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A MIXED METHODS APPROACH TO UNDERSTANDING
THE JUVENILE REENTRY MENTORING PROCESS

By

Sara E. Moore

A DISSERTATION

Presented to the Faculty of

The Graduate College at the University of Nebraska

In Partial Fulfillment of Requirements

For the Degree of Doctor of Philosophy

Major: Criminology and Criminal Justice

Under the Supervision of Dr. Lisa Sample

Omaha, Nebraska

December, 2019

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A MIXED METHODS APPROACH TO UNDERSTANDING THE JUVENILE REENTRY MENTORING PROCESS

Sara E. Moore, Ph.D.

University of Nebraska, 2019

Advisor: Dr. Lisa Sample

Juvenile mentoring programs are an institution of informal social control that through programmatic design intends to mitigate delinquent behaviors with the development of strong quality social bonds. In these programs, mentees involved in the juvenile justice system are matched with older mentors to form social bonds as a method of encouraging prosocial behaviors. The Juvenile Reentry Mentoring Project (JRMP) is one such mentoring program matching juvenile mentees in the justice system with undergraduate mentors. Research is clear that the longer the match relationship, the stronger the relationship (Rhodes, 2007; Garringer et al., 2017). Yet, research is limited as to the program and relationship factors contributing to lasting quality relationships specific to juvenile reentry mentees (Bazron et al., 2017; Tolan et al., 2014; DuBois et al., 2006; Abrams et al., 2014). Elements understudied include the mentor's approach to the match, mentor and mentee characteristics, and the dosage needed to produce a long-lasting quality relationship. This study attempted to better understand whether these factors contributed to the quality and length of a match relationship for matches in the JRMP. I used an exploratory sequential mixed methods research design to evaluate the potential contributing factors. Given the limitations of the study, particularly relevant the sample size for analysis, findings identified various factors potentially contributing to the

quality and length of a match relationship. The results provide insight and direction for improved data collection and future research.

DEDICATION

I dedicate my dissertation to my very supportive family and mentors. First, I would be remiss to not recognize that God was with me through every step, holding my hand, and giving me the confidence and knowledge needed to succeed; thank you Lord for your constant presence. To my loving, supportive, understanding, and patient husband, Mark, thank you. Your constant words of encouragement and willingness to support me through this long process meant more to me that I can express, particularly as you continued to push me when I needed that extra nudge and listened to me process through problems.

I am blessed to have such wonderful sons that were there to remind me of the importance of achieving my goals. Trent, even though you were learning over the years what I was doing, you tried your best to understand and allow me the time needed to work on projects while also gently reminding me when I needed a “mommy and son” break. Jaxon, you have been a part of this process since you were born, and watching you develop through this time has been a much needed joy.

To my parents, you have supported and encouraged me through every academic pursuit. The skills you imparted on me were paramount in achieving this goal. Mom, without your unwavering support and dedication to see me succeed, no matter the hour, I would have faltered. You have always been a comfort and guide through every step, pushing me when needed, and your expert proofreading skills were essential. Pa, the strength you have shown me over the years with your own challenges was a constant reminder of the abilities and strength you bestowed on me. Throughout this process, your unconditional love and confidence in my abilities encouraged my continued progress.

To my brothers and sisters, thank you for continuing to support my academic pursuits and encouraging me to go as far as possible. Particularly my older brothers, I have learned so much from each of you, your life experiences and knowledge assisted me at various stages in my academic pursuits. Grandma, you and grandpa were always encouraging me. You were there when I needed you, and your love and support was always felt with each step in my education. While I cannot thank every family member individually in this dedication for their support and encouragement, I know each of your contributions to my success and am blessed to have such a supportive family.

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CHAPTER 1:
INTRODUCTION

Juvenile delinquency, or law violations by youth, has been a public concern for centuries. The juvenile justice system was designed to punish, treat, and deter youth from future offending by addressing assumed reasons for delinquent behaviors that included poor morals due to, among other failings, a lack of prosocial relationships or weak bonds to society (Bernard & Kurlychek, 2010). Hence, juvenile mentoring programs were established as a means of community support to ensure youth develop social bonds with prosocial older role models.

When discussing mentoring programs for youth, Big Brothers and Big Sisters (BBBS) is the program most commonly mentioned. Mentoring programs such as BBBS focus on establishing a mentoring relationship through matching younger mentees with an older mentor with prosocial life experiences to provide support and prevent delinquency (Garringer, Kupersmidt, Rhodes, Stelter, & Tai, 2015). To establish relationships, the most common model is one-to-one mentoring that matches adults with youths (Garringer, McQuillen, & McDaniel, 2017). The second most popular model is a group relationship that matches multiple mentors with multiple mentees. Depending on the goals of the program, there are a few other lesser known and utilized mentoring models. One such model is the cross-age model matching older youth mentors with younger youth mentees in a school setting in order to encourage academic achievement.

The goals of mentoring programs are vast to include developing life skills and social skills, academic enrichment, identity development, general youth development, or establishing a caring or supportive relationship, all in an overall effort to discourage delinquency (Garringer, McQuillin, & McDaniel, 2017). Sometimes the desired goals are less apparent for juvenile offender mentoring programs because mentees may have

already engaged in delinquency; therefore, apart from achieving the typical program goals of life skills or general youth development, juvenile program outcomes may focus more on psychological and emotional growth or positive social acceptance and less on tactics to avoid delinquency (Herrera, DuBois, Grossman, 2013; DuBois et al., 2011; Bazron et al., 2017). Programs typically match youth as a means to prevent socially undesirable behavior such as truancy through achievement of the program goal. Yet, what is less understood about mentoring are the programs focused on one-to-one matching of mentors with juvenile offenders in need of intervention rather than prevention. Research is needed to recognize the program elements and aspects of juvenile mentoring that lends to influential positive mentoring relationships on delinquency.

The Juvenile Reentry Mentoring Project (JRMP) is a mentoring program matching juvenile offenders with undergraduate student mentors in an effort to establish mentoring relationships by providing support and encouraging prosocial behaviors under the supervision and guidance of an instructor as an intervention to hinder further delinquent behaviors that result in punitive system involvement. Given that outcomes are influenced by the strength and length of mentoring relationships (Grossman & Rhodes, 2002), this study seeks to better understand mentoring relationships by asking: *What contributes to the quality and length of a match relationship in juvenile mentoring programs?*

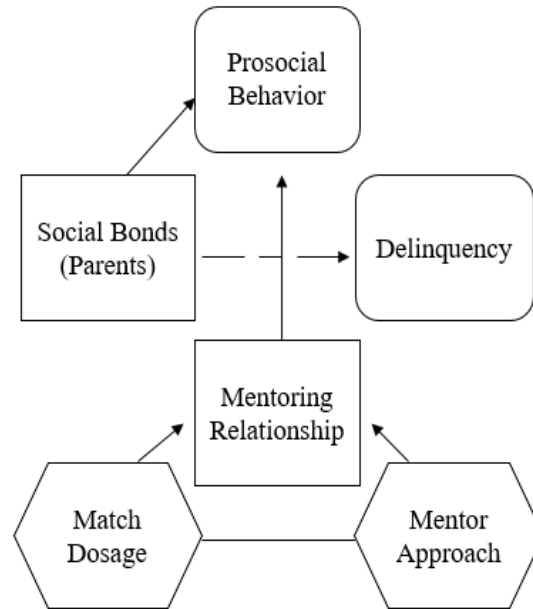


Figure 1: Logic Model

Figure 1: Logic Model displays the potential influence of a mentoring relationship on mentee development of prosocial behaviors. Mentor's approach to the match may influence the quality of the relationship as well as the longevity. A match lasting a year or more lends to a stronger relationship and likelihood of prosocial outcomes (Grossman & Rhodes, 2002; Garringer et al., 2015). Additionally, the frequency and intensity of the match contacts, or dosage, may factor into or be a factor of the mentor's approach and affect match length. Both the mentor's approach and match dosage can affect mentoring relationships meant to influence prosocial behavior through social bonds that reduce delinquent behavior.

In an effort to address my complex research question, it is necessary to recognize the factors influencing the mentoring relationship based on best practices. When discussing mentoring programs, studies note effective program aspects such as screening, matching procedures, training, and supervision (Garringer et al., 2015; Bazron, Brock,

Read, & Segal, 2017; DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). The aspects of mentoring programs that remain understudied are the mentor's approach to the relationship, mentor characteristics, mentee characteristics, or the needed dosage for eliciting the desired outcomes for youth (Karcher, Kuperminc, Portwood, Sipe, & Taylor, 2006). The lack of research in this area makes the programming and relationship elements necessary for a strong and lasting relationship unclear (Bazron et al., 2017; Tolan, Henry, Schoeny, Lovegrove, & Nichols, 2014; DuBois, Doolittle, Yates, Silverthorn, & Tebes, 2006; Abrams, Mizel, Nguyen, & Shlonsky, 2014). Rather than focusing this study on simply the outcomes of mentoring programs, I seek to better understand the process of mentoring programs by examining identifiable factors that influence the quality and length of relationships while noting unique programming and relationship aspects that need further exploration.

Program Components and Outcomes

To understand the value of any program outcome, it is essential to review the purposes of the program and the targeted population through the systematic collection of program activities, elements, and outcomes (Patton, 2008). Generally, the JRMP aims to reduce recidivism among youth returning to the community from a rehabilitation treatment center and prepare college students for careers in the criminal/juvenile justice or similar fields (JRMP, 2017), but there are internal program components that must occur to achieve these broader goals.

Juvenile offenders often lack positive adult role models, leading to multiple risk factors associated with delinquency such as anger management and academic failure. The

purpose of juvenile mentoring programs is to provide an avenue for juvenile offenders to establish supportive prosocial relationships with conventional adult role models in an effort to foster positive psychological and social development (Bazron et al., 2017). A supportive prosocial mentoring relationship then becomes an institution of informal social control. Through various institutions such as the family, schools, churches, etc., adolescents strengthen their bonds to society, impeding delinquent behaviors. The institutions being either formal (juvenile justice system) or informal (family, peers, mentors). The role of informal social control is paramount for deterring delinquency given that many of these social bonds result in social capital, or an interpersonal relationship that encourages trust, interdependence, and mutually beneficial outcomes. The youth can utilize these informal social controls as resources to aid in their transition to adulthood. For youths who lack familial, peer, and/or academic support, mentoring relationships become an institution of informal social control providing support and resources for adult transition while encouraging desistance. The JRMP facilitates opportunities that encourage a supportive relationship between undergraduate student mentors and juvenile offender mentees to influence psychological, emotional, and social developmental outcomes such as anger management and academic performance (Baglivio, Wolff, Piquero, DeLisi, & Vaughn, 2017). The opportunity to reduce recidivism and promote positive outcomes is relevant to the type of mentoring relationship developed and the programmatic adherence to best practices (Morrow & Styles, 1995; Garringer et al., 2015; DuBois, Holloway, Valentine, & Cooper, 2002; Tolan et al., 2013). It is then incumbent upon us to understand types, lengths, and qualities of mentoring relationships to understand overall program outcomes.

Informal Social Control

Mentoring relationships become a form of informal social control as they mitigate potential delinquent behaviors resulting from a lack of social bonds. Hirschi (1969) conceptualized the importance of social bonds as a means to deter delinquent behaviors through four elements: attachment, commitment, involvement, and belief. The element of attachment is paramount pertaining to mentoring relationships. Regarding attachment, adolescents will engage in delinquent behavior if they lack a bond with someone who will promote their “internalization of norms” wherein norms are shared by both and any violation of a norm may result in violating the expectations of the relationship deemed as valuable (Hirschi, 1969; Hirschi & Laub, 2002). Adolescents’ bonds to societal norms is associated with the presence of a bond to conventional others (Hirschi, 1969). The concept of social bonds and the application to mentoring relationship as a means to deter delinquent behavior was further expanded by Sampson & Laub (1993) through the identification of informal social control.

Hirschi refrained from indicating the institution(s) important for bonds or the value of bond quality, instead focusing on “weak” bonds to society leading to delinquency (Hirschi, 1969; Hirschi & Laub, 2002). Despite juveniles’ histories of delinquent behavior, deterrence from delinquency relates to the strength and quality of bonds to specific institutions of social control pivotal to the transition into adulthood, and not just the presence of a bond as Hirschi implies (Sampson & Laub, 1993; Laub & Sampson, 2001). According to Sampson and Laub (1993), a strong quality bond includes consistent involvement, an emotional attachment, and appropriate responses to delinquent behaviors. During the process of developing a strong quality mentoring relationship,

mentees are accumulating positive outcomes such as reductions in criminal thinking (Sampson & Laub 2001, 1993; Goldner & Maysless, 2008). Additionally, Sampson and Laub (1993) explained that weak bonds lead to engaging in delinquency, which further weakens adolescents' investments in their bonds with societal norms, thereby, challenging their ability to initiate and reengage the bonds resulting in continued delinquency.

Subsequently, establishing strong quality bonds with mentors improves mentee outcomes since weak bonds may lead to youth engaging in delinquent behavior during the match relationship such as substance use or running from home or placement, which then further weakens the mentoring relationship and mentees' bonds with society resulting in potential adult criminal behaviors. Mentor approach, mentor and mentee characteristics, and dosage are aspects of a mentoring relationship typified by the program that may either strengthen or weaken these bonds affecting delinquency.

Mentor Approach

Notably, desistance from delinquency is gradual and cumulative because it takes time to invest in relationships and create strong quality bonds that limits involvement in delinquency (Laub & Sampson, 2001; Tolan et al., 2014). The development of strong bonds relies heavily on mentors' approaches to relationship. Mentors focused on providing support for prosocial thinking as well as being a resource for the mentee's needs is important for developing quality mentoring relationships (Morrow & Styles, 1995). Mentors then focus on meeting the needs of the mentee and establishing a caring relationship, noted as a Developmental Approach, along with promoting goal achievement and behavioral change, noted as a Prescriptive Approach (Morrow & Styles,

1995). The Developmental Approach is characterized by mentors being flexible to the youth's needs, having interest in the youth's life, and seeking to just have fun with the mentee. The Prescriptive Approach is marked by the mentor's focus on the goals of the match and decisions on the tasks, activities, or topics of conversation, with a lack of consideration for mentee thoughts or desires.

A balance of both approaches is rewarding for mentees and mentors, as it is essential for fostering a lasting bond (Moore, 2018). A predominately prescriptive approach is linked to negative match outcomes such as short match durations because of the authoritative nature of the approach (Moore, 2018; Morrow & Styles, 1995). A third approach, instrumental, is an approach similar to prescriptive, but focuses on guiding or supporting mentees with task or goal completion versus the prescriptive where it is directive and mentor driven (Karcher et al., 2006). Karcher et al. (2006) note the instrumental approach focuses on goal or skill achievement whereas the developmental approach focuses on fostering a close and trusting relationship. The authors further note the instrumental approach may be more beneficial for achieving outcomes associated with reducing delinquent behaviors. A balance of developmental and instrumental or prescriptive approaches contribute to the quality and length of matches.

Match Length

Match length, or dose, is associated with match approach, but it is unclear the role dosage has on the quality of the match relationship for juvenile offender mentees. Research is clear, however, the longer the match, the stronger the mentoring relationship while matches ending prematurely, typically 6 months or less, result in negative

outcomes (Rhodes 2007; Garringer et al., 2017; Grossman & Rhodes, 2002; Bernstein, Dun Rappaport, Olsho, Hunt, & Levin, 2009). Research further notes a match duration of one year or more is effective for attaining desired outcomes, although the components of a quality match necessary for a one-year match length remains unclear (Garringer et al., 2015; Berstein et al., 2009; Grossman & Rhodes, 2002). The match length in terms of dosage includes the frequency and intensity of contact during the relationship. The frequency of contact is indicated by the number of mentor-mentee interactions in a month, and the intensity is noted by the number of contact hours during the interactions (Garringer et al., 2017). In many mentor programs, an expected frequency of contact is weekly or biweekly with an intensity of one to two hours each interaction (Garringer et al., 2017). However, mentor and mentee motivation to schedule meetings interfere with the ability to meet per program expectations. In matches with high risk youth, canceled match interactions are common, with mentees typically canceling (Herrera et al., 2013). Match cancelations can influence the quality of the match given the limited interactions as well as the potential mentor frustration of canceling that may occur without warning, which could then influence the mentor's approach (Herrera et al., 2013).

Mentor and mentee aspects can limit match interactions for several reasons to include the mentor's satisfaction of the match, mutually beneficial nature of the relationship, pace in which the match progresses, and maintaining of unreasonable match expectations (Suffrin, Todd, & Sánchez, 2016; Rhodes, 2007; Kupersmidt, Stump, Stelter, & Rhodes, 2017; Spencer, Drew, Walsh, & Kanchewa, 2018). The longer the match duration, the more potential to lessen the impact of mentor and mentee aspects that can shorten duration (Rhodes, 2007). Thus, both the match approach and dosage lead to

the strength and quality of a match, the value of which, as a form of informal social control, cannot be understated as a potential mitigating factor for a mentee's involvement in delinquent behaviors as noted in Figure 1.

Mentor & Mentee Characteristics

An understanding of match quality can be garnered through studying the individual external and internal characteristics of the mentor and mentee to include demographics, mentee recidivism, and mentor goals and prior volunteer experiences, as displayed in Figure 2: Logic Model with Mentee and Mentor Characteristics.

