Therapeutic Mentoring: Outcomes for Youth in Foster Care

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LOYOLA UNIVERSITY CHICAGO

THERAPEUTIC MENTORING:
OUTCOMES FOR YOUTH IN FOSTER CARE

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL

IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

PROGRAM IN SOCIAL WORK

BY

SARA B. JOHNSON

CHICAGO, ILLINOIS

DECEMBER 2009
ACKNOWLEDGEMENTS

The completion of this dissertation has been a life-changing experience that was enhanced by a community of colleagues, friends, and family, as well as mentors, who guided and supported me along the way. I would like to thank my committee for their ongoing availability and encouragement throughout my work on this project. I am deeply grateful to my chairperson, Dr. Terry Northcut, whose steadfast support and optimism, beginning with my first days in the doctoral program, bolstered my efforts every step of the way. I am also very grateful to Dr. Julia Pryce who generously invested her time and energy into my project early in the process and provided solid and reliable direction throughout. Thank you to Dr. Zoran Martinovich who patiently guided me through the world of statistics with persistence, humor, and clarity. I will always be grateful to him for my newly acquired knowledge and experience with statistics.

I would like to extend a very special thanks to Dr. Robert Bloom for his early and ongoing support. Our hallway conversations always made me smile and reminded me that it was possible to finish. I also want to thank Sabrina Townsend for her technical assistance and help in mining and delivering the data for this project.

This project was inspired by the many youth who courageously turn to caring and supportive relationships in the face of incredible challenges, and by my colleagues’ commitment and ideals to remain consistently available to these youth and their families. I am grateful to have had this opportunity to explore these extraordinary caregiving relationships. Finally, I would like to express my heartfelt gratitude to my dear friends
and family. Your love, encouragement, and optimism enhanced every phase of this process. Knowing that I could turn to you whenever needed allowed me to experience the true pleasure of the journey, with each of you by my side. I am especially grateful to my devoted and caring husband, Ty Johnson. We have started and ended many journeys together, and this one has particular significance. Thank you for your unconditional and unending love and support.
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ABSTRACT

This study examined the impact of therapeutic mentoring on youth in foster care. Youth outcomes on the Child and Adolescent Needs and Strengths (CANS) measure for four groups of youth were compared. Three treatment groups were divided based on the amount of therapeutic mentoring received and compared on CANS outcome scores as measured from baseline to 6, 12, and 18 months. The fourth group did not receive any therapeutic mentoring. Outcome domains for emotional and behavioral functioning, peer relationships, academic functioning, and community involvement were analyzed. All youth in the study (n = 262) received counseling and support through the System of Care (SOC) program, designed to prevent placement disruption for foster youth.

Analyses revealed a significant difference for youth who received therapeutic mentoring compared to youth without therapeutic mentoring. For youth mentored in the first 6 months of participation in the SOC program, improvement was demonstrated in the areas of family and social functioning, school behavior, and recreational activities. In the baseline to 18-month period, mentored youth showed significant improvement on measures for traumatic stress symptoms. Study results suggest that therapeutic mentoring shows promise for enhancing treatment interventions for youth in foster care and warrants further study to maximize the benefits for this specialized approach to mentoring.
CHAPTER ONE
INTRODUCTION

When youth lack supportive, nurturing relationships, it can be difficult for them to find a constructive path in life. This can lead to a number of detrimental outcomes such as low levels of educational achievement, delinquent behavior, and health problems, which detract from their ability to be fully contributing members of society (Courtney & Dworsky, 2006). Youth in foster care have more behavioral and emotional difficulties, are more likely to experience suspensions and expulsions from school, and are also more likely to receive mental health services than youth generally identified as “at risk” (Kortenkamp & Ehrle, 2002). This suggests that the population of youth in foster care require a different kind of attention in terms of feasible and effective service interventions.

Youth mentoring has shown promise as an intervention for children and youth faced with environmental risk factors (DuBois, Holloway, Valentine, & Cooper, 2002) and warrants further study for youth living in foster care. Mentoring has been defined as “a process aimed at strengthening an individual at risk through a personal relationship with a more experienced and caring person. Through shared activities, guidance, information, and encouragement, the individual gains in character and competence and begins setting positive life goals” (Barron-McKeagney, Woody, & D'Souza, 2001, p. 120).
Youth with environmental risks (e.g., from low-income, single-parent homes) have been shown to benefit from mentoring relationships. After participation in a Big Brothers Big Sisters (BBBS) mentoring program, at-risk youth showed improvements in their relationships with parents and feelings of competence at school, as well as better school attendance (Rhodes, Grossman, & Resch, 2000). At-risk youth who engaged in a mentoring relationship for one year were less likely to engage in destructive behaviors (i.e., start using drugs or alcohol, get into fights, or skip school), were more confident in school, and were better able to get along with their families as compared to a control group who did not participate in mentoring (Grossman & Tierney, 1998). These positive results for at-risk youth support further investigation of mentoring programs for a specific at-risk population, youth living in foster care.

Given that youth in foster care face more significant challenges and poorer outcomes than other youth at risk who are not in foster care (Kortenkamp & Ehrle, 2002), mentoring relationships may be especially important for foster youth. To date, outcome research that specifically addresses behavioral outcomes for foster youth in mentoring relationships is promising, yet limited. In one study, close relationships and having trust in others were more difficult for foster youth before participation in a youth mentoring program (Rhodes, Haight, & Briggs, 1999). After experiencing a close mentoring relationship for 18 months, foster youth showed significant improvement in self-esteem enhancement, social skills, and trust in others. Foster youth in the control group experienced decreased peer support over time (Rhodes et al., 1999). These findings
provide initial evidence for the potential value of mentoring relationships for foster youth.

In their recent study of natural mentoring relationships among youth transitioning out of foster care and into independent living, Munson and McMillen (2009) found that the experience of mentoring and the duration of the mentoring relationship were related to positive psychological outcomes for foster youth, such as decreased symptoms of depression, lower reported stress, and better satisfaction with life. Natural mentors were defined as “non-parent adults” who engaged in “mentoring relationships, or consistent connections” with youth (Munson & McMillen, 2009, p. 105). In this study, 339 youth were interviewed quarterly between their 17th and 19th birthdays. The interviews included completion of measures on the youths’ depression symptoms, perceived stress, and life satisfaction. Additional interview questions included the retrospective duration of the natural mentoring relationship (i.e., how long the youth had been engaged with the natural mentor), the frequency of the contact with the natural mentor, relationship quality, and whether the relationship continued over time (Munson & McMillen, 2009). The results of this study showed that foster youth with natural mentors in their lives reported fewer depressive symptoms, lower stress, higher reported satisfaction with life and fewer arrests than youth who reported not having a natural mentor (Munson & McMillen, 2009).

The length of the mentoring relationship has been shown to have a significant impact on youth outcomes (Grossman & Rhodes, 2002). In Munson and McMillen’s study, youth in long term mentoring relationships (at least one year) reported lower
perceived stress than at earlier time points, fewer depression symptoms than youth in shorter relationships (less than one year), and a reduced likelihood for arrest by age 19 (2009). In Rhodes, Haight, and Briggs’ study, improvements in self-esteem, social skills and trust in others appeared after 18 months in a mentoring relationship (1999). These findings regarding the length of relationship support those of Grossman and Rhodes’ (2002), which reported that mentoring relationships lasting longer than one year are more helpful than relationships lasting less than one year.

Further, Munson and McMillen’s (2009) study suggests that mentoring can be helpful to youth in foster care, particularly for youth in transition out of foster care and in cases in which mentoring is provided for a period exceeding one year. The authors note that future research is needed to show whether natural mentors are helpful not only at the time of transition into independent living, but also throughout the lives of foster youth. The research thus far on mentoring programs for foster youth suggest that mentoring relationships may attenuate some of the negative effects related to living in foster care and provide support for future investigation of this important topic (Munson & McMillen, 2009; Rhodes et al., 1999).

