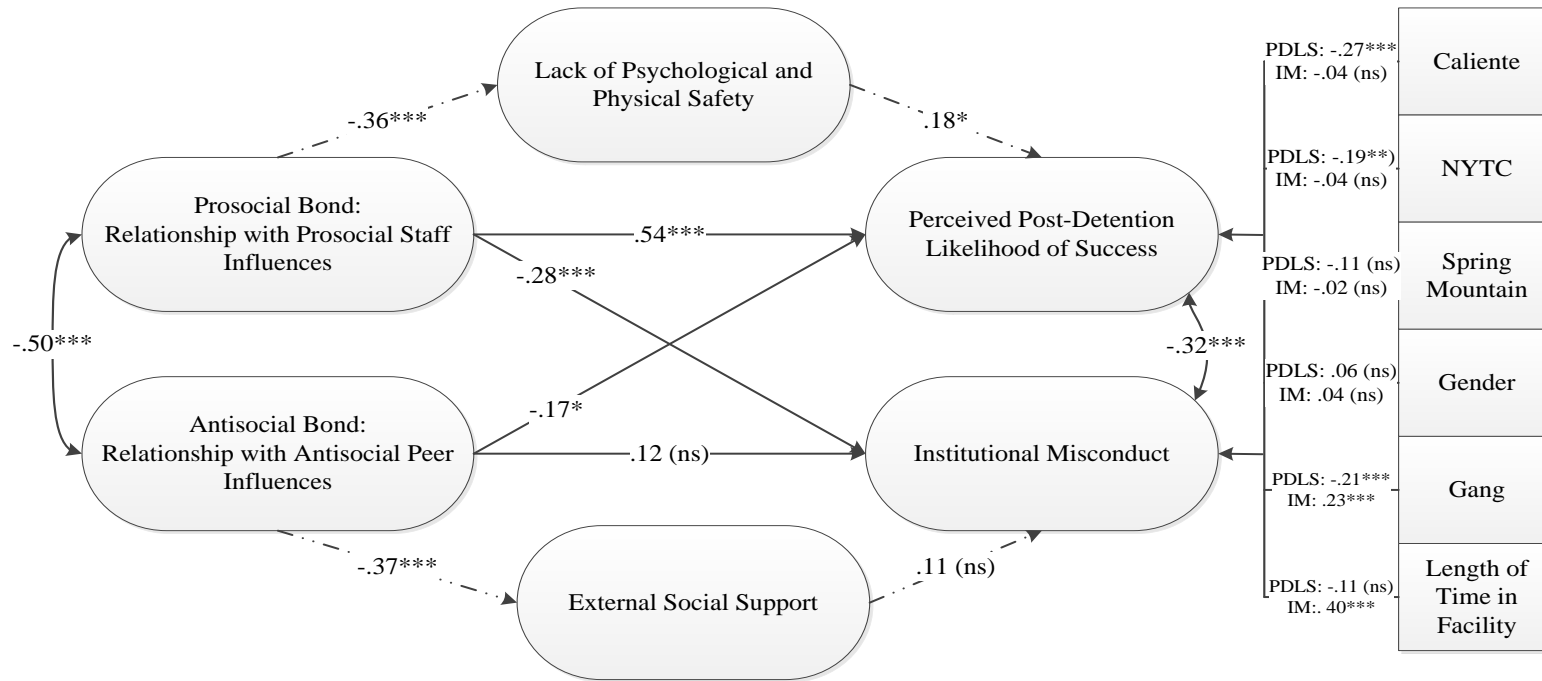


Figure 5.6

Third Alternative Model “Covariates”

Caliente, NYTC, and Spring Mountain are dummy-coded variables with DJJS youth as the referent.

Gender is dummy-coded with males = 0 and females = 1.

Gang Involvement is dummy-coded with Gang Involvement = 1 and No Gang Involvement = 0

Length of time in the facility is a continuous variable ranging from 1 (less than a week) – 11 (more than two years).

All reported coefficients are standardized.

Dashed lines indicate indirect effect, solid lines indicate direct effects.

Model fit statistics were as follows:  $\chi^2$  (df) = 382.97 (158),  $p < .001$  CFI = .882, TLI = .855, RMSEA = 0.069

\*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , ns = non-significant.

### **Additional Findings about Social Support (Not Included in Model)**

This section reports the results of a series of questions about youth's social support structures both in and outside of the facility. Although the information is not included in the structural equation model, the data does help provide some valuable information that may help to explain some of the findings found within the structural equation models. First, youth were asked whether they currently have a boyfriend or girlfriend outside of this facility. A total of 98 (33.2%) reported that they did not, whereas 192, 65.1% reported that they did (1.7% skipped the question). Youth who responded that they did have a boyfriend or girlfriend outside of the facility were then asked how many months they had been with their boyfriend or girlfriend via an open-ended response. Responses ranged from 1 month to 84 months with a mean of 13.8 months and a median of 10.5 months. On average, females reported slightly longer relationships than males (Mean = 15.88 vs. 13.38, median 12 vs. 10 months).

Following the pilot study, it was decided that more information was needed about the types of important relationships youth had inside and outside the facility, and to determine if youth went to different people depending on the type of support they needed. Youth were asked five questions about to whom, within and outside the facility, they *most often* went when feeling sad or anxious or needed advice or help. They were also asked for whom, inside and outside the facility, they were most motivated to make positive changes. This information provides important contextual background to understanding youth's relationships with facility staff and peers and their external social support networks.

Unfortunately, these items were not included in the pilot test, and many youth struggled to follow the directions on this set of items. As Table 5.3 indicates, there were a substantial number of youth who either skipped these questions or selected more than one option. A number of youth also selected “Other”, even though their write-in response matched one of the other categorical responses listed. For example, on the first question, 73 youth did not provide a response, 157 correctly selected just one option, and 71 selected more than one option. Table 5.16 through 5.19 below reports the results of these questions, including the proportion of missing data, and multiple selections.

Youth were first asked to select, from a list of options of people from inside the facility, who they went to most often when they felt sad or anxious. Table 5.16 below reports the results of this series of questions. Youth were most likely to report that they did not go to anyone at the facility when they were sad or anxious. Interestingly, only 14.5% of youth reported that they did not feel sad or anxious at the facility, and almost two-thirds of youth said they did not go to anyone in the facility when they were sad or anxious. Following that, almost 20% reported that they went to a resident in their unit, followed by 15.4% who reported that they went to a counselor. Percentages are taken from the total number of youth who provided at least one response to the question.

Table 5.16

*Responses to Questions about Social Support among People within the Facility When Feeling Sad or Anxious*

Of the following people inside this facility, who do you go to most often		
when you feel sad or anxious (check one)?	N	%
I don't go to anyone in this facility when sad/anxious.	140	61.4%
Resident in unit	45	19.7%
Counselor	35	15.4%
Guard	34	14.9%
I have not felt sad or anxious in this facility.	33	14.5%
Probation officer	20	8.8%
Teacher	12	5.3%
Social worker	8	3.5%
Other	7	3.1%
Priest/rabbi/other religious staff person	3	1.3%
Missing	73	32.0%
Selected >1 Response	71	31.1%
<b>Total Responses</b>	<b>228</b>	

When asked to whom they were most likely to go when they needed help or advice, only 26.9% of youth indicated that they do not go to anyone for help or advice in the facility. After that, youth were most likely to indicate that they go to guard at the facility (30.9%) followed by a resident in their unit. Table 5.17 below reports the results of this series of questions.

Table 5.17

*Responses to Questions about Social Support among People within the Facility When in Need of Help or Advice*

Of the following people inside this facility, who do you go to most often when you need help or advice (check one)?		
	N	%
Guard	77	30.9%
I don't go to anyone in this facility when need advice or help.	67	26.9%
Resident in unit	59	23.7%
Counselor	48	19.3%
Probation officer	42	16.9%
Social worker	21	8.4%
Other	18	7.2%
Teacher	16	6.4%
I have not needed advice or help since I have been at this facility.	13	5.2%
Priest/rabbi/other religious staff person	9	3.6%
No Response Selected	52	20.9%
Selected >1 Response	122	49.0%
<b>Total Responses</b>	<b>249</b>	

Youth were then asked a parallel set of questions about who, outside of the facility, they most wanted to talk to when they felt sad or anxious (Table 5.18) Youth were most likely to report that they went to their mother/father/guardian when they felt sad or anxious (44.7% of all responses given), followed closely by boyfriend/girlfriend (40.2%). Other youth reported that they went to their brother/sister (14.4%).

Table 5.18

*Responses to Questions about Social Support among People Outside the Facility When Feeling Sad or Anxious*

Of the following people outside this facility, who have you most		
wanted to talk to when you felt sad or anxious (check one)?	N	%
Mother/Father/Guardian	118	44.7%
Boyfriend/girlfriend	106	40.2%
Brother/Sister/Sibling	83	31.4%
Friend	71	26.9%
Another Family Member	38	14.4%
No one	34	12.9%
Do Not Feel Sad or Anxious	21	8.0%
Teacher/Counselor/Coach/Another Adult	9	3.4%
Other	5	1.9%
Missing	37	14.0%
Selected > 1 Response	173	65.5%
<b>Total Responses</b>	<b>264</b>	

A final question was asked in this series of questions, “Of all the people inside and outside this facility, who are you most motivated to make positive changes for?”

Table 5.19 below reports the results of this question. Youth were most likely to report that they wanted to make positive changes for their Mother/Father/Guardian (55.9%), followed by their Brother/Sister (39.3%), and then their Boyfriend/Girlfriend.

Interestingly, a total of 52 (17.6%) of youth reported an “Other” response, with 14 youth writing in responses like my daughter/son/child, and 23 youth writing in “myself” or a

similar response. Only a small proportion of youth ( $n = 81$ ) reported that they were most motivated to change for someone inside the facility. However, of those who selected someone from inside the facility, they were most likely to select Probation Officer (10.5%).

Table 5.19

*Responses to Questions about Social Motivations for Change*

Of the following people inside and outside this facility, who are you most motivated to make positive changes for (check one)?	N	%
Mother/Father/Guardian	165	55.9%
Brother/Sister/Sibling	116	39.3%
Boyfriend/Girlfriend	80	27.1%
Other	52	17.6%
Another family member	47	15.9%
Friend	34	11.5%
Probation officer	31	10.5%
No one	30	10.2%
Myself	23	7.8%
Guard	18	6.1%
Teacher/Counselor/Coach/Another Adult	15	5.1%
Child	14	4.7%
Counselor	11	3.7%
Teacher	7	2.4%
Priest/rabbi/other religious staff person	6	2.0%

Social worker	5	1.7%
Resident in unit	3	1.0%
God	2	0.7%
<hr/>		
Missing	6	2.0%
Selected > 1 Response	137	46.4%
<b>Total Responses</b>	<b>295</b>	
<hr/>		

Finally, youth were asked to think of a special person that they most wanted to see when they were stressed or upset. As with the previous social support items, youth again frequently selected more than one option, rather than selecting just one person. A total of eight youth did not respond to the question, 208 correctly responded with just one option, and 85 selected more than one option. They were then asked a series of questions about how frequently they had been visited or otherwise contacted by this special person since they had been at the facility. Youth were most likely to select their parent or guardian as the person they most often went to when they were stressed or upset (47.8%), followed by their brother/sister/sibling (33.1%) and then boyfriend/girlfriend (30.4%). Table 5.20 below reports the results of this question.

Table 5.20

*Responses about Special Person Youth Go To When Stressed or Upset at Home*

Who is the special person from home that you are most likely to go to when you feel stressed or upset?		
	N	%
Mother/Father/Guardian	140	47.8%
Brother/Sister/Sibling	97	33.1%
Boyfriend/Girlfriend	89	30.4%
Friend	60	20.5%
Another Family Member	30	10.2%
Other	17	5.8%
Teacher/Counselor/Another Adult	10	3.4%
Missing	8	2.7%
Selected > 1 Response	85	29.0%
<b>Total Responses</b>	<b>293</b>	

Youth were then asked a series of questions about how often they had been visited by this special person, how often they had received an email, text, or letter from this person, and how many times they had talked on the phone with this person. Youth were also asked, overall, how many times they had been visited by anyone since they had been detained. Table 5.21 reports the results of this series of questions, with parentheses indicating the results for youth who had been detained longer than a month. Some youth provided responses that were not quantifiable (e.g. “a lot”, “all the time”, “countless”, etc.), which were recoded as missing data. When youth provided responses like “every week” or “every month” (between 3-12 per question), numbers were estimated based on

their length of stay (i.e. if youth had been at the facility two months and had visits 'every week', it was estimated they had roughly nine visits). More than half of all youth (55.7%) reported never having received a visit from this special person since they had been detained, though 41.3% reported having been visited by someone from home since they had been detained. Most youth had received several phone calls during their detention stay. Youth were more likely to receive phone calls than they were to receive emails/texts/letters than they were to receive emails or letters.