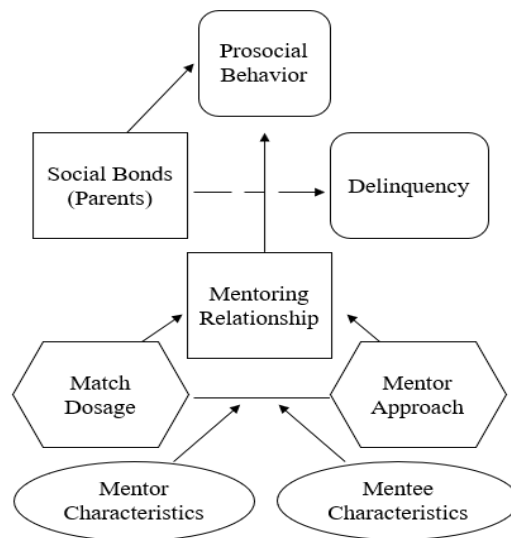


Figure 2: Logic Model with Mentee and Mentor Characteristics

Notably, studying the characteristics of mentors and mentees provides a minute understanding as to the complexity of the role a mentoring relationship may have on prosocial outcomes. Sampson and Laub (2005) contend that desistance from delinquent behaviors results from more than the existence of an institution of informal social control such as a mentoring relationship. Rather, desistance further includes the role of human

agency and “random developmental noise.” Human agency as a trait is an individualized response of self-interest that comes in degrees and relates people’s level of intent toward self-improvement. Juveniles may not be aware of their actions influencing desistance, such as actively engaging in a quality bond with their mentor, or they may be fully aware of their actions, such as intentional cessation of risky behaviors due to causing harm to others (Paternoster, 2016). Sampson and Laub (2005) note random aspects, or uncertain mechanisms related to genetic expression, of development apart from genes and/or environment effect offending behaviors. Therefore, desistance is a product of the intersection of institutions of informal social control, human agency, and random processes. Adolescents’ deviation from offending behavior is in part due to their choice to engage in a mentoring relationship and cease delinquent behaviors, the quality of the relationship, and other random processes. The study of unknown mechanisms involved in genetic expression is problematic due to the nature of these random processes being random, without the ability to be clearly identified and defined. However, recognizing the role of characteristics allows insight into human agency and the quality of the match relationship as portended in Figure 2.

Attribution Theory

Research has utilized Heider’s attribution theory to understand the role of individual internal and external characteristics in perceptions of the cause of another’s nonconforming behavior. Demographics, mentee recidivism, and mentor prior experience and professional goals are internal and/or external characteristics a perceptor may use to determine intent related to delinquent behaviors or investment in the match relationship.

A key point of attribution theory is the focus on the perceptor, the person perceiving the characteristics of another as the cause of the behavior or outcome (Heider, 1958; Malle, 2011; Weiner, 2011). In relation to mentoring, the characteristics may be linked to the mentee's level of responsibility for delinquent acts, or both the mentor and mentee's level of responsibility for the lack of relationship quality. These characteristics are also referred to as internal or external attributions that lend to causal inferences made within the relationship. The match approach, dosage, and subsequent duration may be influenced by these attributions such as the mentor altering the approach to reflect their perception of the mentee's level of responsibility for their delinquent behavior.

Heider's intentions to provide a theoretical understanding of interpersonal relations through a causal attribution process evolved into the contested versions of today's attribution theory. Even though disciplines refer to Heider's original theory, there is a lack of consensus as to the theoretical application. Attribution theory is typically referred to as either causal attribution, attribution of responsibility, or attribution of blame. Arguments have been made that these types differ significantly from Heider's original intent, yet, an additional view posits that they are interconnected through a sequential order (Shaver & Drown, 1986; Kroner, & Mills, 2004; Workman & Freeburg, 1999). In order to recognize attribution theory in the context of mentoring, it is important to understand Heider's intended causal attribution theory. Heider relayed the causal process as intention combined with the "raw material" or information gathered regarding the person, the internal or external factors, and the outcome as all contributing to the overall perception of causality (Heider, 1958, Malle, 2011, Weiner, 2011). Heider identified information gathering as vital in the process for assigning causality in that it

accounts for mediating conditions, (i.e. contact with probation officers), internal factors (i.e. ability, knowledge, attitudes), and environmental factors (forces outside the individual's control, i.e. family) (Heider, 1958; Weiner, 2011). Heider (1958) indicated that the intention of people to produce outcomes is obtained through mediating conditions and the ascription of people's ability and effort. Additionally, the perceptor may view a person as able and knowledgeable of committing an outcome when intention and effort are present; otherwise, the outcomes could be pertaining to external factors, impeding ability and knowledge (Heider, 1958).

Heider (1958) was concerned the field of social psychology was particularly focused on perceptions among larger groups of people, but there remained a need to understand perceptions between two people as a means to lending insight into group problems. For example, within a mentoring relationship, when a mentee has an experience such as enjoying a game played with the mentor, this is part of the raw material that provides information that an event occurred and a cause took place; playing a game led to enjoyment. Additional levels of information gathering can then begin to take place to further interpret the event or elicit additional facts about the experience or persons involved such as discussing their day or other interests. Upon reviewing the raw material, the mentee may seek to understand the cause of the experience such as determining if the enjoyment was due to chance, they were already in a good mood due to earlier events in the day, or due to the mentor that was playing the game. If the cause was deemed to be due to the mentor, the mentee begins to determine intent; was this person playing to please them or someone else or was it for class credit. The mentee then continues to understand the level of intent by evaluating the attributions within the

mentor's control such as effort to achieve goals, abilities, knowledge, and attributions outside of the mentor's control such as illness, neighborhood factors, family influences. The attributions along with intention assist individuals in determining the level of causation by the other person as either personal causality, within their control-intentional, or impersonal causality, outside of their control-unintentional. The perception of an attribute as either being internal or external is influenced by the level of perceived intent.

In the process of attributing action or cause, intention is directly related to the individual (perceptor) determining either personal causality, intentional and within the person's ability, knowledge, and effort, or impersonal causality, unintentional and outside of the person's control wherein external factors could be influential (Malle, 2008). The importance of recognizing the perception of intention is that if the mentor believes the mentee had intention and personal causality, it lends to the perception of mentees being potentially harmful and could influence their approach to the match relationship (Malle, 2011). For example, a mentee engaging in fights at school may lead the mentor to perceive the mentee as harmful and the behaviors within the mentee's control, thus, attributing personal causality. However, if the mentor knew the mentee recently divulged sexual assault within the home, then they may attribute the behavior to factors outside of the mentee's control and impersonal causality. Heider (1958) emphasized that intention is paramount in determining personal causality as well as the concept of effort; as the amount of effort indicates the degree of intention to cause an outcome. Heider (1958) relayed the process of impersonal causality as an event that results in an uncontrollable outcome due to an external factor that influences the circumstances related to the outcome. Conversely, the process of personal causality

reflects the intention of an individual to manipulate the event and circumstances by drawing on internal factors in order to achieve the desired outcome (Heider, 1958). The perception of intention can be construed as a function of human agency that promotes or hinders match quality. The type of approach elected by mentors is resultant of their causal perception of intention relevant internal and external characteristics, which can influence prosocial outcomes as noted in Figure 2.

Heider (1958) noted that attribution of action or causality are commonplace and permit the perceptor to understand and react to their surroundings. In mentoring, actions relate to the positive or negative behaviors of mentors and mentees. A Mentee's continued behavior to run from home and avoid treatment services would be an action leading to a perception of causality. However, the type of causality would depend on whether the mentor perceived the action to be due to the mentee's intention to avoid self-improvement when they have the ability to successfully complete treatment or due to the mentee's abusive home environment and their lack of control to maintain personal safety. A person can be destructive to the environment of another through their delinquent or unexpected behaviors, and the other individual then attempts to understand this change brought on by the actions, whether directed at them through the attribution of action or the causality process (Heider, 1987; Heider, 2005). Once causality is determined, the perceptor can cause the person to change by asking them or by commanding, as can be indicative of a developmental or prescriptive approach, respectively (Heider, 1958). With the aforementioned example, the mentor's perception the mentee personal causality to run away based on avoiding self-improvement may then respond with a prescriptive approach focused on goal setting and directing the conversation around changing

behaviors whereas the mentor perceiving the run behavior as a product of the home environment and impersonal causality would attempt to ask the mentee about their behaviors and work with them to find effective solutions. Thus, the mentoring relationship can be influenced by the actions of either the mentor or mentee through the causal process. These actions such as changes to match approach or frequency of visits, resulting from causal attribution based on the characteristics of the mentor or mentee may occur at the onset of the match or later on in the match relationship.

Current Study

The current study uses an exploratory approach to extend previous mentoring research by examining processes within the Juvenile Reentry Mentoring Project (JRMP) and determining the match characteristics that influence the quality and length of the match relationship. Specifically, what mentor and mentee characteristics influence the match approach and match dosage? Then, how do match approach and match dosage influence match quality and length? The study aims at understanding the intersection of the strength of the match and the duration by way of individual characteristics, approach, and dosage. The use of a mixed methods approach allows for exploring the various factors related to the quality and length of a relationship. Primary data were collected through reading the mentors' journals completed during their involvement in the course associated with the JRMP. Outcome measures and mentor and mentee characteristics were obtained through course assignments completed by the mentor or from the facility associated with the mentee. Chapter 2 examines the current literature on mentoring programs and connects identified best practices to the JRMP. This chapter will discuss

literature on mentor and mentee characteristics and match approach associated with successful match relationships that will guide the inductive and deductive methodological approach. Chapter 3 explains the exploratory sequential mixed methods research design used in data collection and analysis. Chapter 4 explores the results of mentor and mentee characteristics on match approach and Chapter 5 discusses the findings relevant to dosage. Chapter 6 evaluates whether and how approach and dosage relate to match length. Chapter 7 reviews the findings associated with mentor and mentee characteristics that influence match approach and dosage and overall match length. I also discuss the implications of my findings to include suggested program revisions to encourage positive outcomes for mentors and mentees and improved data collection procedures for future program evaluation.

CHAPTER 2:
EMPIRICAL LITERATURE

Consistent with the goals of preparing students for careers in the criminal/juvenile justice or similar fields and reducing recidivism among youth returning to the community from a residential facility, the program screens and recruits undergraduate students as mentors and matches them with juvenile mentees court ordered to a residential treatment facility. The body of research is limited on mentoring programs for juvenile justice involved youth reentering the community from a congregate care setting (Bazron et al., 2017; Abrams et al., 2014; Tolan et al., 2014; Eddy & Schumer, 2016; Chan & Henry, 2014). Studies tend to focus on whether a program produces expected outcomes such as reduced recidivism or improved academic performance rather than the development of a positive supportive relationship, which is paramount to expected outcomes (Li & Julian, 2012; Morrow & Styles, 1995). Thus, understanding the elements of a program that fosters a developmental relationship is necessary to understand anticipated outcomes, particularly as noted through match length since effective mentoring programs indicate matches should last one year or more (Garringer et al., 2017).

In reviewing the program, it is important to distinguish specific program processes apart from outcomes, then measuring them separately and together (Patton, 2008). The JRMP processes align with best practices to include recruiting, screening, training, supervising, and matching. Within each of these processes, certain mentor and mentee characteristics such as demographics, the mentor's personal goals and experiences, and mentee's delinquent behaviors; match approach; and dosage are observed and can be connected with the outcome of match length.

Program Overview

Volunteer student mentors are recruited through academic advisors, fliers, classroom presentations, and word of mouth. The students need to be at least a sophomore level student, but preferably junior or senior due to the intensive program requirements and ideal maturity to properly maintain a mentoring relationship. Prospective mentors complete a screening process that includes a background check and interview with the instructor prior to being matched. Background checks are conducted to keep youth safe from harm by identifying mentors that may pose a safety risk (Garringer et al., 2015; Bazron et al., 2017). The checks include criminal record, sex offender registry, child abuse/neglect registry, and driving record. An interview with the prospective mentor assists with informing them about the program, expectations, and target population as well as determining appropriateness and ability of the individual to work with juvenile justice populations (Bazron et al., 2017; Garringer et al., 2015). At the conclusion of the interview, students sign an agreement noting they understand and agree to the program expectations. Students without infractions on their records and those that successfully complete the interview are then enrolled in the course and proceed with the matching process. The first step of this process includes the student's submission of a one-page autobiography for review by the instructor and facility for use in identifying potential mentees.

Prospective mentees volunteer to engage in the JRMP through one of two Youth Rehabilitation Treatment Facilities. The facility in Kearny, NE is designated for males while the one in Geneva, NE is for females. Mentees are identified by the facility as in need of support through their treatment team processes that note number of visitors, level

of external support, and therapeutic contacts. The second step of the matching process involves round-robin style interviews between the mentors and mentees focused on learning about shared interests; which is an invaluable aspect of a quality mentoring relationship (Bazron et al., 2017; Garringer et al., 2015; Moore, 2018; DuBois et al., 2011; Pryce, Kelly, & Guidone, 2014). According to Pryce et al. (2014), this approach to the matching process is one of four typically used by programs. The first is the “administrator-assigned” method wherein the program assigns the matches without input from the mentor or mentee. The second is “youth-initiated mentoring” or “choice-based” in which the mentee identifies potential mentors. The third utilizes formal assessments such as personality inventories to identify matches. Finally, the fourth approach is the one utilized by the JRMP, this is the “program-initiated meet-n-greet”. With this format, after every potential match meet, both mentor and mentee are asked to identify the individuals with whom they felt connected and enjoyed meeting without ranking the selections. After the interviews in the JRMP, students submit a journal assignment for review by the instructor identifying two names of youth they are interested in mentoring. The facility and instructor then determine the matches primarily based on the preferences of the mentor. Mentees may verbally report their preferences to the facility, the mentors, or instructors, but no formal process is in place per best practices (Pryce et al., 2014; Kendall, 2007). Programs promoting the mentee’s perception of similarity in interests and extroversion as well as voice in selecting a mentor lend to longer matches (Madia & Lutz, 2004; Kendall, 2007; Karcher, 2014). Best practices also considers geographic proximity; therefore, match decisions in the JRMP also take into consideration the

communities in which mentors reside and the mentee will return upon release (Bazron et al., 2017).

Mentors are required to enroll in two semesters and attend weekly class sessions; which promotes the mentor's engagement to the one-year match commitment that facilitates successful match outcomes (Spencer, Drew, Walsh, & Kanchewa, 2018; Rhodes & DuBois, 2008; Higley, Walker, Bishop, & Fritz, 2014; Grossman & Rhodes, 2002). Prior to match approval, mentors participate in at least three weeks of course instruction on juvenile law, juvenile practice, and working with adolescent populations. This practice is encouraged for juvenile mentoring programs to help mentors understand juvenile justice processes and experiences of mentees (Bazron et al., 2017). Throughout the course, mentors complete weekly journals, detailing interactions with their mentees. Mentors are expected to communicate with their mentees on a weekly basis in-person or through other methods such as letters, phone, or text per best practices (Garringer et al., 2015; Garringer et al., 2017). While the youth resides in the facility, face-to-face visits and letters are the sole contact methods; with a minimum of once per month in-person visits.

The instructor provides training and supervision through weekly classroom interactions and journal submissions, which is an element of best practices for monitoring and supporting the matches (Garringer et al., 2015). Through the journals, instructors learn of the mentor's perceptions, biases, questions, challenges, and successes in the relationship, allowing them to provide support that can encourage mentor satisfaction, early intervention of match challenges, and appropriate responses to the needs of the mentee (Bazron et al., 2017; DuBois et al., 2002; Tapia, Alarid, & Enriquez, 2013).

Classroom training offers the opportunity for cultivation of cultural competency, communication skills, mental health and substance abuse awareness, and youth development. The journals and classroom interactions permit a level of supervision designed to encourage quality match relationships and reduce ethical violations (Rhodes & DuBois, 2008; DuBois et al., 2002; Kupersmidt & Rhodes, 2014; Grossman & Rhodes, 2002; Bazron et al., 2017; Peaslee & Teye, 2015; Madia & Lutz, 2004).

Demographics

Mentoring programs are encouraged to match based on demographic similarities as age, gender, race, and ethnicity; research is evolving as to the efficaciousness of these practices (Garringer et al., 2015; Sánchez, Colón-Torres, Feuer, Roundfield, & Berardi, 2014; Karcher, 2007). Sánchez et al. (2014) notes that it is important to recognize the complexity of defining and measuring race, ethnicity, and culturally relevant mentoring relationships as they can be a factor in developing trusting relationships, but matches based solely on these certain demographic characteristics may sacrifice the importance of matching based on shared interests that are known to result in effective outcomes (DuBois et al., 2011; Pryce, et al., 2014). Yet, research indicates the value of considering race and ethnicity during the match process along with age and gender. Since these characteristics are important in the matching process, they also have the potential to influence the quality of the match relationship. The mentor may view certain demographics as internal or external attributions that may or may not have caused the mentee's illegal behaviors. This causal perspective of a mentee's attributions can

influence the match approach and dosage, overall weakening this institution of informal social control, resulting in shorter match lengths with potentially negative outcomes.

