THESIS

MENTORING FIRST-TIME AND LOW-LEVEL DELINQUENT ADOLESCENTS:

THE IMPACT OF AN ON-CAMPUS MENTORING PROGRAM ON SENSE OF SELF AND RULE

NON-COMPLIANCE

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ABSTRACT

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Researchers have linked sense of self variables such as self-esteem and self-concept to delinquent activity among adolescents for decades, finding that delinquency is often associated with lower levels of sense of self and proposing that lower self-esteem may motivate delinquent behavior. This thesis first considers relevant research and theories, and then presents an evaluation of Campus Corps, a college-campus mentoring program for low-level or first-time offending youth. Using hierarchical regression models, it was determined that youth in Campus Corps, compared to non-participants, experienced higher levels of self-esteem, self-concept, and feelings of being important to others. Youth in higher-quality mentor relationships experienced, on average, lower rule non-compliance, higher self-esteem, higher feelings of being noticed by others, and higher feelings of being important to others. This program evaluation contributes to the small body of research on mentoring programs for delinquent and status-offending youth, adding to the definition of what makes a mentoring program effective.

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CHAPTER I

Introduction

Various philosophies exist about how to best prevent youth from repeating delinquent or status offending behavior. Some believe that without intervention, status offenders may go on to pose a threat to society. These scientists tend to favor programs that are designed to treat suspected underlying causes of delinquency (Cocozza et al., 2005). Others normalize delinquent behavior during adolescence, and argue that labeling adolescents as delinquent only serves to increase recidivism by contributing to a delinquent self-image and associated behavior (Jennings, Gibson, & Lanza-Kaduce, 2009). Empirical evidence does show that committing a delinquent act is not an uncommon experience in the life of a youth, and most do grow out of this behavior (Stewart, 2010). However, some youth continue to re-offend throughout their juvenile years and others go on to continue offending as adults (Stewart, 2010). Because the estimated cost of delinquency and crime to society is extensive, it is important to consider how to prevent continued delinquency among youth.

The focus of this study is on a college-campus mentoring program, called Campus Corps, which aims to prevent continued delinquency in youth. The program pairs first-time or low-level status offending youth, aged 11 to 18, with undergraduate student mentors in a group setting of other youth and mentors. Campus Corps helps keep youth out of the justice system by utilizing a holistic, relational intervention: community, campus-based mentoring focusing on school success, higher education, career opportunities, and relationship building. Campus Corps was designed to address issues associated with at-risk, offending youths, such as substance use and mental health by improving their senses of self, getting youth engaged in enriching

activities, and increasing school success and involvement.

It is assumed that one way in which Campus Corps will reduce recidivism rates among participating youth is by improving their sense of self (e.g., self-esteem, self-concept, and sense of mattering in the world). Research has consistently linked sense of self with delinquency, but the nature of this relationship continues to be explored. For instance, some scholars have shown that delinquent youths have lower sense of self than non-delinquent youth (e.g., Carroll, Houghton, Wood, Perkins, and Bower, 2007; Herrmann, Mcwhirter, and Sipsas-Herrmann, 1997; Gold & Mann, 1972). Additionally, delinquent activity has been linked to increasing levels of self-esteem, so theorists have suggested that youth with low self-esteem engage in delinquent activity in order to increase their self-esteem levels. As this evidence is reviewed, it will be argued that improving youth's sense of self through a positive, effective mentoring relationship shows promise as a way to reduce the depth of youth involvement in delinquent activities.

I hypothesize that Campus Corps mentoring will decrease youth's rule non-compliance and increase youth's sense of self, including their self-esteem, self-concept, and feelings of mattering, by facilitating a positive relationship with a mentor. It is suggested that this relationship will serve as a corrective experience for the youth, allowing the youth to begin seeing him- or herself in a better, more positive light. The mentor-mentee relationship will also be considered to examine if a higher-quality relationship will bring about greater changes in sense of self, mattering, and/or attitudes toward delinquency.

Based on research described above and below, the following hypotheses were proposed:

Hypothesis 1

The first hypothesis is that Campus Corps will have a direct impact on rule non-compliance, where Campus Corps participants will have lower levels at the end of the program

than comparison group youth. This hypothesis is based on findings that mentoring has changed

problematic behaviors in at-risk youth (e.g., Keating, Tomishima, Foster, & Alessandri, 2002).

Hypotheses 2 and 3

Two hypotheses are specified for self-esteem and self-concept. The hypothesis

specified related to self-esteem is that Campus Corps will have a direct impact on youth's self-

esteem, where Campus Corps participants will have higher levels at the end of the program than

the comparison-group youth. The hypothesis specified related to self-concept is that Campus

Corps will have a direct impact on youth's self-concept, where Campus Corps participants will

have higher levels at the end of the program than the comparison-group youth. This hypothesis

is important because of empirical findings suggesting that low self-concept and self-esteem are

associated with delinquency (e.g., Herrmann et al., 1997) and theoretical ideas regarding sense

of self as a motivator of delinquency (Ajlouny, 2006). Evidence that mentoring shows trends in

increased self-concept and self-esteem (e.g. Eby, Allen, Evans, Ng, & DuBois, 2008) supports the

hypothesis that a mentoring program may influence sense of self in its participants.

Hypothesis 4

The hypothesis regarding feelings of mattering is that Campus Corps will directly impact

a youth's feelings of mattering, where Campus Corps participants will have higher levels at the

end of the program than the comparison-group youth. This hypothesis is based on evidence

that suggests mattering and sense of self are correlated (Elliott et al., 2004), but also considers

that mattering will be especially relevant to sense of self when mentoring is the treatment for

delinquent youth.

Hypothesis 5

A final hypothesis is that mentor relationship quality will be associated with dependent

variables, so that higher quality mentor relationships will be associated with improvements in

each of the outcomes. This hypothesis is supported by research showing the importance of

measuring the quality of mentor relationships because it tends to make a difference in research

findings, where youth in higher-quality relationships are discovered to benefit more greatly

(Grossman & Rhodes, 2002; Slicker & Palmer, 1993).

CHAPTER II

Literature Review

Improving a youth's sense of self has the potential to help them avoid becoming

involved in delinquent activities, and possibly decreasing involvement after it has already been

initiated. In order to demonstrate this, research on low-level offending youth and the outcomes

related to intervention will be presented. Then, the literature on the relationship between

sense of self and delinquency rates will be reviewed. An overview of self-enhancement theory

(Kaplan, 1978) will present more evidence suggesting that delinquency raises self-esteem in

adolescents. An overview of attachment theory will explain that securely attached youth

engage in less delinquency, highlighting the importance of a close and secure relationship as a

predictor of delinquency. A relatively new concept in the sense of self literature, mattering, will

be described, and it will be argued that a sense of mattering may be particularly responsive to

mentoring. The literature review will examine other mentoring programs and what has made

the programs successful. Finally, the question of what makes a mentor-mentee relationship

effective will be considered. Overall, the following literature review will argue that improving

sense of self shows promise as a way to curb delinquency.

Status Offending Youth

Campus Corps is offered to low-level offending youth, the majority of which have

committed status offenses. Status offenders are juveniles who have engaged in actions that

only individuals above a certain age are allowed to engage in, such as truancy, running away

from home, and possession of tobacco or alcohol. Status offenses account for an estimated 18%

of all juvenile arrests (American Bar Association, Center for Children and the Law, 2010). In

2004, over 400,000 youth were arrested or held in limited custody because of a status offense

arrest (American Bar Association, Center for Children and the Law, 2010) and in 2006 an

estimated 2,219,600 total juvenile arrests were made (Snyder, 2008).

While these offenses typically are not harmful or victimizing to members of society,

research shows that status offenses and later delinquency are linked to arrests (American Bar

Association, Center for Children and the Law, 2010). For example, Henry and Huizinga (2007)

found that truancy was a significant predictor of initiating alcohol, tobacco, and marijuana use

during adolescence. Thus, it can be assumed that children who are delinquent in minor ways

are at higher risk of engaging in future acts of more serious delinquency.

Status offenders are reprimanded by law enforcement and the justice system in a variety

of ways. Not all status offenders are referred for formal court processing; some are handled by

law enforcement and dismissed and others are formally adjudicated, possibly even sent to

justice facilities for detainment. According to the Office of Juvenile Justice and Delinquency

Prevention (OJJDP), between 1989 and 1998, 4 in 10 runaway cases and just 1 in 10 truancy and

ungovernability cases were referred by law enforcement to be formally handled in juvenile

court. This indicates that most status offenders are simply returned to their families, while

others endure more extensive reprimands. An estimated 159,400 status offenders were

officially processed in juvenile justice courts in the United States in 2004, a 39% increase from

1995. Of the status offenders petitioned to court, 63% were adjudicated, compared with 50% in

1995. About 7% of status offenders were securely detained, compared with 6% in 1995 (Stahl,

2008).

Diversion Programs. Low-level delinquent youth and status offenders who are not

petitioned for formal court processing are often referred to community agencies, many of which

were developed out of the desire for appropriate alternatives to arrest and formal processing in

the justice courts (Cocozza et al., 2005; Jennings et al., 2009). With the introduction of the

Juvenile Justice and Delinquency Prevention Act in 1974, states have been finding ways to deter

juveniles from committing delinquent acts, instead of just reacting to delinquent or status

offending activity.

Since the 1960s, rather than merely punishing and confining offending youth, juvenile

justice systems across the United States have been creating plans for constructive and

supervised activities to teach youth how to be productive members of society. These plans are

known as diversion plans and involve the state taking on the role of *parens patriae*, acting in the

best interest of the child (Stewart, 2010). Diversion is meant to reduce the depth of a youth's

entry into the juvenile justice system by providing opportunities for expunging charges and

avoiding adjudication (Chapin & Griffin, 2005). The plan is often implemented when the youth

has received legal charges for the first time in order to divert the youth from continuing on a

delinquent path. A diversion plan could include several components such as community service,

drug or alcohol education, and enrichment activities.

Research on juvenile diversion programs is not systematically conducted and thus claims

about their efficacy in reducing recidivism are inconclusive. However, evidence exists that

diversion programs are meeting intended goals, such as lightening caseloads. Historically,

juvenile diversion programs were implemented to decrease juvenile court caseloads so courts

would be more efficient in processing more serious offenses. Diversion programs were also

hoped to be more cost-effective, less stigmatizing, and less coercive (Stewart, 2010).

Additionally, diversion was designed to keep offending youth in their home with their families

and communities. When youth are incarcerated, their association with negative peers increases

and their access to positive influences decreases. This is likely the reason that youth who are

placed in correctional facilities tend to re-offend more than youth placed elsewhere (Bankston,

2009; Nee & Ellis, 2005).

Some empirical evidence exists suggesting that diversion programs meet these intended goals. While dated, an important study was conducted by Osgood and Weichselbaum (1984). After examining nine diversion programs in seven metropolitan cities, the authors concluded that the diversion programs informed by a theoretical background provided a significantly different experience from a formal adjudication process. The study found that diversion programs served the needs of the youth whereas the justice system was concerned with social control and coercion. Along with other studies showing that diversion programs reduce the number of cases formal courts process (Stewart, 2010), this evidence suggests that diversion programs are reducing the depth of youth's involvement with formal courts.

The results on whether diversion helps reduce recidivism are inconclusive. Stewart (2010) speculated that this is because communities implement differing plans. For example, one community may require community service while the youth is on probation, whereas another community may require probation, community service, education, and a restorative justice component, such as meeting with victims. Even though results are inconclusive, a handful of researchers in the 1980s evaluated the efficacy of diversion programs in relation to recidivism and found that their programs produced lower rates of recidivism. For example, Davidson, Redner, Blakely, Mitchell, and Emshoff (1987) evaluated several diversion plans that utilized specific interventions (all of which centered on a relationship with a college student volunteer). The study found that the these interventions produced lower recidivism rates compared to an intervention within the juvenile justice system, a placebo group, and a group that experienced a formal juvenile court system processing. Other studies have found no positive impact on recidivism and subsequent deviant behavior from implementing diversion plans (Stewart, 2010). Because of these differing results, and the fact that evaluations of diversion plans are not being

systematically conducted, it is not possible to conclude that diversion programs are effective in reducing recidivism.