Table 5.21

*Contact from Special Person (SP) or Anyone from Home while Detained*

*(Only Youth Detained > 1 Month)*

Contact Type	Range	Mean	Median	% Never Visited	% Missing Data
Visits	0 - 20	1.60 (2.0)	0.0 (0.0)	55.7% (51.6%)	9.0%
Phone Calls	0 - 500	11.45 (15.7)	3.0 (6.5)	26.7% (21.9%)	19.3%
Emails/Texts/Letters	0 - 300	5.13 (7.0)	0.0 (0.0)	52.0% (42.0%)	14.3%
Total Visits (Any)	0 - 100	3.42 (4.10)	1.0 (1.0)	41.3% (37.9%)	8.0%

Youth were asked to report how satisfied they were with the number of times they had been visited by this special person since they had been at the facility. Overall, 28.3% were Very Unsatisfied, 6.3% were Unsatisfied, 26.3% were Neutral, 10.7% were Satisfied, and 17.7% were Very Satisfied (all others wrote in "not applicable, have not had visits" or left blank). Youth were also asked what the primary barriers were to receiving visits from home. Table 5.22 below reports the primary barriers to visitation. Youth were most likely to report that the facility only allowing certain people to visit was a barrier to visitation (70.5% selected). Another 42.4% of youth reported that the facility's distance from home was a primary barrier for visitation. "Other" responses included comments like "grandma sick and cannot visit", "only allowed to receive letters, cannot send letters out", "parents do not have enough money to visit", and "do not have enough phone time yet", "phone call rules are at inconvenient times", and "makes me too sad to talk to them."

Table 5.22

*Reported Barriers to Receiving Visits while Detained (N = 278)*

Do any of the following make it difficult to see or talk to people from home while you are here? (select all that apply)	<i>N</i>	<i>%</i>
The facility only allows certain people to visit.	196	70.5%
The facility is too far away from home.	118	42.4%
The facility visiting hours are not long enough.	73	26.3%
The facility visiting hours are not at convenient times.	59	21.2%
Other	41	14.7%
Your friends, family, or other people from home cannot afford to visit.	40	14.4%
Your friends, family, and other people in your support network are not trying to visit you enough.	20	7.2%
Your friends, family, or other people from home do not like to visit you here.	19	6.8%
You do not have family, friends, or other people from home who would visit you here.	13	4.7%
You do not want to talk or visit with people in your close support network.	3	1.1%

## **Chapter VI: Discussion**

This study focused in-depth on the nature and impact of detained youth's relationships with the following people: 1) staff within the facility; 2) peers within the facility; and 3) important social networks from home, including families, friends, and romantic partners. Findings suggest that youth had complex sets of relationships while in the facility, some potentially more beneficial than others. This chapter summarizes the major findings of the study and explanation for those findings, and follows with a discussion of the implications for future research, theory, and practice. Both the limitations and the strengths of the study are described.

### **Overview of Results**

The purpose of this study was to test a Social Development Model (Hawkins & Weiss, 1985; Catalano & Hawkins, 1996) predicting youth's institutional misconduct and their perceived likelihood of post-detention success from their self-reports about the quality and nature of relationships with staff and other detained youth. Additionally, integration of family and community as well as perceptions of safety, both variables known to promote positive development in out-of-school time settings (Eccles & Gootman, 2002), were included as indirect effects on these prosocial and antisocial pathways. Eccles and Gootman's framework also provided guidance that helped define the specific indicators used in the Antisocial Peer Influence and Prosocial Staff influence latent constructs, as the SDM does not explicitly define the exact behaviors staff and peers might utilize to provide prosocial/antisocial opportunities, involve youth in these opportunities, and reward youth for engaging in these opportunities. The two dependent

variables, Institutional Misconduct and Perceived Likelihood of Post-Detention Success, were selected for study as research indicated that they would serve as strong proxies of recidivism, as rates of institutional misconduct and self-efficacy to desist from crime have previously been identified as strong predictors of recidivism (Mulvey et al., 2004; Rose & Clear, 2003; Trulson, 2007).

To test this model, a survey was administered to 301 youth ranging in age from 12 to 18 years old who were detained at two state- and two county-run facilities in Nevada. Structural equation modeling was used to assess how the proposed social development model fit the data, and whether the hypothesized relationships among variables were supported. Overall, the model was well-supported as originally proposed. Youth who reported that staff provided opportunities, involved them, and rewarded them for engaging in prosocial activities at the facility were significantly less likely to break rules than youth who did not report high exposure to prosocial adults. Youth who reported higher prosocial exposure from staff were more likely to believe they would be successful once they left the facility than youth who reported less prosocial exposure. Youth who reported interacting with peers at the facility who discouraged prosocial activity and were not involved in prosocial activities themselves, were *less* likely to believe they would desist from crime once they left the facility than youth with less of an antisocial bond. The relationship between peer antisocial influences and institutional misconduct was not significant, and youth exposed to antisocial peer influences were not significantly more likely to break rules at the facility than youth not exposed to peer antisocial influences.

Youth's perception of how emotionally and physically safe they felt while detained partially mediated the relationship between staff prosocial influences and perceived post-detention likelihood of success. That is, youth who felt less safe at the facility were less likely to believe staff were promoting a prosocial environment at the facility than youth who felt more safe. Interestingly, youth who felt less safe actually reported *higher* perceptions of post-detention likelihood of success than youth who felt more safe. However, perceptions of safety did have a negative mediating impact on the relationship between prosocial staff influences and PDLS, such that when youth felt unsafe at the facility, the positive relationship between prosocial staff influences and PDLS was diminished. Satisfaction with social support from family and friends outside of the facility did not mediate the relationship between antisocial peer influences and Institutional Misconduct as had been predicted. Youth who reported exposure to antisocial influences from peers were significantly less likely to report satisfaction with the support provided by their friends and family.

Though not supported in the structural equation model as a mediating variable, when asked directly for whom they were most motivated to make positive changes, the vast majority of youth reported that external friends, family, romantic partners, and other adults from home were their primary motivation guiding them to make positive changes. Within the facility, youth were able to identify some key individuals they utilized for social support. Interestingly, more youth reported that they went to another resident in the facility when they felt sad or anxious than they reported going to a guard or counselor. When they needed *help or advice* in the facility, however, they were most likely to go to

a guard, followed by a resident in their unit. These findings indicate that other peers at the facility provided not only antisocial influences, as suggested in much of the literature on deviancy training (Sherman et al., 1998), but were important sources of emotional support during times of sadness and stress. That said, almost two-thirds of youth indicated that they did not go to anyone in the facility when they felt sad or anxious and one-third did not go to anyone when they needed advice. It is unknown why youth did not attempt to seek out help or support at the facility during times of stress, and future research should examine youth help-seeking behaviors in residential settings.

When asked a parallel set of questions about who, outside of the facility, youth most often wanted to talk to when they felt sad or anxious or needed advice, they were most likely to list a mother/father/guardian followed by a boyfriend or girlfriend. In fact, the importance of romantic relationships was noted by many youth in this study. Roughly two-thirds of all youth (65.1%) indicated that they currently had a boyfriend or girlfriend outside of the facility, reporting fairly long relationships, with a mean of over a year (13.8 months) and a median of one year. Nearly a third (30.4%) of youth listed their boyfriend/girlfriend as the special person from home that they most were likely to go to when they felt stressed or upset, nearly equal to the number who selected a parent/guardian (47.8%) or brother/sister/sibling (33.1%). More than a quarter (27.1%) of youth indicated that they were most motivated to make positive life changes for their boyfriend/girlfriend, though most youth were most motivated to change for a parent (55.9%) or their sibling (39.3%). These findings are particularly compelling given that the majority of facilities permitted them only to receive visits from family, thereby

denying them access to the person for whom many youth were most motivated to change. Unfortunately, the poor quality of the data from the social support questions did not allow for analyses in the structural equation model, since a substantial proportion selected multiple answers instead of discrete answers. That said, the results and importance of romantic relationships should be examined further in future research given their salience to youth in this study.

To further describe the results and their potential implications, each major research question and sub-hypotheses are presented below along with relevant findings from this study. Existing research is integrated to provide insight into why convergent and divergent results may have occurred.

**Research Question 1: Are there significant differences among facilities that warrant multi-level analyses to account for facility's impact on the dependent variables in the model?**

There were substantial differences in youth characteristics, detention environment, and the average length of stay across the facilities. Youth at DJJS were at the facility a median of 1-4 weeks, while youth at Caliente and Nevada Youth Training Center had been at the facility, on average, almost three times as long. Youth at Spring Mountain were only there for 3-4 months. Further, Nevada Youth Training Center and Spring Mountain only housed males, while the other two housed mixed genders. Youth at NYTC were also more likely to have committed more serious crimes than youth at Spring Mountain, DJJS, or Caliente. Despite these differences, a series of ANOVAs comparing

the major variables of interest in the study by facility indicated that there were only a handful of variables whose means differed significantly by the facility.

Interestingly, ratings of staff were relatively consistent across facilities, but ratings of peer deviancy training, and fear of victimization did differ significantly across sites. Youth at Spring Mountain were significantly more likely to report that peers at the facility had broken rules, misbehaved, or offered alcohol or drugs (“Peer Deviancy Training”) than youth at DJJS and NYTC, and were more likely to think that their peers did not seem like they were trying to engage in prosocial activities than youth at Caliente. They were also less likely to believe that the other youth approved of them trying to engage in prosocial activities. Youth at Caliente were significantly more likely to fear bullying at the facility in comparison to youth at DJJS, while youth at NYTC were significantly more likely to feel as though they belonged at the facility. The ANOVAs did not uncover significant differences in perceptions of PDLs by facility, nor self-reported rates of Institutional Misconduct. However, given that the ANOVAs indicated that some of the key SDM predictive variables differed, facility type was added as a covariate in the first alternative model tested. The results of this and the other alternative models tested are discussed at length later in this discussion.

**Research Question 2: Does the model proposed adequately fit the data?**

The confirmatory factor analysis and structural equation model indicate that the original model proposed adequately fit the data. The CFI and TFI were both over .90, and RMSEA was less than .07, the chi-square ratio was less than 3, factor loadings for the indicators were mostly above .70, and all were above .63, indicators of a well-fitting measurement model. Most pathways were in the expected direction, except for the relationship between perceptions of safety and PDLS. That said, there were some challenges with the measurement model, particularly related to the Antisocial Peer Influence latent construct. Rather than the intended three scales (Opportunities, Involvement, and Rewards for Antisocial Activity), poor factor loadings resulted in the creation of a latent construct that was comprised of only two scales. These scales assessed peer disapproval for engaging in *prosocial* activities and the extent to which peers were involved in prosocial activities themselves. Thus, it was not assessing peers' encouragement of antisocial activities, rather discouragement of prosocial activities, which may not be the same process. However, because the original model basically fit the data well, all hypotheses related to the pathways were able to be tested. Each pathway was identified as a separate hypothesis, the results of which are summarized in the following section.

*Hypothesis 1a: Youth reporting a higher prosocial bond with staff will report higher perceived likelihood of post-detention success than youth with a lower prosocial bond.*

Supported. This pathway was supported and had one of the largest coefficients in the model. Youth who reported having more positive relationships with prosocial detention staff were also more likely to believe that they would succeed post-detention

than youth with less positive relationships. These findings are in line with the Social Development Model, which suggests that youth who have opportunities, involvement, and rewards for engaging in prosocial activities will also adopt prosocial norms and behaviors. These findings also support research indicating that youth who feel highly engaged in institutional programming tend to report a higher perceived likelihood of post-detention success (Marsh & Evans, 2010), as well as research by Marsh and Evans (2009) who found that youth in detention who rated the quality of their relationship with a staff member as high in trust, positive affect, and closeness, and felt that staff member was effective at problem solving were significantly more likely to report higher PDLs.