Age

A mentoring relationship is characterized as having an older mentor guide and support a younger mentee; therefore, an age gap is assumed in order for a mentoring relationship to exist. In order to foster a strong social bond by maintaining appropriate boundaries, serving as role models, and being a trusted confidant, mentors need to be at least two-years older or maintain a two-year grade gap (Garringer et al., 2015; Karcher, 2007; Karcher, 2014). The mentees within the JRMP program are youth within the juvenile court system that committed a misdemeanor or felony infraction. Within the state of Nebraska, juveniles within court jurisdiction are considered to be under the age of 18 yet older than 11 (as of July 1, 2017) but could remain under court jurisdiction until age of majority, which is 19 years-of-age (Neb. Rev. Stat. § 43-245 (2, 11); Neb. Rev. Stat. § 43-247). Mentors within the JRMP are required to be at least a sophomore level in standing. Throughout the state of Nebraska as noted by most recent data, the majority of undergraduates enrolled as freshman in college are over the age of 19 (approximately 65% in 2015) (NE CCPE, 2017), lending to a greater likelihood of maintaining a 2-year age or grade gap in the mentoring relationship when matching at a sophomore level.

Age becomes a factor in the mentor's perception of a mentee's nonconforming behaviors. Juveniles perceived as younger and immature are more likely to be held less responsible than their older counterparts (Scott, Reppucci, Antonishak, & DeGennaro, 2006). Since impersonal causality is linked to intention, younger juveniles are viewed as

less culpable given their lack of ability as related to their knowledge or control of environmental factors (Heider, 1958; Weiner, 2006). Therefore, the older the mentee, the more personal causality attributed to behaviors, which could negatively influence mentor approach and length. Furthermore, as youth age, particularly females, matches are more likely to be shorter as they may display mistrust and parental alienation that can inhibit the development of a strong bond with a mentor (Grossman & Rhodes, 2002; Rhodes, Lowe, Litchfield, & Walsh-Samp, 2008). Even though matches with older adolescence was found to result in premature match closures, this effect can be mitigated through the development of a strong quality bond (DuBois et al., 2002; Kupersmidt et al., 2017).

Gender

The JRMP conducts same-gender matches although the findings are mixed as to the benefits of same versus cross gender matching, but studies are clear there are relational differences among the genders (Liang, Bogat, & Duffy, 2014; Kanchewa, Rhodes, Schwartz, & Olsho, 2014; Park, Liao, & Crosby, 2017; Rhodes et al., 2008). Best practices among mentoring programs involves same-gender matching, particularly for the premise that there are more similarities to themselves and the mentor can be a role model to assist with navigating identity and role development (Bazron et al., 2017; Garringer et al., 2015; Garringer & MacRae, 2008; Liang et al., 2014). A salient point related to limiting cross-gender matching is the concern of romanticizing the relationship or misperceptions of sexual interest (Liang et al., 2014).

Females and males are found to experience mentoring relationships differently, which can affect match approach and length. The role gender has on match approach is

unclear (Liang et al., 2014). According to Hanham & Tracey (2017), male mentees expressed difficulty upon reentry to the community from a juvenile justice center, noting residual effects from this setting inhibited their adjustment. The effects from being in placement made it difficult to find employment or improve academically and could impede their ability to foster positive relationships; therefore, as in the efforts of the JRMP, providing time for a mentoring relationship to develop prior to release is an important component to maintaining the relationship. The established mentoring relationship upon release then allowed for the male mentors to be “reliable allies,” “confidence builders,” and “educational and occupational resources” to the male mentees, assisting them with overcoming the potential negative effects of reentry. The study further revealed that a balanced approach of developmental, instrumental, and prescriptive methods assists with reentry by developing stronger bonds and longer match durations.

Female mentors may engage the relationship with the expectation of quickly developing close emotional connections with mentees, resulting in a weak bond and misaligned approach with their mentee (Spencer et al., 2018). Female matches are noted to end prematurely, but as a match progresses beyond a year they are maintained for longer durations than male matches and with greater satisfaction in the relationship than males (Rhodes et al., 2008; Spencer et al., 2018). Gaarder, Rodriguez, and Zatz (2004) found that female juveniles in the justice system are perceived by probation officers as more challenging to provide services. Additionally, given their involvement in the justice system, their behaviors are perceived as socially inappropriate for females, leading to a lack of understanding at the onset of gender specific issues that limit the development of

a trusting relationship. The officers then attribute personal causality to female juveniles' involvement in the system. Female mentors may approach the match relationship similarly at the onset, which could impede dosage and limit the progression of the match, resulting in premature match closures. However, the female mentor may adjust their approach further into the match as they receive instruction and feedback on gender specific issues in the class setting, but this would be challenging to assess and may be a mitigating factor.

Race

Similar to matching on gender, best practices include matching on similar race, ethnicity, and culture even though findings are mixed as to the utility of this practice (Bazron et al., 2017; Garringer et al., 2015; Garringer & MacRae, 2008; Sánchez et al., 2014). However, even though matching on similar race is considered best practice, programs are encouraged to supersede this practice with matching on similar interests, due to finding that match length was not a factor in cross-race matches when interests were a matching criterion (Grossman & Rhodes, 2002; Garringer et al., 2015; Sánchez et al., 2014; Rhodes, Reddy, Grossman, & Lee, 2002). The JRMP matches with a focus on similar interests wherein the mentor primarily determines the mentee they felt most connected, which may include race or culture but these are not a definitive aspect of the matching decision.

Whether a match is same- or cross-race may alter the mentor's perceptions of the mentee and their approach to the match relationship. Programs with cross-race matches may experience weakened bonds resulting from cultural mistrust, therefore, cultural

competency needs to be considered in the training process to address any negative effects of cultural incompetence (Sánchez et al., 2014). The JRMP has no clear cultural competency curricular component but may incorporate it into classroom discussion and instructor feedback where appropriate. Program awareness of cultural incompetence and perceptions based on race is important as these issues may adversely affect the mentor's approach and subsequent match length. Seminal research conducted by Bridges and Steen (1998) pertaining to attributions found that Black youth were seen as more dangerous per their internal attributes versus White youth as the cause of their behavior was attributed to external attributes. A mentor viewing the mentee as having greater intention and personal causality may lead to their perception of the mentee as being potentially harmful, thus altering their approach and dosage (Malle, 2011).

Rodriguez (2007) noted some external attributes can be perceived in terms of personal causality when race is a factor. The study noted that court decision-making processes revealed detention decisions differed for Blacks, American Indians, Whites, and Latino/as when "community characteristics (e.g., poverty rate, unemployment rate, and crime) as sources of external attributes" were taken into account when under juvenile court jurisdiction (p. 649). These external attributes significantly influenced the detention decision for Latino/as rather than Whites or other minorities as they were less likely to be detained in high-crime areas, and more likely to be detained regardless of the unemployment rate. Yet, Scott et al. (2006) found race was not linked to attitudes of culpability when determining public perception of juvenile offenders, possibly due to the participants purposely avoiding any perceived racial bias. This speculation was similar to one purposed by Rodriguez (2007), noting the lack of significant effects on Blacks being

contrary to prior research may be a function of overcompensation by the court to address any overrepresentation in the system. Thus, it is possible, mentors may impart personal causality to certain races or ethnicities, but their shared interests, connectedness, and efforts to avoid perceived biases may mitigate any effects on approach, dosage, or length. Additionally, in the JRMP, the mentor journals may alert the instructor to any biases, giving time to address the effects on the match relationship.

Mentor Personal Goals and Experiences

Mentors' motivations, skills and abilities, expectations, and prior mentoring experience are all influential qualities on the outcomes of a mentoring relationship. Mentors have different reasons for initiating a mentoring relationship and programs are encouraged to recruit on the expected benefits of the target mentor population. In the instance of the JRMP, the target population consists of undergraduate students. I speculate this population expects to receive course credit and professional development from participating in the program, which are the motivating factors the program targets for recruitment. Therefore, student mentors agree to participate and form mentoring relationships with the expectation of eliciting these benefits. Mentors motivated by professional development are more likely to develop strong social bonds leading to positive effects on delinquency, aggression, drug use, and academic performance than mentors participating for personal reasons or civic duty (Tolan, Henry, Schoeny, Lovegrove, & Nichols, 2014). The importance of meeting mentors' expectations by program level participation as well as within the match are paramount to the success of the relationship. Program efforts to meet mentor expectations alongside the ability for the

mentor and mentee to align and meet relationship expectations results in greater mentor satisfaction and longer matches (Suffin, Todd, & Sánchez, 2016; Spencer et al., 2018; Madia & Lutz, 2004; Spencer, Basualdo-Delmonico, Walsh, & Drew, 2017; Goldner & Mayseless, 2009). Mentors utilizing a balanced match approach or frequent contacts with their mentee may be more satisfied with the program and match expectations, resulting in longer match relationships.

Undergraduate student mentors' majors lend additional insight into their expectation of professional skill development. Mentors with a major (e.g. criminal justice) in a related field to juvenile justice may receive the most benefit through professional skill development and ability to utilize their learned skills from other related coursework. Mentors with applicable motivations, skills, and abilities attuned to the unique needs of the mentee population are better equipped to establish a lasting relationship (Stukas, Clary, & Snyder, 2014). Mentor prior volunteer experience, particularly mentoring, employs skills that factor into relationship quality. Mentors interested in working with youth or who had prior experience are able to allay detrimental effects on the quality of the relationship as they may be more cognizant of environmental stressors such as family conflict or poverty, and can adjust the match approach (Raposa, Rhodes, & Herrera, 2016; Rhodes & DuBois, 2006).

Consistent with attribution theory, mentors with prior experience may perceive environmental attributes as unintentional with a modicum of impersonal causality that encourages a match approach and dosage designed to foster the bond and assuage negative match outcomes (Heider, 1958). Programs documenting prior experience, benefit from eliciting the mentor's acquired abilities allowing for effectively establishing

a strong bond and further cultivating them into professional skills. The JRMP documents prior experience but does not appear to purposely capitalize on the experience. However, it is possible the skills acquired from the experience are unknowingly promoted as the match progresses allowing the instructor to glean insight into the mentor and the match relationship. Mentor involvement in court hearings and treatment team meetings with the juvenile, parents/guardians, probation officer, and other vested stakeholders may also be an aspect contributing to their ability to adequately address the mentees needs and further strengthen the bond, even so, these efforts are a function of information gathering as they determine causal attribution and would advance their professional development.

Mentee Delinquent Behaviors

The JRMP lacks data pertaining to the juvenile's offense history, academic achievement, employment, mental health, or perceptions of the mentor or the quality of the match relationship primarily due to accessibility of records and permissions for youth under the jurisdiction of the juvenile court. Mentee behaviors and educational or occupational achievement can be indicators of environmental stressors, such as family conflict, that impede match quality and length (Suffin, Todd, Sánchez, 2016; Grossman & Rhodes, 2002; Rhodes et al., 2008; Kupersmidt et al., 2017). The JRMP obtains information on mentee recidivism as their return to one of the two aforementioned Youth Rehabilitation Treatment Centers. Mentors satisfied with match expectations and feel there is a strong quality bond with their mentee are apt to attribute the behaviors and return to the facility as impersonal causality, an unintentional event (Weiner, 1995; Heider, 1944). Whereas, matches with weak bonds and whose mentors are dissatisfied

with the relationship will view the behaviors as intentional and attribute personal causality resulting in premature match closures (Weiner, 1995; Madia & Lutz, 2004; Kupersmidt et al., 2017).

Mentor Approach

The JRMP matching process is the first interaction where mentors begin information gathering, identifying internal and external attributes, and assigning causation. As matches progress, regular communication with mentees, classroom instruction and interactions, and participation in treatment team meetings and court hearings provide venues for mentors to solidify perceptions of the mentee. Perceptions culminate into the mentor's approach to the match relationship. Mentor implicit knowledge of behaviors and societal responses as well as perceptions of personal attributions inform a response to the perceived attributes of the mentee (Heider, 1958). In mentoring relationships, the match approach signifies mentor response. A response to perceived impersonal causality would tend to manifest as a developmental or instrumental approach, permitting intention and threat of harm to the mentor remain uncharacteristic of the mentee (Heider, 1958; Heider 1944). Mentors with this approach then focus on identifying the needs or uncontrollable attributes influencing mentee behaviors through promoting a caring match relationship that guides and supports the mentee to overcome the negative attributes (Morrow & Styles, 1995; Heider, 1958; Heider, 1944).

Conversely, mentors perceiving personal causality due to internal attributes respond with a prescriptive approach that protects them from potential harm caused by

intentional behaviors (Heider, 1944). A prescriptive response then permits mentors to take an authoritative stance aimed at challenging the behavior and conforming mentee behaviors to perceived acceptable behaviors (Morrow & Styles, 1995; Heider 1958). A balanced approach then recognizes the shared responsibility between the mentee and environmental attributes, refrains from perceiving intentional behaviors a threat to personal safety, and acknowledges the benefit of interpersonal relationships as a means of informal social control (Heider, 1958; Morrow & Styles, 1995; Karcher et al., 2006; Heider, 1944; Sampson & Laub, 1993). Mentor perceptions likely fluctuate as they learn more about the mentee and garner further understanding from the classroom structure, subsequently leading to a balanced approach responsive of mentee needs.

Dosage

Effective mentoring programs require mentors to participate in weekly face-to-face meetings with mentees that total four or more hours a month (Garringer et al., 2015). Yet, with regard to programs targeted to mentoring juveniles reentering the community, mentors are encouraged to begin meeting the youth in the facility as early as nine months pre-release, but typical practice may be 3-6 months before release with monthly meetings (Bazron et al., 2017; Chan & Henry, 2014). The JRMP requires mentors to conduct a minimum of monthly face-to-face meetings an hour in length while mentees are in the facility but maintain weekly communication through other methods, particularly mailing letters or cards. Mentors often meet the encouraged contact frequency of biweekly face-to-face visits at an hour in length. Upon release from the facility, mentors are required to engage in weekly face-to-face meetings with the mentee with no specified length.

Even though there are suggested best practices applicable to juvenile reentry mentoring, research has been limited as to the effective dosage and intensity, or number of hours necessary to achieve a strong quality bond, often indicating “regular contact” per established program guidelines as the best practice (Chan & Henry, 2014; Bazron et al., 2017; Abrams, Mizel, Nguyen, & Shlonsy, 2014). Research posits that with increased interactions, a stronger quality bond forms as a balance of power shifts where mentor and mentee feel a more equalized contribution to the match, which becomes indicative of a developmental approach (Li & Julian, 2012; Morrow & Styles, 1995). Additionally, when a mentor perceives an influx in the presence of environmental attributes responsible for mentee behaviors, this may result in increased dosage (Lakind, Atkins, & Eddy, 2015). Maintenance of dosage requirements encourages strong quality bonds that lead to longer match lengths.

Match Length

Match length is an indicator for match relationship satisfaction as those with greater dissatisfaction by either the mentor or mentee will result in shorter match durations (Grossman & Rhodes, 2002; Rhodes et al., 2008; Spencer et al., 2018; Spencer et al., 2017). The stronger the match relationship the longer the match and likelihood of it acting as an institution of informal social control. Best practices note the value of programs requiring a one-year commitment to the match relationship, either a calendar or school year (Garringer et al., 2015; Bazron et al., 2017; Grossman & Rhodes, 2002). Yet, research notes a calendar year match commitment is most effective at achieving beneficial outcomes such as academic achievement (Grossman & Rhodes, 2002; Rhodes

2007; Bernstein et al., 2009). The JRMP requires mentors to commit to the match relationship for a period of one calendar year. It is plausible to assume even though this is established at the onset between the mentors and mentees, one or both perceive the match length to be limited to a school year given the context of the program. Effective programs also elicit a one-year commitment from mentees (Garringer et al., 2015), however, this practice is not apparent with the JRMP.

Understanding the context of the match relationship garners insight into potential reasons for unexpected match terminations which lead to feelings of abandonment, disappointment, and anger about the overall match process (Spencer et al., 2017). Reviewing whether individual mentor or mentee characteristics, approach, or dosage influence match length is important for fostering a lasting quality relationship with beneficial outcomes.

In summary, to determine what contributes to the quality and length of the match relationship, it is important to understand the intensity of the interactions (dosage) and the mentor's type of engagement with the mentee (approach). As indicated in Figure 2, certain mentor and mentee characteristics may or may not influence the dosage or approach and subsequent prosocial outcomes. Mentor and mentee demographics, mentor prior experience and personal goals as well as the mentee's delinquent behaviors, potentially alter match approach and dosage and subsequent match length and quality. Balanced mentor approaches and maintenance of required dosage may lead to longer matches and quality relationships through stronger bonds, resulting in mentees' prosocial behaviors.

CHAPTER 3:
METHODS

Data

There have been 130 matches between student mentors and mentees committed to a youth rehabilitation treatment center since the first student cohort in fall 2012 to the fall 2017 cohort. The matches included students from University of Nebraska Lincoln (UNL) ($N = 102$), University of Nebraska Kearney (UNK) ($N = 6$), University of Nebraska Omaha (UNO) ($N = 17$), and Doane University ($N = 5$). The JRMP maintains a record of all matches since the inception of the program in 2012 in response to an evaluation on youth reentry from a rehabilitation and treatment center in the state of Nebraska. Student submissions of Journal 1 and Journal 20 (last journal) consist of basic demographic information and personal or match updates to include academic, employment, and match closure status. A variety of researchers and undergraduate students have assisted with updating the dataset, leading to missing or unclear information. Additionally, different data collection procedures across the universities resulted in inconsistencies in information obtained on the matches.