Effectiveness studies for a variety of youth mentoring programs have become the focus of increased attention in recent years. In 2002, David DuBois and his colleagues conducted a meta-analysis of 55 evaluations of mentoring programs and their impact on youth (DuBois et al., 2002). The meta-analysis reviewed 574 effect sizes covering 59 independent samples for studies evaluating the effectiveness of youth mentoring programs. The average effect size for these studies was $d = .18$ (DuBois et al., 2002).
Ultimately, the review supported positive results overall for the mentoring programs reviewed. The factors shown to have a moderator effect on the success of youth mentoring programs include:

- Monitoring of program implementation, screening of prospective mentors, matching of mentors and youth on the basis of one or more relevant criteria, both prematch and ongoing training, supervision, support group for mentors, structured activities for mentors and youth, parent support or involvement component, and expectations for both frequency of contact and length of relationships (DuBois et al., 2002, p. 165).

These program practices consistently predicted positive effects for mentoring programs. However, the authors noted that many mentoring programs focused more on preparing matches than on supporting the matches once they were under way. In addition, mentoring programs showing the largest effect sizes were focused on serving the population of at-risk youth (i.e., youth with environmental risks and deficits) (DuBois et al., 2002). DuBois et al. surmised that the nonprofessional and volunteer nature of most mentors may not be well-suited for youth with the most complex and challenging obstacles (2002). Overall, mentoring programs that integrate a majority of the factors listed above have been shown to produce positive outcomes for at-risk youth. However, there is a lack of comprehensive evaluations on youth mentoring programs that serve at-risk youth, as well as foster youth. In addition, the mentoring program characteristics and interventions must be closely studied in order to determine what about these programs makes them effective (DuBois et al., 2002).

The therapeutic mentoring program evaluated in the current study contained several of these program characteristics. This provides a consistent starting point in terms of the evaluation of mentoring outcomes. Monitoring, screening and matching of mentors
and youth based on specific criteria, mentor training, supervision, support groups for mentors, and expectations for the frequency and duration of the mentoring relationship were all components of the therapeutic mentoring program in this study. While some structured activities were offered to the youth and mentors in this program, it was not consistent. Parent involvement and support was facilitated, but not necessarily as a part of the mentoring program. The complete program description is included below. The presence of these relevant program components suggest that the program studied in this dissertation has the appropriate structure to produce positive outcomes, as seen in prior mentoring evaluations (DuBois et al., 2002). Additional components of the current study that have not been evaluated thoroughly thus far, are the at-risk nature of the youth population and the more professional nature of the mentors employed to support the youth. Since previous findings suggest that these are the factors that, when present, produce positive outcomes, this study represents a “best practices” model within which positive outcomes for youth are expected.

To investigate how these program factors may contribute to youth outcomes, four groups of foster youth were compared on behavioral outcomes, as measured on the Child and Adolescent Needs and Strengths (CANS) tool (J. Lyons, Griffin, Fazio, & Lyons, 1999). Measures were taken at different points in time in the program (baseline, 6 months, 12 months, and 18 months). It is hypothesized that foster youth can benefit measurably from a therapeutic mentoring relationship that lasts at least six months. This hypothesis is informed by a number of mentoring outcome studies, including the study conducted by Grossman and Rhodes (2002) in which youth in mentoring relationships
that lasted longer than twelve months showed significant gains in several areas of functioning, including self-worth, academic performance, and relationships with parents. Youth in relationships that terminated earlier than six months showed a significant decline in functioning (e.g., self-worth and perceived scholastic competence).

In the current study, scores on 10 CANS domains were analyzed to answer the research questions for the current study. The CANS domains encompassed emotional and behavioral functioning, peer relationships, school achievement, and community involvement. These outcomes were chosen because they are the most often cited outcomes identified by previous mentoring outcomes research (Grossman & Rhodes, 2002; Karcher, 2005; Rhodes et al., 1999; Tierney, Grossman, & Resch, 2000). However, since very little research has been conducted on outcomes for foster youth in mentoring programs, it was important to use similar outcomes as the previous literature in order to begin to build the literature and compare how therapeutic mentoring with paid mentors compares to volunteer mentoring for youth who while at-risk, typically live in the home of a biological parent or other family member and not in foster care.

The research questions for the current study are: 1) What are the differences on behavioral outcomes between four groups of foster youth, three groups who received different amounts of therapeutic mentoring (for 6 months, 12 months, or 18 months) and one group who did not receive any therapeutic mentoring, while participating in a specialized foster care program?; and 2) Is the length of the therapeutic mentoring relationship (i.e., up to 6 months, 12 months, or 18 months) associated with the level of improvement from intake to discharge? These research questions are based on the
hypotheses that a longer duration and a therapeutic form of mentoring are more effective in facilitating positive change for foster youth, beyond what a typical mentoring program might be able to achieve. The purpose of this research is to contribute to the developing field of mentoring, and specifically to advance knowledge in terms of the effectiveness of a structured, specialized form of mentoring, designed to address issues faced by youth living in foster care.
CHAPTER TWO
LITERATURE REVIEW

Foster Care: Prevalence and Challenges

Youth are placed in foster care to prevent further mistreatment or neglect, and to provide an environment where they can receive supportive services that facilitate recovery and promote growth and development (Lawrence, Carlson, & Egeland, 2006; Mennen & O'Keefe, 2005). While the foster care system operates as a protective entity, youth often develop significant maladaptive symptoms both as a result of the abuse and neglect that brings them into the system, as well as the trauma experienced as a result of removal from biological relatives, and from instability of foster placements (Kortenkamp & Ehrle, 2002; Racusin, Maerlender, Sengupta, Isquith, & Straus, 2005). Evidence shows that youth who experience foster care display greater levels of behavioral issues upon release from care, and ongoing after release, as compared to youth who live in disadvantaged home environments with adequate parental care (Lawrence et al., 2006).

Given these findings, more effective interventions are needed to help attenuate the negative impact of living in foster care. In order to better understand the specific challenges faced, the literature on foster youths’ experience related to emotional and behavioral functioning, educational challenges, peer relationships, and community involvement is reviewed below. The purpose in detailing these domains is to demonstrate how the interaction of child maltreatment leading to out-of-home care results in deficits
in important areas of a youth’s development. Presumably, these negative impacts have environmental antecedents and therefore may be amenable to interventions, such as therapeutic mentoring, that are targeted to facilitate positive change in these same areas.

The negative developmental consequences for children placed in foster care has been well-documented (Burns et al., 2004; Kortenkamp & Ehrle, 2002; Lawrence et al., 2006; Racusin et al., 2005; Rosenfeld et al., 1997; Rubin et al., 2004; Vandivere, Chalk, & Moore, 2003). These consequences include increased behavior and mental health problems (Clausen, Landsverk, Ganger, Chadwick, & Litrownik, 1998; Lawrence et al., 2006), low academic achievement (Blome, 1997; Courtney & Dworsky, 2006; Pecora et al., 2006), poorer peer relationships (Bolger, Patterson, & Kupersmidt, 1998), and decreased community involvement (Courtney, Piliavin, Grogan-Kaylor, & Nesmith, 2001). These areas consistently present challenges for youth living in foster care and can have long-term developmental consequences. They are important to review in order to determine whether therapeutic mentoring can have a positive impact on foster youth experiencing these problems. In addition, these areas have been found to have mediator effects for other outcomes as will be discussed below (Kuperminc et al., 2005).

Emotional and Behavioral Functioning

Youth in foster care have disproportionately higher rates of psychiatric disorders than other youth (McMillen et al., 2005), and nearly half of children in foster care are diagnosed with emotional or behavioral disorders (Burns et al., 2004). As a result, foster youth have a high need for mental health treatment and receive mental health services at a higher rate than other disadvantaged youth (Rosenfeld et al., 1997). However, of those
youth who score within the clinical range on the Child Behavior Checklist (CBCL), a large percentage do not receive mental health services (Burns et al., 2004). For example, one-half of youth who were the subjects of abuse or neglect investigations were found to need mental health treatment, but only one-fourth of this group actually received mental health services (Burns et al., 2004). These findings suggest that mentors may need higher skill levels or more support in order to respond therapeutically to foster youth than for other youth not in foster care. While the mentoring relationship cannot replace a psychotherapeutic relationship, it can serve as an additional support in a foster youth’s life or perhaps as transitional support for some youth while awaiting more intensive treatment.