Supportive relationships with positive adults and their beneficial impact on program outcomes are perhaps one of the most robust findings in the youth development field. In a large-scale study of urban after-school programs, Hirsch (2005) found that the relationships between youth and staff are the most fundamental strength of the program and the primary reason for youth's continued participation. McLaughlin (2000) has similarly argued that guidance and support from frontline youth workers are two of the most important predictors of long-term success for youth involved in programs. This finding continued to support a large body of work highlighting the importance of frontline youth workers in promoting positive youth outcomes.

*Hypothesis 1b: Youth reporting a higher prosocial bond with staff will report lower rates of institutional misconduct than youth with a lower prosocial bond.*

Supported. Youth who reported having more positive relationships with staff were also significantly less likely to engage in institutional misconduct. These findings also

support the SDM, which predicts that when youth align with the prosocial norms associated with the prosocial influences in their lives, they are also more likely to adopt the behaviors that would be supported by these influences. The indicators for the Prosocial Staff Influence latent construct primarily surrounded youth's perception of how well staff enforced rules, engaged them in detention programming, held high expectations for their success, and effectively rewarded them for demonstrating prosocial behaviors at the facility, all key aspects of Eccles and Gootman's (2002) framework for positive youth developmental programming. It is also possible that staff who are able to form positive prosocial influences with youth are also the same staff who are able to enforce rules or deter youth from engaging in antisocial activities while detained.

*Hypothesis 1c: Youth's perception of their physical and psychological safety will have a negative indirect effect on the link between their prosocial bond with staff and their post-detention likelihood of success.*

Supported. Although youth who reported feeling less safe at the facility were actually more likely to believe they would do well once they left the facility, when tested as an indirect effect, lack of physical and psychological safety did have a negative impact on the relationship between Prosocial Staff Influences and PDLS as predicted. That is, youth who felt less safe at the facility did not have as strong a relationship between having positive relationships with staff and their PDLS as youth who felt safer at the facility. It is interesting that youth who felt less safe at the facility were more likely to report they would do well once they left facility, counter to the original hypothesis.

However, this finding does make some intuitive sense, though it is less supported by the literature than the reverse relationship.

Research indicates that a variety of life events may initiate the crime desistance process, including a traumatic experience like juvenile detention. For some youth, poor adjustment to the facility and chronic fear of victimization while they are detained may be a strong enough deterrent to them that they want to actively change their life course to avoid returning to juvenile detention in the future. However, this finding is counter to much of the literature on psychosocial distress and recidivism. Among detained females who reported high stress, depression, anxiety during and post-detention were significantly more likely to recidivate than females who did not report high levels of stress, depression, or anxiety (Benda, 2005). Incarceration has also been found to exacerbate prior emotional disturbances by increasing social isolation and boredom, and placing them at higher risk for bullying and victimization by other inmates (Brown & Ireland, 2006). Further, youth reporting high distress have been found to engage in more frequent and severe institutional misconduct (e.g. rule-breaking, failing to follow orders) and have poorer outcomes post-detention than youth who are not distressed during detention (Brown & Ireland, 2006).

That said, youth who reported having exposure to positive staff influences were significantly more likely to feel safe and have less emotional instability than youth who did not report exposure to positive staff influences. And, in accordance, feeling unsafe while at the facility did reduce the strength of the positive relationship between staff prosocial influences and post-detention likelihood of success. Psychological and physical

safety is one of the most critical elements of Eccles and Gootman's (2002) framework for developing high quality programming for youth as it is impossible for youth to engage effectively in activities when they are concerned about their personal welfare. Youth who do not feel safe at the facility might resent staff for failing to protect them, a finding in line with research in school settings. For example, a large-scale study by Mehta, Cornell, Fan, and Gregory (2013) found that youth who believed their school had high rates of bullying were less likely to report feeling committed to school.

*Hypothesis 2a: Youth reporting a higher antisocial bond will have higher rates of institutional misconduct than youth who have a lower antisocial bond.*

Not Supported. There was not a significant relationship between youth reporting that they had relationships with antisocial youth at the facility and their self-reported rates of Institutional Misconduct. The lack of finding is in opposition to the research indicating that deviancy training in after school programming has a deleterious impact on youth outcomes, and the overall social development model which indicates that youth who are exposed to antisocial influences are more likely to engage in antisocial behaviors. This finding is also in opposition to one of the more robust findings in adolescent literature, that youth are more likely to take risks in the presence of other youth (Steinberg, 2008). Adolescent crime occurs much more often in the context of groups, as opposed to adults, who tend to commit crimes more often when they are alone. A study by Steinberg (2008) monitoring participants' brain activity while playing a video game found that youth were 50% more likely to take risks while driving with peers, than when they were alone. The research also indicated that youth's pleasure and reward center of the brain was activated

in the group activity. Thus, typically, research would support the relationship between exposure to deviant peers and antisocial activities, like rule-breaking at the facility.

The lack of relationship between exposure to antisocial influences and institutional misconduct may be due to several reasons, including measurement error. The Peer Antisocial Influences latent variable was the only variable in the model that required substantial scale adjustments because the original scales had low factor loadings (ranging from .2 - .4), likely because the event asked about in those original scales were rare and highly controlled by staff (e.g. accessing contraband like drugs, cigarettes, or alcohol at the facility). As was discussed previously in the methodology section, two of the three original scales intended as indicators of the overall “Peer Antisocial Influences” latent variable had to be dropped because of mis-specification. As a result, only one of the original scales (Peer Rewards for Antisocial Activities) was used along with another scale about whether youth believed peers at the facility were actively trying to engage in prosocial activities at the facility, like school and therapy. Although factor loadings improved after the indicators were altered, the factor loadings were still lower than all the other indicator factor loadings in the model, and the latent construct did not perfectly parallel the original constructs proposed in the SDM. To summarize, the lack of relationship between Peer Antisocial Influences and misconduct may be due to issues of construct specification, not because the theory is incorrect.

Another reason the pathway was not supported may be that youth who have a higher antisocial bond with peers may be less willing to self-report that they had engaged in institutional misconduct. That is, youth who align with deviant influences at the

facility may be less inclined to be honest on a survey they associate with the facility or with authority figures. Or, it is possible that staff who see youth affiliating with peers who might be negative influences may be watched more closely than youth who do not try to affiliate with negative influences at the facility. Thus, peers youth with strong antisocial attachments, are less likely to have opportunities to engage in rule-breaking behaviors because they are more heavily monitored.

*Hypothesis 2b: Youth reporting a higher antisocial bond will report a lower perceived likelihood of post-detention success than youth who have a lower antisocial bond.*

Supported. Also as predicted, youth who reported having exposure to antisocial influences were also less likely to believe they would succeed post-detention, than youth less exposed to these influences. This finding is aligned to the Social Development Model, which predicts that when youth actively select prosocial or antisocial influences with whom to bond, they are more likely to adopt the norms and behaviors supported by those socialization units (Catalano et al., 1999). Thus, if antisocial peers are actively encouraging youth to not engage in the rehabilitative programming offered at the facility, it is unlikely youth are enhancing their own odds of post-detention success by taking advantage of skill-building opportunities while detained.

These findings support the work of others on deviancy training (i.e. Sherman et al., 1998; Bayer, Pintoff, & Pozen, 2003), indicating that aggregating deviant youth in delinquency prevention programs can actually increase the likelihood that they will recidivate. A facility's ability to reduce deviancy training among youth does appear to be a critical predictor of youth's likelihood of success post-detention.

*Hypothesis 2c: Social support perceived from external social networks will have an indirect effect on youth's antisocial bonds and their institutional misconduct.*

Not supported. The relationship between Social Support from home and Institutional Misconduct was not significant. That is, youth who reported strong social support from their friends and families were not significantly more or less likely to engage in Institutional Misconduct than youth without that support from home. That said, the relationship between Peer Antisocial Influences and Social Support was significant. Youth who reported strong antisocial influences at the facility were significantly less satisfied with the support they received from friends and family at home than youth who did not report antisocial influences. Because the direct effect between Antisocial Peer Influences and Institutional Misconduct was not supported, the indirect effect of Social Support from home on the relationship between Antisocial Peer Influences and rates of Institutional Misconduct could not be tested.

The lack of a relationship between Social Support and Institutional Misconduct was somewhat contradictory to the high proportion of youth who reported that they were most motivated to make positive changes in their lives for friends, family, and romantic partners in other parts of the survey. Although they *reported* feeling most motivated to change for people from home, their interactions with people from home while detained did not impact their actual behaviors, according to the results of the structural equation model. This could be due to model misspecification, as the social support latent construct had slightly lower factor loadings than desired (.65) and only two indicators.

An alternative explanation for why External Social Support did not relate to Institutional Misconduct is that the relationships occurring on a more daily basis *within* the facility are those that have the most impact on youth's decision to break rules. This makes sense, given how little some youth interacted with their social support networks from home, with some youth reporting never having visits while detained, though they still reported high social support from their friends and family.

Survey results on youth's receipt of visitation while in the facility may help to explain why *External* Social Support was perhaps less important to youth than what occurred on a more daily basis in the facility. In general, the results suggest that many youth had few visits from friends or family, or really, much contact with home at all, while they were detained. Nearly half (43.6%) of all youth indicated that they had not had any visits from someone from home. More than a third (34.6%) of youth reported feeling unsatisfied or very unsatisfied with the number of times they had been visited by their close friends and family since they had been detained. These findings suggest that many youth had little contact with home, which may explain why the relationships that occurred within the facility on a more daily basis were more significantly related to the outcomes of interest, and why the external social support measures were not related the dependent variables. Although youth reported positive support from home, the ways in which staff enforced rules and engaged them in programming were likely more predictive of their rule-breaking behaviors.

*Hypothesis 3a: Youth reporting a higher prosocial bond with staff will have a lower antisocial bond with peers.*

Supported. Youth who reported a positive relationship with prosocial staff were significantly less likely to report having positive relationships with youth who engaged in antisocial activities. This finding is compelling for several reasons. First, the Social Development Model suggests that youth who have opportunities, involvement, and rewards for engaging in prosocial activities are more likely to want to engage in prosocial behaviors, and, not engage in antisocial activities for which they know they will not receive rewards. Research suggests that youth who adopt more antisocial or more prosocial norms and behaviors are subsequently more likely to affiliate with groups with similar norms and behaviors (Catalano et al., 2005). Thus, the SDM would suggest that youth who affiliate with prosocial staff and adopt the norms and behaviors they support, like not breaking rules and trying to change their antisocial behaviors, would also be more likely to reject antisocial norms while at the facility. This finding in this study, therefore, supports this assumption of the SDM model.

This finding may also be the result of behaviors by staff to limit deviancy training at the facility by not allowing youth to discuss their crimes, and limiting unmonitored time for youth to talk with one another. The same staff who work hard to set a positive example for youth and encourage youth to do well at the facility may also be the same staff who work hard to limit deviancy training opportunities at the facility. Research by Goldman et al. (1983) suggests that staff experience is a critical mediator of the relationship between deviancy training in group therapy, and antisocial outcomes. The research found that when staff were more experienced, the adverse effect of grouping deviant youth together was decreased substantially.

*Hypothesis 3b: Youth reporting lower post-detention likelihood of success will report higher institutional misconduct.*

Supported. Youth who did not believe they were going to succeed once released were also significantly more likely to report having engaged in Institutional Misconduct since they had been detained. This finding aligns with the SDM, in that the theory predicts that once the prosocial or antisocial bond forms, youth are subsequently more likely to change their attitudes and their behaviors in alignment with the prosocial or antisocial pathway. Youth who have made the decision to avoid antisocial peers, not recidivate, and engage in prosocial activities upon release, may also be making the conscious decision not to engage in those activities while detained. These findings also parallel the extensive literature on self-efficacy, and its strong relationship with actual behaviors, particularly when the self-efficacy is directly related to the outcome behaviors (Bandura, 1977, 1997). Youth who believed they were going to do well once they left the facility likely do not want to jeopardize these outcomes by breaking rules at the facility that might increase their length of stay.