The program originally began with students from UNL and has consistently been taught by the same instructor with similar data collection and updating procedures throughout the years, resulting in limited missing information from this subset. Yet, there have been minor changes in program delivery resulting in the identification of three distinct program phases. Matches with student mentors from the first four classroom cohorts between fall 2012 and spring 2014 represent the foundational course structure for subsequent years, regardless of any program changes. These cohorts began the mentoring experience with access to transition specialists; this is noted as Phase I ($N = 43$). These specialists provided additional support to the matches where future cohorts would not

benefit to include being a resource for probation and court updates and assisting the mentor with securing reentry services for the mentee. The use of transitional specialists ceased after spring 2014 leading to the start of Phase II ($N = 49$), however, remaining programming components were consistent to include an overlap where returning mentors would be enrolled in a course with new mentors. For example, Mentor Cohort A would begin the course in the fall and Mentor Cohort B would begin the course in the spring. Starting in fall 2017, Phase III ($N = 10$) began wherein the new cohorts did not have returning mentors in their courses. Additionally, they would begin the experience in a fall semester and end in a spring semester.

Thus, this dissertation will use data collected from the UNL specific matches between 2012 and 2017 ($N = 102$) through the responses from mentors on Journals 1 and 20 for mentor characteristics, dosage, and match length. Updates to mentor characteristics and match status were obtained through contact with the mentor by an instructor or designee after course completion. Data pertaining to mentee characteristics was obtained through the Nebraska Department of Health and Human Services as this agency operates the Youth Rehabilitation Treatment Centers in both Kearney and Geneva. Match approach was determined through narrative analysis of available submissions for journals 2 through 19 on Phase I student cohorts ($N = 43$). Narrative analysis based on information reported by the mentor in their journals may be limited due to a mentor's lack of reporting. However, the use of journal submissions by the mentors provides insight into the values and beliefs they feel pertinent to the match relationship and necessary for instructor review and guidance as well as for successful grading and course completion.

Sample Characteristics

Of the 102 matches, 19 students did not complete the two-semester enrollment due to graduation ($N = 7$), match closure ($N = 1$), lack of course completion ($N = 4$), mentor moved out of state ($N = 1$), or for reasons unclear ($N = 6$). For nine mentors, the first match was closed, and a match was made with a different mentee, resulting in 93 mentors among the 102 matches. The average age of mentors was 21 with ages ranging between 18 and 27; date of birth for two mentors was not recorded or unclear. Mentors were predominately female (59.1%), white (81.7%), and non-Hispanic (91.4%). Two student mentors were in a school psychology graduate program, and one was in a master's graduate program; the remaining mentors were undergraduate students. The majority of undergraduate student mentors were majoring in criminal justice (77.4%) or a similar field to include psychology (8.6%) and sociology (3.2%). Thirteen mentors clearly noted prior mentoring experience to include Big Brothers Big Sisters ($N = 3$), peer mentor ($N = 3$), or other mentor opportunity such as Teammates ($N = 7$). Sixty-Eight reported on average about two prior volunteer experiences (Range = 0 to 7 experiences). Some experiences ($N = 29$) suggested the mentors may have worked directly with younger populations such as coaching or camps, child advocate volunteer, or assisting with Sunday school.

Four mentees were matched with two different mentors, resulting in 98 mentees for the 102 matches. Since female mentors were matched with female mentees at the Youth Rehabilitation Treatment Center in Geneva, the majority of mentees were also female (59.2%). Mentees were between the ages of 14 and 18 with an average age of 16; date of birth was missing on seven mentees. Most mentees were white (44.9%) and non-

Hispanic (68.4%); race was missing for one mentee and ethnicity was missing for 18. The age gap between mentee and mentors was between 1 and 9 years with an average of 4 years. The average gap aligns with enhanced program practices of a minimum three-year age gap that improves on basic standards of a two-year gap (Garringer et al., 2015).

Based on the recidivism measure of a juvenile mentee returning to a Youth Rehabilitation Treatment Center, 88.8% did not recidivate. Refer to Table 1: Sample Descriptive Statistics for mentors and mentees from the overall 102 match sample.

Table 1: Sample Descriptive Statistics (N = 102)

Model Variables	Mentors (N = 93)		Mentees (N = 98)	
	Variable Description/ Range	Proportion or M(SD)	Variable Description/ Range	Proportion or M(SD)
<i>Age</i>	18 to 27 ^a	21.10 (1.469)	14 to 18 ^b	16.38 (1.073)
<i>Gender</i>				
Male	1=yes, 0=no	.409	1=yes, 0=no	.408
Female	1=yes, 0=no	.591	1=yes, 0=no	.592
<i>Race</i> ^c				
White	1=yes, 0=no	.817	1=yes, 0=no	.449
Black	1=yes, 0=no	.540	1=yes, 0=no	.255
Other	1=yes, 0=no	.129	1=yes, 0=no	.286
Mentor Specific				
<i>Major - Criminal Justice</i>	1=yes, 0=no	.774	-	-
<i>Prior Volunteer Experiences</i>	0 to 7	1.83 (1.672)	-	-
Mentee Specific				
<i>Recidivated</i>	-	-	0 to 2	.13 (.397)
All Matches (N=102)				
<i>Age Gap</i> ^d	1 to 9	4.27 (1.764)		

^a Missing 2 cases, ^b Missing 7 cases, ^c Missing 1 case for mentees, ^d Missing 9 cases

Domains

A mixed methods approach to analysis will be used given the complexity of measuring match quality and length. Reflecting on my research question, in order to determine what contributes to the quality and length of a match relationship, it is necessary to understand the complexity of measuring potential elements influencing the

relationship within the context of a process evaluation wherein program elements are evaluated separately and then together to determine the influence on the outcome - in this case, match length. As noted by Patton (2008), assessing what the program offers and does as well as the characteristics of participants are important when attempting to measure the impact on the outcome. In using the lower portion of Figure 2 as a guide, Figure 3: Variables within Logic Model provides a visual display for a basic understanding of assessing program and participant variables available for measuring relationship quality and length based on best practice.

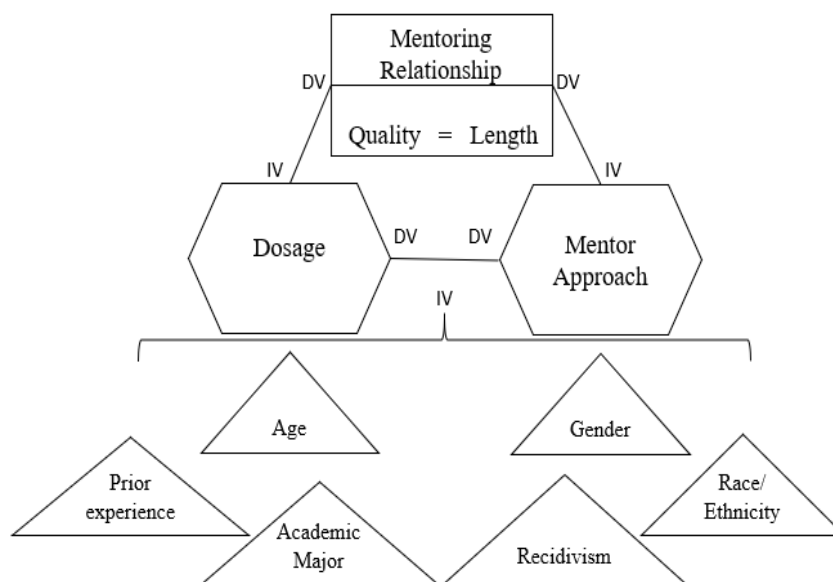


Figure 3: Variables within Logic Model

As previously noted, since a longer match length is related to a stronger bond, or better-quality relationship, the effect of dosage and mentor approach on match length will be assessed. Efforts were made to depict the complexity of these variables as best as possible given the small sample size, the nature of this study as a process evaluation, and the lack of information; refer to Appendix A: Table of Variables for a summary of model variables and coding descriptions. Match Approach, Dosage, and Match Length are

domains in which multiple models of analysis are needed for identifying contributing factors to the match relationship as outlined in Figure 4: Models for Analysis. Within the match approach and dosage domains, available mentor and mentee characteristics are evaluated to determine any influence. Then, with the understanding of potential relationships, specific aspects of approach and dosage are evaluated as to whether they influence length. For ease of analysis and reporting, findings from each of the domains will be discussed in Chapters 4-6, respectively.

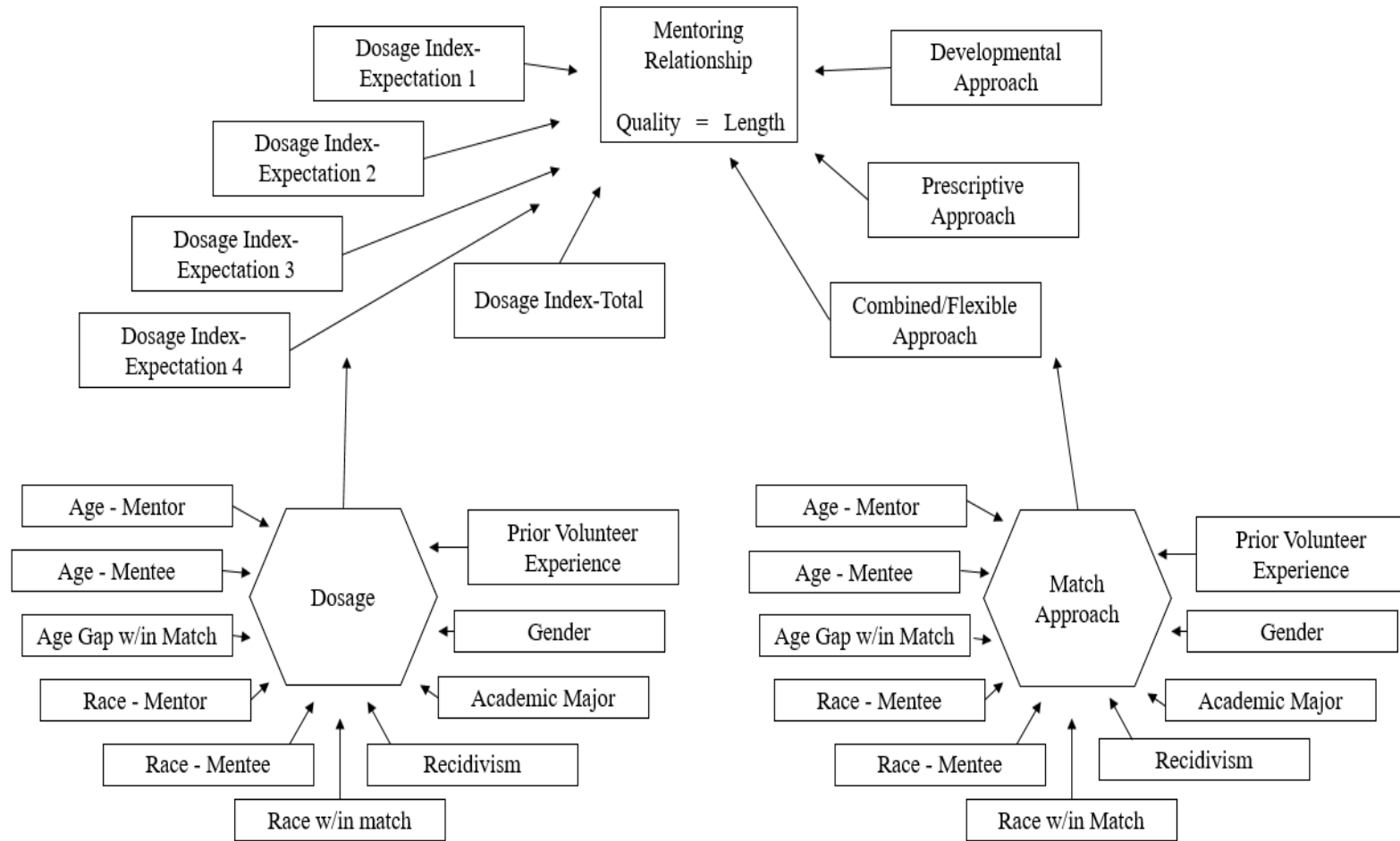


Figure 4: Models for Analysis

Data limitations preclude me from controlling for any confounding variables, but analysis still allows insight into potential contributing factors to a match relationship that would benefit from future research with a larger and more complete sample. Ideally, interaction effects would also be analyzed as noted in the Figure 3 between dosage and mentor approach as well as among characteristics and with match length; however, given the limitations of this data, particularly missing information, interactions are unable to be discussed. While assumptions can be made pertaining to approach and dosage being reciprocal, additional data is needed to better depict the continuum on which a relationship progresses wherein changes and effects in and between approach and dosage can be identified in sequence. Additionally, mentee perspectives are unknown pertaining to the mentor's approach and match quality.

Domain: Match Approach

As previously discussed, narrative analysis was conducted on mentor journals in Phase I (fall 2012 to spring 2014). Two mentors did not have journals for the second match as it occurred after course completion. One mentor began the course in a fall term and graduated prior to their first match, therefore, no journals were submitted for this match. Thus, three matches were not included due to missing journals, resulting in narrative analysis of journals on 40 matches. Table 2: Descriptive Statistics for Analysis Variables: Mentor Approach displays the descriptive statistics for independent level only variables specific to this outcome variable.

Table 2: Descriptive Statistics of Analysis Variables: Mentor Approach (N = 40)

Model Variables	Variable Description	Proportion
<i>Age</i>		
Mentors 20 or younger (N = 37) ^a	1=yes, 0=no	.378
Mentees 16 or younger (N = 39)	1=yes, 0=no	.538
<i>Age Gap within Match-5 or more years</i>	1=yes, 0=no	.550
<i>Gender-Female</i>		
Mentors	1=yes, 0=no	.595
Mentees	1=yes, 0=no	.615
<i>Race - White</i>		
Mentors	1=yes, 0=no	.838
Mentees	1=yes, 0=no	.513
<i>Race within Match - Same race</i>	1=yes, 0=no	.575
Mentor Specific		
<i>Prior Volunteer Experiences</i>	1=yes, 0=no	.784
<i>Major/Graduate Degree - Criminal Justice</i>	1=yes, 0=no	.676
Mentee Specific		
<i>Recidivated</i>	1=yes, 0=no	.179

^a Missing 1 case

For mentor approach, four mentors had two separate matches, resulting in 37 mentors for the 40 matches. Mentor age was coded dichotomous for analysis due to the small sample size and based on best practices encouraging a minimum two-year age gap with enhanced practices focusing on a three-year gap (20 or younger = 1; 21 or older = 0). One mentee had two mentors, resulting in 39 mentees among 40 matches. Mentee age was coded based on the average age (16 or younger = 1; 17 or older = 0). To further determine the influence of age, each match was assessed for an age gap of more than five years considering the average age gap (M = 4.87; SD = 1.85; Range = 2 to 9 years) for this sample while being consistent with enhanced best practices of three or more years (5 or more years = 1; less than 5 years = 0). Gender and race were coded dichotomous (female = 1, male = 0) (White = 1; Other = 0). Race was further coded to indicate whether the mentor and mentee were the same race (yes = 1; no = 0).

Mentor characteristics included the number of prior volunteer experiences as reported by the mentor in their Journal 1 submission, a lack of response to this question in the journal was coded as zero experience. The specific experience was not further categorized as only two mentors noted prior mentoring experience and also due to potential subjective interpretation of the experience such as reporting “4-H” may not necessarily mean working directly with youth or “Soccer Camp” could mean youth or adult. However, for mentor approach, any prior volunteer experience may indicate an increased likelihood to work with the mentee rather than mentors without any noted experience (prior experience = 1; no experience = 0).

The primary target population are Criminal Justice majors as the program is offered through the School of Criminology and Criminal Justice; therefore, the variable Major/Graduate Degree was coded dichotomous for a reported Criminal Justice major (Criminal Justice major = 1; Other major = 0). Finally, recidivated indicates the youth returned to a Youth Rehabilitation Treatment Center (yes = 1; no = 0).

Measuring Match Approach

As noted in previous research conducted by Moore (2018) on the mentor’s approach to the match relationship, mentor journals were coded using a hybrid approach to thematic narrative analysis (Fereday & Muir-Cochrane, 2006; Bailey, 2015). First, a deductive method to analysis allowed identification of two primary categories, Developmental and Prescriptive, attributed to the mentor’s approach to the match relationship by using previous research conducted by Marrow & Styles (1995). Each mentor’s journals were coded by sentence in order of submission, using MaxQDA. Each

statement and word were coded with either a developmental or prescriptive code. Second, coding in cycles encouraged an improved coding scheme and facilitated inductive inquiry that generated nine subcodes and five themes (Saldaña, 2013; Creswell, 2013). Themes were identified through inductive inquiry, noting the mentor's approach to the match relationship from the onset of the match in the first journal entry to the last journal entry. Therefore, for the purposes of this study, from inductive inquiry another category emerged wherein the mentor used a balanced or flexible approach, blending both developmental and prescriptive approaches.