While research has shown that children living with biological parents fare better than children in foster care (Kortenkamp & Ehrle, 2002), foster parents can play an important role in facilitating the healing process for foster youth with emotional and behavioral difficulties. For foster youth who live in a home with an attentive and nurturing caregiver, the effects of past experiences, such as abuse, neglect, and poverty may be attenuated (Kortenkamp & Ehrle, 2002). Thus, if living with attentive and nurturing caregivers eases some of the effects of traumatic experiences, therapeutic mentoring may provide the additional support and nurturing necessary to reduce some of the negative impacts of living in foster care. Given the extent to which foster youth experience significant mental health difficulties as compared to other youth, a specialized approach to mentoring must be carefully developed, implemented, and evaluated.
Educational Challenges

The emotional needs of foster youth can often interfere with their ability to perform well in school (Blome, 1997; Courtney & Dworsky, 2006; Trout, Hagaman, Casey, Reid, & Epstein, 2008). Youth in foster care demonstrate significantly lower success rates in school as compared to other youth and typically enter care already a grade behind their age (Smithgall, Gladden, Howard, Goerge, & Courtney, 2004). In addition, entering foster care can be disruptive to youth academically, and foster youth have a higher risk of being held back the year after placement in foster care (Smithgall et al., 2004). Given that foster youth face significant challenges in actively engaging in school and succeeding, it is useful to understand the scope of educational problems for foster youth, as well as mediating factors that contribute to higher success for this population. This section outlines how living in foster care can affect academic outcomes and reviews how mentoring has the potential to impact foster youths’ ability to achieve success in school.

When compared to youth who live with biological families, foster youth graduate high school and complete GEDs at a significantly lower rate, and are much more likely to drop out of high school (Blome, 1997). On a local level, youth in foster care are designated for special education, most often due to a behavioral disorder or learning disability, at significantly higher rates than other Chicago Public School (CPS) students (Smithgall et al., 2004). In addition, foster youth attending a Chicago Public School are “almost twice as likely to drop out of school as other CPS students” (Smithgall et al., 2004, p. 74). These poor educational outcomes for youth in foster care emphasize the
need for increased support for this population. While poor educational outcomes may be linked to a large number of complicated factors, the potential role of outside support in positively impacting these outcomes is an important consideration that has promising implications.

Youth aging out of foster care report a number of difficulties in the transition from out-of-home care to independence, including educational challenges. Courtney et al. (2001) reported initial findings from the Foster Youth Transitions to Adulthood Study which followed 141 youth who aged out of foster care in Wisconsin in 1995 and 1996. The study interviewed 17- and 18-year-old foster youth before they left foster care, and again at 12-18 months after aging out of foster care. Initial findings showed that before leaving foster care, foster youth had constructive academic and vocational aspirations for themselves. However, when a group of foster youth aging out of foster care were interviewed, it was reported that almost half of them did not complete high school, although when first interviewed, most of the youth (71%) indicated they expected to graduate and go onto college (Courtney et al., 2001). One-third of the group also scored below an 8th grade reading level. In addition, almost half of the group reported having changed schools at least four times since starting school (Courtney et al., 2001). These findings suggest that while most youth in foster care start out with perhaps the same aspirations as other youth, their experience in foster care can present obstacles that may limit their ability to achieve important educational goals, such as reading at grade level and graduating from high school.
Using longitudinal data from a large-scale study of the Big Brothers Big Sisters program, Rhodes, Grossman, and Resch (2000) evaluated whether mentoring relationships impacted youths’ academic outcomes. All youth in the study (n=959) were interviewed before they were assigned to a control or treatment group, and then interviewed again 18 months later. Youth in the treatment group met with their mentor on average from 9 to 13 months at least three times per month for an average of 3.6 hours. The youth interview questions came from a number of measures including a parent relationship scale containing questions about the youth’s relationship with his/her primary caregiver. Subscales of the Self-Perception Profile for Children (Harter, 1986) measured confidence in school and self-worth. Finally, youth were asked about their attendance and grades, as well as study habits and asked how much they valued academic success. The results of the study showed differences between the control and treatment groups in that mentored youth reported better parental relationships and school attendance, and more confidence in school relative to non-mentored youth at follow-up (Rhodes et al., 2000). The authors concluded that the positive impact of mentoring relationships on youths’ academic adjustment was mediated in part through an increase in positive perceptions of the parental relationship (Rhodes et al., 2000).

The Rhodes et al. (2000) study demonstrates the mediator effect that mentoring relationships can have on youth. The positive outcomes include improving parental and peer relationships. As a result of this additional support in the youth’s life, it is theorized that other areas of functioning are also positively impacted, such as school achievement and self-worth. The underlying cause of the change between youth and parent (Rhodes et
al., 2000) is not clear. However, the study’s authors posit that effects could either include change within the youth’s internal working model and therefore how the youth interacts with the parent, or that the mentoring relationship has the effect of reducing “normative developmental tensions” that might exist between adolescent and parent (Rhodes et al., 2000, p. 1668). Either way, this study is instructive regarding how mentoring can have positive impacts both directly on behavioral outcomes, as well as mediate other outcomes due to improving youths’ parental and peer relationships.

**Peer Relationships**

As with emotional and behavioral functioning and experiences at school, peer relationships can play a vital role in how a youth relates with those within and outside of the home environment (Bolger et al., 1998; Kindermann, 1993; Rhodes et al., 1999). Research has shown that peer relationships also act as mediators for improved academic and behavioral functioning (Bolger et al., 1998; Kindermann, 1993). When youth have difficulties in peer relationships, they “may suffer cascading effects of negative social interactions” that can lead to complications in other areas of functioning, including self-concept (Bolger et al., 1998, p. 1172). Youth who have been abused and/or neglected have a complicated set of issues that have the potential to be moderated by peer relationships (Bolger et al., 1998). For instance, maltreated youth who reported having a positive peer friendship showed increases in self-esteem over time (Bolger et al., 1998). Given the potential of peer relationships to improve youth functioning in other areas, future study on how to support peer friendships for maltreated youth is warranted. This
section will review the research on peer relationships for maltreated or foster youth and discuss how mentoring can bolster youths’ relationships with peers and others.

Rhodes et al. (1999) found that relationships and trusting others is more challenging for youth in foster care than for other youth. However, foster youth in mentoring relationships showed an increase in social skills, positive experiences engaging in relationships, and feeling trust in others, as well as improved peer support and self-esteem (Rhodes et al., 1999). Their study utilized data from a national study of Big Brothers Big Sisters programs that included 959 adolescents aged 10-16 years. Participants were placed into two subgroups: “foster” and “nonfoster” (Rhodes et al., 1999). The “foster” group included youth who indicated that their custodial parent was a relative. The foster group was then further divided into “relative foster” (n=78) and “nonrelative foster” (n=12) groups. The “nonfoster” group consisted of 90 youth who indicated their custodial parent was their biological mother or father. The nonfoster group was matched with the foster group on demographic variables such as gender, race, and age. About half of each the foster and nonfoster group were placed on a waiting list and served as the control group in the study (Rhodes et al., 1999).

Outcomes for the treatment group and the control group were compared at baseline and 18 months later. The outcome information was collected by caseworkers via intake assessment information. This information included abuse histories (e.g., sexual, physical, and emotional, as well as domestic violence and substance abuse). Caseworkers also reported on the progress of the mentoring relationships. In addition, a 12-item questionnaire was completed by the foster parents that included “the reason or reasons
that they felt their child-ward would benefit from the program” (Rhodes et al., 1999, p. 190). At the 18-month follow up, foster and nonfoster parents rated their satisfaction with the program and whether the program had made a difference in their child’s life. In addition, the parents responded to a series of 21 questions regarding their impressions of the mentor who worked with their child. The parents’ rated the answers to the questions on a 4-point scale, such as 1 = very true to 4=not at all true (Rhodes et al., 1999). Finally, youth completed a 20-item Features of Children’s Friendship Scale (Berndt & Perry, 1986) consisting of five subscales for different problems or supports.