What is Sense of Self?

In order to understand the idea that improving sense of self may change delinquent activity, we must examine the constructs that researchers use to assess how one feels about one's self and how these feelings could motivate behavior. Sense of self is defined as the way a person feels about him or herself, and it has been conceptualized in numerous ways by researchers over time, with two common variables being self-concept and self-esteem. Self-concept refers to a person's perception of how or what they are, whereas measures such as self-esteem and self-worth refer to how good or bad, confident or insecure, valuable or invaluable a person perceives him- or herself to be (Sigelman & Rider, 2009). While these two concepts are almost always considered to be unique from one another, they both refer to how an individual seems to him- or herself, thus they both refer to a person's sense of self.

Delinquency and Sense of Self

Sense of self has been historically linked to delinquent behavior. Several pieces of evidence show the relationship between self-concept and delinquency. In 1972, Gold and Mann found that more delinquent youths had significantly lower levels of self-esteem. Several studies have analyzed a longitudinal data set of boys in the tenth grade from 1966 to 1969 (Bachman, O'Malley, & Johnston, 1978) and have consistently found a moderate to significant association between self-esteem and delinquency where lower self-esteem precedes delinquency (Bynner, O'Malley, & Bachman, 1981; Mason, 2001; Rosenberg & Rosenberg, 1978). Kaplan (1978) reported a substantial base of evidence in a series of papers that examined changes in self-esteem and delinquency in a three-wave panel of junior high school students. The main finding was that self-esteem was initially low for those who increased their delinquency over time.

Carroll et al. (2007) showed that students with low levels of delinquency had significantly higher classroom, peer, and confidence self-concepts. Additionally, the number of arrests (a measure of delinquency) a youth experiences is negatively correlated with self-concept (Jennings et al., 2009). These findings highlight the link between sense of self and delinquency.

More recent research has expanded self-concept by considering it composed of different dimensions—such as athletic competence or morality—which has enabled researchers to discover more precise ways in which sense of self is associated with delinquency in adolescents. Herrmann et al. (1997) revealed a predictive relationship between self-concept and gang involvement when they looked at multiple dimensions of self-concept. They found that the competence dimension was negatively correlated with gang involvement, such that this dimension of self-concept predicted classification into high and low involvement groups a significant portion (61.5%) of the time. The authors declared these results significant enough to conclude that self-concept played a role in gang involvement. Forney, Crutsinger, and Forney (2006) measured self-perception of morality as a dimension of self-concept, and found that adolescents who rated themselves lower on this variable had greater shoplifting involvement. Church, Wharton, and Taylor (2009) showed that higher self-image is an indicator in the decision not to be delinquent, and suggested that if a youth can maintain a strong positive self-image, they may be able to resist the temptation to commit deviant acts.

These findings have shown that sense of self variables, such as self-esteem and self-concept, are associated with delinquency, where lower levels of sense of self are associated with higher rates of delinquent activity among youth. Thus, it stands to reason that improving sense of self may reduce the chance of delinquency in adolescents.

Theory Linking Sense of Self and Delinquency

Based on evidence that self-concept and delinquency are linked, researchers began to examine whether one variable predicted or preceded the other. Many studies examining the link between dimensions of self-concept and delinquent behavior have concluded that low self-concept predicts or precedes delinquency (Church et al., 2009; Herrmann et al., 1997). These pieces of evidence may support a postulation made by Cohen (1955) that delinquent behavior is an attempt to enhance a low self-concept and acquire status. Reckless, Dinitz, and Murray (1956) expanded on this postulation by suggesting that self-esteem insulates against delinquency. These theorists saw committing delinquent acts as a way for youth to change comparison groups, so they no longer had to endure the strain of being unable to access mainstream approval (Ajlouny, 2006). This idea, which will be explored below, is known as self-enhancement theory. If low self-concept predicts delinquency, then it stands to reason that increasing self-concept may be a legitimate way to prevent a youth's involvement in delinquent activities, and possibly decrease involvement after it has already been initiated. Next, Kaplan's (1978) self-enhancement theory and attachment theory will be considered to examine how sense of self is associated with delinquent activities, and how mentoring may be able to change delinquency by improving sense of self.

Self-Enhancement Theory. Kaplan's (1978) self-enhancement theory proposed that adolescents commit delinquent acts in order to improve their self-esteem. Kaplan offered evidence from a panel of adolescents over time (Bachman et al., 1978) that for students whose self-esteem was initially declining in the first year of the study, an increase in delinquency was associated with an increase in self-esteem during the second year of the study. Put simply, it appeared that being delinquent helped raise the student's self-esteem. Another finding by Kaplan showed that deviant patterns helped reduce feelings of self-rejection for those who were

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initially high in self-rejection. This effect occurred only in settings where deviant patterns fit

with valued social roles and subjects could defend against any negative responses of others.

Kaplan and Liu (2000) provides an example of such a setting in his study of self-enhancement

theory in relation to social protesting youth. Kaplan found that less typical youth (ones who did

not feel they could get ahead in society if they worked hard enough) have higher levels of self-

derogation. Kaplan did not measure self-esteem in this study, however self-derogation and self-

esteem have been positively correlated in his other studies (Kaplan, 1978). More typical youth

who feel they could have their needs met in society tended to have lower levels of self-

derogation. This is reflective of the idea that youth who perceive themselves as unable to have

their needs satisfied in conventional society feel worse about themselves. These findings

support the idea that delinquent behavior is an attempt to increase feelings of low, declining

self-esteem, whereby engaging in this behavior enhances self-concept, largely by alleviating an

adolescent of the need to compare themselves to conventional standards (Carroll et al., 2007).

This lines up with the idea that being delinquent frees the youth from the distress of trying to

achieve mainstream approval because their new delinquent status shifts them into a position

where they are obtaining approval from a different, more counterculture social system (Ajlouny,

2006).

It should be noted that not all research studies have discovered that measures of low

self-concept always precede involvement in delinquent behavior. For example, Wells and

Rankin (1983) found no effects of self-esteem on subsequent delinquent activities when they

controlled for prior causal variables including academic grades, positive family relationships, and

social rejection. Also, these researchers found a derogatory effect of delinquency on self-

esteem, such that those involved in subsequent delinquent activities had lower self-esteem

levels than before they became delinquent. Kaplan (1978) has suggested that those with low

self-esteem are motivated to be delinquent but delinquency will only improve self-esteem when it is an alternative to past conventional activities. Thus, the finding that delinquency has a negative impact on self-esteem may be skewed given that the study's analysis may have been applied too broadly. This finding does not negate the theoretical postulation that delinquent activities are an attempt to improve self-concept; the fact that delinquency does not always make a youth feel better about him- or herself does not mean the youth will not be motivated to try.

Contributions from Attachment Theory. Attachment theorists would likely argue that youth would not be motivated to improve their self-esteem levels through delinquency if they were in a positive, supportive, and secure relationship with a strong attachment figure. Attachment theorists (e.g., Parker & Benson, 2004) have examined delinquency in youth and found that secure attachment with parents is associated with lower levels of delinquency. This section will consider this relationship and the suggested reasons attachment theorists believe it exists. This theory will be reviewed because it supports the idea that the parent-child relationship is highly important to a child's behavior, and although mentoring may not have the capacity to change attachment styles, it may be able to change how a youth feels about their relationships with parents (e.g., Rhodes, Grossman, & Resche, 2000). Additionally, by changing a youth's internal working model, a high-quality, secure mentor-mentee relationship may serve as a corrective experience where a youth comes to see him- or herself as capable and worthy of care and support.

Delinquency and problem behaviors have been interpreted as products of insecure or disorganized attachment with parents. According to Bowlby (1973), unfailing parental support is the key component for those who grow up to become stable and self-reliant. In a study of over 16,000 adolescents, Parker and Benson (2004) supported this basic tenet of attachment

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theory. Compared to teens in families with low support from parents (a variable the authors

found positively correlated with secure attachment), those in families with higher parental

support had significantly lower substance use and misconduct levels. Parental support was

negatively correlated even with more serious misconduct, like cocaine usage and delinquency.

Niccols and Feldman (2006) explained the importance of attachment in child behavior by

arguing that, theoretically, children have less to lose by disobeying a parent with whom they

have a disorganized or insecure attachment. Bosmans, Braet, Van Leeuwen, and Beyers (2006)

showed that attachment mediates negative parental control and problem behavior in 10- to 15-

year-olds. Whereas parenting behaviors such as control may become less relevant in predicting

adolescent behavior, attachment may remain a significant element of the parent-child

relationship that prevents adolescents from engaging in externalizing behavior, such as

delinquency. All of these findings support attachment theory's emphasis on the parent-child

relationship being a primary influence on a child's behavior. These findings also seem to extend

attachment theory by suggesting that parental support through attachment provides

adolescents with a coherent schema, which can be used as a map to allow for exploration

without running into problematic or dangerous aspects of the environment (Parker & Benson,

2004). In this way, attachment with a primary supportive figure helps youth avoid becoming

delinquent. While it is not likely that mentors will become attachment figures, mentors can act

as a consistent, stable, and supportive presence in an adolescent's life—someone to whom the

youth can matter.

The idea that strong bonds matter to delinquency is reflected by the Social

Development Model created by Catalano and Hawkins (1996) based upon data collected from

the Seattle Social Development Project, a community study of childhood risk factors. The model

hypothesizes that children become bonded to families and social groups that reward them for

their involvement and present them with opportunities. These bonds create a positive

development trajectory that usually does not involve the degree of delinquency seen in children

who are involved in environments without these bonds (preventionaction.org, 2008). The

model states that children will adopt the beliefs and behavioral patterns of the family,

community, or social group to which they are most strongly bonded. Thus, children bonded to

antisocial communities or social units will manifest the problem behaviors seen in the unit.

Similar to an attachment perspective, the model suggests that children will behave according to

the norms they were socialized in because deviant behavior (i.e., non-normative behavior) could

threaten the security of the attachment (Cohen, 2008). Thus, the model suggests that

delinquent youth are delinquent largely because of a missing or weak bond to a prosocial unit of

some type.

In a case where the mentor becomes a stable and supportive presence, views that the

youth has about him- or herself may change. Bowlby's (1973) concept of the internal working

model is relevant to the change in sense of self that may come with mentoring. Mentors may

be able to help improve sense of self by changing a youth's internal working model, or put

simply, helping the youth see themselves in a new, more positive light. Internal working models

are cognitive representations of relationships based on past interactions, and they help a youth

know what to expect from relationships (Shomaker & Furman, 2009). In considering how

mentoring benefits adolescents, Rhodes (2004) proposed that mentors can help improve a

youth's internal working model by showing caring behavior and providing support, thereby

challenging negative working models and being a "corrective experience" (p. 33) for the

adolescent. Theoretically, if the mentee possessed a more positive or healthy internal working

model, they would experience more positive and functional relationship experiences. These

experiences could serve as reinforcements of an adolescent's positive place in the world, working to improve their senses of themselves (Parker & Benson, 2004).

Mentoring and Sense of Self

Empirical Evidence. Scholars agree that mentoring is associated with a wide range of positive outcomes, such as deterring risky behavior and promoting pro-social behavior (Eby et al., 2008). And despite mixed reviews of its benefits, support for individual and group mentoring programs remains strong (Rhodes, 2004). Based on a meta-analysis conducted by Eby et al., when a more experienced or senior person takes an interest in a less experienced or disadvantaged individual, that individual experiences attitude, health, relational, motivation, and career benefits.