An alternative, more cynical, explanation for this finding might be that youth who are providing socially desirable responses and reporting that they are going to succeed post-detention may also be under-reporting their rule-breaking behaviors. In fact, Marsh (2007) did find that youth who gave more socially desirable responses were also more likely to have more positive perceptions of their post-detention forecasts. Future research should include a social desirability index to ascertain the extent to which youth provided these responses.

## Alternative Models

A critical component of the Structural Equation Model process is the testing of alternative models to determine whether the proposed model out-performs other plausible models. This study tested three alternative models, two of which fit the model better than the original, but were less supported by theory and literature. The success of these near-equivalent, alternative models indicates that the original model is clearly not the only explanation of causality that can be supported by the data. However, as MacCallum and Austin (2000) indicate, "...finding of good fit does not imply that a model is correct or true, but only plausible" (p. 218). The original model tested is supported by a well-validated theory and by a comprehensive review of literature on youth antisocial activity, youth development, and risk and resiliency. The alternative models either do not have the same level of support, or do not have the same level of model fit that the more parsimonious original model demonstrated. That said, these alternative models did produce some findings that warrant discussion and further study.

**First alternative model: All pathways.** The first alternative model assessed all possible pathways among the study variables, including the addition of a pathway between Safety and External Social Support, as well as an indirect effect of External Support on the relationship between Staff Prosocial Influences and PDLS. Additionally, it tested an indirect effect of Lack of Safety on the relationship between Peer Prosocial Influences and Institutional Misconduct. This model had a slightly higher CFI, identical RMSEA, but a larger confidence interval around the RMSEA compared to the original model, which may indicate a lower degree of precision in the model. Also, the proportion

of variance accounted for by the five additional pathways did not increase substantially with the addition of five pathways. No additional variance was accounted for in the post-detention likelihood of success variable from the original, although more of the variance in Institutional Misconduct was accounted for by the additional pathways. Model complexity increased dramatically, however, and given that only two of the five additional pathways were significant, the tradeoff for complexity and additional variance accounted for and decreased precision (indicated by larger confidence intervals in the fit indices) would indicate that this model did not out-perform the original. That said, the model did add some interesting new information about the relationship between safety and rule-breaking behaviors that warrant further study.

First, there was a significant negative relationship between Antisocial Peer Influences and Perceptions of Safety, such that youth who reported that the youth around them were antisocial influences felt *safer* at the facility than youth who did not report having exposure to antisocial influences. There are several possible explanations for this finding, including that youth who had any kind of relationship with other youth at the facility, even antisocial influences, might adjust better to the facility than youth who do not report relationships with peers at the facility. This reasoning is somewhat supported by the literature and by other findings in this study. Some studies indicate that detained youth may act out in an attempt to protect themselves from harm or try to seek protection from antisocial peers (Edgar & O'Donnell, 1998; Lahm, 2009). A longitudinal study by Juvonen and Ho (2008) found that middle school students who associated bullying others with high social status (“coolness”) in the first semester of middle school demonstrated

increased antisocial behavior in the second year at that school. This study may indicate that youth at these facilities themselves engaged in antisocial behaviors, like bullying, in order to fit in with other antisocial peers they deemed as "high status." Further, as discussed previously, many youth sought out another resident at the facility when they were feeling sad or anxious, indicating that youth regularly relied on their peers for emotional support.

Second, there was a positive relationship between Perceptions of Safety and Institutional Misconduct, such that youth who felt *less* safe at the facility were also *more* likely to break rules. There is some support for this relationship in the literature. Specifically, fear of victimization while incarcerated has been linked to higher institutional violence as inmates attempt to protect their property and defend themselves against victimization from other inmates (Edgar & O'Donnell, 1998; Lahm, 2009). Psychosocial distress while incarcerated may exacerbate some youth's behavioral problems, and youth reporting high distress have been found to engage in more frequent and severe institutional misconduct (e.g. rule-breaking, failing to follow orders) and have poorer outcomes post-detention than youth who are not distressed during detention (Brown & Ireland, 2006). The other three added pathways were non-significant.

**Second alternative model: Reversed variable direction.** The second alternative model reversed the direction of the variables, so that PDLs predicted perceptions of safety and relationships with staff, and Institutional Misconduct predicted peer relationships. Social Support was omitted from the model. Model fit was improved with this model, but only because the Social Support latent construct was omitted. In fact,

when this same latent construct was removed from the original model, it had identical model fit to the reversed model. However, because model fit was adequate, it can be said that the reverse causal relationship can be supported by the data.

The reversed variable model is not well-supported by the literature nor by theory. Numerous studies have indicated that effectively structuring programs can impact youth's self-efficacy and skill development and that not having those elements in place will produce the opposite outcomes (Eccles & Gootman, 2005). Intuitively, it is also far more likely that staff's enforcement of rules and enforcement of peer deviancy training is what impacts youth rule-breaking, rather than rule-breaking predicting youth's perceptions of peers and staff. Within educational settings there is strong evidence that effective enforcement of school rules is related to increased perceptions of safety (Akiba, 2008; Hong & Eamon, 2011), and that students who perceive school rules as fair, but strict, are much more likely to feel safe (Arum, 2003). Thus, it makes much more sense that staff and peers at the juvenile detention facility define the climate of a detention facility. That said, it is possible that the relationship between institutional misconduct and peer and staff relationships is bi-directional, such that the more youth get in trouble at the facility, the less likely they are to bond with staff and the more likely they are to bond with peers. However, the original version of this model does seem more plausible, and given identical model fit is a better description of the relationships.

**Third alternative model: Covariates.** The third alternative model tested four types of covariates within the original model to ensure that these characteristics did not pose any undue influence on the theoretical model that was not explained in the original

model. Model fit for the final version with all four types of covariates (facility, length of stay in facility, gang involvement, and gender) was substantially lower than the original model, and some fit statistics like the CFI, did not meet the cutoff criteria of .90 or higher. This is particularly telling that a model fit statistic that penalizes for lack of parsimony like the CFI, was low with this model, and the proportion of variance accounted for in the dependent variables did not increase at all from the original model. Further, all relationships that existed in the original model that did not contain covariates remained identical once covariates were added. These findings indicate that while significant, the covariates did not add substantially to the model proposed. The poorer fit statistics rule out the model as better fitting than the original. However, the relationships between the covariates and the dependent variables do provide some compelling findings that may warrant further study. These results are described below.

***Facility differences.*** The results of these pathways indicated that there were some significant differences in Institutional Misconduct and perceptions of post-detention likelihood of success. Specifically, youth at Caliente, Spring Mountain, and NYTC on average, reported significantly lower Post-Detention Likelihoods of Success than youth at DJJS. Overall, youth at DJJS had substantially shorter stays than youth at the other facilities, likely indicating that they had less serious offenses on their records than the youth at the other facilities. Interestingly, youth at DJJS reported comparable levels of gang affiliation, and previous detention stays as youth at the other facilities. Thus, it was not as though they were first-time offenders or were less enmeshed in criminal behaviors, but perhaps their offenses were less serious and they knew they were more likely to

return home fairly soon and begin rehabilitating. Though one might expect that rule-breaking behaviors might differ by facility given that some staff might enforce rules more strictly than others, the covariate SEM did not indicate that there were significant variations in rule-breaking frequency across the facilities.

*Length of stay in facility.* Length of time spent in the facility at the time of data collection was significantly related to youth's rates of Institutional Misconduct, but not their Post-Detention Likelihood of Success. Logically, it makes intuitive sense that youth who spend more time in detention also have more opportunities to break rules. Controlling for the impact of length of time on Institutional Misconduct did not improve model fit or change pathway coefficients, suggesting that the original relationships were fairly robust, even without controlling for it in the original model.

Interestingly, youth who had been at the facility longer did not report any greater sense of post-detention likelihood of success. This is surprising, as one might expect that youth who had spent longer amounts of time in rehabilitative programming might feel more optimistic about their ability to succeed once they leave the facility. However, there is mounting evidence indicating that longer lengths of stay do not appear to have any impact on youth's likelihood of recidivism. The lack of a relationship between longer institutional stays and recidivism was most notably demonstrated by Loughran et al. (2009), who, using a longitudinal sample of serious juvenile offenders determined that after controlling for selection there was no detectable benefit to placing youth in longer terms of stay on their actual re-arrest rate or self-reported re-arrests. In light of this study and other similar findings in the adult criminal justice system (e.g. Gendreau, Goggin,

Cullen, & Andrews, 2001), new recommendations from the Juvenile Law Center (2015) have advocated for shorter lengths of stay for youth in juvenile detention. The findings from the present study support these recommendations, finding a null effect of length of stay on youth's perceived likelihood of success post-detention.

***Gang involvement.*** Almost half of the participants in this study self-reported that they were in a gang. A multitude of studies have suggested that gang involvement is one of the strongest predictors of future recidivism, and have consistently revealed that gang affiliates are more delinquent than non-gang affiliates (Esbensen & Huizinga, 1993; Gordon, et al., 2004). Several recent studies have called for increased research studying desistance patterns for youth in gangs. Huebner and associates (2007) applied several Cox proportional hazards models to investigate the affects of gang membership, gun use, and drug dependence on time to reconviction for a sample of recently released young adults. Through self-reports of individual behaviors and official reconviction records, they found that gang members were nearly twice as likely to reoffend, and were nearly two and a half times as likely to re-offend if they had substance use issues.

Gangs contribute to the culture in confinement facilities in several other negative ways. The presence of gangs in a facility significantly increases the likelihood that a youth will be offered contraband and the percentage of youth living in units characterized by poor youth–staff relations are much higher in facilities with a gang presence (Sedlack & McPherson, 2010). Youth are much more likely to report having been sprayed with pepper spray by staff in units where gangs are present (Sedlack & McPherson, 2010). For reasons likely related to recruitment and exposure, confinement in a juvenile correctional

facility is one of the strongest predictors of adult prison gang membership (Howell, 2010).

**Gender.** In the alternative model tested, gender did not appear to be significantly associated with either post-detention likelihood of success, or self-reported Institutional Misconduct. Marsh (2007) also did not find significant differences between male and females on the Post-Detention Likelihood of Success measure in his sample. The current study appears to validate that male and female detained youth appear to have similar PDLS rates. This is not to say that there are no gendered differences in the mechanisms by which youth achieve their perspectives about their future while detained, as Marsh (2007) did find differences between males and females in how youth-staff relationships impacted PDLS. Specifically, the study found that higher levels of relationship quality and longer relationship duration were important predictors of males', but not females', positive forecasts. The small number of females in the current sample, even as a covariate, was likely reducing its strength as a predicting variable in the model.

This finding is somewhat contradictory to other previous literature which has indicated that there are some differences between males and female young offenders' psychological development, their pathways to delinquency, and their responses to juvenile detention. Research does indicate that males and females differ in their rates of exposure to certain antisocial predictors, including neighborhood risk (Zahn et al., 2010), and lack of supervision and control in the household (Hagan, Gillis, & Simpson, 1985). Females who do commit crimes are more likely to have experienced sexual and physical abuse (Snyder, 2000), internalize problems as a result of abuse (De Coster, 2005; Teplin

et al., 2002), have had mother-child conflict (Liu, 2004) and have been influenced by romantic partners to commit minor delinquency (Haynie et al., 2005). Research also indicates that because juvenile detention facilities are primarily comprised of males, and are not set up to meet the "unique needs" of incarcerated females (Bloom et al., 2002). This study was only able to provide preliminary evidence that there were no differences in PDLs by gender, but future research should examine these differences further.

### **Implications of Research Findings to Theory**

This research study contributes to existing criminological and adolescent developmental theory in a number of ways. First, it supports an integrated model of criminological theory. Although the basic tenets of the social development model held true, the model did benefit from integrating Eccles and Gootman's (2002) framework into the overall model. That is, youth's physical and psychological safety at the facility, one of the key components of Eccles & Gootman's framework, did partially mediate the relationship between the prosocial pathway and youth's beliefs about their likelihood of success. Further, the scales used to measure the peer and staff exposure effects relied heavily on components in the Eccles and Gootman work, including the importance of structuring rules, reducing deviancy training and promoting prosocial norms, and providing opportunities to learn prosocial skills.