The results of Rhodes, Haight, and Briggs study (1999) are outlined in detail in the research section below. However, the specific outcomes related to peer relationships are noted here. At baseline, there were no significant differences between the foster and nonfoster groups in regards to a composite peer support scale (sum of five subscales on the Features of Children’s Friendship measure). However, “foster parents were significantly more likely to indicate that they sought out the program because their child was insecure and did not trust adults, and because their child had poor relationships with others” (Rhodes et al., 1999, p. 191). At follow-up, foster youth were reported to have an improvement in social skills. This improvement was reported by foster parents of mentored youth at a significantly higher rate than nonfoster parents. However, peer support was slightly higher for nonfoster youth. When the three groups were compared (nonfoster, relative foster, and nonrelative foster), the relative and nonfoster groups had higher peer relationship scores than the nonrelative foster group. The groups were also compared on peer subscales and found that nonfoster youth in both the treatment and
control groups showed “slight increases in prosocial support over time” (p. 192). In the foster group, foster youth in the control group all showed decreases in peer support over time, while the treatment group demonstrated an increase in prosocial support (Rhodes et al., 1999). These findings suggest that foster youth are more vulnerable to difficulties in relationships with peers, particularly during adolescence. However, with the intervention of youth mentoring, the negative effects of foster care on peer relationships can be reduced or reversed (Rhodes et al., 1999).

Research on peer relationships is also important in that positive peer friendships have been shown to moderate “the effect of maltreatment on self-esteem” (Bolger et al., 1998, p. 1194). In a study by Bolger et al., maltreatment was found to be associated with poor peer relationships and lower self-esteem was associated with frequent physical abuse (1998). When the physical abuse was chronic, children experienced difficulties in peer friendships over time, although initially reported higher levels of positive friendships. The authors speculate that the children most frequently abused may turn to friends to obtain support, but that “the cumulative effects of chronic physical abuse interfered with children’s ability to maintain close relationships with peers” (Bolger et al., 1998, p. 1192).

Overall, Bolger et al. found that although chronically maltreated youth had the highest likelihood of not being accepted by peers, the same youth also showed an increase in self-esteem over time when they reported being in a “high quality friendship” (1998, p. 1195). The authors note that these findings suggest that youth who experience chronic maltreatment may be “especially in need of, and able to benefit from, peer-based
intervention strategies to improve their personal and social adjustment” (Bolger et al., 1998, p. 1195). The findings from the two studies reviewed above (Bolger et al., 1998; Rhodes et al., 1999) both suggest that vulnerable and chronically maltreated youth have more difficulty with peer relationships and that when provided with supportive and nurturing relationships, these youth are able to make better use of other relationships outside of their families (Bolger et al., 1998).

**Community Involvement**

Community involvement is an important indicator of healthy functioning and is predictive of better functioning both in adolescence, as well as in adulthood (Eccles & Barber, 1999; Fletcher, Elder, & Mekos, 2000; Youniss, McLellan, & Yates, 1997). Having youth involved in after-school, extracurricular, and community activities provides a number of benefits to youth, including an increased sense of empowerment and school-belonging (McMahon, Singh, Garner, & Benhorin, 2004). Other benefits include providing a protective mechanism that assists in facilitating academic achievement, such as increased GPA and higher likelihood of college enrollment, and the prevention of risky behaviors (Eccles & Barber, 1999).

Youth mentoring can facilitate and model healthy interactions with one’s environment and community and allow for increased community involvement throughout life. Adults raised in family foster care reported being less involved in their communities and activities than the general population (Buehler, Orme, Post, & Patterson, 2000). With the intervention of youth mentoring during adolescence, foster youth demonstrated improved outcomes in the areas of overall health and mental health, as well as being less
likely to have engaged in a fight, and a marginal trend towards increased engagement in higher education (Ahrens, DuBois, Richardson, Fan, & Lozano, 2008). These are important indicators because they show that while youth raised in foster care typically demonstrate negative outcomes in adolescence and into adulthood, exposure to community activities (including participation in a mentoring program) appears to promote better adult functioning.

Research suggests that when mentoring activities take place in the community, they are slightly more impactful than when mentoring is provided in school settings (DuBois et al., 2002). Portwood and Ayers (2005) speculate that school-based mentoring programs may have shown a smaller effect size than community-based programs due to the time limits inherent in a school setting such as the academic year and school day. These time constraints may interfere with the mediators that have shown to produce positive outcomes such as frequency of contact, feelings of emotional closeness between mentee and mentor, and the length of the relationship (DuBois et al., 2002; Portwood & Ayers, 2005). This further supports the importance of looking for ways to facilitate community participation and involvement when designing and facilitating mentoring activities. The current study will measure whether foster youth show better outcomes on behavioral outcomes related to community involvement (e.g., social functioning and recreational activities) after participating in a mentoring program in order to further support the research on this topic.
Summary

A thorough examination of the outcomes for youth in foster care is helpful in determining the areas where more support is needed in the lives of these youth. The evidence leads to two important conclusions: 1) Youth who have lived or are living in foster care face significantly more challenges in emotional and behavioral functioning, academic performance, peer relationships, and community involvement on average than those not raised in foster care; and 2) Both foster and non-foster youth with supportive and nurturing relationships, either with family members or outside support, such as mentors, fare better on outcome measures than other youth. While mentoring will not be able to affect change in all of the areas where foster youth struggle, it is important to consider these areas (i.e., emotional and behavioral functioning, academic achievement, peer relationships, and community involvement) when evaluating the effectiveness of mentoring. Each of these areas present significant challenges for youth in foster care. However, they may also be areas of potential impact and promise as related to how supportive interventions can contribute to improving the lives of foster youth.

Therapeutic Mentoring

The current study hypothesizes that youth in foster care will benefit from a specialized type of mentoring (i.e., therapeutic mentoring) designed specifically to meet the needs of youth in foster care (see Table 1). While no current research literature exists specifically on therapeutic mentoring for foster youth, the framework of the current study is informed by several perspectives, including attachment theory (Ainsworth, 1989; Bowlby, 1969). As children in foster care are dealing with the trauma of abuse and
neglect and the loss of being separated from biological family members, therapeutic mentors can offer a unique, supportive relationship. Since much of the harm experienced by these youth has been through relationships, it may be most effective to provide relationship-based interventions, such as therapeutic mentoring, to give youth a different form of relationship experience in which to learn new modes of interpersonal relating (Rhodes et al., 1999).

Attachment theory places an emphasis on how early relationships set the course for development, while later relationships have the potential to alter the course of future development (Ainsworth, 1989). Attachment theory provides one theoretical framework for understanding how attachment and relationship models produce patterns for involvement. This framework emphasizes the importance of the potential for change, and also of carefully developing mentoring relationships for youth who have not had supportive early experiences. Attachment theory and its connection to mentoring interventions will be explored in greater detail in the theory section of this paper.

The literature on developmental mentoring is instructive in terms of how relationship-based mentoring programs are defined. Morrow and Styles (1995) define developmental mentoring relationships as relationships in which mentors plan and facilitate activities that vary based on the youth’s abilities and needs at a specific time. The initial phase of the mentoring relationship is devoted to engagement and building a strong bond. Once trust is built and the relationship is stable, the mentor may encourage the youth to grow towards more specific goals, such as reinforcing strengths (Morrow & Styles, 1995). The focus of a developmental or therapeutic mentoring relationship is the
relationship itself, rather than any concrete set of tasks or goals. The idea is that within this strong bond, the youth will be empowered and supported to pursue goals that focus on increased functioning (Morrow & Styles, 1995). A complementary definition of developmental mentoring by Deutsch and Spencer (2009) describes that the first task in developmental mentoring is to establish “a strong connection with the young person” (p. 53). The mentor’s first priority is to make the relationship enjoyable and to “set developmentally appropriate expectations that are informed by the youth’s preferences and interests” (Deutsch & Spencer, 2009, p. 53).