An example of a study on delinquent youth and mentoring shows that a mentoring relationship may be a meaningful component of a program aimed at reducing recidivism. Bouffard and Bergseth (2008) evaluated a program for juvenile delinquents transitioning from incarceration back to their communities. The program had a strong mentoring component: results showed that about 45% of activities between the youth and the transition coordinator fell under the mentoring category. The study demonstrated how mentoring in combination with other services (including accompaniment to legal meetings) can be effective in getting youth on a less delinquent track. Youth in the program experienced significantly fewer new criminal contacts during the first 6 months after their release, as compared to youth who were only on probation. Also, these youth were significantly less likely to test positive for drugs and seemed to have less risks and needs than youth in the comparison group (Bouffard & Bergseth, 2008). Importantly, researchers credited the success of the reentry services program in part to the fact that it emphasized mentor-mentee relationships, calling the relationship an "active ingredient" (p. 316) that significantly improved the youth's participation in the program. While these results

are uplifting, as we will discover, they have not been echoed or addressed by other evaluations. This study represents one of the few evaluations of mentoring programs that directly consider how mentoring impacts youth at-risk for juvenile delinquency.

However, mentoring has not been consistently or substantially linked to improvements in sense-of-self measurements like self-concept and self-esteem. Meta-analyses have shown that mentoring is associated with a wide range of behavioral benefits, but effect sizes are generally small and more concentrated for academic and workplace mentoring, not youth mentoring (DuBois, Holloway, Valentine, & Cooper, 2002; Eby et al., 2008). In an evaluation of a school-based mentoring program of 32 tenth graders at-risk for dropping out of high school, Slicker and Palmer (1993) found no improvements in self-concept even after evaluating only the students who were effectively mentored, based on ratings of mentor logs. Keating et al. (2002) evaluated an intensive 6- to 12-month program where mentors spent at least 3 hours per week with 34 youths age 10 to 16 at-risk for juvenile delinquency or mental illness. While a slight upward trend in self-concept was reported over time, the difference between pre- and post-intervention measures was not significant. Others have noted slight increases in self-esteem levels as well (e.g., Dennison, 2000). In comparing 31 mentored fourth- and fifth-graders to 22 non-mentored children, Schmidt, McVaugh, and Jacobi (2007) found only slight improvements in self-concept, where popularity self-concept (as compared to behavior, anxiety, and happiness dimensions) was the only significant dimension changing. Additionally, Grossman and Tierney (1998) showed that even large-scale studies of Big Brothers/Big Sisters participants have reported that mentoring has not significantly improved global self-worth, social acceptance, or self-confidence.

Why Studies Are Not Finding Results. Mentoring may not always be associated with increases in self-concept because of the challenges inherent in changing adolescent self-

concept. First, self-concept may be steadily declining with age during adolescence. Carroll et al.

(2007) gathered a multidimensional measure of self-concept and found that, for students from

grades 8 through 12, the confidence dimension of self-concept was generally declining with age.

The fact that self-concept may normally be declining during adolescence means that a mentor of

an adolescent would be combating a general downward trend. Demo and Savin-Williams (1992)

highlighted that self-concept changes very gradually, thus shorter-length mentorship programs

may not be as effective (Rhodes et al., 2000). In fact, one of the few programs that produced a

significant shift in sense of self variables was tested on girls with longer mentor relationships (3

to 8 years) and detected positive impacts on self-efficacy and aspirations (Maldonado, Quarles,

Lacey, & Thompson, 2008). Because of these challenges inherent in changing a youth's sense of

self, it is not surprising that mentoring programs have not detected significant changes in self-

esteem or self-concept.

Moreover, the impact on sense of self by mentoring programs may not have been

detected because studies have not found appropriate mediators. Rhodes (2004) pointed out

that evaluations of mentoring programs may not detect changes in sense of self with global self-

worth measures, and that indices that target specific dimensions should be used. As discussed

above, Rhodes et al. (2000) were able to detect an impact on global self-worth by mentors, but

only when they considered improved parental relationships as a mediator. They did not find an

effect on global self-worth when they considered the impact of mentoring directly. It was only

when the authors considered improved parental relationships as mediators that changes to self-

worth were visible. This stands as an example of how effects on sense of self measures, like

self-worth, may only be detected when appropriate mediators are considered.

Another potential reason mentoring programs are not successfully finding results for

sense of self variables is because of the cost and time required to implement a program with

empirically validated keys to mentor success. Maldonado et al. (2008) reviewed research on

these key elements and found the following to be aspects associated with successful programs:

allowing the mentee to be involved in deciding how time is spent; the mentor agreeing to be

consistent and dependable; having the mentor assume responsibility for keeping the

relationship intact, even when the mentee seems unresponsive; maintaining a balanced

relationship where fun is used as a tool to build connection; mentors respecting mentees'

viewpoints; and mentors consulting with program staff. Similarly, an evaluation of the Big

Brothers Big Sisters mentoring program found that structured time, continual supervision and

training of mentors, engaging in physical activities, and supporting the mentee's education were

present in successful mentor relationships (Langhout, Rhodes, & Osborne, 2004). Keating et al.

(2002) explained that studies of mentoring programs have produced inconsistent results in this

area due to programs being limited, relying on volunteers and donations, and only meeting once

or twice per month. Additionally, Grossman and Tierney (1998) have concluded that high-

intensity programs work better. Each of these keys takes a great deal of time and energy to put

into place, and this may explain why mentoring programs are not always carried out effectively.

Mentoring, Delinquency, and Sense of Self Through Mattering

Meta-analyses have not found that mentoring has significant impacts on traditional

measures of sense of self, such as self-esteem and self-concept. Since self-concept and

delinquency have been linked though, it is important to address the sense of self in an

adolescent and explore ways in which Campus Corps, as a mentoring program, may impact how

youths feel about themselves.

One such measure of sense of self that will be considered by the proposed study is a

newer social psychological measurement of self-concept, termed mattering, that addresses self-

worth and how valued one feels. The concept of mattering may be particularly relevant to

mentoring as a way to understand delinquent behaviors. Mattering, originally introduced by

Rosenberg and McCollough in 1981, addresses the question of whether or not, as a person, we

feel we are a significant part of the world around us. Do we fit in? Do others think about us,

even in some small way? Would other people care about what happens in our lives? If we felt

we did not matter, we would feel irrelevant, like the world would be the same without us in it.

As will be discussed, mattering and delinquency have been shown to be inversely correlated and

the feeling of not mattering may motivate youths to be delinquent (Rosenberg & McCollough,

1981). Mentoring may be a way to increase a youth's sense of mattering, and thereby decrease

delinquent activity.

In creating a measurement of mattering, Elliott et al. (2004) introduced three distinct

factors to determine how much people feel they matter in the world. The first factor,

awareness, is a measurement of one's cognitive experience, and asks a respondent to identify

how much he or she is recognized as an individual, whether others notice when he or she comes

and goes, and if he or she is acknowledged in social situations. Elliott et al. noted that feeling

like others are not aware of our presence is a particularly disheartening and sobering

experience, and one is motivated to avoid or change this feeling. Thus people may be motivated

to act in socially undesirable ways if it would mean not being ignored; negative attention is

better than none at all.

The remaining two factors of mattering defined by Elliott et al. (2004), importance and

reliance, address relationships. The importance factor is a consideration of the degree to which

one is the object of interest or concern among others. Do people listen to our complaints? Do

we believe others are there to provide needed social support? An additional sign of importance

is if one's actions reflect on another person. If someone exists in our life to feel proud or

ashamed of us, we matter to that individual. The third factor of mattering as a construct,

reliance, entails whether others look to us for satisfaction of their needs and wants. If there is

an element of choice in this looking, if we were chosen out of a pool of others to be needed, our

mattering increases. Elliott et al. also noted that, in addition to these three factors being

fulfilled, "mattering is distinguished by the sense that others are relating to a person largely as

an end in itself and not as a means to some other end" (p. 342).

Although it is a new construct, researchers have confirmed that mattering to others is

related to an individual's sense of self and perceived social support. Elliott et al. (2004) found

that mattering was negatively related to self-consciousness and alienation of an individual and

positively related to levels of self-concept and self-significance. The fact that mattering and

social support are linked (Dixon Rayle & Chung, 2007) seems to support social psychological

findings that the self is a result of social feedback (Harter, 1999). The concept of mattering

posits that the way we perceive others as aware of us, relying on us, and seeing us as important

plays into how good or bad we feel about ourselves (Elliott et al., 2004). Mattering can be

considered an appropriate and holistic measurement of sense of self that takes into

consideration theoretical ideas about the self as a construct of social interaction. For these

reasons, and its potential relevance to mentoring, mattering will be considered a central

measurement in the evaluation of Campus Corps.

Mattering can be construed as highly relevant to youth motivation to be delinquent and

Kaplan's (1978) self-enhancement theory. In their initial study detailing mattering, Rosenberg

and McCollough (1981) found that lower mattering was associated with higher delinquency in

males, and Elliott et al. (2004) suggested that the experience of not mattering could drive

individuals to act in socially undesirable ways, simply to get attention and feel they matter in

some way. The finding that self-esteem is enhanced in association with increasing delinquent

behavior may be a product of adolescents feeling they matter more, even if it is in a socially

undesired way. Elliott et al. found that self-esteem is positively correlated with sense of

mattering. Self-enhancement theory suggests that adolescents feel better about themselves

because they have removed themselves from seeking mainstream approval. The finding that

adolescents feel better about themselves as they become delinquent could also be construed as

them feeling they matter more as they become delinquent and get attention for either doing

something wrong or approval from their new delinquent status group.

Mattering can be construed as an essential part of attachment; a child matters to a

parent when a secure attachment is present. Similar to attachment, mattering is positively

correlated with sense of self measurements (Elliott et al., 2004). Additionally, like attachment,

mattering has been linked to externalizing and delinquent behavior. As mentioned, Rosenberg

and McCollough (1981) found mattering to be negatively associated with delinquency: males

who felt they mattered little to their parents were more likely to be delinquent. Schenk et al.

(2009) also found that mattering to either nonresidential biological fathers or step-fathers

predicted low engagement in externalizing behavior, as reported by teachers, for 133 early

adolescents. These authors directly linked their results to attachment theory, stating that when

children feel that they are important to their parents (i.e., that they matter), they feel secure

about their social positions and are able to positively adjust in their development. Thus, it is

reasonable to assume not only that mattering is related to attachment, but that it is related to a

child's sense of self and his or her motivation to become involved in delinquent behavior.

Mentoring may impact sense of self through increasing a youth's sense of mattering.

The experience of mattering to a mentor could be construed as a corrective experience.

Because mattering is a new concept, it has not been empirically tested in relation to mentoring.

However, one program designed to offer mentoring along with comprehensive academic

tutoring and counseling to college students at-risk for dropping out had a significant positive

impact on mattering for undergraduate students (Gomez, 2009).   Dixon Rayle (2006) suggested

that mattering may play a significant role in the counselor-client alliance, where both can feel

they matter. Feeling a sense of mattering may bring clients to a place of increased

accountability to themselves, their counselor, and the process of change. If mattering has the

potential to be of importance in therapy, it may have similar potential for significance in

mentoring.

Mentoring and Sense of Self Through Relationship

Researchers evaluating mentoring programs have begun to notice that the quality of the

mentor-mentee relationship is the key component producing change in youths' psychosocial

development. Dubois and Rhodes (2006) have concluded that mentoring works when

relationships are positive, close, consistent, and enduring. When mentor-mentee relationships

are considered as the setting or backdrop in evaluations of mentoring programs, researchers

generally find that youth in higher-quality relationships experience more benefits than those in

lower-quality relationships (e.g., Grossman & Rhodes, 2002; Slicker & Palmer, 1993). Quality of

the mentor relationship not only helps determine who will fare well, but also helps explain the

youth who experience decreases in positive psychosocial variables. When mentoring

relationships fail, the youth may incur decrements to their functioning and self-esteem levels

(Rhodes, Reddy, Roffman, & Grossman, 2005). Slicker and Palmer (1993) were one of the first to

consider "effective mentoring" by measuring the quality and duration of relationships, and

found that effectively mentored youth had better academic outcomes than controls. Those who

were in mentoring relationships that ended prematurely (i.e., were ineffectively mentored)

experienced a significant decline in self-concept as compared to youth who were not mentored.