The Developmental approach is characterized by the mentor being flexible to the youth's needs, having interest in the youth's life, engaging in present-oriented activities, seeking to just have fun with the mentee, and reports of both the mentee and mentor having a positive match experience. Based on these characteristics, eight codes were generated to identify the Developmental approach: 1) enjoying the moment; 2) sought guidance; 3) interest in family; 4) collaboration; 5) youth confiding; 6) friendship; 7) rapport building; and 8) supportive. An example of a development approach is noted in John's¹ journal entry specific to focusing on the mentee's interests:

“I really want to get a skateboard and try and attempt skating with him. I've never really been into skating but I think this is something that could really bring our bond closer together. It seemed like he was willing to open up more when I showed interest in something that he really likes to do.”

Another example is from Sandy as she focused on listening to the mentee and reflected on the mentee's statements to further understand, support, and guide:

¹ Pseudonyms were used for mentors and mentees names and identifying information was removed in order to maintain anonymity

“Her mom told her not to tell anyone, but thankfully she did tell someone. She had been bottling this up for, I’m guessing, quite a while. I feel like this could have a lot to do with her anger and self esteem issues. I told her again that she didn’t do anything wrong and that it was good she reported it.”

Prescriptive approaches tend to focus on the mentor’s thoughts or goals for the match wherein the mentor determines the activities and topics of conversation, their focus is more change driven and goal oriented, they engage in future-oriented activities, and the match reports negative experiences. Seven codes were used for the Prescriptive approach: 1) regulate behavior; 2) direct the conversation; 3) give advice or confront a behavior; 4) goal focused; 5) mentor focused; 6) change driven; and 7) lack of creating a bond.

Mentors with this specific approach throughout the match relationship were less flexible as they tended to direct conversations and goal development or lacked insight into mentee needs. An example of a prescriptive approach is from one of Kevin’s journal entries, “My plan is to have him really reevaluate the goals he originally told me in July at one of our first meetings and try to create another base for him to start at.” Another example of focusing on changing behaviors and lacking insight into the mentees needs is from Jamie, “I am hoping that I can make a positive impact on her and that her willingness will help her change her ways and try to become a law-abiding citizen.”

A balanced or flexible approach includes mentors that maintained a developmental and prescriptive approach throughout the match or transitioned from primarily one to the other. Arguably, condensing such complex human interactions into three categories minimizes the gradations in approach with each interaction and overtime, leading to an unclear understanding of match interactions. A survey completed by both

mentor and mentee after each interaction along with narrative analysis of journal entries would improve insight into approach and the effect on quality. Furthermore, attempting to quantify interactions into three categories for analysis removes conceptual validity. Even though three categories limit comprehension of mentor approach and quality, it is an initial step to recognizing the value of each approach and need for future research. Of the total matches ($N = 40$), 11 were noted as having primarily a developmental approach, 7 had solely a prescriptive approach, and 22 were noted as having a balanced or flexible approach as noted in Table 3: Descriptive Statistics of Match Approach.

Table 3: Descriptive Statistics of Match Approach ($N = 40$)

Model Variables	Variable	
	Description	Proportion
Developmental	1=yes, 0=no	.275
Prescriptive	1=yes, 0=no	.175
Combined/Flexible	1=yes, 0=no	.550

Domain: Dosage

Journals 10 and 20 request information on the types of contacts in the match relationship to include the number of facility visits, community or home visits, team meetings or court hearings attended, and other correspondence such as letters. From the total sample ($N = 102$), journal submissions for dosage was recorded on 70 matches.

Table 4: Descriptive Statistics for Analysis Variables: Dosage notes the independent level variables specific to the outcome dosage. Three mentors and mentees had two separate matches, with dosage reported for each, resulting in 67 total mentors and 67 mentees.

Table 4: Descriptive Statistics of Analysis Variables: Dosage (N = 70)

Model Variables	Variable Description	Proportion
<i>Age</i>		
Mentors 20 or younger (N = 67)	1=yes, 0=no	.478
Mentees 16 or younger (N = 67) ^a	1=yes, 0=no	.493
<i>Age Gap within Match-5 or more years</i>	1=yes, 0=no	.343
<i>Gender-Female</i>		
Mentors	1=yes, 0=no	.627
Mentees	1=yes, 0=no	.642
<i>Race - White</i>		
Mentors	1=yes, 0=no	.806
Mentees	1=yes, 0=no	.403
<i>Race within Match - Same race</i>	1=yes, 0=no	.414
Mentor Specific		
<i>Prior Volunteer Experiences</i>	1=yes, 0=no	.731
<i>Major/Graduate Degree - Criminal Justice</i>	1=yes, 0=no	.791
Mentee Specific		
<i>Recidivated</i>	1=yes, 0=no	.134

^a Missing 6 cases

Age was coded similarly as approach for both mentors (20 or younger = 1; 21 or older = 0) and mentees (16 or younger = 1; 17 or older = 0), considering best practices and the average ages. Age gap was coded as five or more years to assess the influence of age within the match (5 or more years = 1; less than 5 years = 0). Gender and race were coded dichotomous (female = 1, male = 0) (White = 1; Other = 0). Race was coded to reflect same race matches (yes = 1; no = 0). As with approach, prior volunteer experience was coded to reflect any experience (prior experience=1; no experience=0), major/graduate degree specified Criminal Justice (yes = 1; no = 0), and recidivated as an indication of the youth returning to a YRTC (yes = 1; no = 0).

Measuring Dosage

As displayed in Table 5: Descriptive Statistics of Dosage, the minimum expectations for the JRMP dosage include four elements: 1) one biweekly visit while the

mentee is in the facility; 2) one weekly visit upon release in the community; 3) attendance at a team meeting or court hearing; 4) additional letter, phone, or social media contacts as needed to maintain communication. Measuring dosage at the minimum expected contact negates any nuances of different types of interactions, lengths of each interaction, issues connecting with mentee such as behavior or extended facility length, and purpose of the interaction. However, measuring dosage based on the mentor's ability to meet minimum expectations can provide insight into the effectiveness of this program element and the degree to which interactions contribute in the match relationship. Dosage was coded on a four-point Likert-type Scale where zero indicates the mentor noted contacts with the mentee while neglecting to meet any of the four minimum expectations for dosage, and a four means the mentor met all four expectations.

Table 5: Descriptive Statistics of Dosage (N = 70)

Model Variables	Variable Description/Range	Proportion or M(SD)
<i>Expectation 1:</i>		
Number of facility visits	1 to 16	5.97 (3.46)
Average hours/facility visit ^a	50 min to 4.23 hrs	1.82 (.68)
Index-met biweekly	1=yes, 0=no	.300
<i>Expectation 2:</i>		
Number of community visits	0 to 8	1.74 (2.51)
Average hours/community visit ^b	1 hr to 4.38 hrs	.509 (1.02)
Index-any community visit	1=yes, 0=no	.271
<i>Expectation 3:</i>		
Number team meeting or court hearing	1 to 4.5	.789 (1.19)
Index-any team meeting or court hearing	1=yes, 0=no	.429
<i>Expectation 4:</i>		
Number additional contacts	1 to 18	2.96 (3.59)
Index-at least one contact	1=yes, 0=no	.700
<i>Index-Total Expectation 1-4</i>		
Meeting two or more expectations	1=yes, 0=no	.571

^a Missing 1 case; ^b Missing 3 cases; ABBREVIATION: M=Mean; SD=standard deviation

The first expectation was measured based on the frequency of facility visits and the average hours per facility visit leading to an overall index score, indicating the expectation of biweekly meetings were met. One facility visit biweekly was assessed through the number of weeks while the mentee was in the facility until release to the community, match ended, or mentor was no longer enrolled in the course, whichever came first. Intensity was measured using the number of hours mentors spent visiting mentees. Mentees may have been granted a furlough while in the facility, allowing an opportunity to meet with mentors in the community while not yet released. There were 35 matches wherein the mentee remained in the facility beyond the end of the student's academic participation in the course, therefore, any community visits between the start of the match and the end of the student's participation in the course was inferred to be a result of a furlough and counted as a facility visit. Three mentees left the facility within the first week of the match relationship, the length of each visit averaging approximately 1 hour and 30 minutes for the first mentee, 2 hours for the second mentee, and 2 hours and 36 minutes for the third. Mentors ($N = 70$) ranged between 1 to 16 visits, averaging 5.97 facility visits ($SD = 3.46$). Within the sample, one mentor noted having two facility visits, but the number of hours spent visiting the mentee was not reported. The number of hours mentors visited with mentees ranged from 1.50 to 58 hours ($M = 11.81$; $Mdn = 8.50$; $SD = 11.00$). The average number of hours per facility visit ($N = 69$) ranged from 50 minutes to 4 hours 23 minutes ($M = 1.82$; $SD = 0.68$). Given the use of this variable in the overall index, the match was coded as either meeting this biweekly expectation (30%) or not (yes = 1, no = 0).

Weekly community visits were configured similarly as the hours per facility visit through discovering the number of weeks between the mentee's release to the community and the end of the school year the mentor would last report contact hours, or the end of the match relationship, whichever came first. Mentors reported visits to the youth's home as well as community locations. This expectation was measured with the frequency of community visits, the average number of hours per community visit, and whether mentors reported any community visits. Thirty-five mentors would have the ability to visit mentees in the community or home and record the number or hours prior to the end of academic participation. Nineteen mentors from the 35 eligible mentors noted meeting with a mentee in the community or home ranging from 0 to 8 ($M = 1.74$; $Mdn = 0$; $SD = 2.51$), three mentors only noted the number of hours they visited and not the number of times. The program does not specify a number of hours mentors visit while in the community but does note visits should be weekly. None of the mentors met once per week after release into the community. The time spent with mentees during community or home visits ranged from 0 to 37 hours ($M = 2.05$; $Mdn = 00$; $SD = 5.43$). The average hours per community visit was about 30 minutes, 16 mentors noted visiting between 1 hour to 4 hours and 38 minutes ($SD = 1.02$). For the scale, the expectation was coded as engaging in any community or home visit following match release ($N = 19$) (yes = 1, no = 0).

Mentors working with juvenile reentry mentees have the unique opportunity to support mentees through attendance at a court hearing or team meeting wherein the mentee, parents, probation officer, and other vested stakeholders discuss mentee progress. Of the sample ($N = 70$), the average attendance at a team meeting or court hearing was

less than one ($M = 0.79$; $SD = 1.19$) with 30 mentors (43%) attending between 1 and 4.5. A minimum contact requirement includes attendance at a team meeting or court hearing regardless of residence and was coded as such (yes = 1; no = 0).

Lastly, the final criterion for the index of determining minimum expectations for dosage included reporting additional contact efforts with the mentee such as letters, phone, or text messaging. Of the 70, the average number of additional contacts was approximately three ($M = 2.96$; $Mdn = 2$; $SD = 3.59$) with 49 (70%) mentors noting between 1 and 18 contacts. Due to being unable to clearly determine if letters, phone calls, or social media contacts were made outside of or in lieu of regular facility or community visits, just documenting one or more of these additional contacts was an indicator of minimum expectations (yes = 1; no = 0).

After dichotomously coding each expectation criterion, a total index for dosage was determined for analysis by summing the frequency of either meeting (yes = 1) or not meeting (no = 0) an expectation. A mentor that met no expectation criterion was coded as 0 whereas a mentor that met all four criteria was coded as 4. Of the mentors noting dosage ($N = 70$), 29% ($N = 20$) met at least one expectation, 31% ($N = 22$) two expectations, 24% ($N = 17$) three expectations, and one mentor (1%) met all four expectations. The variable was further coded as either meeting two or more expectations (yes = 1) or less than two (no = 0). The final coding scheme was used due to only one mentor meeting all four expectations, and meeting at least two expectations aligns with mentoring dosage benchmarks rather than meeting only one (Garringer et al, 2015).

Domain: Match length

The closure status of the match relationship was updated by the instructor during the mentor's enrollment of the course. As previously noted, after enrollment the instructors or a designee attempted to contact mentors with updates pertaining to the status of the match and career or academic progress. Match length was determined using the start and end dates of the match relationship, as reported by the mentor. For the overall sample ($N = 102$), match length was coded as a dichotomous variable representing the match lasting at least one year (64.7%) (yes = 1; no = 0) as research notes this is the minimum length to achieve successful outcomes and permits using matches without an end date (Spencer et al., 2018).

Analysis

The sample size limits the ability to effectively conduct regression analysis and generalize results for all models, particularly as large effects will go undetected or will be overestimated (Babyak, 2004; Peduzzi, Concato, Kemper, Holford, & Feinstein, 1996). Small sample sizes also lead to less than five cases in some cells of the contingency tables, which would lead to errors and invalid results if using only a chi-square test (Upton, 1992; Blalock, 1979). Therefore, Fisher's Exact Test is considered to be a conservative test to use with small samples as it yields more accurate results, but only with 2 x 2 tables (Blalock, 1979). I used a one-tailed test as direction should be noted in advance and is the preferable method (Upton, 1992; Blalock, 1979). The Fisher's Exact Test will inform whether a difference is likely between the two variables but does not indicate the strength or direction of the association. Given the data, inferences can be

made allowing for future research directions through running a series of analysis using contingency tables to identify whether relationships exist between identified independent and dependent variables as previously discussed with Figure 4: Models for Analysis.

Analysis of contingency tables for each relationship noted in Figure 4 will then be discussed for each domain, Match Approach, Dosage, and Match Length, in chapters 4-6, respectively.

CHAPTER 4:
RESULTS - MATCH APPROACH

A series of contingency tables were created to assess the relationship between match approach and various characteristics. These tables assist with determining the factors related to approach that in turn may contribute to the length of the match relationship. Age, gender, race, and mentor and mentee specific characteristics will be discussed in relation to the three match approaches: developmental, prescriptive, and combined/flexible.

Age

As noted in Table 6: Results Match Approach and Age, Chi-Square and Fisher's Exact Tests were conducted on each of the three match approaches and the three age variables: mentor age 20 or younger, mentee age 16 or younger, and an age gap within the match of five or more years. Age was not a contributing factor to match approach as there were no significant associations. Mentor or mentee age were not associated with the type of approach the mentor used during the match relationship. A five-year gap in ages within the match was also insignificant in the type of approach used by the mentor. Notably, with more complete data and a larger dataset, it is possible significant relationships may exist if the three age variables could remain continuous and a series of logistic regression analysis could be conducted.

Gender

Similarly, gender was not a significant contributing factor to match approach. Table 7: Results Match Approach and Gender display the Chi-Square and Fisher's Exact

Tests conducted for the association between gender of the match and the three mentor approaches.

Table 6: Results Match Approach and Age Variables (N = 40)

Model Variables	χ^2 (p = .05)	Fishers Exact		95% CI	RR = 0	95% CI	Odds Ratio	95% CI
		Test (one-tailed)	RR = 1					
Developmental (yes = 1)								
Age - Mentor 20 or younger ^a	.124 ^b	p = .500	.864	.391 - 1.913	1.113	.601 - 2.061	1.288	.315 - 5.267
Age - Mentee 16 or younger	.001 ^b	p = .623	1.011	.538 - 1.902	.986	.460 - 2.115	.975	.242 - 3.931
Age Gap within Match \geq 5 years	.559 ^b	p = .347	1.290	.630 - 2.639	.759	.380 - 1.515	.588	.145 - 2.381
Prescriptive (yes = 1)								
Age - Mentor 20 or younger	.173 ^b	p = .522	1.273	.384 - 4.223	.864	.457 - 1.633	.679	.109 - 4.240
Age - Mentee 16 or younger	.016 ^b	p = .617	.955	.468 - 1.948	1.061	.417 - 2.698	1.111	.214 - 5.764
Age Gap within Match \geq 5 years	.925 ^b	p = .297	.721	.406 - 1.280	1.697	.500 - 5.765	2.353	.398 - 13.900
Combined/Flexible (yes =1)								
Age - Mentor 20 or younger	.000	p = .621	1.007	.472 - 2.149	.995	.587 - 1.688	.989	.273 - 3.581
Age - Mentee 16 or younger	.004	p = .601	1.019	.580 - 1.787	.978	.490 - 1.950	.960	.274 - 3.359
Age Gap within Match \geq 5 years	.004	p = .601	1.019	.580 - 1.787	.978	.490 - 1.950	.960	.274 - 3.359

^aMission 1 Case; ^bNote Fisher's Exact test as expected cell counts less than 5; RR, Relative Risk; CI, Confidence Interval

Table 7: Results Match Approach and Gender (N = 40)

Model Variables	χ^2 (p = .05)	Fishers Exact		95% CI	RR = 0	95% CI	Odds Ratio	95% CI
		Test (one-tailed)	RR = 1					
Developmental (yes = 1)								
Female Match	.677 ^a	p = .329	.806	.502 - 1.295	1.517	.527 - 4.370	1.882	.412 - 8.596
Prescriptive (yes = 1)								
Female Match	.104 ^a	p = .533	1.114	.558 - 2.223	.848	.323 - 2.232	.762	.145 - 3.993
Combined/Flexible (yes =1)								
Female Match	.242	p = .436	1.128	.700 - 1.818	.815	.357 - 1.858	.722	.197 - 2.643

^aNote Fisher's Exact test as expected cell counts less than 5; RR, Relative Risk; CI, Confidence Interval

Race

Chi-Square and Fisher's Exact Tests were conducted for three match approaches and three race variables: mentor race as White, mentee race as White, and the same race within the match. Table 8: Results Match Approach and Race Variables display the lack of significant associations between race and the approach the mentor used during the relationship.