Research has indicated that the developmental approach to mentoring has had more success in facilitating positive outcomes than have other forms of mentoring, such as prescriptive mentoring, which is more adult-driven than youth-driven (Morrow & Styles, 1995). Some of the positive benefits of a developmental approach are a longer lasting relationship that is more consistent, and youths’ report of feeling more comfortable and supported in these relationships (Morrow & Styles, 1995).

In order to address the power of consistency and longevity on youth outcomes, the therapeutic mentoring program evaluated in the current study provided training to therapeutic mentors focused on the effects of trauma and abuse and resulting symptoms youth may experience. In addition, the program supervisors emphasized the importance of consistency in the mentoring relationship and the resulting impact of this on foster youth. Termination was also planned carefully. Therapeutic mentors were provided specific protocol about how and when to begin talking with their mentees about
termination, as well as how to plan for the termination session and whether providing a gift to the foster youth to say good-bye would be appropriate.

Table 1  Key Characteristics of Therapeutic Mentoring

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapeutic Mentors</td>
<td>Carefully interviewed and screened and receive ongoing and intensive supervision and training from Master’s level social workers.</td>
</tr>
<tr>
<td>Therapeutic mentoring</td>
<td>Delivered on a consistent, weekly basis.</td>
</tr>
<tr>
<td>Program supervisor and youth’s clinician</td>
<td>Carefully monitor the weekly interventions with foster youth.</td>
</tr>
<tr>
<td>Therapeutic Mentors</td>
<td>Trained to therapeutically respond to youth with trauma experiences.</td>
</tr>
<tr>
<td>Therapeutic Mentors</td>
<td>Receive paid compensation.</td>
</tr>
<tr>
<td>Termination process</td>
<td>Carefully planned and carried out.</td>
</tr>
</tbody>
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Ongoing research on this unique approach to mentoring will help to develop the definition and delivery of therapeutic mentoring. Further research will have helpful implications for future application of this approach. The following sections review the literature relevant to developing a definition for therapeutic mentoring. First, the literature on foster parent training explains how specialized training for caregivers of foster youth can impact youth functioning. Next, exploration of the concept of paid versus volunteer mentoring provides information regarding the different features of both types of mentor and what they contribute uniquely to the mentoring experience. The
following section looks at the broader mentoring research as it applies to impacting youth functioning. These areas of the literature help define what aspects of mentoring are most important and assist in building the case for therapeutic mentoring as a unique approach designed to facilitate better outcomes for foster youth.

*Training for Mentors and Foster Parents*

Mentors for a special population, such as youth in foster care who have experienced multiple losses, often including abuse and/or neglect, must be provided with specialized training and supervision. This is important because mentors who are trained and supported will be more likely to provide foster youth with therapeutically-guided interventions and will maintain longer connections with youth, rather than become dissuaded by the youths’ special needs and difficulties with interpersonal relationships (Rhodes, 2002). The literature related to training therapeutic mentors is sparse, but exploration of literature on training provided for foster parents may help illuminate this area. Since foster parents and mentors are both presented with an opportunity to facilitate healing, growth, and development for foster youth, this is an important parallel in the literature.

Evidence shows that foster parents who receive support, training, and tools to understand the special needs of their foster child, are better able to assist in positive socialization, supervision, and improved outcomes for the youth they foster (Fisher & Chamberlain, 2000). Findings on the effects of foster parent training demonstrate how training for specialized caregivers of foster youth can have a significant impact on the youth’s behavioral outcomes (Chamberlain et al., 2008), as well as inform training and
development in therapeutic mentoring programs for foster youth. In regards to directly impacting foster youth’s behavioral outcomes, Chamberlain et al. (2008) found that a comprehensive foster parent training program that taught positive reinforcement techniques and discipline skills “increased parental effectiveness in these skills, which related to decreased child behavior problems, especially for families who reported higher levels of initial problems” (p. 24). A group of 700 foster parents was randomly assigned to either an intervention or control group. The intervention group participated in a 16-week training that emphasized positive reinforcement and non-harsh discipline techniques. Outcome measures were taken at baseline and termination. The measures used were the Parent Daily Report Checklist (PDR; Chamberlain & Reid, 1987) and foster parent reports on the frequency of positive reinforcement and punishments (Chamberlain et al., 2008). Foster parents in the intervention group showed increased parental effectiveness in using supportive, positive approaches, without using harsh punishment as compared to the control group. The results showed that child behavior problems decreased, especially for families who had initially reported a higher number of problems (Chamberlain et al., 2008).

In another study, pre-service foster parent training was found to increase new foster home licensing (Simon & Simon, 1982). In this study, two groups of foster parents, trained and untrained, were compared on the number of placements and placement failures in the first year after licensure. After the introduction of training, rates of licensure increased and trained foster parents accepted twice as many placements as the control group. In addition, the youth placed in the trained foster parent homes had
experienced more placements, indicating they may have been more difficult to care for; however, the trained group of foster parents had a significantly lower re-placement rate than the untrained foster homes. The authors noted that “the outcome picture seems to indicate that trained foster homes are either more tolerant and accepting of acting-out behaviors and/or better prepared to deal with such conduct than their untrained counterparts” (Simon & Simon, 1982, p. 523).

Foster parent training has also been shown to enhance the outcomes of the foster placement regardless of foster parent experience, environmental issues, and foster children’s difficulties (Boyd & Remy, 1978). Training was found to be most effective when provided before the placement of a foster child to foster parents with less experience in high-stress situations and foster children presenting with significant difficulties (Boyd & Remy, 1978). In high stress placements when foster parents received training, outcomes improved for high-risk children by reducing the number of failed placements as compared to foster parents who did not receive training. In addition, trained foster parents were more likely to maintain their foster parent licenses, while untrained foster parents were less likely to maintain their licenses (Boyd & Remy, 1978). Research in this area suggests that a supportive intervention, such as foster parenting, can attain significant success through a theory-based training intervention (Chamberlain et al., 2008; Fisher & Chamberlain, 2000).

Because providing pre-match and ongoing training and supervision for volunteer mentors was cited as a moderator for more impactful mentoring programs (DuBois et al., 2002), it is important to consider the impact of training on foster youth outcomes for paid
mentors. The foster parent training literature addresses interventions for youth in foster care and lends support to the current study which examines whether a specialized mentoring intervention can have a similar impact on foster youth. The implementation of mentor training was a key component of the program under study. According to the research, training can increase the effect that interventions have on behavioral outcomes (Chamberlain et al., 2008). Training can also help to increase the likelihood that mentors will respond therapeutically to their mentees, while remaining available to provide mentoring on a long-term basis if needed (Parra, DuBois, Neville, Pugh-Lilly, & Povinelli, 2002).

Volunteer and Paid Mentors

As the research has suggested, positive youth outcomes are related to sustained mentoring relationships (Grossman & Rhodes, 2002; Rhodes, Lowe, Litchfield, & Walsh-Samp, 2008). The longevity of mentoring relationships depends on the ability of programs to retain mentors for at least a year or longer. To develop effective retention strategies, programs first need to understand what factors contribute to maintaining mentors. The potential for differing levels of commitment, effectiveness, and retention between volunteer and paid mentors is an important issue for further exploration. Most published studies on the effectiveness of mentoring involve volunteer mentors. While DuBois et al. (2002) found that pay or volunteer status did not have significant relation to effect size for mentoring outcomes, it is still important to consider the literature on volunteering as compared to paid work to understand how this difference may impact the interpretation of findings from the current study.
The program under study for this dissertation research utilized paid mentors. The mentors in this study were closely supervised and trained for working with youth in foster care. Paid mentors are a recent phenomena and present advantages for youth programs over using volunteers. Paid mentors may be more committed to working with youth for a longer period of time, be more prepared and willing to work with the most challenging youth, and be more able to follow the youth if they move from home to home, as is often the case with foster youth (Smith, 2004). In addition, “paid mentors may be more responsible and perceived differently by their mentees than volunteer mentors” (Zand et al., 2009, p. 15). Some of the challenges associated with utilizing paid mentors are cost, ability to provide ongoing training and support, and the lack of evidence that paid mentors are any more effective than volunteer mentors (DuBois et al., 2002; Smith, 2004). While promising efforts are underway in the area of paid mentoring (e.g., Friends of the Children program), and volunteer mentoring has thus far only shown modest results, increased evaluation and outcomes using paid mentors will be a valuable addition to the research in youth mentoring.