This lends support to Nakkula and Harris' (2005) assertion that research on mentoring programs

must include a measure of relationship quality. Mentoring relationships have the capacity to be

beneficial when they are positive, but also detrimental when the relationship is negative or short.

Researchers are striving to uncover how mentoring works, under what conditions, and towards which outcomes, and generally the mentoring relationship has been placed at the center of these questions (Nakkula & Harris, 2005). The next step is to define what makes a mentoring relationship effective, and research is beginning to address this important question. Effective mentoring relationships have been characterized as mostly positive (Rhodes et al., 2005), with the mentor having high feelings of self-efficacy about their ability to maintain a successful relationship (Karcher, Nakkula, & Harris, 2005). In advocating for the mentoring relationship to be considered an important setting in evaluating mentoring programs, Deutsch and Spencer (2009) pointed out ways to define the nature and quality of the mentoring relationship. Youth in longer relationships with their mentor tend to reap more benefits, thus duration of the relationship contributes to an effective mentoring experience. Frequency and consistency of contact counts: more time spent together will create more opportunities for youth to be exposed to positive, corrective experiences. Emotional connection between mentor and mentee is also important, as is the mentor's approach to mentoring, where mentors who make the relationship enjoyable, developmentally appropriate, and shape interactions around the youth's preferences and interests are involved in more satisfying relationships. Deutsch and Spencer also explained that mentors with an approach based on positive regard, authenticity, empathy, warmth, support, and challenge create more effective relationships. All of these factors contribute to a mentor-mentee relationship that's not only positive and enjoyable for the individuals involved, but is also the driving force behind positive psychosocial changes in the youth. Clearly, research has identified that taking the mentoring relationship into consideration when looking for changes in sense of self is crucial.

CHAPTER III

Method

Participants

Participants were recruited for inclusion in this study in a variety of ways. Treatment group youth were participants of Campus Corps, a mentoring program for at-risk youth (described below), who were referred by either a community outreach agency that serves delinquent or status-offending youth, agencies of the juvenile justice system (e.g., Probation) school resource officers, or parents. Comparison group youth were all involved with a specific community outreach center for delinquent and status-offending youth; this particular community outreach center was also the primary referral source to Campus Corps, with 86% of these youth being affiliated with this agency. The total sample consisted of 162 youth, 2 of which did not respond to demographic questions. Of those who responded, 85 were female (52.5%) and 75 were male (46.3%). The mean age was 14.76 years (SD = 1.59), and ranged from 11 to 18. Caucasians were the most widely represented ethnic group in the sample (55.6%), while 24% of the youth identified as Hispanic or Latina and 7.8% identified as Hispanic and White. Of the remaining 12 participants, three identified as Black or African-American, one identified as both Black and White, 2 identified as Asian American, 3 identified as American Indian or Alaskan Native, and 3 identified as American Indian or Alaskan Native and White.

Treatment Group. The treatment group was composed of 96 youth, 35 (36.8%) of which were female and 60 (63.2%) of which were male (1 participant did not provide their gender). The mean age was 14.74 (SD = 1.60), ranging from 11 to 18. The majority of the sample (58.9%) described themselves as White (Caucasian/non-Hispanic), and a notable portion (31.3%) described themselves as Hispanic. Of the remaining six individuals who did not identify as White or Hispanc (or a combination of the two), 1 identified as Black or African-American, 1

25

identified as both White and Black, 1 identified as Asian American, 1 identified as American

Indian or Alaskan Native, and 2 identified as both American Indian or Alaskan Native and White.

A large majority of the youth acquired a legal charge prior to beginning Campus Corps

that led to their referral to the program. The majority of these charges (39.6%) were

misdemeanors. The majority of youth (25%) acquired drug and/or alcohol charges. Table 1

shows the breakdown of the original charge types. Note that 17 youth did not provide an

original charge, and 19 did not provide a category for their charge.

Approximately 41% of the youth reported living with their mother and father, 36.6%

reported living with their mother only, and 9.7% reported living with their father only. The

remaining youth (11.8%) reported living in a blended family, with other adult relatives, or with

other unrelated adults.

Comparison Group. The comparison group was comprised of 66 youth. Of these 66

youth who completed an intake questionnaire, 19 completed a termination questionnaire. At

intake, the sample consisted of 50 females (75.8%) and 16 males (24.2%). The mean age was

15.01 (*SD* = 1.59), ranging from 11 to 18. The majority of the sample (57.6%) described

themselves as White (Caucasian/non-Hispanic) and a notable portion (33.9%) described

themselves as Hispanic. Of the remaining 5 youth who did not identify as Hispanic or White (or

a combination of the two), 2 identified as Black or African-American, 2 identified as American

Indian or Alaskan Native, and 1 identified as Asian American. Of the 19 youth who completed a

termination questionnaire, 15 (78.9%) were female and 4 (21.1%) were male.

Sample Attrition. There was a low attrition rate in the treatment group and a high

attrition rate in the comparison group for this study. Six individuals in the treatment group

dropped out or were deemed inappropriate for Campus Corps. Because of unanticipated

changes in the practices of the community agency serving the comparison group, the

researchers were unable to acquire termination data for 47 subjects in the comparison group. The sample attrition rate was examined in regards to gender and rule non-compliance using the chi-square statistical test to determine whether this attrition was random. The chi-square results of the test applied to examine gender and drop-out indicate that the dropout rate for the entire sample (both treatment and comparison groups) varied significantly by gender; the resulting chi-square value was χ^2 (1, N = 163) = 8.33, p < .05. This means that the attrition rates observed likely did not occur by chance. Inspection of the comparison table shows that a greater percentage of females (42.4%) dropped out as compared to males (21.1%). Likewise, a greater percentage of males (78.9%) remained in the program than females (57.6%).   Phi, which indicates the strength of the association between gender and dropout was -.22, p < .05. It should be noted that of the six youth who dropped out of Campus Corps, only one was female, indicating that this dropout of females occurred primarily in the comparison group. The sample attrition rate was also examined through the chi-square statistical analysis to test the relationship between dropout and rule non-compliance. This chi-square statistic was also significant: χ^2 (2, N = 152) = 7.23, p < .05. Inspection of cross tabulations shows that those with the highest percentage of drop-out were of low rule non-compliance (40.4%). The strength of this association was represented by phi, which was .22. These results suggest that the sample's attrition in regards to gender and rule non-compliance was not random.

Design and Procedure

This study utilized a quasi-experimental design, as it involved a pretest and posttest for an experimental and comparison group where participants were not randomly assigned to groups. Assignment to groups was based on youth availability during a window of enrollment. The comparison group was comprised of youth who missed this enrollment window. Almost all youth in the study were accessed via a specific community outreach program providing juvenile

delinquent diversion or deferment treatment. The entire comparison group and 86% of the

treatment group were affiliated with this outreach program. Of the remaining treatment group

members, 3 (3.13%) youth were referred by the Department of Health and Services, 3 (3.13%)

were referred by their probation officers, 3 (3.13%) were referred by a restorative justice

program, 3 (3.13%) were referred by their school's resource officer, and 1 (1.01%) was referred

by a statewide grant. There were also 4 (4.17% of the sample) youth who returned for a second

semester of Campus Corps, and so were self-referred. The similarity in sources that referred

youth to this study suggests the equivalency of the two groups.

The data for this study was collected through questionnaires. Consent for the program

was obtained from both the youth and their parents after being presented with information on

both the nature and the purpose of the study, which was stated as making Campus Corps better

for future youth. Once consent was obtained, identical packets of questionnaires were given to

participants in the comparison and treatment groups. Campus Corps youth were given the

intake (Time 1) questionnaire during the first week of the fall 2010 Campus Corps program and

the termination (Time 2) questionnaire at the end of the program. Comparison-group youth

were given the intake (Time 1) questionnaire when they entered the community outreach

program as clients and the termination (Time 2) questionnaire when they completed the

requirements of the community outreach program.

Intervention

Campus Corps is a 12-week after-school mentoring program located on the Colorado

State University campus that meets weekly. The program occurs 4 nights per week, where a

different group of approximately 25 mentor-mentee pairs meets for 4 hours each night.

Mentors are trained to understand the goals of Campus Corps, have gender and cultural

awareness, build effective and trusting relationships, and help youths feel they matter. For the

fall 2010 program, mentees chose their mentor from three choices presented to them based on their interests and any special needs of the youth. The youth and their mentor spent the first half-hour (from 4 to 4:30 P.M.) with their mentor family, which was composed of four mentor-mentee pairs, for a walk around campus designed to get the youth thinking about attending college and to support general health and wellness. From 4:30-5:30 P.M., mentors and mentees were engaged in Supporting School Success, where they completed homework, worked from GED workbooks, or brainstormed college or career options. From 5:30 to 6 P.M., the mentor family ate a meal together. From 6 to 7 P.M. and from 7 to 8 P.M., the youth were involved in an activity of their choice with their peers and mentor. Positive enrichment activities included art (e.g., drawing, photography, and T-shirt design), athletics, and cooking classes.

Measures

Demographics. Data on gender, age, and ethnicity were collected, as each has been found to contribute to self-concept, although not always at statistically significant levels (Jennings et al., 2009) and have been found to each contribute significantly to delinquency (Church et al., 2009). Other demographic variables were measured, including family structure (who the participant primarily lives with and how many siblings they have), importance of religion and/or spirituality, gang affiliation, delinquent charges acquired before and after the program, and whether or not the participant or any member of his or her family has ever undergone mental health, substance abuse, or special education treatment.

Sense of Self. Both self-concept and self-esteem were measured to tap into youths' sense of self. Self-esteem was measured using the Rosenberg Self-Esteem Scale, which assesses respondents' feelings about themselves. This measure consists of 10 items and a 4-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." Sample items include, "On the whole, I am satisfied with myself," and "All in all, I am inclined to feel that I am a failure." See

Appendix A for items utilized by this study. In a prior study, the test-retest reliability was .85,

and the internal consistency reliability score was .88 at pretest and .89 at posttest (Carryer &

Greenberg, 2010). In the current study, Cronbach's alpha was .88 at pretest and .89 at posttest.

Self-concept was measured with the Self-Perception Profile (Neeman & Harter, 1986),

which was selected because of its multidimensionality. Instructions were modified to ensure

readability, and Microsoft Word's readability statistics confirmed that the questionnaire

qualified as fourth-grade reading level. Item construction is designed to limit the tendency of

the respondent to provide the socially desirable answer. The respondent first chooses between

two statements about which he or she is most like, and then ranks their choices as either "Sort

of True for Me" or "Really True for Me" (Harter, 1982). An example item is "Some students like

the kind of person they are BUT other students wish that they were different." See Appendix B

for items utilized by this study. Of the 12 total subscales that comprise the Self-Perception

Profile, two were used: Peer Acceptance and Global Self-worth. In a prior study, the internal

consistencies of the subscales ranged from .76 to .92 (Neeman & Harter, 1986). In this study,

reliability coefficients were low for the peer acceptance scale ($\alpha < .60$), thus the total scale scores

were used in analysis. The reliability coefficient for the total scale was .83 at pretest and .87 at

posttest.