Second, the findings about the importance of romantic relationships in detained youth's lives contributes to a body of emerging literature suggesting that romantic relationships are one of the factors that contribute to youth's decision to offend or desist from crime (Cauffman, Farruggia, & Goldweber, 2008; Moffitt, Caspi, Rutter, & Silva,

2001; Simons, Stewart, Gordon, & Conger, 2002). Although a number of studies have provided evidence about the importance of romantic relationships to adolescents' development and decision-making, the majority of these studies have relied on "normative" samples of school-based (Simonset al., 2002), or nationally representative samples (Haynie, Giordano, Manning, & Longmore, 2005; Herrera et al., 2011). This study examined the importance of these relationships among youth who do not fit the traditional "normative" sample in many ways, and in many cases, are not even allowed to have contact with romantic partners during detention.

In one national study, 36% of 13 year olds, 53% of 15 year olds, and 70% of 17 year olds have had a "special" romantic relationships in the last 18 months (Carver, Joyner, & Udry, 2003). Thus, while it is not surprising that such a large proportion of youth in this sample had a romantic relationship, it is somewhat surprising how many of them reported maintaining those relationships while detained. And, in fact, when asked about visitations from home while detained, the majority of youth (70.5%) listed "The facility only allows certain people to visit" as a barrier to seeing or talking to people from home while detained. In the pilot study, one youth indicated that his girlfriend would drive to his mom's house on scheduled calling days so that he could talk to her, since both visits and phone calls at Jan Evans only permitted youth to talk to family while detained. Thus, youth did manage to find alternative ways to talk with romantic partners, even if they were not technically allowed to receive visits or take phone calls from them. Though preliminary, these findings do indicate that romantic relationships among youth

in detention are not only salient, but are often perceived as the most important relationship for which youth are willing to change behaviors.

Third, this study is one of the first to examine both staff prosocial influences along with deviant peer influences, acknowledging that both can have an impact on youth's behaviors and their attitudes about their post-detention success at the same time. Indeed, although not explicitly analyzed, it appears that youth, in accordance with the SDM, are more likely to select a prosocial pathway or an antisocial pathway, which reinforces either positive attitudes and outcomes (high self-efficacy to desist from crime and rule following) or negative attitudes and outcomes (low self-efficacy to desist from crime and rule breaking).

### **Implications of Study to Practice**

This study has a number of implications for juvenile justice programming. First, it may indicate that what occurs during detention, and primarily the relationships youth have with detention staff and peers, can in part determine whether youth believe they will succeed once they leave the facility. In fact, given the relative isolation youth reported from their close friends and family members and romantic partners while they were detained, what occurs within the facility and the way staff build relationships with youth is a critical predictor of youth's likelihood of post-detention success.

Additionally, this study underscores staff's role in creating a safe environment for youth. As Eccles and Gootman (2005) highlight, a safe environment is the most critical element of any community program. In this study, it indirectly deteriorated the

relationship between prosocial staff influences and post-detention likelihood of success and was associated with youth's rule-breaking behaviors. Almost 15% of youth reported feeling sad or depressed at the facility, and 21% feared being bullied. These findings are slightly lower than found nationally. According to a 2010 Office of Juvenile Justice and Delinquency Prevention report on the conditions of juvenile confinement, roughly one-third of the more than 2,000 youth detained in a correctional facility reported that they feared attack by someone, with 25% fearing attack by another resident, and 22% fearing attack by a staff member (Sedlak & McPherson, 2010). However, the findings underscore the importance of ensuring youth's safety during detention to improve their psychosocial outcomes.

This study indicated that there is a strong negative relationship between institutional misconduct and self-efficacy to desist from crime after detention. Youth who continue breaking rules during detention, be they small or more major rules, also do not believe they will be able to stop their criminal behavior after release. This finding may suggest that detention facilities could examine Institutional Misconduct as an early warning system for youth's overall commitment to continue recidivating. That is, youth who break rules early on in their stay may require additional programmatic support. These findings also parallel similar work by Balfanz, Herzog, and Mac Iver (2007) on early warning indicators within educational settings. Their work suggests that youth's rule-breaking in elementary and middle school can strongly predict youth's likelihood of disengagement from school. As such, Balfanz, Herzog, and Mac Iver (2007) argue that schools should utilize this and other types of early warning indicators to identify youth

who require additional academic and behavioral supports in school. Juvenile detention centers should similarly use rule breaking behaviors in the facility as an indicator that youth do not feel self-efficacious to desist from crime post-release, and may need additional interventions.

This study highlights the importance of staff creating prosocial environments in juvenile detention settings. Detention facilities should not only recruit staff who believe that youth can change and that juvenile detention is a place in which youth can learn the skills needed to succeed post-detention, but staff training should also teach staff how to build these positive relationships with youth. Indeed, Eccles and Gootman (2002) similarly advocate that staff receive training in how to build positive relationships with youth. With that said, the supportive relationships youth had with other residents in their units also have important implications for detention facilities, as they may indicate that some youth are more likely to seek out their peers when they feel stressed or anxious, and that peers may play a critical role in promoting positive adjustment to the facility.

This study also focuses on the importance of allowing greater opportunities for youth to have contact with their external support networks who are not traditionally allowed to visit at the facility. A substantial number of youth reported not having had any visits while at the facility, and even more reported not having had contact with the person from home they identified as one of their primary source of support. Indeed, the benefits of visitation on psychosocial adjustment to incarceration is fairly well established in the adult literature (Hoffman, Dickinson, & Dunn, 2007; Jiang & Winfree, 2006) though it has primarily focused on visits from spouses and/or children (Gordon & McConnell,

1999; Grinstead, Zack, & Faigeles, 2001), and how visits impact the transition from incarceration to home (Bales & Mears, 2008). As such, we know very little about how social support in the form of face-to-face visits might impact mental health during adjustment to detention among juvenile offenders.

### **Study Strengths**

This study has a number of strengths that also provide guidance about future research. This study represents one of a remarkable few studies that have collected data from youth about the conditions in their detention facilities that affect their likelihood of recidivism. A literature search in 2015 produces few studies identifying which program, structures, relationships, policies, and practices influence youth recidivism. There remains no substantial body of literature describing the psychological processes or life changes among serious adolescent offenders that promote positive adjustment and desistance from antisocial activity (Steinberg & Cauffman, 2000; Laub & Sampson, 2001; Losel & Bliesener, 1990). Even less is known about how the juvenile detention experience itself impacts youth's likelihood of recidivism (Trulson, 2007), their psychosocial development (Steinberg & Cauffman, 2000), or if detention has any long-term impact on youth at all (Loughran et al., 2009).

Additionally, few studies have systematically studied the factors within detention facilities that predict youth's perceptions of their likelihood of not committing crimes again once they are released. Rather, the majority of studies have examined predictors of criminal onset, but have provided little guidance to facilities about how to structure their facilities, train staff, and group youth in ways that can help to improve youth's likelihood

of success. The handful of researchers in the country who have studied the factors within facilities that are likely to impact youth's likelihood of success have, with few exceptions, not relied upon theory to guide their studies. The present dissertation study uses a well-validated theoretical model of youth's prosocial and antisocial behaviors to guide model testing, which helps to ensure that the findings could potentially be replicated in other locations, with other populations of youth, and produce similar findings. Further, this study focuses on the factors over which facilities can exert some control, rather than factors over which they have less control, including youth's home life, their gang involvement, and their socioeconomic status. As such, the study has direct implications for how facilities can structure interactions between youth, between youth and facility staff, and between youth and their important social support networks in a way that is likely to reduce institutional misconduct and increase youth's perception that they will do well once they leave the facility.

This study focuses not only on the factors within facilities that improve youth's likelihood of success, but also acknowledges that youth are exposed to both antisocial and prosocial influences even during detention even while engaged in rehabilitative programming. Thus, youth may still be exposed to antisocial influences or psychosocial stressors that can have a deleterious impact on their likelihood of success upon release. An examination of both the potential benefits and risks of detaining youth in residential placements is critical to furthering the field's understanding of when and with whom to place in such programs.

This study represents a substantial undertaking to collect data from a large proportion of the youth detained in Nevada facilities, gathering data from 301 youth,

nearly half of all youth detained in a residential facility in Nevada. Data were also collected specifically to study the theoretical model, thereby ensuring that the indicators used in the model were well-aligned to the model of interest, rather than relying on secondary data collection. In addition, the data were collected in-person, by the researcher conducting the analyses, which provides unique insight into why some data issues may have occurred. Responding to the questions that youth asked about the survey items during the data collection helped elucidate why youth may have answered the way that they did. Collecting the data in-person also provides insight into the context within which the surveys were completed. Collecting data directly from youth is also a benefit of this study, as it provides a much-needed youth perspective on the factors within the facility that directly impact their attitudes and behaviors, rather than relying on data sources external to youth.

Interviews during the pilot study also provided a wealth of information about youth's perceptions of the facility and their beliefs about what helped and did not help them on their journeys to desist from criminal activity once released. Conducting additional qualitative interviews with youth about the conditions of their facility and what programs, staff, structures, and policies have helped influence their beliefs about their likelihood of success and their criminal patterns may help researchers delve further into the "black box" of juvenile detention.

### **Study Limitations**

Several limitations of this study warrant discussion. One limitation of this work is its cross-sectional design, which does not allow for longitudinal measurement or

determinations about causality. This limitation has an impact on our understanding of the nature and impact of juvenile detention in at least two ways. First, it does not allow us to fully understand whether youth's relationships and perceptions of their relationships change during the course of their detainment. It is highly likely that youth's attitudes towards staff and their peers change during their detainment, and so too might their perceptions of their social support networks. Youth's friends and families might be highly supportive at first, but as the sentence wears on, their ability or motivation to visit and support youth might wane, or might increase. There is also substantial turnover in staff positions in juvenile detention settings, such that an influx of new and outgoing staff might hinder youth's abilities to form long-lasting relationships with positive staff role models.

Second, this study examines youth's self-efficacy to desist from crime, not their actual behaviors once released. Although there is substantial evidence (Benda, 2001; Mulvey et al., 2004; Rose & Clear, 2003; Visher & Farrell, 2005) supporting the link between self-efficacy to desist from crime and actual criminal behaviors post-release, this dissertation study did not examine actual post-release behaviors. A number of factors external to those examined could have an impact on youth's post-release success that are not being measured, including youth's home life, their involvement in gangs, and their substance use. Additionally, a study of 2,346 juvenile delinquents by Caudill (2010) found that for the most part, youth were at low risk of recidivism immediately following release; however, the risk of recidivism climbs quickly thereafter and peaks between 3 and 5 months, particularly when youth were involved in gangs prior to their detention. These findings may indicate that even youth who may feel like they have highly

likelihood of positive outcomes post-release may decline in their self-efficacy the more time they spend in home and social environments that are not conducive to rehabilitation.

Additionally, there were some challenges with the measurement of some of the indicators. As discussed previously, the Peer Antisocial Influences latent construct was not able to be specified as hoped in accordance with the SDM. Low factor loadings associated with two of the three scales, likely a result of youth not having many opportunities in a highly structured environment to break rules, required that alternative scales be used. This limited the ability to test the model as hoped, as the replacement scales tested more youth's perceptions about whether peers at the facility were engaged in prosocial activities and encouraged prosocial activities like working hard in classes and attending therapy. They did not necessarily assess peers' direct encouragement of antisocial behaviors, rather a lack of engagement in the facility programming.

Fortunately for the facilities, but unfortunately for the normality of the Major Institutional Misconduct scale, few youth reported engaging in high rates of Major Institutional Misconduct at the facility. As such, there were some measurement challenges associated with the positive kurtosis of this scale. Although transformations helped improve the normality of the distribution, the fact remains that very few youth engaged in the serious rule-breaking behaviors the scale assessed, or at least did not report them.

Another limitation of this study is the use of self-reported Institutional Misconduct rates by youth, rather than actual facility records. There are some benefits to self-report, as official records tend to underestimate these problems because inmates are reluctant to report incidents due to fear of retaliation from peers or beliefs that staff will

not follow up on their concerns (Leschied, Cunningham, & Mazaheri, 1997). However, some youth may certainly fear reporting that they have broken rules at the facility, or some youth may even “posture”, and over-report their Institutional Misconduct rates. That said, 89% of youth reported having broken at least one rule since they had been at the facility, suggesting that youth, on the whole, were open to reporting their rule-breaking behaviors. Future research should attempt to compare youth's self-reported rule-breaking behaviors with official records to validate whether self-report is an appropriate proxy of actual behaviors among detained youth.