One of the debates in the literature regarding paid workers versus volunteers discusses whether monetary rewards might increase or decrease intrinsic motivation (Frey & Goette, 1999). Cognitive evaluation theory (Deci & Ryan, 1985) posits that giving rewards for good performance actually lowers an individual’s intrinsic motivation. That is, the individual continues to perform for the external reward rather than being internally motivated to achieve. In contrast, Eisenberger & Cameron (1996) argue that “the detrimental effects of reward are more limited than supposed either by popular views
or by cognitive evaluation theory” (p. 1158). They point out that rewards given as an incentive for good performance may decrease self-determination, but may also increase how an individual perceives their own competence because rewards can also serve as an “informational feedback concerning one’s performance relative to that of other individuals” (p. 1155). If rewards do decrease motivation, does that mean that paying mentors would decrease their motivation or commitment? Before this conclusion can be reached, additional factors must be considered when looking specifically at the impact of pay on mentors and subsequently the youth they mentor.

Conceptually, when considering youth mentors, arguments for volunteers and paid workers are both compelling (Smith, 2004). Volunteers are in a supportive role that often complements the work of paid professional staff. In addition, volunteers may be motivated to support youth primarily out of a personal interest and desire to help. Some of the drawbacks are that volunteers may not have a background in a helping field and may be less committed to staying with a program for a set period of time, and could leave suddenly without appropriately terminating with their mentee. Volunteers also may not be prepared or willing to work with the most challenging youth, such as foster and at-risk youth (Smith, 2004).

Gerstein, Wilkeson, and Anderson compared paid and nonpaid volunteers (2004) on their responses to the Volunteer Functions Inventory (Clary, Snyder, & Ridge, 1992; Clary et al., 1998). The results showed that as compared to nonpaid volunteers, the paid volunteers (i.e., AmeriCorps members) reported higher levels of altruism and concern for others, and that they were interested in volunteering in order to obtain new opportunities
and experiences as well as demonstrate their knowledge, abilities, and skills (Gerstein et al., 2004). Paid volunteers were also more likely to believe that volunteering was a way to enhance their own growth and development, as well as to spend time with others and have the favorable perception of others (Gerstein et al., 2004). What these findings suggest is that the paid volunteers were motivated by their desire to help and an interest in opportunities for personal growth. Compensation did not seem to diminish or compromise their intrinsic motivation (Gerstein et al., 2004).

Related to intrinsic motivation is mentor efficacy. In a path analysis of mentor relationships and their benefits, Parra, DuBois, Neville, and Pugh-Lilly (2002) found that mentors who believed mentoring was beneficial to youth before beginning a relationship were associated with perceived benefits for youth after a one-year period. In addition, the perception of high-quality training was associated with positive mentor efficacy ratings. These mentor efficacy ratings were also positively associated with more monthly contact with youth and fewer reports of relationship obstacles. Mentor ratings of efficacy were also linked to “enhanced feelings of closeness” (Parra et al., 2002, p. 383). This research indicates that mentors who feel more confident and knowledgeable are better able to overcome relationship obstacles, meet more regularly, and facilitate close bonds with their mentees. The reason this research is important in relation to paid and volunteer mentors is that it highlights the importance of the self-efficacy of mentors in predicting successful mentoring relationships. Paid mentoring programs may be in a better position than volunteer programs to increase feelings of mentor efficacy by paying mentors, providing carefully structured training, and facilitating ongoing, consistent matches.
Also, if it is the case that volunteer mentors have less availability and training for the level of necessary skill and commitment to mentor foster youth, the results of the current study may lend support to the importance of utilizing a more professional and paid staff to provide mentoring to foster youth.

Mentoring Research

Several factors play a part in what makes mentoring effective, including well-designed program implementation and careful screening and matching of mentors (DuBois et al., 2002). While studies have shown the positive impacts of mentoring, youth who present with numerous risk factors are also in a position to be affected negatively if mentoring is not carefully delivered and evaluated (Britner, Balcazer, Blenchman, Blinn-Pike, & Larose, 2006).

Studies on mentoring for at-risk youth have shown promising results (Barron-McKeagney et al., 2001; DuBois et al., 2002; Thompson & Kelly Vance, 2001) that support further evaluation of mentoring programs for foster youth. Findings from the National Longitudinal Study of Adolescent Health (“Add Health” Study) demonstrate the impact of long-term mentoring on foster youth as they transition into adulthood. Data from this study was used to evaluate adult outcomes for individuals who reported having lived in foster care (Ahrens et al., 2008). In this study, youth who had lived in foster care had poorer outcomes as adults than the general population; however, when youth in foster care were involved in natural mentoring relationships as adolescents, better outcomes resulted in the areas of educational attainment, aggression, and health, with a significant difference for combined positive outcomes (Ahrens et al., 2008). The authors speculate
that the positive outcomes may be attributable to the longitudinal nature of the study
design, but may also be a result of the long-term nature of the natural mentoring
relationships, some of which were up to 10 years in length, as the mentors were built into
the youths’ social structure (Ahrens et al., 2008). These findings point to the need for
ongoing and expanded evaluations of how supportive relationships, such as mentoring,
can increase the chances for foster youth to succeed later in life.

Big Brothers Big Sisters (BBBS) is a volunteer mentoring model that has been the
subject of several large-scale evaluations. Big Brothers Big Sisters “pairs unrelated adult
volunteers with youths from single-parent households with an approach that is intensive
in delivery and broad in scope” (Grossman & Tierney, 1998, p. 405). Mentors meet with
their mentees approximately 2-4 times per month for at least one year, with each meeting
lasting about 3-4 hours. Professional staff of the organization screen and train volunteers
and oversee the matches (Grossman & Tierney, 1998).

Evaluations of BBBS services have primarily stemmed from a large national
study conducted by Public/Private Ventures (Grossman & Tierney, 1998). Eight
programs across the country were selected to participate in the evaluation due to having
large caseloads and established waiting lists. From these programs, a sample of 1,138 was
selected. A total of 959 youth were included in the analysis of outcomes. A majority of
the youth in the sample were at risk due to living in low-income, single parent households

The study participants were randomly assigned to a treatment and control group.
All participants completed questionnaires at intake and follow-up (18 months). Case
managers also provided information regarding the youth and mentor-mentee matches to supplement the data. The baseline data for the treatment and control group showed no meaningful differences. The entire sample contained about 60% males, 57% minorities, and was aged 11-13 years (Grossman & Tierney, 1998).

Results from this evaluation of BBBS programs showed that the mentored group was “significantly less likely than their control counterparts to start using illegal drugs and alcohol during the study period” (Grossman & Tierney, 1998, p. 413), with the largest impact shown for minority youth (70% less likely to have started using illegal substances). Mentored youth also showed improvement in relation to the control group in a reported reduction in hitting behavior or violence, a marginal increase in GPAs and school attendance, and increased confidence in the ability to complete schoolwork. Slightly higher scores were also shown for parent-child and peer relationships (Grossman & Tierney, 1998). A subsequent analysis of the same data sought to determine whether the impact mentoring relationships have on academic outcomes is mediated through youth’s relationships with parents (Rhodes et al., 2000). The analysis found that “improved perceptions of parental relationships, although not the sole determinant, are important mediators of change in adolescents’ academic outcomes and behaviors” (Rhodes et al., 2000, p. 1667). This was determined after being compared to an alternative model that showed parental relationships as an outcome of mentoring relationships, rather than a mediator (Rhodes et al., 2000).