Mattering. The degree to which one feels one matters in the world and to others was

measured by an instrument created by Elliott et al. (2004) termed the Mattering Index. The

measure consists of 18 items, with 5-point Likert scale responses ranging from "Strongly

Disagree" to "Strongly Agree."   Sample items include, "If the truth be known, no one really

needs me," "No one would notice if one day I just disappeared," and "My successes are a source

of pride to people in my life." See Appendix C for items utilized by this study. Elliott et al.'s

evaluation of the index has confirmed its strength and efficacy, and found it to possess content,

construct, and discriminant validity. In a prior study, internal consistency ratings from several samples were high for both the awareness subscale (Cronbach's alpha ranged from .82 to .87) and the importance subscale (Cronbach's alpha ranges from .79 to .86).

For this study, two subscales were used. The awareness subscale measures the respondent's perception of how aware others are of him or her. The importance subscale measures how important the respondent perceives him or herself to be to others.   For this sample, Cronbach's alpha was calculated for both subscales and the total index scale score. The importance subscale reliability score was .79 at pretest and .82 at posttest. The awareness subscale reliability score was .85 at pretest and .87 at posttest. The total scale score was .89 at pretest and .91 at posttest.

Rule Non-Compliance. The Rule Non-Compliance subscale of the Antisocial Beliefs and Attitudes Scale (ABAS) was used to measure respondents' attitudes toward delinquency. Rule non-compliance is a factor that seems to underlie early and persistent problem behavior in youths (Butler et al., 2007). This factor was predictive of self-reported antisocial behavior for all ages and grades examined. The 10-item subscale includes items such as, "I'd feel pretty bad if I broke the rules at my school," "I'm afraid to hang around with young people who get in trouble," and "A lot of teachers bother young people too much." Responses are on a 3-point Likert scale, from "Disagree," to "Not Sure," to "Agree." See Appendix D for items utilized by this study. The internal consistency of the Rule Non-Compliance subscale is high (Cronbach's alpha = .79) (Butler et al., 2007). In the present sample, the internal consistency reliability coefficients were .78 at pretest and .82 at posttest.

Mentor-Mentee Relationship. It was hypothesized that effectively mentored individuals would benefit more from Campus Corps than ineffectively mentored individuals, thus the mentor-mentee relationship was measured. The Youth Mentoring Survey, developed by

mentoring researchers Harris and Nakkula (Expert Mentoring Consultants, 2009), assesses

relational and growth-focused aspects of the mentoring match. Responses are offered on a 4-

point Likert scale, from "Not at all true" to "Very true." Sample items include "My mentor

makes me happy," and "I am willing to try new things that my mentor suggests (foods, activities,

etc.)." In this study, reliability coefficients at posttest were .95 for the relational quality

subscale, .91 for the instrumental quality subscale, and .82 for the prescription subscale. The

total scale reliability score was .94.

CHAPTER IV

Results

In order to examine the proposed hypotheses, data from youth questionnaires was

inputted and analyzed using SPSS analytic computer software. An alpha level of .05 was used to

test for statistical significance. Two-sided tests were used for all hypotheses. Descriptive

statistics were calculated to examine demographic data and uncover trends in rule non-

compliance and sense of self for both groups of participants (see Table 2 for means and

standard deviations of key variables over time).

Groups were examined for equivalency through overlapping histograms for each key

variable. The distributions shown in treatment and comparison group histograms shared

approximately all of their variance, indicating that the groups were the same in regards to key

variables at the beginning of the program.

Hypothesis Testing

Study hypotheses proposed that youth who participated in the Campus Corps

mentoring program (independent variable) would indicate lower levels of rule non-compliance

and higher levels of self-esteem, self-concept, and feelings of mattering (dependent variables).

The first four hypotheses stated that Campus Corps participants would possess (a) lower levels

of rule non-compliance, (b) higher levels of self-esteem, (c) higher levels of self-concept, and (d)

higher feelings of mattering. The last hypothesis was that, among students in Campus Corps,

higher quality mentor relationships would be associated with lower levels of rule-

noncompliance and higher levels of self-esteem, self-concept, and mattering.

Assumptions regarding homogeneity of variance were evaluated for each of the

regression analyses presented below. Unstandardized predicted values and unstandardized

residuals were examined to ensure normality and homogeneity of variance of the residuals.

Influential outliers were identified by examining Cook's Distance values, leverage values, and DFBETAS, which indicated the influence of each case. Based on these observations, three cases were considered to be influential outliers in differing models and were removed from analysis. There was reason to believe that two of these three cases were not taking the questionnaire seriously, while there was ambiguity about the reasoning for the third case's large influence on the regression equation. It seemed to be, however, that the participant misunderstood the questionnaire, as up to 3 out of 4 possible answers were selected.

Hypothesis 1: Rule non-compliance. The first hypothesis specified that Campus Corps would have a direct impact on rule non-compliance as defined by the ABAS. Specifically, it hypothesized that Campus Corps participants would have lower levels of rule non-compliance at the end of the program than comparison group youth. To assess the relationship between rule non-compliance and Campus Corps participation, a hierarchical regression model was specified. The first model (Model A), which included age, gender, and Time 1 rule non-compliance as predictors of Time 2 rule non-compliance, was statistically significant, $F(3, 96) = 42.82$, $p < .001$. The R^2 value was .583, meaning that 58.3% of the variance in rule non-compliance at the end of the program was explained by the model. The second model, referred to as Model B, added the Campus Corps treatment indicator to Model A. The treatment indicator was not a significant predictor of rule non-compliance ($b = .05$, $SE = .09$, $p > .05$). That is, above and beyond age, gender, and Time 1 rule non-compliance, the treatment accounted for only .10% of the variance in rule non-compliance (R^2 change = .001). See Table 3 for the complete results.

Hypothesis 2: Self-esteem. It was hypothesized that Campus Corps participants would have higher self-esteem levels at the end of the program than the comparison-group youth. To assess the relationship between self-esteem, as defined by Rosenberg's Self-Esteem Scale, and Campus Corps participation, a hierarchical regression model was specified. The first model

(Model A), which included age, gender, and Time 1 self-esteem as predictors of Time 2 self-esteem, was statistically significant, $F(3, 97) = 27.78$, $p < .001$. The R^2 value was .473, meaning that 47.3% of the variance in self-esteem at the end of the program was explained by the model. The second model (Model B) added the Campus Corps treatment indicator to Model A. The treatment indicator was a significant predictor of self-esteem ($b = .34$, $SE = .12$, $p < .01$). That is, above and beyond age, gender, and Time 1 self-esteem, the treatment accounted for 4.5% of the variance in self-esteem (R^2 change = .045). See Table 3 for the complete results.

Hypothesis 3: Self-concept. The hypothesis specified regarding self-concept was that Campus Corps participants would have higher self-concept levels at the end of the program than the comparison-group youth. To assess the relationship between self-concept, as defined by Harter's Self-Perception Profile, and Campus Corps participation, a hierarchical regression model was specified. The first model (Model A), which included age, gender, and Time 1 self-concept, was statistically significant, $F(3, 96) = 29.66$, $p < .001$. The R^2 value was .492, meaning that 49.2% of the variance in self-concept at the end of the program was explained by the model. The second model (Model B), added the Campus Corps treatment indicator to Model A. The treatment indicator was a significant predictor of self-concept ($b = .27$, $SE = .13$, $p < .05$). That is, above and beyond age, gender, and Time 1 self-concept, the treatment accounted for 2.4% of the variance in self-concept (R^2 change = .024). See Table 3 for the complete results.

Hypothesis 4: Mattering. The fourth hypothesis was that Campus Corps participants would have higher feelings of mattering, as defined by the Mattering Index, at the end of the program than the comparison-group youth. A similar hierarchical regression model was specified for both subscales of the Mattering Index: awareness and importance.

The mattering importance subscale was considered first. This subscale assesses the degree to which a youth feels important to others in his or her life, e.g., if anyone takes pride in

his or her accomplishments. The first model (Model A), which included age, gender, and Time 1 mattering importance score, was statistically significant, $F(3, 90) = 32.31$, $p < .001$. The R^2 value was .530, meaning that 53.0% of the variance in importance at the end of the program was explained by the model.   The second model (Model B), added the Campus Corps treatment indicator to Model A. The treatment indicator was a significant predictor of the Mattering Index's importance subscale ($b = .27$, $SE = .14$, $p < .05$). Above and beyond age, gender, and Time 1 importance score, the treatment accounted for 2.0% of the variance in importance (R^2 change = .020). See Table 3 for the complete results.

However, treatment was not a significant predictor variable in hierarchical regression models that considered the awareness subscale and the total mattering scale as dependent variables. See Table 3 for the complete results.

Hypothesis 5: Mentor Relationship Quality.   It was hypothesized that higher mentor relationship quality would be associated with more positive outcomes among students participating in the Campus Corps program. To test this hypothesis, hierarchical regression models were specified. First each outcome of interest (e.g., rule non-compliance, self-esteem, self-concept, and mattering) was regressed on the control variables (i.e., the Time 1 measure of the outcome of interest, age, and gender). This constitutes Model A. Next, mentor relationship quality was added as an additional predictor to Model A. This constitutes Model B.

Rule Non-Compliance. A hierarchical regression model was specified to assess the relationship between rule non-compliance and relationship quality among youth involved in Campus Corps. Model A was statistically significant, $F(3, 80) = 41.38$, $p < .001$. The R^2 value was .620, meaning that 62.0% of the variance in rule non-compliance at the end of the program was explained by the model. The second model added mentor relationship quality to Model A. Mentor relationship quality significantly predicted rule non-compliance ($b = -.18$, $SE = .06$, $p <$

.01), indicating that a higher quality mentor relationship is associated with youth feeling less inclined to break rules. Relationship quality accounted for 4.4% of the variance in rule non-compliance above and beyond age, gender, and Time 1 rule non-compliance (R^2 change = .044). See Table 4 for complete results.

Self-Esteem. A hierarchical linear regression model was specified to assess the relationship between self-esteem and relationship quality among youth involved in Campus Corps. Model A was statistically significant, $F(3, 80) = 26.35$, $p < .001$. The R^2 value was .510, meaning that 51.0% of the variance in self-esteem at the end of the program was explained by the model. The second model added mentor relationship quality to Model A. Mentor relationship quality significantly predicted self-esteem ($b = .23$, $SE = .07$, $p < .01$), indicating that a higher quality mentor relationship is associated with youth having higher self-esteem. Relationship quality accounted for 5.9% of the variance in self-esteem above and beyond age, gender, and Time 1 self-esteem (R^2 change = .059). See Table 4 for complete results.

Mattering. To examine if mentor relationship quality predicted the importance subscale scores of the Mattering Index, Model A was statistically significant, $F(3, 78) = 33.15$, $p < .001$. The R^2 value was .573, meaning that 57.3% of the variance in importance at the end of the program was explained by the model. Model B added mentor relationship quality to Model A. Mentor relationship quality significantly predicted importance ($b = .18$, $SE = .08$, $p < .05$), indicating that a higher quality mentor relationship is associated with youth feeling like they are important to others. Relationship quality accounted for 2.8% of the variance in importance above and beyond age, gender, and Time 1 importance (R^2 change = .028). See Table 4 for complete results.

To examine if mentor relationship quality predicted the awareness subscale scores of the Mattering Index, Model A was statistically significant, $F(3, 78) = 14.29$, $p < .001$. The R^2 value

was .367, meaning that 36.7% of the variance in awareness at the end of the program was explained by the model. Model B added mentor relationship quality to Model A. Mentor relationship quality significantly predicted awareness (b = .18, SE = .08, p < .05), indicating that a higher quality mentor relationship is associated with youth feeling that others are aware of their presence. Relationship quality accounted for 4.0% of the variance in awareness above and beyond age, gender, and Time 1 awareness (R^2 change = .040). See Table 4 for complete results.