Mentor Specific Characteristics

Table 9: Results Match Approach and Mentor Specific Characteristics display the contingency tables conducted for Developmental, Prescriptive, and Combined/Flexible approaches with the mentor having any prior volunteer experience and mentor major/graduate degree in criminal justice. Again, no significant relationships were found between the mentor's prior experience nor being a criminal justice major and the approach within the relationship.

Mentee Specific Characteristic

Recidivism as the mentee's return to a YRTC was not significantly associated with the mentor's developmental, prescriptive, or combined/flexible approach. Table 10: Results Match Approach and Mentee Specific Characteristic note the Chi-Square and Fisher's Exact Test for mentee recidivism and match approach.

Table 8: Results Match Approach and Race Variables (N = 40)

Model Variables	χ^2 (p = .05)	Fishers Exact		95% CI	RR = 0	95% CI	Odds Ratio	95% CI
		Test (one-tailed)	RR = 1					
Developmental (yes = 1)								
Race - Mentor White	.416 ^a	p = .464	.910	.709 - 1.169	1.897	.249 - 14.466	2.083	.215 - 20.170
Race - Mentee White	.125	p = .500	.885	.458 - 1.709	1.138	.545 - 2.377	1.286	.319 - 5.175
Race within Match - Same Race	.234 ^a	p = .454	.867	.498 - 1.509	1.233	.511 - 2.972	1.422	.340 - 5.941
Prescriptive (yes = 1)								
Race - Mentor White	.003 ^a	p = .721	.990	.708 - 1.384	1.061	.146 - 7.729	1.071	.105 - 10.914
Race - Mentee White	.173 ^a	p = .500	.848	.408 - 1.764	1.202	.480 - 3.008	1.417	.273 - 7.342
Race within Match - Same Race	.674 ^a	p = .351	.764	.435 - 1.340	1.591	.465 - 5.440	2.083	.352 - 12.320
Combined/Flexible (yes =1)								
Race - Mentor White	.388 ^a	p = .435	1.086	.841 - 1.403	.611	.126 - 2.964	.563	.091 - 3.493
Race - Mentee White	.404	p = .376	1.222	.660 - 2.264	.815	.429 - 1.549	.667	.191 - 2.333
Race within Match - Same Race	1.125	p = .230	1.333	.784 - 2.266	.667	.307 - 1.448	.500	.138 - 1.813

^aNote Fisher's Exact test as expected cell counts less than 5; RR, Relative Risk; CI, Confidence Interval

Table 9: Results Match Approach and Mentor Specific Characteristics (N = 40)

Model Variables	χ^2 (p = .05)	Fishers Exact		95% CI	RR = 0	95% CI	Odds Ratio	95% CI
		Test (one-tailed)	RR = 1					
Developmental (yes = 1)								
Prior Volunteer Experience	.031 ^a	p = .619	.969	.693 - 1.355	1.138	.269 - 4.812	1.174	.199 - 6.935
Major - Criminal Justice	.729 ^a	p = .311	1.264	.699 - 2.286	.683	.293 - 1.589	.540	.130 - 2.243
Prescriptive (yes = 1)								
Prior Volunteer Experience	.390 ^a	p = .431	1.145	.698 - 1.880	0.636	.161 - 2.522	.556	.086 - 3.580
Major - Criminal Justice	.154 ^a	p = .529	.891	.522 - 1.521	1.273	.363 - 4.466	1.429	.239 - 8.528
Combined/Flexible (yes =1)								
Prior Volunteer Experience	.101 ^a	p = .528	.951	.693 - 1.304	1.222	.354 - 4.215	1.286	.272 - 6.069
Major - Criminal Justice	.218	p = .446	.896	.562 - 1.429	1.222	.526 - 2.838	1.364	.370 - 5.028

^aNote Fisher's Exact test as expected cell counts less than 5; RR, Relative Risk; CI, Confidence Interval

Table 10: Results Match Approach and Mentee Specific Characteristic (N = 40)

Model Variables	χ^2 (p = .05)	Fishers Exact		95% CI	RR = 0	95% CI	Odds Ratio	95% CI
		Test (one-tailed)	RR = 1					
Developmental (yes = 1)								
Recidivated (yes = 1)	.502 ^a	p = .381	.632	.181 - 2.211	1.138	.764 - 1.695	1.800	.349 - 9.278
Prescriptive (yes = 1)								
Recidivated (yes = 1)	.173 ^a	p = .569	1.485	.216 - 10.230	.919	.647 - 1.305	.619	.064 - 6.025
Combined/Flexible (yes =1)								
Recidivated (yes = 1)	.101 ^a	p = .528	1.222	.354 - 4.215	.951	.693 - 1.304	.778	.165 - 3.672

^aNote Fisher's Exact test as expected cell counts less than 5; RR, Relative Risk; CI, Confidence Interval

The lack of significant findings for age, gender, race, prior volunteer experience, criminal justice major, and recidivism in relation to match approach are consequential. These findings indicate the mentor's approach is not influenced by any of these characteristics alone. However, it is possible interaction effects or other untested variables are contributing to the mentor's approach such as the mentee's prior experiences or offending behaviors. While these factors may not be contributing to match approach, they may influence dosage.

CHAPTER 5:
RESULTS – DOSAGE

Contingency tables with Chi-Square and Fisher's Exact Test were conducted to determine relationships of mentor and mentee independent variables with dosage as measured by the four index expectations: 1) met biweekly; 2) any community visit; 3) any team meeting or court hearing; and 4) at least one additional contact. Additionally, the total index value of meeting two or more expectations was evaluated to determine associations with age, gender, race, prior volunteer experience, criminal justice major, and recidivism variables.

Age

Table 11: Results Dosage and Age Variables depict the findings of the Chi-square, Fisher's Exact Test, and Relative Risk for age of mentor and mentee and the match age gap with the dosage indexes (Sauerbrei & Blettner, 2009). Expectations 1-4 revealed no significance for dosage and age. The total index of two or more expectations indicated a significant relationship with the mentor being 20 years of age or younger ($\chi^2 = 4.018$, $p = .05$; Fisher's Exact Test, $p = .038$) and a five year or more age gap ($\chi^2 = 4.992$, $p = .05$; Fisher's Exact Test, $p = .024$). Of the 70 total matches, 23 mentors age 20 or younger met two or more dosage expectations. Based on relative risk, mentors 20 or younger are 0.580 times likely as those over 20 years of age to meet two or more dosage expectations. Mentors 20 or older are 1.569 times as likely to not meet two or more expectations. As previously noted, six mentee cases are missing the date of birth needed for determining the age gap within the match. So, of the 64 matches, 10 matches had an age gap of five years or more and met two or more dosage expectations. Matches with a five year or more age gap are 2.046 times likely as those with less than a five-year age

gap to meet two or more expectations. Age gaps less than five years are 0.626 times as likely to not meet two or more expectations.

Table 11: Results Dosage and Age Variables ($N = 70$)

Model Variables	Fishers Exact		95% CI	RR = 0	95% CI	Odds Ratio	95% CI	
	χ^2 ($p = .05$)	Test (one-tailed) RR = 1						
Expectation 1: Met Biweekly (yes = 1)								
Age - Mentor 20 or younger	1.204	$p = .202$	.750	.459 - 1.226	1.333	.769 - 2.311	1.778	.633 - 4.995
Age - Mentee 16 or younger ^a	.381	$p = .363$	1.172	.696 - 1.974	.844	.497 - 1.431	.720	.253 - 2.050
Age Gap within Match ≥ 5 years ^a	.005	$p = .578$	.977	.500 - 1.908	1.014	.675 - 1.524	1.038	.354 - 3.046
Expectation 2: Any Community Visit (yes = 1)								
Age - Mentor 20 or younger	1.110	$p = .217$	1.384	.724 - 2.644	.776	.498 - 1.209	.561	.190 - 1.655
Age - Mentee 16 or younger	.084	$p = .501$	.926	.556 - 1.542	1.095	.584 - 2.054	1.183	.379 - 3.693
Age Gap within Match ≥ 5 years	.356	$p = .388$	1.267	.565 - 2.837	.879	.588 - 1.314	.694	.208 - 2.315
Expectation 3: Any Team Meeting or Court Hearing (yes = 1)								
Age - Mentor 20 or younger	.172	$p = .431$	.900	.548 - 1.477	1.100	.698 - 1.733	1.222	.473 - 3.157
Age - Mentee 16 or younger	2.107	$p = .115$	1.426	.864 - 2.353	.681	.405 - 1.145	.477	.175 - 1.303
Age Gap within Match ≥ 5 years	3.319	$p = .058$	1.889	.912 - 3.914	.704	.483 - 1.025	.373	.127 - 1.094
Expectation 4: One additional contact (yes = 1)								
Age - Mentor 20 or younger	.221	$p = .418$	.875	.495 - 1.548	1.120	.706 - 1.776	1.280	.457 - 3.585
Age - Mentee 16 or younger	2.092	$p = .124$	.643	.327 - 1.264	1.500	.904 - 2.488	2.333	.729 - 7.469
Age Gap within Match ≥ 5 years	3.200	$p = .069$	1.800	.986 - 3.287	.636	.354 - 1.145	.354	.111 - 1.129
Total Index: Two or more expectations (yes = 1)								
Age - Mentor 20 or younger	4.018*	$p = .038^*$	.580	.327 - 1.027	1.569	1.010 - 2.437	2.706	1.011 - 7.242
Age - Mentee 16 or younger	1.245	$p = .195$	1.299	.826 - 2.042	.731	.412 - 1.295	.563	.204 - 1.552
Age Gap within Match ≥ 5 years	4.992*	$p = .024^*$	2.046	1.079 - 3.881	.626	.397 - .989	.306	.106 - .880

^aMissing 6 cases; RR, Relative Risk; CI, Confidence Interval; * $p \leq .05$

Gender

From the contingency tables analyzing the relationship between female matches and dosage indexes, only one index area indicated a significant relationship, as displayed in Table 12: Results Dosage and Gender. Female matches were significantly associated with the first expectation of meeting biweekly ($\chi^2 = 4.207$, $p = .05$; Fisher's Exact Test, $p = .035$). There were 17 female matches that met the biweekly expectation. Female matches are 0.681 times likely than male matches to meet the biweekly visit expectations while the youth resides in the facility. Male matches are 2.357 times likely to not meet the biweekly visit expectation. There were no significant associations between female matches and expectations 2-4 or the total index of meeting two or more expectations.

Table 12: Results Dosage and Gender ($N = 70$)

Model Variables	χ^2 ($p = .05$)	Fishers Exact		95% CI	RR = 0	95% CI	Odds Ratio	95% CI
		Test (one-tailed)	RR = 1					
Expectation 1: Met Biweekly (yes = 1)								
Female Match	4.207*	$p = .035^*$	.681	.491 - .944	2.357	.926 - 6.002	3.463	1.016 - 11.801
Expectation 2: Any Community Visit (yes = 1)								
Female Match	.001	$p = .601$	.993	.664 - 1.487	1.011	.508 - 2.012	1.018	.342 - 3.032
Expectation 3: Any Team Meeting or Court Hearing (yes = 1)								
Female Match	.326	$p = .375$	.900	.629 - 1.287	1.200	.637 - 2.259	1.333	.496 - 3.582
Expectation 4: One additional contact (yes = 1)								
Female Match	.420	$p = .350$	.875	.573 - 1.336	1.235	.661 - 2.309	1.412	.496 - 4.016
Total Index: Two or more expectations (yes = 1)								
Female Match	2.040	$p = .119$	.762	.515 - 1.127	1.556	.846 - 2.859	2.042	.762 - 5.472

RR, Relative Risk; CI, Confidence Interval; * $p \leq .05$

Race

Contingency tables for associations between race variables and dosage indexes are displayed in Table 13: Results Dosage and Race Variables. There was no significance between race and expectations 1-2 and the total index. For expectation 3, mentors with the same race as mentees was significantly associated with meeting the expectation of attending at least one team meeting or court hearing ($N = 8$; $\chi^2 = 4.715$, $p = .05$; Fisher's Exact Test, $p = .026$). Same race matches were 1.969 times likely than dissimilar race matches to attend a team meeting or court hearing. Matches in which the mentor was a different race than the mentee were 0.648 times than same race matches to not attend a meeting or hearing. Fisher's Exact Test noted significance between mentor race as White and expectation 4 of using an additional contact method such as letters or social media ($N = 37$; Fisher's Exact Test, $p = .046$). Within this contingency table, one cell had a count less than five, lending to Chi-Square being insignificant but significance with Fisher's Exact Test as it can be calculated with cell counts less than five. White mentors were 1.261 times likely than non-White mentors to use an additional contact method such as letters. Non-White mentors were 0.194 times likely to not use an additional contact method than White mentors.

Table 13: Results Dosage and Race Variables (N = 70)

Model Variables	Fishers Exact			95% CI	RR = 0	95% CI	Odds Ratio	95% CI
	χ^2 (p = .05)	Test (one-tailed)	RR = 1					
Expectation 1: Met Biweekly (yes = 1)								
Race - Mentor White	.364 ^a	p = .406	.929	.742 - 1.163	1.429	.437 - 4.671	1.538	.377 - 6.276
Race - Mentee White	2.415	p = .100	.623	.352 - 1.105	1.414	.867 - 2.307	2.269	.799 - 6.444
Race within Match - Same Race	.474	p = .334	.814	.460 - 1.440	1.169	.734 - 1.860	1.435	.512 - 4.026
Expectation 2: Any Community Visit (yes = 1)								
Race - Mentor White	3.054 ^a	p = .074	.807	.671 - .972	4.471	.623 - 32.083	5.538	.668 - 45.914
Race - Mentee White	.084	p = .501	.926	.556 - 1.542	1.095	.584 - 2.054	1.183	.379 - 3.693
Race within Match - Same Race	.226	p = .423	1.171	.600 - 2.283	.900	.592 - 1.368	.769	.260 - 2.274
Expectation 3: Any Team Meeting or Court Hearing (yes = 1)								
Race - Mentor White	.071	p = .514	1.031	.820 - 1.296	.875	.328 - 2.337	.848	.253 - 2.847
Race - Mentee White	.080	p = .487	1.091	.596 - 1.996	.947	.653 - 1.374	.868	.327 - 2.303
Race within Match - Same Race	4.715*	p = .026*	1.969	1.015 - 3.819	.648	.438 - .957	.329	.119 - .912
Expectation 4: One additional contact (yes = 1)								
Race - Mentor White	3.783 ^a	p = .046*	1.261	1.047 - 1.519	.194	.027 - 1.401	.154	.019 - 1.273
Race - Mentee White	.233	p = .412	1.167	.630 - 2.159	.903	.589 - 1.385	.774	.273 - 2.193
Race within Match - Same Race	.137	p = .460	.889	.472 - 1.675	1.083	.716 - 1.639	1.219	.428 - 3.472
Total Index: Two or more expectations (yes = 1)								
Race - Mentor White	.071	p = .514	.970	.771 - 1.219	1.143	.428 - 3.052	1.179	.351 - 3.955
Race - Mentee White	.080	p = .487	.917	.501 - 1.678	1.056	.728 - 1.531	1.152	.434 - 3.054
Race within Match - Same Race	1.590	p = .155	1.429	.821 - 2.485	.769	.503 - 1.175	.538	.205 - 1.416

^aNote Fisher's Exact test as expected cell counts less than 5; RR, Relative Risk; CI, Confidence Interval; *p ≤ .05

Mentor Specific Characteristics

Table 14: Results Dosage and Mentor Specific Characteristics note the results from contingency tables for prior volunteer experience and a criminal justice major with the dosage indexes. Significance existed between majoring in criminal justice and the first expectation of biweekly facility visits, however, it should be noted one cell in the contingency table had a count less than five. Even though Chi-Square tests revealed significance at the $p = .01$ level, Fisher's Exact Test is considered for a more accurate calculation when cells counts are below five ($N = 12$; $\chi^2 = 8.182$, $p = .01$; Fisher's Exact Test, $p = .007$). Mentors with a major in criminal justice are 1.536 times likely than other majors to complete biweekly visits while in the facility. Non-criminal justice majors are 0.286 times likely than criminal justice majors to not meet the expectation of biweekly visits. Expectations 2-4 and the total index revealed no significance with mentor specific characteristics.