The findings from the outcome evaluations on BBBS programs are significant in supporting research for therapeutic mentoring. While the BBBS model utilizes volunteer
mentors, the structure of the model is comparative to that of the therapeutic mentoring program in that volunteers are consistently trained and supported, care is taken in making matches based on youth and mentor characteristics, and the population of the programs are similar in that they are primarily serving at-risk youth. While the therapeutic mentoring program under study employs paid mentors and serves foster youth, the outcomes from the BBBS programs are still instructive in terms of the potential for mentoring to facilitate positive outcomes for a vulnerable youth population.

While research that focuses on mentoring outcomes for foster youth is extremely limited (Britner & Kraimer-Rickaby, 2005). One study that stemmed from the original BBBS evaluation focused particularly on mentoring for youth in foster care (Rhodes et al., 1999). Rhodes et al. (1999) found that when foster youth who received mentoring were compared with a control group, the treatment foster youth demonstrated an increase in prosocial support and enhanced self-esteem, while youth in the control group (without mentors) showed declines in these areas. The sample for the study included 90 foster youth, 78 of which indicated that their foster parent was a relative. Twelve participants were categorized as nonrelative foster youth (custodial parent was a foster parent and not a relative). A matched group included 90 youth who indicated they lived with their own parents. About half of each of the foster and nonfoster groups were in the treatment group, while the remaining youth were in a control group. The youth engaged in relationships with volunteer mentors from the Big Brothers Big Sisters organization for an average of 12 months, with most matches meeting at least one time per week (Rhodes et al., 1999).
The mentored and non-mentored groups were compared at baseline and at 18 months on measures of cognitive and social experiences. Caseworkers recorded information related to the youths’ history and progress of the mentoring relationship, and parents were asked a series of questions related to why they enrolled their children in the program, how they think their child benefited from the program, and how satisfied they were as parents with the program (Rhodes et al., 1999). The caseworkers’ reports indicated that there were no differences between the groups (foster versus nonfoster and among nonfoster, relative foster, nonrelative foster) in terms of the intensity or quality of the mentoring relationship (Rhodes et al., 1999).

Foster parents were significantly more likely, and nonfoster parents were significantly less likely, to indicate they sought out the mentoring program due to their child’s insecurity or lack of trust in adults. At follow-up, foster parents reported that their child was demonstrating improved social skills and had become more comfortable with and trusting of adults. However, nonfoster parents whose children received mentoring were less likely to report improvements in these areas (Rhodes et al., 1999). This indicates that for the children who were identified as having challenges in trusting adults (i.e., foster children) an experience with an adult mentor facilitated an improvement in social skills and trust. This is important for the current study because it demonstrates that the potential exists for youth facing the most challenges to experience improved behavioral outcomes in response to a therapeutic mentoring relationship.

Finally, foster youth reported more positive peer relationships and improved self-esteem at the end of the 18-month study (Rhodes et al., 1999). In addition, children who
were living in relative foster home placements showed slightly higher levels of prosocial support than children living in nonrelative foster homes (where slight declines were noted). The authors of this study conclude that because the control group youth all showed declines in peer support as time progressed, foster youth may have a higher risk of difficulties with maintaining close relationships with peers. They also concluded that although youth in foster care are presented with specific challenges, they are still able to engage in and benefit from mentoring relationships. These findings have particular significance in demonstrating how the mentoring relationship has a role in mediating the effects of placement in foster care (Rhodes et al., 1999).

The results of Rhodes et al.’s study indicate the need for increased attention to be paid to mentoring for youth in foster care as well as further evaluation to better understand the characteristics of the relationships that facilitate the improvements seen in their study (1999). It is important to note that Rhodes et al. evaluated a volunteer mentoring program. While many of the other characteristics of the program are similar to the program evaluated in this dissertation, it is feasible that this difference might impact the ability to generalize findings from the current study to other volunteer mentoring programs.

Length of Mentoring Relationship

The relationship between the mentor and youth is at the root of successful mentoring and it is important to consider how the length of a given relationship influences the consolidation of benefits from the relationship. Youth in foster care often experience a series of disrupted relationships that begin when they are removed from
their families of origin and continue if placements are not successful. Studies show that youth exhibit an increase in behavior problems after entering foster care and that these behavioral problems may contribute to disruption in foster placements, necessitating youth to move from home to home after entering care (Lawrence et al., 2006). It is therefore relevant to consider the effects of these frequent disruptions, as well as how the length of mentoring relationships may attenuate the negative effects of such disruptions.

Research has shown that longer mentoring relationships produced better outcomes and a larger number of improvements than for youth in shorter mentoring relationships (Grossman & Rhodes, 2002). In addition, for premature terminations, or relationships that lasted less than 3 months, youth actually showed a decrease on measures of self-worth and perceived scholastic competence, as well as a significant increase of alcohol use. At the same time, youth in relationships for more than 12 months showed significant increases on measures of self-worth, socialization, academics, and family relationships, and a decrease in substance use (Grossman & Rhodes, 2002).

Length of mentoring relationships also seem to vary with boys and girls (Rhodes et al., 2008). Overall, girls’ relationships were longer than the boys’ relationships with their mentors. Study participants were asked about their satisfaction with their mentor and the relationship with him/her. Girls reported feeling more satisfied by the relationships and found longer-term relationships to be more helpful than both boys and girls in shorter relationships (Rhodes et al., 2008). These findings are meaningful because one of the hypotheses for the current study is that longer mentoring relationships are more beneficial for foster youth. Rhodes et al.’s (2008) findings have supported this
hypothesis in terms of the mentees’ own reports of satisfaction. The participants in Rhodes et al.’s study reported higher satisfaction with longer relationships, with girls being more satisfied with the longest length of mentoring relationships as compared to boys whose satisfaction “plateaus after medium-term relationships” (7-12 months) (Rhodes et al., 2008, p. 190).

In the current study, the length of the matches was dependent primarily on external factors (i.e., DCFS mandate); however, it is helpful to observe how the relationship duration impacts outcomes for the foster youth evaluated. While the optimal time frame for mentoring relationships is still unclear, the trends in the research suggest that longer-term relationships (12 months or longer) produce significantly better outcomes than short-term relationships, which have been associated with decreases in youth functioning.

Theoretical Foundations

Theoretical frameworks can assist in understanding how the mentoring relationship, as an agent of change, contributes to behavioral outcomes. In discussing a variety of theoretical perspectives as applied to youth mentoring, DuBois and Karcher (2005) state that theories “offer a rich interpretive lens for reviewing empirical findings as well as a template for bringing into relief important gaps in the extant literature” (p. 8). Theoretical models that provide useful backdrops for the current study of therapeutic mentoring include attachment theory (Ainsworth, 1989; Bowlby, 1969), relational-cultural theory (Miller & Stiver, 1997), positive youth development (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Larson, 2006), and social learning theory (Bandura,
Since the mentoring intervention takes place within the context of the relationship between the mentor and youth, consideration of theoretical explanations regarding how this relationship correlates to positive behavioral change for youth will help guide the current research and interpret the outcomes.

**Attachment Theory**

Given the difficulties faced by youth removed from their initial caregivers as a result of abuse and/or neglect, it is important to understand how therapeutic mentoring might attenuate some of the negative results of those experiences. Attachment theory helps illuminate how a positive relationship between a mentor and mentee may assist in building a new model for relationships, and therefore influence how foster youth experience subsequent relationships. This theoretical viewpoint is an optimistic one, because it allows for individuals who have been exposed to traumatic experiences and poor attachments the ability to learn more productive ways of interacting later in life if provided with growth-promoting interpersonal relationships (Rhodes, 2002; Rhodes et al., 2000; Rhodes et al., 1999). This section will first summarize the primary tenets of attachment theory as they relate to the current study. A discussion of the current research on attachment theory will be explored in relation to the impact of foster care on youth’s attachments. Finally, application of attachment theory to the findings from the current study, as well as the limitations of the theory, will be examined.