Self-concept. When models A and B were examined for self-concept as a dependent variable, mentor relationship quality was not a significant predictor, (b = .145, SE = .09, p > .05). That is, above and beyond age, gender, and Time 1 self-concept, mentor relationship quality accounted for only 1.7% of the variance in self-concept (R^2 change = .017). See Table 4 for the complete results.

CHAPTER V

Discussion

The purpose of this study was to examine the effects of participating in the Campus

Corps mentoring program on youth's sense of self (e.g., self-esteem, self-concept, and

mattering) and rule non-compliance, and to determine if the quality of the mentoring

relationship would be associated with greater changes in these variables. Compared to non-

participants, youth who participated in Campus Corps experienced significantly increased levels

of self-esteem, self-concept, and feelings of mattering. However, they did not experience

improvements in rule compliance above and beyond the comparison group. For youth in

Campus Corps, mentor-mentee relationship quality was a significant predictor for three of the

four key dependent variables: self-esteem, mattering, and rule non-compliance, but not self-

concept.

Hypothesis 1: Rule Non-Compliance

Participation in Campus Corps was not a significant predictor for rule non-compliance in

regression analyses. *T*-tests showed that rule non-compliance did decline for youth both in the

intervention and comparison groups, on average. The difference between pretest and posttest

levels of rule non-compliance was statistically significant for Campus Corps youth, but not

comparison-group youth. It may be that treatment did not predict rule non-compliance because

both groups reported a gender downward trend on this variable. This general downward trend

in both groups may be due to the fact that 86% of the youth in Campus Corps and all of the

youth in the comparison group were affiliated with a specific community outreach program that

works with youth and families to decrease the youth's delinquency. As part of this community

outreach program's services, youth are often required to attend classes on various topics,

including drug and alcohol use, anger management, bullying, and communication. They also are

often required to undergo regular urinary and breath analysis to detect substance use.

Additionally, some youth in the program are actively involved in court proceedings, and face the chance of being sent to a residential treatment facility or a juvenile detention center. The motivation to stay out of trouble and not break rules may have been very high during the program, and this may explain why participation in Campus Corps did not predict lower rule non-compliance.

Hypotheses 2, 3, and 4: Sense of Self

As hypothesized, participation in Campus Corps resulted in increases to self-esteem, self-concept, and mattering for youth in comparison to the control group. As discussed in the literature review, changes in self-perceptions are rarely found in program evaluations of mentoring programs. Several studies have shown a small upward trend in self-concept from pretest to posttest, but substantial links to improvements in sense of self have not been established. For example, a large-scale study on Big Brothers/Big Sisters showed that, although the program resulted in several positive outcomes for youth participants, it did not produce changes in youth's sense of self (Grossman & Tierney, 1998). This evaluation of the Campus Corps mentoring program presents evidence that mentoring programs can impact the way youth feel about themselves, which is desirable given the strong link between sense of self and delinquency.

Campus Corps may have been successful in improving youth's sense of self for two primary reasons. First, Campus Corps is a high-quality program, employing virtually all empirically validated keys to mentoring success. Second, Campus Corps is designed to focus on the development of youth's sense of self in a multifaceted way, providing opportunities for adolescents to improve their self-perceptions on many different dimensions.

Campus Corps incorporates every one of the keys to success for mentoring programs described by mentoring researchers (e.g., Grossman & Tierney, 1998; Keating et al., 2002; Langhout et al., 2004; Maldonado et al., 2008), which may explain why the program is capable of making changes to sense of self. Langhout et al. found that structured time and supporting the mentee's education are central to successful mentoring relationships. Maldonado et al. found that programs work best when they allow mentees to be involved in decisions about how time is spent. Campus Corps incorporates these three recommendations in the following ways. First, there is a basic structure for every meeting (30 minutes of "Walk and Talk," 1 hour of "Supporting School Success," 30 minutes of a family-style meal, and 2 hours of activities). The mentee must focus on school or career for an hour during Supporting School Success, thus the program achieves a focus on education. However, within each of these structured activities is a level of choice for the mentee: they can pick from several activities offered and decide which homework assignment they want to work on. Langhout et al. also showed that physical activities were important and Maldonado et al. found that fun should be used as a tool to build connection. The 2 hours of activities that mentors and mentees engage in help the pair have fun together and often provide opportunities to engage in physical activity. Maldonado et al., Langhout et al., and Grossman and Tierney all emphasized the importance of maintaining the quality and consistency of the mentoring relationship. It was suggested that mentors should be consistent, dependable, assume responsibility for keeping the relationship intact, respect their mentees' viewpoints, and have access to supervision and training. Campus Corps mentors engage in training and supervision before and after each encounter with their mentees, and they are encouraged to seek and utilize staff support, which is consistently present in the form of "mentor coaches." Mentors are trained to take responsibility for the relationship, keep the relationship balanced, and respect their mentee's ideas and points of view. Lastly, Grossman

and Tierney and Keating et al. showed that mentoring works best when it is frequent and consistent. Since Campus Corps meets once per week on the same day each week for 4 hours, it is frequent and consistent. Campus Corps may have improved sense of self because it employs these empirically validated keys to mentoring success.

Campus Corps also may have been effective in changing sense of self because of its multifaceted approach to improving the lives of its members. Since sense of self is multidimensional (Sigelman & Rider, 2009), an appropriate intervention would target many aspects that make up the way an adolescent views him or herself. This would include general competence, acceptance by others, scholastic achievement, athletic competence, creativity, and social competence (Harter, 1999). Campus Corps provides opportunities for youth to improve in each of these dimensions because of its combination of social, academic, fun, creative, and athletic activities. The group format of the program, where many mentor-mentee pairs spend time together, provides numerous opportunities for youth to acquire positive feedback from others. Youth are encouraged to be accepting and respectful of others in the program, which likely increases the sense of being accepted by others. Campus Corps focuses on academics and scholastic achievement by requiring youth to: (a) take a walk on a college campus while learning about career opportunities and college life, and (b) spend an hour with their mentor concentrated on current school progress, homework, or tutoring during Supporting School Success. Social opportunities are provided throughout the entire 4 hours of the program and are emphasized by each youth being a part of a mentor family. The 2 hours spent engaged in fun, creative, or athletic activities give each youth a place to enrich their individual interests, talents, or enjoyments. The design of Campus Corps encompasses many of the aspects that a multidimensional sense of self requires, and this diversified experience may be responsible for the observed changes in sense of self, above what the comparison group experienced.

Hypothesis 5: Quality of the Mentor Relationship

In this study, the quality of mentor-mentee relationship was associated with improvements in Campus Corps youth's rule non-compliance, self-esteem, and mattering. This result indicates that youth in higher-quality relationships benefit more than those in lower-quality relationships. This hypothesis was important to consider because researchers have pointed out (use more formal word) that the mentor-mentee relationship is the "active ingredient" that produces results in mentoring programs (e.g., Bouffard, & Bergseth, 2008).

As noted in the literature review, the mentor-mentee relationship is an important area of focus when implementing a mentor program. A good relationship can maximize the benefits of mentoring, but a failed relationship can actually decrease youth functioning and self -esteem levels (Rhodes et al., 2005). Deutsch and Spencer (2009) stated that quality mentor programs are ones that have a mentor screening process and a training program. These authors also emphasized quality mentors as ones who are positive, supportive, and empathic. Campus Corps prioritizes the quality of the mentor-mentee relationship in multiple ways. First, an application process exists to select only qualified mentors and screen out those who are unqualified. Second, before the program begins, mentors participate in a comprehensive training program, which includes how to have empathy and positive regard for their mentees. Third, mentees are allowed to select their mentor from profiles of mentors to help facilitate a good match. Fourth, throughout the mentoring program, mentors receive support, education, and guidance in pre- and post-labs: before and after each night of meeting with their mentees, mentors participate in seminar-style labs where they can process their experiences of mentoring. Throughout each night, mentor coaches are present to provide any support that may be needed. These resources are available to help mentors be capable of maintaining a successful relationship with their mentee because feeling self-efficacious is a characteristic of an effective mentoring relationship

(Karcher et al., 2005). All of these efforts seem to combine to help most mentor-mentee pairs form successful mentoring relationships, and help explain why Campus Corps is an effective program.

The fact that higher-quality relationships were associated with more positive outcomes in this study fits with other research in the mentoring literature stating that the relationship is the medium for which change is expected to take place. An established finding in the mentoring literature is that a high-quality mentor-mentee relationship is the key to success of programs, with positive, close, consistent, and enduring mentoring relationships working best (Dubois & Rhodes, 2006). A close relationship has been found to promote positive outcomes in situations similar to mentoring. For example, literature regarding common factors in therapeutic interventions identifies the alliance or relationship between client and therapist as a prominent agent for change. Being in a strongly aligned relationship with a therapist seems to begin holding therapy clients accountable for change, before any actual interventions occur (Sprenkle, Davis, & Lebow, 2009). This may be true for the mentoring relationships in Campus Corps as well. Being in a high-quality relationship means that youth feel close with their mentor and can count on him or her. There is a possibility that this alone contributes to the youth feeling accountable to change.

A higher-quality mentoring relationship may be associated with more positive outcomes for youth because it provides a bridge to a prosocial community. Campus Corps may be the prosocial community that youth are missing in their lives. As Catalano and Hawkins (1996) explained in their Social Development Model reviewed above, children behave according to the norms of the community they bond to. Those children who bond to the prosocial community, via a bond with their mentor, of Campus Corps may have a reason not to act against these norms (i.e., engage in deviant behavior) because it might threaten the security of their

attachment to the program. By being connected to a mentor and bonding to the program, the

youth may also have a corrective experience where they are allowed to see themselves through

a different more positive light. This proposed pathway to change was described by Rhodes

(2004). If a mentor succeeds in challenging the negative views their mentee holds of him- or

herself, the mentor may be responsible for boosting the mentee's self-perceptions.

Lastly, the program evaluation found that mentor relationship quality was not

associated with higher levels of self-concept, while it was noted that Campus Corps participants

had significantly higher self-concepts than comparison group youth. In other words, differences

in the quality of the mentor relationship did not impact self-concept, but the Campus Corps

treatment did. This suggests that the self-concepts of Campus Corps participants were impacted

by something other than just the quality of the mentor relationship.

Limitations and Future Directions

An important limitation of this study is the size of the comparison group. In order to

detect medium or typical effect sizes with two-tailed tests for a significance level of .05, a

sample size of approximately 60 participants is necessary at all waves where data is obtained.

The comparison group at pretest consisted of 66 youth. However, because of policy changes

with the community outreach program, the researchers were only able to collect data from 19

of these 66 youth. At posttest, the comparison group was composed of only 5 males and 14

females. This indicates that the ability to detect statistical significance was greater for the

treatment group than the comparison group in this study. Additionally, the study's internal

validity was comprimised by participants not being randomly assigned to groups. With non-

random assignment, variables that may have influenced the dependent variables could not be

automatically controlled for. Thus, we cannot be sure that confounding variables, such as

school performance and home life, are not responsible for any observed effects of Campus

Corps. A related limitation was that the sample attrition seemed not to be random, which indicates that the resulting comparison group was different than the treatment group. Although random assignment is challenging, future mentoring program evaluations should strive to accomplish a pool of youth that are appropriate for mentoring interventions who can be randomly assigned into treatment and comparison groups.

Summary

This study was limited by the size of the comparison group at Time 2, yet it still presents statistical evidence that mentoring programs can be effective in changing the way a youth feels about him or herself. While upward trends in self-esteem or self-concept have been observed in participants of mentor programs, rarely have statistically significant results been noted. In past research, mentoring has not been linked to sense of self consistently or substantially (Dubois et al., 2002; Eby et al., 2008). This study presents evidence that participants in the Campus Corps mentoring program had, on average, higher levels of self-esteem and self-concept than youth in a comparison group. This study can contribute to the paucity of research on mentoring programs with delinquent youth, with its main contribution being that mentors can have an impact on the sense of self of their mentees. In connection with theory and evidence that sense of self may motivate delinquency (Kaplan, 1978), these results offer the suggestion that mentoring is a way to help youth feel better about themselves and their abilities so that they will not engage in delinquent activity.