Table 14: Results Dosage and Mentor Specific Characteristics (N = 70)

Model Variables	χ^2 (p = .05)	Fishers Exact		95% CI	RR = 0	95% CI	Odds Ratio	95% CI
		Test (one-tailed)	RR = 1					
Expectation 1: Met Biweekly (yes = 1)								
Prior Volunteer Experience	2.508	p = .096	.786	.605 - 1.021	2.286	.744 - 7.021	2.909	.746 - 11.338
Major - Criminal Justice	8.182 ^{a**}	p = .007 ^{**}	1.536	1.045 - 2.257	.286	.116 - .701	.186	.055 - .627
Expectation 2: Any Community Visit (yes = 1)								
Prior Volunteer Experience	2.952	p = .081	1.355	.899 - 2.040	.512	.244 - 1.077	.378	.122 - 1.169
Major - Criminal Justice	.370 ^a	p = .380	1.091	.807 - 1.474	.745	.292 - 1.899	.683	.199 - 2.344
Expectation 3: Any Team Meeting or Court Hearing (yes = 1)								
Prior Volunteer Experience	.006	p = .579	.989	.741 - 1.319	1.031	.474 - 2.245	1.043	.359 - 3.029
Major - Criminal Justice	.707	p = .295	.900	.708 - 1.144	1.500	.572 - 3.931	1.667	.503 - 5.520
Expectation 4: One additional contact (yes = 1)								
Prior Volunteer Experience	.169	p = .461	1.067	.792 - 1.436	.833	.344 - 2.017	.781	.240 - 2.543
Major - Criminal Justice	2.525 ^a	p = .104	.797	.575 - 1.105	2.042	.850 - 4.903	2.563	.786 - 8.356
Total Index: Two or more expectations (yes = 1)								
Prior Volunteer Experience	.217	p = .421	.933	.695 - 1.253	1.200	.558 - 2.582	1.286	.446 - 3.708
Major - Criminal Justice	.064	p = .520	1.032	.808 - 1.318	.889	.355 - 2.226	.861	.269 - 2.753

^aNote Fisher's Exact test as expected cell counts less than 5; RR, Relative Risk; CI, Confidence Interval; *p ≤ .05; **p ≤ .01

Mentee Specific Characteristic

Of the nine mentees that recidivated, none had any community visit resulting in a true zero for interpretation of relative risk and significance for Fisher's Exact Test ($\chi^2 = 3.848, p = .05$; Fisher's Exact Test, $p = .047$). This indicates matches with no community visits is significantly associated with the mentee recidivism as indicated by their return to a YRTC. There were no associations between expectations 1, 3-4, and the total index with mentee recidivism as noted in Table 15: Results Dosage and Mentee Specific Characteristic.

Results from the dosage indexes revealed significant associations with mentor, mentee, and within match variables. These associations note the value of certain program elements and the mentor's role in meeting expectations outlined for those elements. These are areas that would benefit from additional research with a larger sample and limited categorization of data so as to better understand the strength and direction of these relationships. The significant and insignificant factors within the Match Approach and Dosage domains will be considered as to the potential contributing factors of a mentor relationship when evaluating the influence of these domains on Match Length in Chapter 6.

Table 15: Results Dosage and Mentee Specific Characteristic (N = 70)

Model Variables	χ^2 (p = .05)	Fishers Exact		95% CI	RR = 0	95% CI	Odds Ratio	95% CI
		Test (one-tailed)	RR = 1					
Expectation 1: Met Biweekly (yes = 1)								
Recidivated (yes = 1)	1.026 ^a	p = .259	.536	.160 - 1.799	1.109	.883 - 1.393	2.071	.496 - 8.643
Expectation 2: Any Community Visit (yes = 1)								
Recidivated (yes = 1)	3.848 ^{a*}	p = .047*	.000	0	.824	.725 - .935	.000	0
Expectation 3: Any Team Meeting or Court Hearing (yes = 1)								
Recidivated (yes = 1)	.011 ^a	p = .596	.938	.275 - 3.197	1.010	.841 - 1.212	1.077	.263 - 4.408
Expectation 4: One additional contact (yes = 1)								
Recidivated (yes = 1)	.055 ^a	p = .545	1.167	.322 - 4.231	.977	.797 - 1.197	.837	.188 - 3.719
Total Index: Two or more expectations (yes = 1)								
Recidivated (yes = 1)	.011 ^a	p = .596	1.067	.313 - 3.637	.990	.825 - 1.189	.929	.227 - 3.801

^aNote Fisher's Exact test as expected cell counts less than 5; RR, Relative Risk; CI, Confidence Interval; *p ≤ .05

CHAPTER 6:
RESULTS – MATCH LENGTH

To assist with understanding the contributing factors leading to the length of match relationships and subsequently the quality, 2 x 2 contingency tables for match length with the two domains of mentor approach and dosage were analyzed using Chi-Square and Fisher's Exact Test with interpretations of Relative Risk for better understanding of any significant associations (Sauerbrei & Blettner, 2009).

Match Approach

Table 16: Results Match Length and Mentor Approach indicates similar significant relationships between match approach and match length as the Moore (2018) study. There was no significance between a developmental approach and match length. A prescriptive approach significantly related to match length ($\chi^2 = 8.485$, $p = .01$; Fisher's Exact Test, $p = .004$) and was used by seven mentors; none of which had a match length lasting one year or more, resulting in a true zero. A combined/flexible approach significantly contributed to a match lasting one year or more in length ($\chi^2 = 14.545$, $p = .001$; Fisher's Exact Test, $p = .000$). Notably for the combined/flexible approach, a smaller sample size may be leading to a wider confidence interval (3.464 – 83.436) for odds ratio (17.000) and the uncertainty of the estimate. If the sample size were larger, the confidence interval for odds ratio would potentially become narrower indicating a better estimate.

Table 16: Results Match Length and Mentor Approach (N = 70)

Model Variables	χ^2 (p = .05)	Fishers Exact Test (one=tailed)	RR = 1	95% CI	RR = 0	95% CI	Odds Ratio	95% CI
Developmental	3.135	p = .078	2.667	.825 - 8.260	.706	.472 - 1.056	.265	.058 - 1.209
Prescriptive	8.485 ^a **	p = .004	.000	0	.650	.471 - .897	.000	0
Combined/Flexible	14.545 ^a ***	p = .000 ^a ***	.294	.135 - .642	5.000	1.709 - 14.628	17.000	3.464 - 83.436

^aNote Fisher's Exact test as expected cell counts less than 5; RR, Relative Risk; CI, Confidence Interval; **p ≤ .01; ***p ≤ .001

Table 17: Results Match Length and Dosage (N = 70)

Model Variables	χ^2 (p = .05)	Fishers Exact Test (one=tailed)	RR = 1	95% CI	RR = 0	95% CI	Odds Ratio	95% CI
Expectation 1:								
Met Biweekly (yes = 1)	.909 ^a	p = .258	1.467	.689 - 3.121	.825	.529 - 1.286	0.563	.171 - 1.851
Expectation 2:								
Any Community Visit (yes = 1)	.493 ^a	p = .365	.688	.230 - 2.051	1.128	.832 - 1.530	1.641	.408 - 6.605
Expectation 3:								
Any Team Meeting or Court Hearing (yes = 1)	.707	p = .295	.733	.339 - 1.587	1.222	.794 - 1.882	1.667	.503 - 5.520
Expectation 4:								
One additional contact (yes = 1)	.909 ^a	p = .258	.825	.529 - 1.286	1.467	.689 - 3.121	1.778	.540 - 5.851
Total Index:								
Two or more expectations (yes = 1)	.856	p = .263	.778	.434 - 1.393	1.333	.751 - 2.366	1.714	.543 - 5.408

^aNote Fisher's Exact test as expected cell counts less than 5; RR, Relative Risk; CI, Confidence Interval; **p ≤ .01; ***p ≤ .001

Dosage

As indicated in Chapter 5: Results – Dosage, significance was found for several variables in relation to dosage indexes such as age of the mentor influencing the likelihood of meeting two or more dosage expectations. Interestingly, however, no significance was found between dosage and match length as displayed in Table 17: Results Match Length and Dosage. A lack of significance may be attributed to the categorization of the dosage variables or the need to analyze interaction effects with a larger sample.

Table 18: Results Match Length and Variables Influence Dosage displays the results for additional contingency tables analyzed to determine if there were any significance between match length and the variables influencing dosage in Chapter 5 using the total sample (N = 102): a) age of mentor 20 or younger; b) age gap within match five years or more; c) gender; d) race with the match being the same; e) major in criminal justice, and f) recidivated. As depicted in Table 19: Results Match Length and Remaining Variables, I also conducted contingency tables on the variables indicated as non-influential: a) age of mentee 16 or younger; b) race of mentor as White; c) race of mentee as White; and d) prior volunteer experience. From these analyses, the matches being female ($\chi^2 = 4.749$, $p = .05$; Fisher's Exact Test, $p = .025$) and the mentee age of 16 or younger ($\chi^2 = 4.915$, $p = .05$; Fisher's Exact Test, $p = .022$) significantly predicted a match lasting one year or more in length. Female matches were 0.667 times likely than male matches to last one year or more, whereas male matches were 1.667 times likely to not last at least one year. Mentees age 16 or younger were 0.598 times likely to last one year or more, and those older than 16 were 1.579 times likely to not last at least one year.

Table 18: Results Match Length and Variables influencing Dosage (N = 102)

Model Variables	χ^2 (p = .05)	Fishers Exact		95% CI	RR = 0	95% CI	Odds Ratio	95% CI
		Test (one-tailed)	RR = 1					
Age - Mentor 20 or younger ^a	2.450	p = .088	.624	.333 - 1.168	1.277	.956 - 1.705	2.047	.828 - 5.059
Age Gap within Match \geq 5 years ^b	.034	p = .516	.953	.572 - 1.587	1.035	.723 - 1.482	1.086	.455 - 2.589
Female Match	4.749*	p = .025	.667	.445 - .998	1.667	1.064 - 2.612	2.500	1.087 - 5.751
Race within Match - Same Race ^c	.327	p = .358	1.131	.746 - 1.716	.890	.593 - 1.336	.787	.346 - 1.789
Major - Criminal Justice	1.456	p = .168	1.146	.931 - 1.410	.611	.266 - 1.401	.533	.190 - 1.495
Recidivated (yes = 1)	.631	p = .326	.611	.177 - 2.116	1.061	.925 - 1.218	1.737	.439 - 6.871

^a Missing 2 cases; ^b Missing 9 cases; ^c Missing 1 case; RR, Relative Risk; CI, Confidence Interval; * $p \leq .05$

Table 19: Results Match Length and Remaining Variables (N = 102)

Model Variables	χ^2 (p = .05)	Fishers Exact		95% CI	RR = 0	95% CI	Odds Ratio	95% CI
		Test (one-tailed)	RR = 1					
Age - Mentee 16 or younger ^a	4.915*	p = .022	.598	.362 - .987	1.579	1.069 - 2.333	2.640	1.107 - 6.295
Race - Mentor White	.309	p = .398	1.052	.885 - 1.252	.764	.292 - 1.997	.726	.234 - 2.253
Race - Mentee White ^b	.101	p = .457	1.078	.682 - 1.703	.943	.653 - 1.362	.875	.383 - 1.997
Prior Volunteer Experience	.168	p = .434	1.053	.826 - 1.343	.868	.439 - 1.716	.825	.327 - 2.077

^a Missing 7 cases; ^b Missing 1 case; RR, Relative Risk; CI, Confidence Interval; * $p \leq .05$

CHAPTER 7:
DISCUSSION

The current study sought to improve understanding of mentoring relationships by asking: what contributes to the quality and length of a match relationship in juvenile mentoring programs? The study of this specific type of mentoring program assists with identifying components such as dosage and basic programmatic processes that are necessary to support relationships (Karcher et al., 2006). An indication of a strong quality relationship is through the length of the match, the longer the match the stronger the relationship. Therefore, through review of best practices for mentoring programs and identification of the programming elements within the Juvenile Reentry Mentoring Project, various factors became apparent for evaluation as potentially contributing to the quality and longevity of a match. Mentor approach and dosage were noted as aspects of a match meriting evaluation as to the influence on match length. Additionally, mentor and mentee demographics and specific characteristics were assessed to determine associations with approach and dosage. By examining the influence of age, gender, and race on approach, dosage, and match length, the study adds to the mentoring literature on program processes appropriate for juvenile mentoring (Karcher et al., 2006). Recognizing factors that influence the mentoring relationship can improve programmatic approaches to enhancing relationship elements that foster youth development of prosocial behaviors. Figure 5: Models for Analysis with Significant Findings displays the factors indicating a significant association with the quality and length of the relationship and warranting additional research.

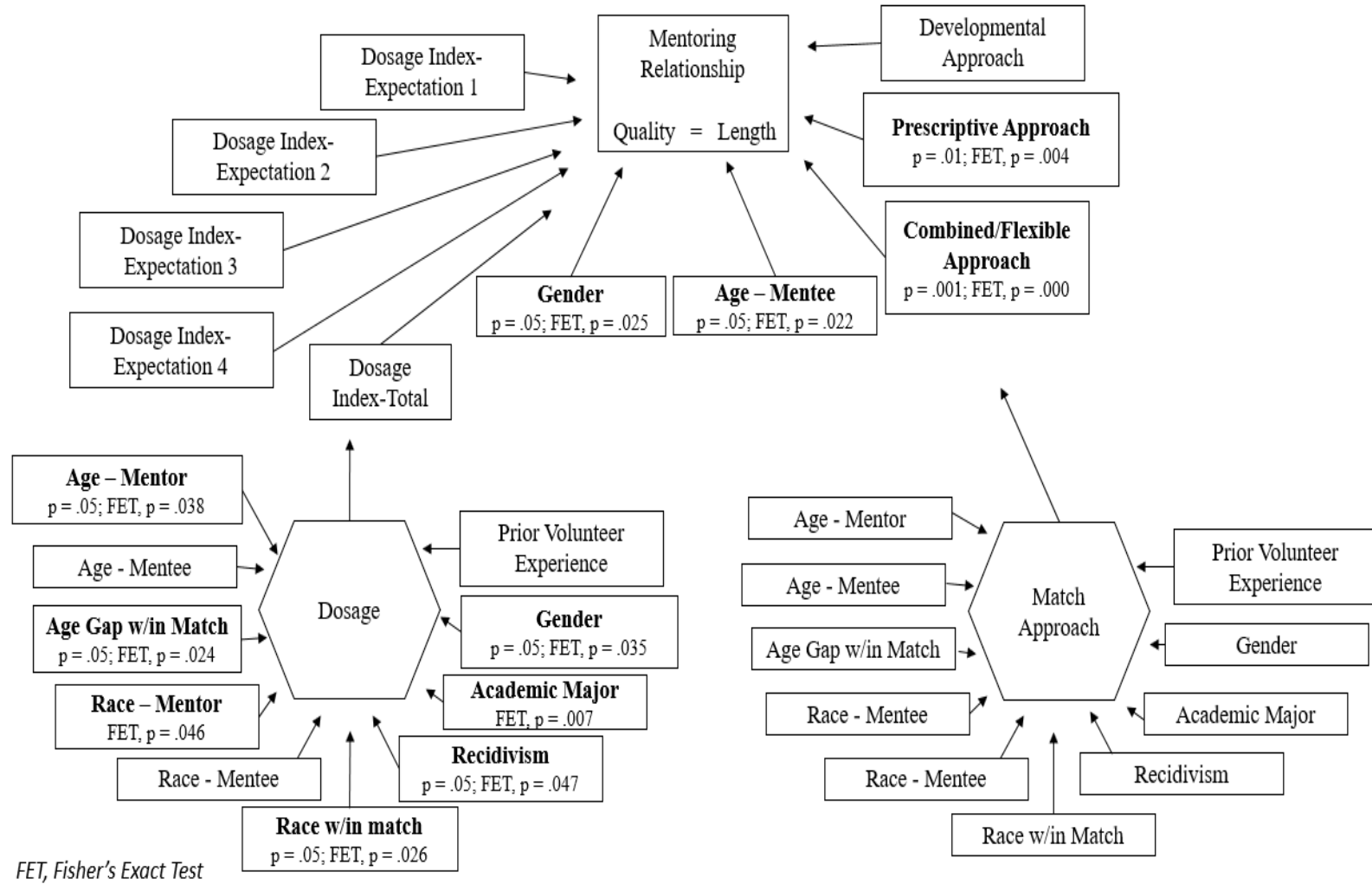


Figure 5: Models for Analysis with Significant Findings

Match Approach

As discussed in Chapter 4, demographic and specific mentor and mentee characteristics were not significant predictors of the three possible approaches a mentor used within the match relationship. While significance was not found, these results are still invaluable. This research is unique in the efforts to identify influences on approach to the relationship that connects with quality and length. Extant research has indicated the value of mentoring approaches on the length of a match but neglected to determine the factors resultant approach (Rhodes & DuBois, 2006; Karcher et al., 2006; Marrow & Styles, 1995). The results assist with understanding basic match elements not related to the use of a particular approach, thus, it encourages seeking beyond these factors to more complex mechanisms of human interaction.

The mentor's perception of the mentee and their subsequent approach is possibly a function of untested interaction effects or other factors not yet identified. The uniqueness in which a relationship evolves over time is an aspect of a match that begs for additional analysis as to the connections with the type of match approach and contribution to match length. The results indicate the mentor's perceptions of the tested factors are not as influential as to their selection of approach, which encourages investigation into the role of the mentee's perceptions on the relationship and possibly the type of approach initiated or reasons for changing approach during the match. The classroom experience may be a programmatic element leading to the match approach as well as the instructor's role in the progress of a match relationship. Notably, a larger sample size and evaluation of confounding variables would enhance the findings of this

study in relation to match approach. While these are limitations of this study, the results can still guide programmatic data collection efforts and future research.