Self-report, in general, poses some barriers to our ability to generalize the outcomes from this study. For example, youth at NYTC had recently been the subject of a major news story about staff abuse prior to data collection. NYTC, interestingly, had higher positive staff ratings by youth. Because of the nature of self-report, it is impossible to ascertain whether youth were being honest about their attitudes towards staff, or whether they feared repercussions for not rating staff positively. Without triangulating the data with additional data sources, like interviews, observations, or content analyses of complaints filed in the facility, it is impossible to know with any certainty how honest youth were on their surveys. Future studies should at a minimum collect social desirability indices, and triangulate the data with other sources, to help validate the findings of this study.

Although the research team attempted to collect the data consistently from all detention facilities, small variations in the survey administration likely impacted youth's responses. For example, at Spring Mountain, youth had much more space and privacy to complete the survey, as the structure of the facility allowed for them to complete the

survey in their own rooms at their own private desks. At DJJS and at the Nevada Youth Training Center, youth completed the survey in their classrooms, while at Caliente, youth completed the survey at small, two-person desks in the cafeteria. At all facilities, a detention staff member was present in the room to maintain order, but in some facilities, the staff member was a teacher (NYTC), while in other facilities the staff member was a guard youth knew well, while at other facilities the staff member was not someone that youth knew particularly well. Further, youth took the survey at various times during the day, and after various events in their stay. Some youth at DJJS, for example, came into the survey midway through the administration, after just having been to court or a meeting with their social worker. Slight procedural differences in the way the data was collected between facilities could account for some of the facility differences seen in the data. Further, because the data collection only occurred at Nevada facilities, which have specific laws, policies, and practices governing them, the results of this study may not be generalizable outside of the state.

### **Future Research Directions**

This study intentionally focused on the facility factors that influenced youth's self-reported likelihood of recidivating, in the hopes of providing information to facilities about the factors they can alter to promote youth's likelihood of positive outcomes. That said, there is an extensive body of literature detailing person variables that impact youth's

likelihood of recidivating, including, substance use (D'Amico et al., 2008), mental health issues, social and emotional skills, including anger management, self-control, relationship skills. It is highly likely that these intrapersonal factors interact within the facility context, allowing some youth to better take advantage of the programs and potentially positive role models that might exist in the facility. Future studies should examine the model by these different person-level variables to determine whether the mechanisms vary as a result of these factors.

Additionally, a new study published by Steinberg, Cauffman, and Monahan (2015) from a large-scale longitudinal study of youth who are incarcerated provides support to the theory that the majority of youth mature out of criminal behaviors. Specifically, the authors report that youth's self-reported impulse control, ability to foresee future consequences, and personal responsibility were significant predictors of their criminal desistance, and that youth who gained these skills earlier were far more likely to mature out of criminal behaviors. Future studies should examine whether and how detention facilities help to promote this maturation process.

Given the self-reported importance of their romantic relationships and their impressive length during detention, future studies should conduct more in-depth examinations of how youth maintain these relationships while detained in spite of policies that limit their opportunities to visit and talk with non-familial individuals. Some studies (Oudekerk, Burger, & Repucci, 2014; Cauffman, Farruggia, & Goldweber, 2008; Herrera, Wiersma, & Cleveland, 2011) have begun to examine how having a partner who engages in prosocial or antisocial activities affects males and females differently. Many

questions remain about how or why these relationships exert their impact on youth's decision to engage in criminal activity or desist from criminal activity.

Another direction for future research is the study of peer emotional support within detention settings, following the findings in this study that many youth seek out other residents in their unit when they are feeling sad or upset. The majority of the literature on youth development programming focuses on how to minimize peer deviancy training and bullying behaviors, or focuses on the important relationships youth build with staff. Much of this research fails to recognize both the importance and potentially beneficial impact that building relationships among youth might have, including by reducing psychosocial distress.

In conclusion, this study does bridge a large gap between two fields of study that rarely intersect: factors promoting positive youth development in the normative population and factors that result in youth desistance from criminal behaviors. As noted by Loeber and LeBlanc (1990), most theories in criminology do not adopt a developmental perspective. This is disheartening, as recent studies have indicated that most youth offenders do "mature out" of delinquency once they reach adulthood as part of the normative youth development process (Steinberg, Cauffman, & Monahan, 2015), and that juvenile detention might actually impede this maturation if programming is not focused on supporting the normative developmental process (Steinberg, Chung, & Little, 2004). Further, the current juvenile justice culture, while changing, is still highly focused on corrections with priority placed on control and surveillance (Barton & Butts, 2008), and less focused on promoting positive youth development. The positive youth

development field is also not without flaws. Weiss (1995) and others (Barton & Butts, 2008) have noted that the positive youth development movement has been relatively inattentive to theory, providing few research-based models of change that can be utilized to construct successful juvenile detention programming

This research study highlights the importance of combining these fields. Youth's perceptions of how well staff established positive relationships with them, engaged them in opportunities that helped build skills, enforced rules, ensured safety, encouraged belonging, and promoted positive norms all predicted more positive outcomes for youth, in accordance with the Eccles and Gootman (2002) framework. This study also tested a well-validated theory of prosocial and antisocial development, using the positive youth development literature to guide its model specification, and the theory was well supported by the data. The bridging of these two fields of literature provide important direction for future research and practice for both the juvenile justice system and more global positive youth development programming.

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## Appendix A: Survey Instrument

# Nevada Detention Center Project

University of Nevada, Reno

*Directions: This survey asks questions about your future, your relationships, and your background. You can skip any questions that you wish to leave blank. Your answers will be confidential, so please answer honestly. DO NOT WRITE YOUR NAME ON THIS SURVEY.*

**Facility ID:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Please Note: Formatting for this instrument altered from original version used to meet dissertation formatting requirements



## I. Questions about You

*These questions ask you some information about your background, how long you have been at this facility, and why you are at this facility. Please answer honestly.*

1. What is your age (in years only): \_\_\_\_\_

2. You are (*check one box*):

- Male  
 Female

3. What is the last grade in school you have completed? \_\_\_\_\_th grade

4. How long have you been at this facility? (include your current stay only; *check one box*)

- Less than one week  
 1 week to a month  
 1-2 months  
 3-4 months  
 4- 5 months  
 6-7 months  
 8-9 months  
 10-11 months  
 One year  
 Two years  
 More than two years

5. How much longer do you think you will be in this facility before you are released? (*check one box*)

- Less than one week
- 1-4 weeks
- 1 month
- 2 months
- 3 months
- 4- 5 months
- 6-7 months
- 8-9 months
- 10-11 months
- One year
- Two years
- More than two years

6. How many times have you been in this or another detention facility? (include your current stay) \_\_\_\_\_ times

7. In your own words, what **one** offense is the **biggest** reason you are in this facility this time? \_\_\_\_\_

8. How many times have you been written up for breaking a rule at this facility? \_\_\_\_\_ times

9. Have you ever been a member of a gang? (*check one box*):

- Yes
- No

**10.** How do you describe yourself (*check one box*)?

- African American / Black
- Asian American / Pacific Islander
- Caucasian / White
- Latino / Mexican / Hispanic
- Native American / Alaskan Native
- Multi-ethnic / Multi-racial (write in): \_\_\_\_\_
- Other (write in): \_\_\_\_\_

**11.** When not in this facility, what adults do you live with most of the time?

- Both biological parents
- Only mother
- Only father
- Mother and stepfather
- Father and stepmother
- Foster parents
- Guardian
- Grandparent(s)
- Other adult or relative
- None of the above (please explain): \_\_\_\_\_

## II. Questions about Your Future

*These questions ask you some information about how you feel about your future after leaving this facility. Please answer honestly.*

**12. How much do you agree with these statements about what you will do when you leave this facility?**

<b><i>After leaving here...</i></b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>a.</b> I will complete high school.	1	2	3	4	5
<b>b.</b> I will hang out with old friends.	1	2	3	4	5
<b>c.</b> I will hang out with friends that I have met in the facility.	1	2	3	4	5
<b>d.</b> I will hang out with different friends who never get in trouble.	1	2	3	4	5
<b>e.</b> I will use drugs and/or alcohol.	1	2	3	4	5
<b>f.</b> I will avoid problems that might lead to committing a crime.	1	2	3	4	5
<b>g.</b> I will work to get along with other adults.	1	2	3	4	5
<b>h.</b> I will work at not getting into fights with other youth.	1	2	3	4	5
<b>i.</b> I will spend more time with adults or family members who will help me avoid trouble.	1	2	3	4	5

j. I won't be doing any crimes.	1	2	3	4	5
k. I will be getting involved in more positive activities (church youth groups, school activities, boys and girls club, etc.).	1	2	3	4	5
l. I will return to detention.	1	2	3	4	5
m. School will help me reach my goals.	1	2	3	4	5

## II. Questions about This Facility

*These questions ask you some information about how you feel about this facility and some of your behaviors since you have been here. Please answer honestly.*

### 13. How much do you think these statements reflect your feelings about this facility:

	Not at all	Very little	Somewhat	Quite a bit	Very much
a. I feel comfortable in this facility.	1	2	3	4	5
b. I feel I am part of this facility.	1	2	3	4	5
c. I am committed to this facility.	1	2	3	4	5
d. I am supported at this facility.	1	2	3	4	5
e. I am accepted at this facility.	1	2	3	4	5

**14. How many times have you done any of the following behaviors since you have been at this facility? (circle the answer that best applies to you). No one at this facility will ever see your responses.**

**How many times have you...**

<b>a.</b>	Not cooperated with staff when they asked me to do something.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>b.</b>	Used foul language (swearing, non-respectful language).	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>c.</b>	Damaged or stolen property.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>d.</b>	Had sexual contact (kissing, touching, sex) with any other residents.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>e.</b>	Tried to leave the detention center when you were not supposed to.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>f.</b>	Made tattoos, pierced ears, or made scratches on yourself or another resident.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>g.</b>	Had someone enter your room or entered someone else's room when you were not supposed to.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12

<b>h.</b> Written or drawn something on the walls of your room when you were not supposed to.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>i.</b> Failed to clean your room when you were supposed to.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>j.</b> Not been dressed the way you were supposed to be dressed.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>k.</b> Talked about a crime you or someone you know committed.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>l.</b> Talked to another resident when you were not supposed to.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>m.</b> Taken pencils, games, cards or other property into your room when you were not supposed to take them.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>n.</b> Grabbed, shoved, punched or kicked <u>another resident</u> .	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>o.</b> Grabbed, shoved, punched or kicked a <u>staff member</u> .	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>p.</b> Cursed at, threatened, or made fun of <u>another resident</u> .	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
<b>q.</b> Cursed at, threatened, or made fun of a <u>staff member</u> .	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More

									than 12
r.	Gotten into a physical fight with <u>another resident</u> .	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
s.	Gotten into a physical fight with a <u>staff member</u> .	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
t.	Threatened <u>another resident</u> with a weapon.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
u.	Threatened a <u>staff member</u> with a weapon.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12
v.	Been written up for any other reason <u>not</u> listed above.	Never	1 -2	3-4	5-6	7-8	9-10	11-12	More than 12

**Keep Going! You are halfway done!**

### III. Staff at This Facility

*These questions will ask you about your experiences with staff at this facility.*

#### 15. How true do you think each statement about staff at your facility is for you?

	Not at all true for me	A little true for me	Somewhat true for me	Mostly true for me	Totally true for me
<b>a.</b> Staff always make sure that facility rules are followed by youth.	1	2	3	4	5
<b>b.</b> Staff provide lots of opportunities to do activities that interest me.	1	2	3	4	5
<b>c.</b> Staff do a good job making sure youth feel like an important part of the facility here.	1	2	3	4	5
<b>d.</b> Staff do a good job of making me want to try my best at this facility.	1	2	3	4	5
<b>e.</b> Activities at this facility are interesting to lots of different youth.	1	2	3	4	5
<b>f.</b> Staff set high expectations about how well I will do when I leave this facility.	1	2	3	4	5