Lastly, this study reinforces the concept that a large part of what matters in helping youth feel good about themselves are the connections they have with other people. For three of the four key variables assessed, higher mentor relationship quality was associated with more positive outcomes. This finding reflects that mentoring works through the structure and closeness of a relationship. Campus Corps gave youth the opportunity to connect with a

mentor, but also other adolescents, other mentors, and a whole mentor family, therefore it

gave them opportunities to like themselves more for reasons outside of getting in trouble.

Table 1

Distribution of Delinquent Charges in a Sample of 96 Youth in Campus Corps

Characteristic	*n*	Valid %
Charge Type		
Theft	17	21.5
Drugs	14	17.7
Miscellaneous/Other	10	12.7
Alcohol	10	12.7
Assault	10	12.7
Criminal Mischief	8	10.1
Harassment	3	3.8
Trespass to Auto	3	3.8
Trespassing	2	2.5
Interference with		
School/Law	2	2.5
Enforcement		
Missing	17	17.7
Category		
Misdemeanor	41	50.6
Petty Offense	26	32.1
Felony	14	17.3
Missing	19	19.0

Table 2

Summary of means for key variables over time

Variable	Time 1 Mean	Time 1 SD	Time 2 Mean	Time 2 SD
	All Participants			
Rule Non-Compliance	1.92	.45	1.85	.47
Self-Esteem	2.98	.64	3.10	.58
Total Mattering Score	3.82	.63	3.71	.58
Self-Concept	3.00	.70	3.10	.63
	Campus Corps Group			
Rule Non-Compliance	1.95	.45	1.86	.49
Self-Esteem	2.95	.59	3.13	.57
Total Mattering Score	3.77	.64	3.74	.60
Self-Concept	2.94	.70	3.12	.66
	Comparison Group			
Rule Non-Compliance	1.88	.46	1.85	.40
Self-Esteem	3.01	.70	2.95	.61
Total Mattering Score	3.92	.61	3.57	.51
Self-Concept	3.08	.70	3.01	.51

Table 3

Summary of hierarchical linear regression models regarding treatment as a predictor

Variables	Self-Esteem		Mattering Awareness		Mattering Importance	
	Model A	Model B	Model A	Model B	Model A	Model B
Constant	.707	.071	2.11***	1.91***	.714	.224
Age	.019	.035	-.009	-.004	.014	.026
Time 1 Level	.685***	.712***	.445***	.447***	.774***	.792***
Female	.103	.175*	-.075	-.055	-.147	-.111
Treatment		.343**		.124		.267*
ΔR^2	.473	.045	.303	.006	.530	.020
Total R^2	.473	.517	.303	.309	.530	.550
ΔF	27.78***	8.50**	12.61***	.75	32.31***	3.85*
	$n = 97$		$n = 91$		$n = 90$	

Variables	Self-Concept		Rule Non-Compliance	
	Model A	Model B	Model A	Model B
Constant	.098	-.399	.322*	.282
Age	.064*	.076**	.006	.008
Time 1 Level	.696***	.721***	.792***	.791***
Female	-.191*	-.132	-.041	-.033
Treatment		.272*		.045
ΔR^2	.492	.024	.583	.001
Total R^2	.492	.516	.583	.584
ΔF	29.66***	4.59*	48.82***	.244
	$n = 96$		$n = 96$	

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

Table 4
Summary of hierarchical linear regression models regarding mentor relationship quality as a predictor

Variables	Self-Esteem		Mattering Awareness		Mattering Importance	
	Model A	Model B	Model A	Model B	Model A	Model B
Constant	.568	-.214	1.96***	1.29*	.575	.101
Age	.033	.045	-.001	.007	.026	.035
Time 1 Level	.680***	.649***	.466***	.467***	.774***	.719***
Female	.093	.073	-.134	-.137	-.140	-.139
Mentor Relationship Quality		.231**		.179*		.177*
ΔR^2	.510	.059	.367	.040	.573	.028
Total R^2	.510	.569	.367	.407	.573	.601
ΔF	26.35***	10.27**	14.29***	5.0*	33.15***	5.09*
	$n = 80$		$n = 78$		$n = 78$	

Variables	Self-Concept		Rule Non-Compliance	
	Model A	Model B	Model A	Model B
Constant	-.036	-.532	.191	1.01*
Age	.064*	.073*	.003	-.004
Time 1 Level	.748***	.725***	.826***	.741***
Female	-.128	-.142	.024	.034
Mentor Relationship Quality		.145		-.180**
ΔR^2	.540	.017	.620	.044
Total R^2	.540	.557	.620	.665
ΔF	29.02***	2.75*	41.38***	9.94**
	$n = 78$		$n = 80$	

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

Appendix A

Rosenberg's Self-Esteem Scale

Below is a list of statements dealing with your general feelings about yourself. There are no right or wrong answers. Circle the <u>ONE NUMBER</u> that indicates how strongly you disagree or agree with each statement.

Statements	Strongly Disagree	Disagree	Agree	Strongly Agree
On the whole, I am satisfied with myself.	1	2	3	4
At times, I think I am no good at all.	1	2	3	4
I feel that I have a number of good qualities.	1	2	3	4
I am able to do things as well as most other people.	1	2	3	4
I feel I do not have much to be proud of.	1	2	3	4
I certainly feel useless at times.	1	2	3	4
I feel that I'm a person of worth, at least on an equal plane with others.	1	2	3	4
I wish I could have more respect for myself.	1	2	3	4
All in all, I am inclined to feel that I am a failure.	1	2	3	4
I take a positive attitude toward myself.	1	2	3	4

Peer Acceptance and Global Self-Worth Subscales of the Self-Perception Profile

> **The following are statements that allow students to describe themselves. Please read the entire sentence across. First decide which one of the two parts of each statement best describes you; then go to that side of the statement and check whether that is just sort of true for you or really true for you. You will just check ONE of the four boxes for each statement.**

REALLY TRUE FOR ME	SORT OF TRUE FOR ME			SORT OF TRUE FOR ME	REALLY TRUE FOR ME
☐	☐	Some students like the kind of person they are	**BUT**	☐ Other students wish that they were different.	☐
☐	☐	Some students are not satisfied with their social skills	**BUT**	☐ Other students think their social skills are just fine.	☐
☐	☐	Some students are often disappointed with themselves	**BUT**	☐ Other students usually are quite pleased with themselves.	☐
☐	☐	Some students find it hard to make new friends	**BUT**	☐ Other students are able to make new friends.	☐
☐	☐	Some students usually like themselves as a person	**BUT**	☐ Other students often don't like themselves as a person.	☐
☐	☐	Some students like the way they interact with other people	**BUT**	☐ Other students wish their interactions with other people were different.	☐

☐	☐	Some students really like they way they are leading their lives	**BUT**	☐ Other students often don't like the way they are leading their lives.	☐
☐	☐	Some students feel they are socially accepted by many people	**BUT**	☐ Other students wish more people accepted them.	☐
☐	☐	Some students would really rather be different	**BUT**	☐ Other students are very happy being the way they are.	☐
☐	☐	Some students are often disappointed with themselves	**BUT**	☐ Other students are usually satisfied with themselves.	☐

Awareness and Importance Subscales of the Mattering Index

The following are statements that measure how you view your relations with other people. When you respond to these statements, focus on people IN GENERAL. Think of the entire collection of other people who populate your everyday life, and respond to each statement in terms of whether it accurately describes your relations with others as a general rule. Do not spend too much time on any one statement; your first reaction is probably most accurate.

Statements	Strongly Disagree	Dis-agree	Neither Agree Nor Disagree	Agree	Strongly Agree
Most people do not seem to notice when I come or when I go.	1	2	3	4	5
In social gatherings, no one recognizes me.	1	2	3	4	5
People do not care what happens to me.	1	2	3	4	5
There are people in my life who react to what happens to me in the same way they would if it had happened to them.	1	2	3	4	5
Sometimes when I am with others, I feel almost as if I were invisible.	1	2	3	4	5
My successes are a source of pride to people in my life.	1	2	3	4	5
I have noticed that people will sometimes inconvenience themselves to help me.	1	2	3	4	5
If the truth be known, no one really needs me.	1	2	3	4	5
People are usually aware of my presence.	1	2	3	4	5
When I have a problem, people usually don't want to hear about it.	1	2	3	4	5
For whatever reason, it is hard for me to get other people's attention.	1	2	3	4	5
Whatever else may happen, people do not ignore me.	1	2	3	4	5
For better or worse, people generally know when I am around.	1	2	3	4	5
Much of the time, other people are indifferent to my needs.	1	2	3	4	5
There are people in my life who care enough about me to criticize me when I need it.	1	2	3	4	5
People tend not to remember my name.	1	2	3	4	5

No one would notice if one day I just disappeared.	1	2	3	4	5
There is no one who really takes pride in my accomplishments.	1	2	3	4	5

Appendix D

Rule Non-Compliance subscale of the Antisocial Behavior and Attitudes Scale

Listed below are statements about people's beliefs and attitudes. There are no right or wrong answers. Circle the <u>ONE NUMBER</u> that indicates how strongly you disagree or agree with each statement.

Statements	Disagree	Not Sure	Agree
I'd feel pretty bad if I broke the rules at my school.	1	2	3
It's none of parents' business what a young person does after school.	1	2	3
I don't like having to obey all the rules at home and school.	1	2	3
I'm afraid to hang around with young people who get into trouble.	1	2	3
I respect teenagers who listen to their parents.	1	2	3
Students shouldn't talk back to the teacher.	1	2	3
It's no big deal to skip a few lessons.	1	2	3
It's not right to yell at your parent.	1	2	3
A lot of teachers bother young people too much.	1	2	3
Parents should know when their teenagers hang around with "bad" friends.	1	2	3

References

Ajlouny, K. (2006). The enhancement of self concept in first-time juvenile offenders using a

short-term psycho-educational/process group. *Dissertation Abstracts International, 67*,

Retrieved from PsycINFO database.

American Bar Association, Center for Children and the Law (2010). Juvenile Status Offenses

Fact Sheet. Retrieved from www.act4jj.org/media/factsheets/factsheet_17.pdf.

Bachman, J., O'Malley, P., & Johnston, J. (1978). *Youth in Transition: Volume IV, Adolescence*

to Adulthood—Change and Stability in the Lives of Young Men. Ann Arbor: Institute for

Social Research.

Bankston, C. (2009). The road less traveled: A qualitative study exploring participants'

perceptions and experiences of the Omega Boys Club Program. *Dissertation Abstracts*

International, *69*(8-B), 5010.

Bosmans, G., Braet, C., & Leeuwen, K. (2006). Do Parenting Behaviors Predict Externalizing

Behavior in Adolescence, or Is Attachment the Neglected 3rd Factor?. *Journal of Youth*

and Adolescence, 35(3)*,* 373-383.

Bouffard, J., & Bergseth, K. (2008). The impact of reentry services on juvenile offenders'

recidivism. Youth Violence and Juvenile Justice, 6(3), 295-318.

Bowlby, J. (1973). *Separation: Vol. 2. Attachment.* New York: Basic Books.

Butler, S., Leschied, A., & Fearon, P. (2007). Antisocial beliefs and attitudes in pre-adolescent

and adolescent youth: The development of the Antisocial Beliefs and Attitudes Scales

(ABAS). *Journal of Youth and Adolescence, 36*(8)*,* 1058-1071.

Bynner, J., O'Malley, P., & Bachman, J. (1981). Self-esteem and delinquency revisited. *Journal*

of Youth and Adolescence, 10(6)*,* 407-441.