Dosage

Regarding the analysis of factors influencing dosage, as indicated in Chapter 5, several significant associations were found. Age was a significant influence as mentors 20 or younger were more likely than older mentors to meet two or more dosage expectations. It is unclear in literature, apart from comparisons of traditional and non-traditional students, as to why younger mentors are more readily able to meet dosage expectations. It is possible younger mentors have less responsibilities impeding their ability to meet regularly with the mentee such as family, increased upper level course expectations, or employment (Dill & Henley, 1996; Wyatt, 2011). Additionally, matches with a five year or more age gap were significantly associated with meeting two or more dosage expectations. Mentors' perception of impersonal causality for youth at least five years younger than they are can be an explanation for the relationship between the age gap and dosage as they view these younger youth as less culpable and therefore more willing to actively engage (Heider, 1958; Weiner, 2006). Separate from the five-year age gap complying with best practices, this gap is reflective of the definition for a mentoring relationship in that older mentors are matched with younger mentees. This gap then permits the older mentor to truly view themselves as older and able to confidently provide guidance and support to the mentee.

Gender was noted as a predictor of meeting the biweekly visit expectations as females were more likely than males to engage match interactions while the youth

resided in the facility. This is reasonably due to distance and/or facility policies and practices. The male facility is approximately a two-hour drive for mentors whereas the female facility is about a one-hour drive. The distance it takes to travel for visits may impact the likelihood that mentors meet the biweekly visit expectation and ability to establish a strong bond prior to release from the facility. Additionally, it would be beneficial to review the policies and practices of each facility to determine if there are aspects impeding or promoting the ability to meet dosage expectations while the youth resides in the facility.

Same race within the match as well as mentor race were indicators of meeting dosage expectations. Matches wherein the mentor and mentee were the same race were more likely than cross-race matches to meet the expectation of attending at least one team meeting or court hearing. I speculate the likelihood of mentors attending a team meeting or court hearing for a same race mentee is more aligned with attributing impersonal causality based on similar interests or connectedness given the racial characteristic, however, further research on this subject would be of interest. White mentors were more likely than non-White mentors to use an additional contact method such as letters. While this finding could be a function of avoiding perceived biases (Rodriguez, 2007; Scott et al., 2016), this may also be related to shared interests and connectedness that urges additional exploration.

Interestingly, prior volunteer experience was not relevant to meeting dosage expectations in this study. Criminal justice majors were more apt to complete biweekly visits while the youth was in the facility than other majors (e.g. psychology, sociology). As previously indicated in Chapter 2, mentors motivated by professional development are

prone to engage in the mentor process and readily understand the value of meeting course expectations applicable to their desired skill development (Tolan et al., 2014). As the course progresses and the mentee exits the facility, mentors may be less inclined to meet expectations as community efforts may not be viewed as applicable to skill development as a justice system facility experience (Raposa Rhodes, & Herrera, 2016; Rhodes & DuBois, 2006). However, given the lack of significance with meeting the expectation of attending at least one court hearing or team meeting, professional skill development is not a sole factor and additional research is warranted that can lead to methods that encourage investment in meeting all dosage expectations.

Understandably, a lack of community visits relates to the mentee recidivating with their return to a YRTC. A youth running from home or additional delinquent offenses upon reentry make it difficult for a mentor to meet with the mentee in the community, however, this behavior signals the weakness of the match relationship. The mentee's disengagement from prosocial norms upon reentry into the community resultant of deviant behaviors implies his/her lack of a social bond with the mentor. A lack of a strong quality bond with the mentor would then impart the perception of personal causality and further limit the development of a relationship even if able to reengage interaction upon return to the facility (Weiner, 1995; Heider, 1944). Deviant behavior resulting in recidivism can be a challenging barrier to overcome for both the mentor and mentee, particularly as it is reflective of a weak social bond. Further research into the outcomes, approaches, and factors of these relationships would be beneficial for identifying aspects instructors can improve within the areas of supervision, support, and training.

It is possible the frequency or amount of contact in the match, as noted by the index measures, and the match length are interdependent and could influence each other (Karcher et al., 2006). Therefore, future efforts should focus on the strength or depth of each mentoring interaction to recognize the impact of dosage given the programmatic parameters for dosage expectations and within the context of the program structure relevant to best practices such as screening, matching, and training (Karcher et al., 2006).

Match Length

A change-driven, goal-directed, and mentor-led prescriptive approach resulted in premature match closures. Since a longer match length is indicative of relationship satisfaction, I presume that a prescriptive approach forgoes the cultivation of a strong bond and lends to the mentee's perception of the relationship as a form of formal social control similar to that of their probation officer (Grossman & Rhodes, 2002). The lack of a strong bond and subsequent informal support and guide results in a dissatisfied relationship. Yet, a combined/flexible approach that is focused on shared interests, enjoying time with each other, and responsiveness to the mentee's changing needs lends to a match relationship lasting at least one year. A combined/flexible approach contributes to a stronger bond and the ability for the relationship to act as a form of informal social control. Greater satisfaction felt by both the mentee and mentor is more apt with this approach since the relationship is less focused on compliance with social norms and more on developing prosocial skills necessary for meeting social norms. The relationship between dosage indexes and match length was insignificant. As previously noted in Chapters 4 and 5, the categorization of all dosage expectations is a limitation in

this study that may lend to insignificant findings. It is plausible that dosage indexes alone are not related to match length, but rather interaction effects such as with approach, predict match length.

Female matches were more likely than male to last one year or more in length. This also connects to the significant associations found with dosage in that female matches were more likely to meet biweekly expectations. These results signify the value of establishing a strong relationship at the onset while the youth remains in the facility prior to reentry (Bazron et al., 2017; Chan & Henry, 2014). The results pertaining to gender are inconsistent with prior research that indicate female matches are noted to end prematurely, lending to the possibility female mentors in this sample may attribute impersonal causality to the mentee and display a willingness to allow gradual emotional connections with mentees (Spencer et al., 2018; Rhodes et al., 2008; Spencer et al., 2018). The training and supervision provided through course involvement may be an influential factor in the gender differences among matches and should be a focus of future research to identify the impact course instruction has on the match through a time series method of the course instruction relevant to match approach, dosage, and match satisfaction indicators.

Similar to the aforementioned dosage and age gap relationship, mentees 16 or younger may be viewed as more agreeable to having an undergraduate student in the role of an older mentor. Additionally, the behaviors and circumstances of younger mentees may be perceived as a product of factors germane impersonal causality and thus, less responsible (Scott et al., 2006; Heider, 1958; Weiner, 2006). The openness to engage in a mentoring relationship and being perceived as less responsible for their actions may be

relevant contributors to why younger mentees are more likely to have a match last at least a year. These matches are then able to establish stronger bonds and act as an effective institution of informal social control. Further data collection efforts and research should focus on the youth's offense history, home environment, and parental relationships as there may be interaction effects with the variables in this study or separate influences on outcomes.

Consistent with prior research, the results from this study regarding race in mentoring relationships was mixed (Sánchez et al., 2014). Race was a factor in two aspects of dosage, but overall pertaining to match length, race is not indicative of a quality long lasting relationship. Similarly, the mentor specific characteristics in this study were not directly associated with match length. Meeting professional skills development components inherent in the program may not be reflective of mentor satisfaction nor a signal of mentor approach. However, the results from this study provide prospective on implications for the JRMP and similar juvenile mentoring programs.

Recommendations

I previously noted various areas for future data collection and research, yet, there are additional opportunities for juvenile mentoring programs to improve practices and impact outcomes. While younger mentors are more apt to meet dosage expectations, the results indicate the need to maintain a five-year age gap with the mentees and the likelihood a match will last longer with younger mentees. Therefore, the JRMP and similar programs would benefit from focusing on maintaining a five-year age gap. It would be challenging for the program to insist on younger mentors and mentees, yet,

recognizing the potential challenges associated with the older populations can highlight areas of training and additional support from the program to bolster dosage and length outcomes.

Some matches may dissipate upon youth returning to the community due to expecting the youth to reconnect with the mentor, however, this is inadvisable (Bazron et al., 2017). Prior to reentry into the community, efforts should be taken to ensure contact information is exchanged between mentor and mentee and a meeting is scheduled promptly following reentry. Mentor communication with probation officers prior to reentry and regularly thereafter could also facilitate opportunities for matches to meet often as the probation officer can update the mentor of any abrupt contact or placement changes. The JRMP needs to assist mentors with establishing a professional and positive relationship with the parents/guardians of mentees consistent with best practices (Garringer et al., 2015). These efforts should begin at the onset of the match and be closely supervised by the instructor thereafter in an effort to foster a professional relationship wherein the mentor is able to focus on the mentee and not inadvertently absorb the parents/guardians as mentees or to assist with communication and concern barriers vocalized by either party (Kaye, 2014).

In the future, match relationships should be assessed at appropriate intervals such as on a monthly basis or every three months. The Working Alliance Inventory-Short is one such measure that can be used in determining the strength of the match relationship (Spencer et al., 2018). This instrument was initially developed for therapeutic relationships, but functional for evaluating mentoring relationships as well (Spencer et al., 2018). The instructor should also encourage feedback from the parents/guardians on a

regular basis as to the effectiveness and satisfaction of the match relationship for their child.

The JRMP should allow more opportunity for mentees to have a perceived “voice” in selecting their mentor. Based on recommendations from Pryce et al. (2014), prior to matching, a brief questionnaire or verbal interview with potential mentees would elicit insight into their opinions about mentoring such as their goals for a match, how they view mentoring, or what type of mentor they envision, particularly if it is unfeasible to ask the mentees directly for their choice as to a mentor. Obtaining youth feedback prior to the meet-n-greet component of the program would foster more quality relationships at the onset of the mentor selection process (Kendall, 2004).

A signed agreement between the mentor and mentee at match initiation would encourage the development and commitment to shared goals and match expectations (Garringer et al., 2015). The agreement needs to consider the mentee’s expectations apart from the mentor or program expectations. Insight into mentor and mentee expectations at the time of the initial meeting aid in determining the affect that achieving or lack of attaining these expectations had on both participants and the identified outcomes (Spencer et al., 2018; Suffin, Todd, & Sánchez, 2016). An agreement also provides a formal notification of the expected match length that inspires compliance by both of them without suggesting repercussions beyond missed relationship opportunities.

Further program improvement for the JRMP includes incorporating a clear closure process. Unexpected or poorly handled match closures may result in negative thoughts and feelings about the match experience and limit either participant from engaging in similar involvements in the future (Spencer et al., 2017). The program needs

to have a clearly communicated procedure for expected and unexpected match closures regardless of whether the match ended prior to or after the one-year commitment (Garringer et al., 2015). Furthermore, a differentiation needs to be made between program match closure processes based on meeting the agreed commitment of at least one year and those closures that occur during course participation or after the one-year mark. Directly after match closure, if able, it would be beneficial for the program to conduct exit interviews evaluating the effectiveness of the match and the program for all parties to include mentor, mentee, parents/guardians, and other stakeholders knowledgeable about the relationship and vested in the youth's outcomes pertinent to the juvenile justice system (e.g. probation officer) (Garringer et al., 2015). The program may want to consider hosting a final celebration for those matches that maintain for the minimum one-year commitment or close due to natural transitions (e.g. moving out of state) while promoting continued investment in the match.

As previously alluded, it will be important to take a developmental evaluation approach to the program by assessing the different transitions and determining elements of interactions that lend to desired outcomes; this would help with identifying those elements that remained or changed as well as those that were productive or harmful (Patton, 2008). As an aspect of further evaluation to assist accounting for influences on outcomes, it is important to include match elements leading to interaction challenges such as geography (proximity of mentor to mentee), available and reliable transportation, socioeconomic status, or investment of treatment team stakeholders to prepare mentees for reentry and endorse match interactions.

Further factors to consider would include the sample limitations of this study given the selective nature of sample participants. Future evaluation of program processes and match outcomes should study different instructors and congregate care settings. Data collection efforts should include methods for obtaining a better understanding of other external and internal attributes such as parental relationship, academic performance, offense history, or employment achievement, which would further encourage enhanced programmatic responses for improved outcomes (Rhodes & DuBois, 2008; Spencer et al., 2018; Karcher et al., 2006; DuBois et al., 2002). Mentee personal factors such as family or abuse may be leading to the dissolution of the match relationship, or other factors may be present but go unnoticed or lack appropriate response by the mentor and instructor that alludes to a weak bond and potential recidivism upon reentry. Therefore, a qualitative review of journals relevant each match with a mentee that recidivated would elicit insight into relationship and program factors contributing to the recidivism behavior and the lack of community visits.

Since juvenile reentry mentoring programs are sparse, the following are five recommendations based on the findings from this study and review of best practices for starting a similar program. First, programs should focus on aligning the components with the four areas of best practices for mentoring programs: Screening, Matching, Training, and Supervision (Garringer et al., 2015). Second, within the areas of best practice and specific to juvenile programs, it is important to involve the responsible guardian whether that is a parent/guardian, childcare services worker, or placement. At minimum, programs should attempt to notify and allow an opportunity for the responsible guardian to ask questions. Mentors and the program would benefit from establishing a connection with

the mentee's probation officer, juvenile caseworker, or other stakeholders. The involvement of the guardian and vested stakeholders could encourage investment and support of the match relationship, particularly upon reentry to the community. Third, a signed agreement between the mentee, mentor, and program is invaluable. The agreement should include shared match goals the mentor and mentee develop, program expectations for dosage, the mentor and mentees match expectations, and a clear closure process. Fourth, a closure process needs to be communicated to both the mentor and mentee. It would be beneficial to include a definition of closure and methods for identifying when a match has closed. Additionally, the steps for closure needs conveyed for each stage in the program relevant the one-year commitment expectation such as prior, at one year, and after. Finally, prior to initiating any matches, it is imperative the program establishes a clear process for data collection and review that would allow for regular monitoring and evaluation of program components consistent with goals outlined in a logic model.

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APPENDIX

Tables of Variables

Model Variable	Variable Description	Coding Considerations
Age		
Mentors	20 or younger = 1; 21 or older = 0	Sample average age of mentors as well as best practices for minimum two year-age gap and when considering juveniles within court jurisdiction are between 11 and 18 according to NE statute (Neb. Rev. Stat. § 43-245 (2, 11); Neb. Rev. Stat. § 43-247)
Mentees	16 or younger = 1; 17 or older = 0	Average age of mentees in sample
Age Gap	5 or more years = 1; Less than 5 years = 0	Average age gap of sample and enhanced best practices of three or more years age gap between mentor and mentee
Gender		
	Female = 1; Male = 0	Reported by mentors in Journal 1 submission; Facility report for mentees
Race		
Mentors & Mentees	White = 1; Other = 0	Reported by mentors in Journal 1 submission; Facility report for mentees
Race within Match	Same Race = 1; Different = 0	Reported by mentors in Journal 1 submission; Facility report for mentees

Mentor Specific Characteristics

Prior Volunteer Experience	Prior experience = 1; No experience = 0	Dichotomous for any prior experience; mentor reported in Journal 1 submission
Major	Criminal Justice major = 1; Other major = 0	Mentor reported in Journal 1 submission or obtained from review of official graduation records

Mentee Specific Characteristic

Recidivism	Return to YRTC = 1; No return to YRTC = 0	Facility records of return(s); sample frequency of returns were 0 to 2; any return was coded dichotomous
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Match Approach

Developmental	Developmental = 1; Other approach = 0	Hybrid approach to thematic narrative analysis; eight codes generated: 1) enjoying the moment; 2) sought guidance; 3) interest in family; 4) collaboration; 5) youth confiding; 6) friendship; 7) rapport building; and 8) supportive
Prescriptive	Prescriptive =1; Other approach =0	Hybrid approach to thematic narrative analysis; seven codes generated: 1) regulate behavior; 2) direct the conversation; 3) give advice or confront a behavior; 4) goal focused; 5) mentor focused; 6) change driven; and 7) lack of creating a bond
Combined/Flexible	Combined/Flexible = 1; Other approach = 0	Mentors that maintain a developmental and prescriptive approach throughout the match or transitioned from primarily one to the other

Dosage

Expectation 1	One biweekly visit = 1; No biweekly visit = 0	Based on frequency of facility visits and average hours per facility visit; dichotomous given best practices and recommended program expectations for minimum biweekly visit
Expectation 2	Any community visit = 1; No community visit = 0	Based on frequency of community visits and average hours per visit; dichotomous given best practices and lack of mentors meeting the weekly expectations
Expectation 3	Any team meeting or court hearing = 1; No team meeting or court hearing = 0	Number of team meeting or court hearing; dichotomous given program expectations
Expectation 4	1 or more additional contacts = 1; No additional contacts = 0	Number of additional contacts including letters, phone, text, social media; dichotomous given best practices and program expectations to maintain contact
Total Index	2 or more expectations = 1; Less than 2 expectations = 0	Likert-Type Scale to note number of expectations met; summed the expectations and assigned between zero (no expectations) to four (all expectations); Dichotomous based on best practices
Match Length	1 year or more = 1; Less than 1 year = 0	Determined using start and end dates of match, as reported by mentor; Dichotomous for one year or more based on best practice