**16. How true do you think each statement is about staff at your facility?**

	<b>Not at all true for me</b>	<b>A little true for me</b>	<b>Somewhat true for me</b>	<b>Mostly true for me</b>	<b>Totally true for me</b>
<b>a.</b> Staff at this facility challenge me to do my best in all activities.	1	2	3	4	5
<b>b.</b> Staff in this facility give me lots of feedback about my behavior.	1	2	3	4	5
<b>c.</b> Staff at this facility only accept my best effort.	1	2	3	4	5
<b>d.</b> Staff at the facility teach me how to make better decisions.	1	2	3	4	5
<b>e.</b> Staff at this facility tell me what I can do to make my life better when I leave here.	1	2	3	4	5

**17. How true do you think each statement is about staff at your facility?**

	<b>Not at all true for me</b>	<b>A little true for me</b>	<b>Somewhat true for me</b>	<b>Mostly true for me</b>	<b>Totally true for me</b>
<b>a.</b> Staff at this facility notice when I am doing a good job and tell me.	1	2	3	4	5
<b>b.</b> Staff praise me when I work hard in activities and classes.	1	2	3	4	5

c.	A lot of what I learn in my classes here I can apply to my life outside of this facility.	1	2	3	4	5
d.	I feel like I can meet the high expectations staff set for me.	1	2	3	4	5
e.	I would like to be more like the staff at this facility.	1	2	3	4	5
f.	I feel good when I behave the way staff want me to.	1	2	3	4	5

#### IV. Questions about Other Youth at this Facility

*These questions ask you some information about your peers in this facility.*

**18. How much do you agree with the following statements about youth in this facility:**

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
a.	1	2	3	4	5
b.	1	2	3	4	5
c.	1	2	3	4	5
d.	1	2	3	4	5

**19. How much do you agree or disagree with each statement about other youth in this facility:**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>a.</b> I spend a lot of time with other youth here who misbehave.	1	2	3	4	5
<b>b.</b> I spend a lot of time here with youth who follow the rules staff set.	1	2	3	4	5
<b>c.</b> I spend a lot of time here with youth who will work hard to stay out of trouble once they are released.	1	2	3	4	5
<b>d.</b> I spend a lot of time here with youth who will probably get into more trouble once they are released.	1	2	3	4	5

**20. Think about the other youth you spend the most time with at this facility. Since you have been here, how many of them have:**

	None	Some	About Half	Most	All	I do not spend time with other youth at this facility
<b>a.</b> Participated in activities at the facility.	1	2	3	4	5	6
<b>b.</b> Made a commitment to stay away from drugs and alcohol after leaving the facility.	1	2	3	4	5	6
<b>c.</b> Liked the classes they took.	1	2	3	4	5	6
<b>d.</b> Attended religious services offered at the facility.	1	2	3	4	5	6
<b>e.</b> Tried to do well in classes.	1	2	3	4	5	6
<b>f.</b> Tried to do well in therapy.	1	2	3	4	5	6

**21. Think about the other youth you spend the most time with at this facility. How much would these youth approve or disapprove of YOU doing each of the following:**

	<b>Strongly Disapprove</b>	<b>Disapprove</b>	<b>Neither Approve nor Disapprove</b>	<b>Approve</b>	<b>Strongly Approve</b>	<b>I do not spend time with other youth at this facility</b>
<b>a.</b> Participating in activities at the facility.	1	2	3	4	5	6
<b>b.</b> Making a commitment to stay away from drugs and alcohol after leaving the facility.	1	2	3	4	5	6
<b>c.</b> Liking school.	1	2	3	4	5	6
<b>d.</b> Attending religious services offered at the facility.	1	2	3	4	5	6
<b>e.</b> Trying to do well in classes.	1	2	3	4	5	6
<b>f.</b> Trying to do well in therapy.	1	2	3	4	5	6

## V. Facility Safety

*These questions will ask you how safe you feel at this facility.*

**21. Even if none of these have happened to you since you have been at this facility, how much do you fear that...**

	Not at all	Very little	Somewhat	Quite a bit	Very much
<b>a.</b> Someone will make fun of you, call you names, or insult you at this facility?	1	2	3	4	5
<b>b.</b> Someone will spread rumors about you at this facility?	1	2	3	4	5
<b>c.</b> Someone will threaten to harm you at this facility?	1	2	3	4	5
<b>d.</b> Someone will push you, shove you, trip you, or spit on you at this facility?	1	2	3	4	5
<b>e.</b> Someone will try to make you do things you do not want to do, for example, give them money or other things?	1	2	3	4	5
<b>f.</b> Someone will leave you out of activities on purpose while at this facility?	1	2	3	4	5

**22. These questions ask you about how often you have the following thoughts or emotions...**

	Not at all	Very little	Somewhat	Quite a bit	Very much
<b>a.</b> Feeling blue (sad)	1	2	3	4	5
<b>b.</b> Feeling others are to blame for most of your problems	1	2	3	4	5
<b>c.</b> Thoughts of ending your life.	1	2	3	4	5
<b>d.</b> Urges to injure or harm someone else.	1	2	3	4	5
<b>e.</b> Difficulty making decisions	1	2	3	4	5
<b>f.</b> Nervousness or shakiness inside.	1	2	3	4	5
<b>g.</b> Not feeling liked or respected by others.	1	2	3	4	5

## VI. Questions about Your Family, Friends, and Other Social Support from Home

*These questions will ask you about the support you have received from important people in your life since you have been at this facility.*

**23.** *Since you have been at this*

*facility, how much do you agree or disagree with these statements about people in your life?*

	<b>Very Strongly Disagree</b>	<b>Strongly Disagree</b>	<b>Mildly Disagree</b>	<b>Neutral</b>	<b>Mildly Agree</b>	<b>Strongly Agree</b>	<b>Very Strongly Agree</b>
<b>a. My family has really tried to help me.</b>	1	2	3	4	5	6	7
<b>b. I get the emotional help and support I need from my family.</b>	1	2	3	4	5	6	7
<b>c. My friends have really tried to help me.</b>	1	2	3	4	5	6	7
<b>d. I can count on my friends when things go wrong.</b>	1	2	3	4	5	6	7
<b>e. I can talk about my problems with my family.</b>	1	2	3	4	5	6	7
<b>f. I have friends with whom I can share my joys and sorrows.</b>	1	2	3	4	5	6	7
<b>g. My family has been willing to help me make decisions.</b>	1	2	3	4	5	6	7
<b>h. I can talk about my problems with my friends.</b>	1	2	3	4	5	6	7

*These questions will ask you about which people inside and outside this facility that may provide you with support.*

**24. Of the following people inside this facility, who do you go to most often when you feel sad or anxious? (check one)**

- Guard
- Counselor
- Teacher
- Priest/Rabbi/Other Religious Staff Person
- Probation Officer
- Social Worker
- Resident in my unit
- Other (please describe): \_\_\_\_\_
- I do not go to anyone in this facility when I feel sad or anxious.
- I have not felt sad or anxious since I have been at this facility.

**25. Of the following people inside this facility, who do you go most often for advice or help? (check one)**

- Guard
- Counselor
- Teacher
- Priest/Rabbi/Other Religious Staff Person
- Probation Officer
- Social Worker
- Resident in my unit
- Other (please describe): \_\_\_\_\_
- I do not go to anyone in this facility when I need advice.
- I have not needed advice or help since I have been at this facility.

**26. Of the following people outside of this facility, who have you most wanted to talk to when you felt sad or anxious? (check one)**

- Mother/Father/Guardian
- Brother/Sister/Sibling
- Another family member like an aunt, uncle, or cousin
- Boyfriend/girlfriend
- Teacher/Counselor/Another Adult
- Friend
- Other person (please describe): \_\_\_\_\_
- I do not usually go to anyone when I feel sad or anxious
- I do not feel sad or anxious very often.

**27. Of the following people outside of this facility, who have you most wanted to talk to for advice or help with something? (check one)**

- Mother/Father/Guardian
- Brother/Sister/Sibling
- Another family member like an aunt, uncle, or cousin
- Boyfriend/girlfriend
- Teacher/Counselor/Coach/Another Adult
- Friend
- Other person (please describe): \_\_\_\_\_
- I do not usually talk to anyone when I need advice or help
- I do not need help or advice very often.

**28. Of all the people inside and outside this facility, who are you most motivated to make positive changes for? (check one)**

- Facility Guard
- Facility Counselor
- Facility Teacher
- Facility Priest/Rabbi/Other Religious Staff Person
- Probation Officer
- Social Worker
- Resident in my facility unit
- Mother/Father/Guardian
- Brother/Sister/Sibling
- Another family member like an aunt, uncle, or cousin
- Boyfriend/girlfriend
- Teacher/Counselor/Coach/Another Adult
- Friend
- Other person (please describe): \_\_\_\_\_
- No one

**29. Do you CURRENTLY have a boyfriend or girlfriend outside of this facility?**

- Yes** → How many months have you been with your boyfriend or girlfriend? \_\_\_\_\_ Months
- No**

**30. Visits from Home**

*Think about someone from home who you are MOST LIKELY to go to when you feel stressed or upset. This special person could be your mother, your father, your boyfriend or girlfriend, your siblings, your best friends, or anyone that you go to when you need emotional support. Think about this special person when you answer these questions.*

a. Who is the special person from home that you are most likely to go to when you feel stressed or upset?:

- Mother/Father/Guardian
- Brother/Sister/Sibling
- Another family member like an aunt, uncle, or cousin
- Boyfriend/girlfriend
- Teacher/Counselor/Another Adult
- Friend
- Other person (please describe): \_\_\_\_\_

b. How many times have you been visited by this special person since you have been in this facility? \_\_\_\_\_

c. How many times have you spoken with this special person on the phone since you have been here? \_\_\_\_\_

d. How many times have you received an email, text, or letter from this special person since you have been here? \_\_\_\_\_

<b>31. How much do you agree or disagree with each statement about this special person?</b>	<b>Very Strongly Disagree</b>	<b>Strongly Disagree</b>	<b>Mildly Disagree</b>	<b>Neutral</b>	<b>Mildly Agree</b>	<b>Strongly Agree</b>	<b>Very Strongly Agree</b>
<b>a. This special person is around when I am in need.</b>	1	2	3	4	5	6	7
<b>b. This special person is someone with whom I can share my joys and sorrows.</b>	1	2	3	4	5	6	7
<b>c. This special person is a real source of comfort to me.</b>	1	2	3	4	5	6	7
<b>d. This special person cares about my feelings.</b>	1	2	3	4	5	6	7

**32. How satisfied are you with the number of times you have been visited by this special person since you have been here?**

- Very Unsatisfied
- Unsatisfied
- Neutral
- Satisfied
- Very Satisfied

**33.** How many times have you been visited by anyone from home since you have been at this facility? \_\_\_\_\_ **times**

**34. Do any of the following make it difficult to see or talk to people from home while you are here? (check as many answers as apply):**

- The facility only allows certain people to visit.
- The facility visiting hours are not at convenient times.
- The facility visiting hours are not long enough.
- Your friends, family, and other people in your support network are not trying to visit you enough.
- The facility is too far away from home.
- Your friends, family, or other people from home cannot afford to visit.
- You do not want to talk or visit with people in your close support network.
- My friends, family, or other people from home do not like to visit me here.
- I do not have family, friends, or other people from home who would visit me here.
- Other (please explain): \_\_\_\_\_

*[Each Question Asked Only of Certain Facilities at Their Request]*

These last questions will ask you about the Ropes Course that you might have participated in at this facility.

**35. How true are these statements about the Ropes Course at this facility?**

	Not at All True for Me	A Little True for Me	Somewhat True for Me	Mostly True for Me	Totally True for Me	I Did Not Participate in the Ropes Course
a. I learned a lot about how to communicate with other people through the Ropes Course.	1	2	3	4	5	Did Not Participate
b. I learned a lot about how to work through problems during the Ropes Course.	1	2	3	4	5	Did Not Participate
c. Through this course, I learned how to stay calm even when I was frustrated.	1	2	3	4	5	Did Not Participate
d. I learned a lot about what my strengths are during this course.	1	2	3	4	5	Did Not Participate
e. I learned a lot about how to work with others during the Ropes Course.	1	2	3	4	5	Did Not Participate
f. I think what I learned through the Ropes Course will help me stay out of trouble when I leave this facility.	1	2	3	4	5	Did Not Participate
g. This course taught me how to think about what would happen before I made a decision.	1	2	3	4	5	Did Not Participate
h. Overall, I think what I learned in the Ropes Course was very helpful.	1	2	3	4	5	Did Not Participate

These last questions will ask you about the Brother to Brother or Sister to Sister Program that you might have participated in at this facility. As a reminder, this program was once a month, and a guest speaker from the community came to talk to you during a special dinner.