Carroll, A., Houghton, S., Wood, R., Perkins, C., & Bower, J. (2007). Multidimensional self-

concept: Age and gender differences in Australian high school students involved in

delinquent activities. *School Psychology International, 28*(2)*,* 237-256.

Carryer, J., & Greenberg, L. (2010). Optimal levels of emotional arousal in experiential therapy

of depression. *Journal of Consulting and Clinical Psychology, 78*(2)*,* 190-199.

Catalano, R. F. & Hawkins, J. D. (1996). The social development model: A theory of antisocial

behavior. In J. D. Hawkins (Ed.), *Delinquency and crime: Current theories* (pp. 149-197).

Chapin, D. A. & Griffin, P.A. (2005). Juvenile diversion. *Juvenile Delinquency; prevention,*

assessment, and intervention, 161-178.

Church, W., Wharton, T., & Taylor, J. (2009). An examination of differential association and

social control theory: Family systems and delinquency. *Youth Violence and Juvenile*

Justice, 7(1), 3-15

Cocozza, J., Veysey, B., Chapin, D., Dembo, R., Walters, W., & Farina, S. (2005). Diversion

from the Juvenile Justice System: The Miami-Dade Juvenile Assessment Center Post-

Arrest Diversion Program. *Substance Use & Misuse, 40*(7), 935-951.

Cohen, A. (1955). *Delinquent Boys: The culture of the gang.* Glencoe, IL: The Free Press.

Cohen, A.L. (2008). *The Social Development Model.* In EBSCO Research Starters: Academic Topic

Overviews. EBSCO Publishing Inc.

Cohen, J. (1988). *Statistical power and analysis for the behavioral sciences* (2nd ed.). Hillside, NJ:

Lawrence Erilbaum Associates.

Davidson, W. S., Redner, R., Blakely, C. H., Mitchell, C. M., & Emshoff, J. G. (1987). Diversion of

juvenile offenders: An experimental comparison. *Journal of Consulting and Clinical*

Psychology, *55*(1), 68-75.

Demo, D., & Savin-Williams, R. (1992). Self-concept stability and change during adolescence.

Self-perspectives across the life span (pp. 116-148). Albany, NY: State University of

New York Press.

Dennison, S. (2000). A win-win peer mentoring and tutoring program: A collaborative model. *The Journal of Primary Prevention, 20*(3), 161-174.

Deutsch, N. L., & Spencer, R. (2009). Capturing the magic: Assessing the quality of youth mentoring relationships. *New Directions for Youth Development*, (121), 47-70.

Dixon Rayle, A. (2006). Mattering to Others: Implications for the Counseling Relationship. *Journal of Counseling & Development, 84*(4), 483-487.

Dixon Rayle, A., & Chung, K. (2007). Revisiting first-year college students' mattering: Social support, academic stress, and the mattering experience. *Journal of College Student Retention: Research, Theory and Practice, 9*(1)*,* 21-37.

DuBois, D., Holloway, B., Valentine, J., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: a meta-analytic review. *American Journal of Community Psychology, 30*(2), 157-197*.*

DuBois, D., & Rhodes, J. (2006). Introduction to the special issue: Youth mentoring: Bridging science with practice. *Journal of Community Psychology, 34*(6)*,* 647-655.

Eby, L., Allen, T., Evans, S., Ng, T., & DuBois, D. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior, 72*(2), 254-267.

Elliott, D. S., Huizinga, D. and Ageton, S. S. (1985). Explaining Delinquency and Drug Use. Beverly Hills, CA: Sage Publications.

Elliott, G., Kao, S., & Grant, A. (2004). Mattering: empirical validation of a social-psychological concept. *Self and Identity, 3*(4)*,* 339-354.

Expert Mentoring Consultants (2009). *Youth Mentoring Survey: Subscale descriptions and*

Reliability Information. Retrieved from http://www.mentoringevaluation.com/

Tools.htm.

Forney, W., Crutsinger, C., & Forney, J. (2006). Self-Concepts and Self-Worth as Predictors of

Self-Perception of Morality: Implications for Delinquent Risk Behavior Associated With

Shoplifting. *Family and Consumer Sciences Research Journal, 35*(1), 24-43.

Gold, M. & Mann, D. W. (1972). Delinquency as a defense. *American Journal of*

Orthopsychiatry, 42, 463-479.

Gomez, D. (2009). Act 101 programs as learning communities: Using the construct of mattering

to enhance higher education service delivery. *Dissertation Abstracts International*

Section A, 69, Retrieved from PsycINFO database.

Grossman, J. B., & Rhodes, J. E. (2002). The test of time: predictors and effects of duration in

youth mentoring relationships. *American Journal of Community Psychology, 30*(2), 199-

219.

Grossman, J. B. & Tierney, J. P. (1998) Does mentoring work? An impact study of the Big

Brothers Big Sisters program. *Evaluation Review, 22*, 115-122.

Harter, S. (1982). The Perceived Competence Scale for Children. *Child Development*, *53*(1), 87-

97.

Harter, S. (1999). Symbolic interactionism revisited: Potential liabilities for the self constructed

in the crucible of interpersonal relationships. *Merrill-Palmer Quarterly: Journal of*

Developmental Psychology, 45(4)*,* 677-703.

Henry, K., & Huizinga, D. (2007). Truancy's effect on the onset of drug use among urban

adolescents placed at risk. *Journal of Adolescent Health, 40*(4)*,* e9-e17.

Herrmann, D., Mcwhirter, J., & Sipsas-Herrmann, A. (1997). The relationship between

dimensional self-concept and juvenile gang involvement: implications for prevention,

intervention, and court referred diversion programs. *Behavioral Sciences & the Law,*
15(2), 181-194.

Jennings, W., Gibson, C., & Lanza-Kaduce, L. (2009). Why not let kids be kids? An exploratory

analysis of the relationship between alternative rationales for managing status

offending and youths' self-concepts. *American Journal of Criminal Justice, 34*(3-4)*,* 198-

212.

Kaplan, H. B. (1978). Deviant behavior and self-enhancement in adolescence. *Journal of Youth*

and Adolescence, 7, 253-277.

Kaplan, H. B., & Liu, X. (2000). Social protest and self-enhancement: A conditional relationship.

Sociological Forum, *15*(4), 595-616.

Karcher, M. J., Nakkula, M. J., & Harris, J. T. (2005). Developmental Mentoring Match

Characteristics: Correspondence between mentors' and mentees' assessments of

relationship quality. *The Journal of Primary Prevention*, 26(2), 93-110*.*

Keating, L., Tomishima, M., Foster, S., & Alessandri, M. (2002). The effects of a mentoring

program on at-risk youth. *Adolescence, 37*(148)*,* 717.

Langhout, R., Rhodes, J., & Osborne, L. (2004). An exploratory study of youth mentoring in an

urban context: Adolescents' perceptions of relationship styles. *Journal of Youth and*

Adolescence, 33(4)*,* 293-306.

Maldonado, N., Quarles, A., Lacey, C., & Thompson, S. (2008). Mentoring at-risk adolescent

girls: Listening to 'Little Sisters.' *Mentoring & Tutoring: Partnership in Learning, 16,* 223-

234.

Mason, W. (2001). Self-esteem and delinquency revisited (again): a test of Kaplan's self-

derogation theory of delinquency using latent growth curve modeling. *Journal of Youth*

and Adolescence, 30(1)*,* 83-102.

Nakkula, M.J., & Harris, J.T. (2005). Assessment of mentoring relationships. In D.L. DuBois &

M. J. Karcher (Eds.), *Handbook of youth mentoring* (pp. 100-117). Thousand Oaks, CA:

Nee, C., & Ellis, T. (2005). Treating offending children: What works? *Legal and Criminological*

Psychology, *10*, 133-148

Neemann, J., & Harter, S. (1986). Self-perception profile for college students. Manual.

University of Denver.

Niccols, A., & Feldman, M. (2006). Maternal Sensitivity and Behaviour Problems in Young

Children With Developmental Delay. *Infant and Child Development, 15*(5)*,* 543-554.

Office of Juvenile Justice and Delinquency Prevention (2003). OJJDP National Report Series

Bulletin: The formal status offense caseload differs substantially from the delinquency

caseload. Retrieved from http://www.ncjrs.gov/html/ojjdp/195420/page17.html.

Osgood, D.W., & Weichselbaum, H.F. (1984). Juvenile Diversion: When Practice Matches Theory.

Journal of Research in Crime and Delinquency, 21, 33-56.

Parker, J., & Benson, M. (2004). Parent-adolescent relations and adolescent functioning: Self-

esteem, substance abuse, and delinquency. *Family Therapy, 32*(3)*,* 131-142.

Preventionaction.org (2008, July 4). *Giving the power of prevention to the people.*

Preventionaction.org. Retrieved from: http://www.preventionaction.org/people/giving-

power-prevention-people/706.

Reckless, W. C., Dinitz, S., & Murray, E. (1956). Self-concept as an insulator against

delinquency. *American Sociological Review, 21,* 744-746.

Rhodes, J. E. (2004). A model of youth mentoring. In DuBois, D. L. & Karcher, M. J. (Eds.)

Handbook of Youth Mentoring (pp. 30-43). Thousand Oaks, CA: Sage Publications, Inc.

Rhodes, J., Grossman, J., & Resche, N. (2000). Agents of change: Pathways through which

mentoring relationships influence adolescents' academic adjustment. *Child*

    Development, 71(6)*,* 1662-1671.

Rhodes, J., Reddy, R., Roffman, J., & Grossman, J. B. (2005). Promoting Successful Youth

    Mentoring Relationships: A Preliminary Screening Questionnaire. *The Journal of Primary*

    Prevention, *26*(2), 147-167.

Rosenberg, M., & McCullough, B. (1981). Mattering: Inferred significance and mental health

    among adolescents*. Research in Community & Mental Health*, *2*, 163-182.

Schenck, C., Braver, S., Wolchik, S., Saenz, D., Cookston, J., & Fabricius, W. (2009). Relations

    between mattering to step- and non-residential fathers and adolescent mental health.

    Fathering, 7(1), 70-90.

Schmidt, M., McVaugh, B., & Jacobi, J. (2007). Is mentoring throughout the fourth and fifth

    grades associated with improved psychosocial functioning in children? *Mentoring &*

    Tutoring: Partnership in Learning, 15(3)*,* 263-276.

Shomaker, L., & Furman, W. (2009). Parent-adolescent relationship qualities, internal working

    models, and attachment styles as predictors of adolescents' interactions with friends.

    Journal of Social and Personal Relationships, 26(5), 579-603.

Sigelman, C. K. & Rider, E. A. (2009). *Life-Span Human Development, Sixth Edition.* Belmont,

    CA: Wadsworth Cengage Learning.

Slicker, E., & Palmer, D. (1993). Mentoring at-risk high school students: Evaluation of a school-

    based program. *School Counselor, 40*(5)*,* 327.

Snyder, H. (2008*). Juvenile Arrests 2005.* Washington, D.C.: Office of Juvenile Justice and

    Delinquency Prevention.

Sprenkle, D. H., Davis, S. D., & Lebow, J. L. (2009). *Common factors in couple and family therapy:*

The overlooked foundation for effective practice. New York, NY US: Guilford Press.

Retrieved from EBSCO*host*.

Stahl, A. (2008). *Fact Sheet 2004: Petitioned status offense cases in juvenile court 1.* Retrieved

from: http://www.ncjrs.gov/pdffiles1/ojjdp/fs200802.pdf.

Stewart, M. (2010). An outcomes study of juvenile diversion programs on non-serious

delinquent and status offenders. *Dissertation Abstracts International Section A,* 70,

Retrieved from PsycINFO database.

Wells, L., & Rankin, J. (1983). Self-concept as a mediating factor in delinquency. *Social

Psychology Quarterly*, *46*(1), 4611-22.