36. How many times have you heard a guest speaker while you have been at this facility? (check one)

- 1 time
- 2 times
- 3 - 4 times
- 5 - 6 times
- 7 - 8 times
- 9 - 10 times
- More than 10 times

37. Who was your favorite guest speaker?: \_\_\_\_\_

**38. How true are these statements about how you felt about the program overall?**

	<b>Not at All True for Me</b>	<b>A Little True for Me</b>	<b>Somewhat True for Me</b>	<b>Mostly True for Me</b>	<b>Totally True for Me</b>	<b>I Did Not Participate in this Program</b>
a. I really enjoyed having dinner with the guest speakers.	1	2	3	4	5	Did Not Participate
b. I looked up to most of the guest speakers as role models.	1	2	3	4	5	Did Not Participate
c. The guest speakers gave me a lot of good advice.	1	2	3	4	5	Did Not Participate
d. The guest speakers helped encourage me to do my best at the facility.	1	2	3	4	5	Did Not Participate
e. I think what I learned from the speakers helped me feel like I could stay out of trouble when I leave this facility.	1	2	3	4	5	Did Not Participate
f. The dinner they served when the guest speakers came was really good.	1	2	3	4	5	Did Not Participate
g. Overall, I think the Brother to Brother/Sister to Sister Program was really valuable to me.	1	2	3	4	5	Did Not Participate

These last questions will ask you about the Creating a Successful Environment (CASE) Program that you might have participated in at this facility. As a reminder, this program is the set of rules that you follow here, and the rewards that you sometimes get for good behavior.

**39. How true are these statements about the Creating a Successful Environment Program (CASE) at this facility?**

	<b>Not at All True for Me</b>	<b>A Little True for Me</b>	<b>Somewhat True for Me</b>	<b>Mostly True for Me</b>	<b>Totally True for Me</b>	<b>I Did Not Participate in this Program</b>
a. The rewards I could get through the behavior program made me want to work hard to follow the rules.	1	2	3	4	5	Did Not Participate
b. I understood what behaviors would earn me rewards.	1	2	3	4	5	Did Not Participate
c. I could explain to other youth here how to move from Tier One to Tier Two.	1	2	3	4	5	Did Not Participate
d. I feel like the rule system is fair to all youth.	1	2	3	4	5	Did Not Participate
e. I think the rule system has helped me learn how to manage my behavior even outside of this facility.	1	2	3	4	5	Did Not Participate
f. I felt like staff gave out rewards fairly to all youth.	1	2	3	4	5	Did Not Participate
g. I feel safer at this facility because staff enforce the rules of the program.	1	2	3	4	5	Did Not Participate
h. I like that everyone knows how to behave because of the CASE behavior system.	1	2	3	4	5	Did Not Participate
i. Overall, I think the CASE behavior system is really valuable.	1	2	3	4	5	Did Not Participate

These last questions will ask you about the Forward Thinking Program that you might have participated in at this facility. As a reminder, this is the program where you work on journals and go to group meetings to talk about your thoughts, feelings, and behaviors.

**40. How true are these statements about how you felt about the Forward Thinking program?**

	Not at All True for Me	A Little True for Me	Somewhat True for Me	Mostly True for Me	Totally True for Me	I Did Not Participate in this Program
a. The group meetings helped me learn how to manage my behavior even outside of this facility.	1	2	3	4	5	Did Not Participate
b. Writing in the journal helped me think about how I could change the behaviors that got me here.	1	2	3	4	5	Did Not Participate
c. I got a lot of good advice out of the group meetings.	1	2	3	4	5	Did Not Participate
d. The journals really helped me think about how to stay out of trouble when I leave here.	1	2	3	4	5	Did Not Participate
e. Overall, I think the Forward Thinking Program was really valuable to me.	1	2	3	4	5	Did Not Participate

**41. Which of these journals were the most helpful to you (select any that apply)?**

- What Got Me Here
- Responsible Behaviors
- Handling Difficult Feelings
- Substance Using Behaviors
- Family
- Victim Awareness
- Individual Change Plan
- Relationships and Communications
- Reentry Plan

**YOU ARE DONE WITH THE SURVEY! THANK YOU!**

## Appendix B: IRB Letter of Approval



University of Nevada, Reno

Research Integrity Office  
 218 Ross Hall / 331,  
 Reno, Nevada 89557  
 775.327.2368 / 775.327.2369 fax  
[www.unr.edu/research-integrity](http://www.unr.edu/research-integrity)

DATE: August 13, 2014

TO: William Evans, PhD

FROM: University of Nevada, Reno Social Behavior and Education IRB

PROJECT TITLE: [614588-2] Nevada Detention Center Project: Full Study

REFERENCE #: 2014S090

SUBMISSION TYPE: Amendment/Modification

ACTION: APPROVED

APPROVAL DATE: August 13, 2014

EXPIRATION DATE: June 19, 2015

REVIEW TYPE: Expedited Review

REVIEW CATEGORY: Expedited review category # 7

The above-referenced protocol was reviewed and approved by one of UNR's Institutional Review Boards in accordance with the requirements of the Code of Federal Regulations on the Protection of Human Subjects (45 CFR 46 and 21 CFR 50 and 56). This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission. This submission has received Expedited Review based on applicable federal regulations.

Please prepare your renewal form at least 4-6 weeks prior to your expiration date using IRBNet. <https://www.irbnet.org>

Our office will send you courtesy reminder to submit your renewal form. Unless renewed, the IRB only has authority under the federal regulations to allow a study to be open 12 months or less. There is no grace period. The study will be closed on the above stated expiration date unless the IRB receives/approves a new renewal form.

Instructions on preparing a modification or submitting your renewal is located on our web site at <http://www.unr.edu/research-integrity/human-research-protection/performing-research> Call our office if you have any questions or problems with use of IRBNet software.

#### Approved Documents

- Amendment/Modification - Modification to add staff to help with data collection (UPDATED: 08/12/2014)
- Protocol - Revised protocol application with new research staff added (UPDATED: 08/12/2014)

Modifications: Addition of Eric Killian, Willie Daugherty, JR Medoza, and Steven Hollingsworth to the research team

**Problems Researchers Must Report to the Research Integrity Office or IRB Staff (to be reported as soon as possible, but within 10 business days)**

- New or additional risks: Outcomes that the principal investigator believes are unexpected, related to the research, and suggest the research may place participants or others at greater risk of harm than was previously known or recognized
- Changes to expected harms or benefits: Any report indicating the frequency or magnitude of harms or benefits may be different than initially presented to the IRB
- Privacy: Any invasion of privacy related to an individual's participation in research
- Confidentiality: Any breach of confidentiality involving research data
- FDA Changes: Any change in FDA labeling or approval for a drug, device or biologic used in a research protocol
- Immediate harm: Any change to the protocol to eliminate an apparent immediate hazard to a research participant, prior to seeking IRB review and approval
- Prisoner: Any incarceration of a participant in a protocol not approved to enroll prisoners
- Sponsor: Any event that requires prompt reporting to the sponsor
- Sponsor: Any sponsor-imposed suspension for risk
- Protocol change: Any accidental or unintentional change to the IRB approved protocol that harmed participants or others, indicates participants or others may be at increased risk of harm, or has the potential to recur
- Device: Any unanticipated adverse device effect
- Department of Health: Any non-compliance identified by Department of Health audit or monitoring
- Federal agency: Any investigation or report by federal agency related to the research
- Medical license or practice changes: Any loss of license or hospital privileges by any researcher on the study
- Complaints: Any complaints that suggest participants or others may have been harmed or placed at increased risk of harm

#### PI Responsibilities

- Maintain an accurate and complete protocol file.
- Submit continuing projects for review and approval prior to the expiration date.
- Submit proposed changes for review and approval prior to initiation, except when necessary to eliminate apparent immediate hazards to subjects. Such exceptions must be reported to the IRB at once.
- Report any unanticipated problems which may increase risks to human subjects or unanticipated adverse events to the IRB within 5 days.
- Submit a closure request 10 days after project completion to the IRB.

If you have any questions, please contact Valerie Smith at 775.327.2368.

Sincerely,



Janet Usinger, PhD  
Chair, Social Behavioral Education IRB  
University of Nevada Reno

## **Appendix C: Nevada Detention Project Pilot Study: Interview Question Guide**

**[read to participant].** *In this part of the study, I am going to ask you a series of questions about the survey you just completed. I want to know what you thought of it, whether there were any questions or directions you found confusing, and how you felt when you completed it. I will also ask you about your experiences with the rules at the facility, your experiences with staff and other youth here, and about any visits or contact you have had with your friends or family. You can say “pass” at any time to any question. You can also choose not to participate in this part if you do not want to. I’m going to give you a blank copy of the survey you just finished so we can discuss it.*

*Before we begin though, I’d like to know a little more about you. What did you do today so I can get a sense of your daily life here. Great, thanks for that. Tell me where you grew up? Was it around here? Great. Now I’m going to ask you some questions about the survey you just completed.*

*Proceed to questions below.*

### **Reaction to Survey**

**QUESTION 1:** "What was your initial reaction to the survey and the questions we asked?"

1. Probe 1: What kinds of emotions did you feel when you answered the questions?
2. Probe 2: Did you think the questions were interesting to answer?

3. Probe 3: Did it make you feel uncomfortable to give your opinions about the facility?
4. Probe 4: Did you like giving your opinions about the facility, staff, other youth here?

### **Content of Survey: Rule-Breaking Behaviors**

**QUESTION 2:** “In the survey we asked you some questions about rule-breaking at the facility. Why do you think youth break rules at this facility?”

1. Probe 1: Do you think other youth at this facility encourage you to break rules?
2. Probe 2: Do you think other youth at this facility help make sure you don't break any rules at this facility?
3. Probe 3: Do you think staff at this facility would care or notice if youth broke the rules?
4. Probe 4: Do you think the rules at this facility are fair? Do staff enforce the rules equally?

### **Content of Survey: Post-Detention Likelihood of Success**

**QUESTION 3:** “Do you think your time at this facility will have an impact on how you will do once you are released from the facility?”

1. Probe 1: How have staff at this facility helped make your chances of success after leaving this facility better?

2. Probe 2: How have staff at this facility helped make your chances of success after leaving this facility worse?
3. Probe 3: How have other youth at this facility helped make your chances of success after leaving this facility better?
4. Probe 4: How have other youth at this facility helped make your chances of success after leaving this facility worse?

### **Content of Survey: Support from Home**

**QUESTION 4:** “Have you had any contact from your friends, family, boyfriend/girlfriend, or other people from home since you have been at this facility?”

1. Probe 1: Who have you had contact with since you have been here and how often?
2. Probe 2: How have you been contacted (email, phone call, letter, in-person visits)?
3. Probe 3: Has it helped you adjust to detention to have contact from people at home? How has it helped?
4. Probe 4: Outside of this facility, who do you go to most often for support when you are feeling stressed or need help with something?
5. Probe 5: Inside this facility, who do you go to most often for support when you are feeling stressed or need help with something?
6. Probe 6: What makes you feel better when you’re in this facility?

**Structure of Survey: Comprehension**

**QUESTION 5:** “While you were taking the survey, were there any questions that were confusing to you or any that you did not know how to respond to?”

1. Probe 1: Some of the questions in the survey asked you to skip to a different section (*point out those questions on blank copy of survey*). Did you find those directions confusing?
2. Probe 2: If you had to pick a few items that were the most confusing or hardest to answer, which ones would you pick?
3. Probe 3: Is there something about this facility that you really wish we had asked you about?

**[Also read to participant]**

*Thank you so much for helping me out with these questions. I really appreciate it. Do you have any questions for me? You can go ahead and go back to your activities now. There is a staff member outside who will walk you back.*