Attachment theory provides a helpful perspective in understanding how children’s relationships with their initial primary caregivers form, and how those relationships impact social and emotional development (Bowlby, 1988; Mennen & O'Keefe, 2005). A
primary aspect of attachment theory, attachment behavior, is considered an evolutionary task designed to provide protection for infants. As the infant grows, he or she uses attachment behaviors (e.g., crying) to draw the caregiver near and to elicit care (Ainsworth, 1989). Within the first year, the infant finds a pattern in the responses from the primary caregiver and these become “working models” of the infant’s surroundings, which are the learned expectations and perceptions of the caregiver and his or her interactions with the infant (Ainsworth, 1989; Bowlby, 1988; Rhodes, 2002). It is these working models that determine how the infant will interact within other relationships as he or she grows up.

If a child’s internal working models are based on early experiences of insufficient caregiving or maltreatment, the development of psychopathology later in life may result (Moss, Rousseau, Parent, St. Laurent, & Saintonge, 1998; Sroufe, Carlson, Levy, & Egeland, 1999). In addition, when early life experiences are fraught with neglect or lack of consistency or nurture, the attachment pattern that results can cause a child to be wary of trusting or turning to any adult when having difficulty (Mennen & O'Keefe, 2005). This will have implications both for how such youth engage in relationships, as well as for how much of an impact new relationships can have on future development.

Internal working models are open to change at a number of points throughout development (Ainsworth, 1989; Rhodes, 2002; Sroufe et al., 1999). “Parent surrogates,” including mentors, may play a role in altering a child’s original internal working model (Ainsworth, 1989, p. 711). The relationship that a parent surrogate provides might be shorter than a primary attachment figure, but “the representational model of the
relationship may persist” (Ainsworth, 1989, p. 711). This indicates that, according to attachment theory, other adult caregivers can provide new models for relationships to youth who have initially experienced maltreatment or neglect and provides support for the potential of therapeutic mentors to provide a “surrogate” relationship that can impact a foster child’s future development.

The following summaries of recent research using attachment theory support how initial primary relationships set the stage for an infant’s attachment patterns, and then also how subsequent relationships can alter or supplant those patterns with new ones. In a study measuring how attachment behaviors can predict behavior problems, children with insecure attachments and avoidant behavior were more likely to experience behavior problems at school and less social involvement than children with secure attachments (Moss et al., 1998). Another study evaluated how youth removed from their biological homes due to maltreatment and placed in foster homes behaviorally adjusted to foster care, as well as how they experienced internal representations of self and the maternal relationship with foster mothers (Milan & Pinderhughes, 2000). The results showed that youth who had more positive experiences of themselves and maternal relationships were able to have more successful and closer relationships with their foster mothers. In contrast, the youth who had negative internal representations when they entered foster care had less positive experiences of their relationships with foster parents and “had less desire for proximity with their new foster mothers” (Milan & Pinderhughes, 2000, p. 76).

Neurobiological research has substantiated the importance of early attachments as well. Siegel (1999) found that meaningful relationships shape how an individual’s mind
and behavior patterns develop. “The structure and function of the developing brain are determined by how experiences, especially within the interpersonal relationships, shape the genetically programmed maturation of the nervous system” (Siegel, 1999, p. 2). If an infant is not raised in a warm and nurturing environment, that infant may have difficulties with future attachments (as a teenager or adult) because the structure and function of the brain is altered during development (Siegel, 1999). Without other secure attachments and no change in caregiving to the infant, the infant’s behavior, emotional regulation, and social relations are significantly affected (Siegel, 1999).

These findings suggest that youth with secure attachments may be more receptive to relationships with adults in general. More specifically, “attachment status might moderate the effects of mentoring such that mentoring programs could be more effective for youth with secure attachments than they could be for youth with insecure attachments” (Barrera & Bonds, 2005, p. 135). However, it might also be true that for youth with insecure attachments, a more structured mentoring intervention may be required, including mentors who are paid, trained, and supervised in order to produce positive results for youth with attachment difficulties.

For instance, in a study of foster youth living in a foster care shelter, almost half of the youth formed secure attachments to the child care staff in the shelter (Howes & Segal, 1993). The foster youth had higher attachment security scores for the relationships with shelter staff who scored highest on a caregiver sensitivity scale. In addition, youth who had longer placements and more interactions with the more sensitive shelter staff had higher security scores (Howes & Segal, 1993). Overall, the study concluded that
maltreated children were able to form alternative attachments to caregivers who were rated as sensitive caregivers (Howes & Segal, 1993). This has implications for therapeutic mentors because if foster youth are able to form attachments with their therapeutic mentors, there is potential for forming secure attachments that could have long-lasting effects on their future development.

In a study on the quality of attachments of foster children to their foster parents, findings suggested that higher quality relationships between foster child and foster parent, yielded more positive results in adjustment to foster care and school performance (Marcus, 1991). “Children who feel more secure with their foster parents, who experience more positive emotional ties with them, and who receive physical affection from them are psychologically better adjusted and experience fewer achievement problems in school” (Marcus, 1991, p. 376). In addition when foster parents in this study scored higher on empathy measures, foster children’s attachments to them were better (Marcus, 1991). The author speculates that these findings may be explained by considering that attachment patterns are not fixed, and can be changed or superseded by later attachment experiences (Marcus, 1991).

In another study on attachment and foster care, foster infants were able to attach to foster mothers after experiencing abuse or neglect, which indicates that regardless of previous experience with caregivers, including maltreatment and the disruption of a primary relationship, foster infants are capable of secure attachment with new caregivers (Dozier, Stovall, Albus, & Bates, 2001). The foster mothers who were able to form secure attachments had been classified as “autonomous with regard to attachment when
they were generally coherent in their discourse, and showed a valuing of attachment” (Dozier et al., 2001, p. 1471). While the sample in this study only included infants, it does further the knowledge in terms of the potential for maltreated youth to form new attachments that “may be demonstrating the ability to rework models of self and other” (Dozier et al., 2001, p. 1475). The authors caution that longitudinal studies are needed to determine whether these attachments can have lasting effects on a child’s attachment behaviors (Dozier et al., 2001).

Attachment theory presents an important framework for how to understand the impact therapeutic mentoring relationships can have on foster youth. As the literature indicates, an individual’s internal working models can be influenced by subsequent relationships. Therefore, if foster youth are able to experience a therapeutic mentoring relationship after experiencing potentially harmful relationships with their initial primary caregivers, they may have a unique opportunity to develop new internal working models based on the relationships with their mentors. This experience has the potential to provide foster youth with healthier options and a new direction.

While attachment theory offers an important perspective on how to view relationships for youth, there are limitations to using attachment theory to help guide the current study and interpret its outcomes. First, while there is evidence that mentoring relationships can have an impact on outcomes for foster youth (Rhodes et al., 1999), it is not clear that these positive outcomes are a result of an attachment relationship with a mentor. Secondly, it is unclear whether attachment relationships need to be of a certain length in order for a secure attachment with the caregiver can develop. While mentors
may engage in caregiving roles with youth, their time with the youth is often limited to once per week or monthly and therefore may not be enough time to allow for an attachment relationship to develop. Finally, given that foster youth may often begin new relationships with a mistrust of adult caregivers and insecure attachments to their own caregivers, there may be a disadvantage from the start in determining whether attachments can develop in mentoring relationships and also whether the relationships are sufficiently nurturing enough to change already established patterns. These are areas that require further study and limit the scope of attachment theory as applicable to this dissertation research.

*Relational-Cultural Theory*

Relational-cultural theory provides further understanding of how relationships develop and their potential to facilitate growth and change (Jordan, Walker, & Hartling, 2004; Miller & Stiver, 1997). Two of the primary concepts in relational-cultural theory, mutual empathy and mutual empowerment, are applicable to therapy as well as mentoring relationships. Mutual empathy is a concept that results in mutual empowerment, “it is a joining together based on the authentic thoughts and feelings of all the participants in a relationship” (Miller & Stiver, 1997, p. 29). Mutual empowerment consists of five elements: 1) the “zest” experienced when connecting authentically with another person; 2) an interplay between people in a relationship where each has an impact on the other (action); 3) resulting knowledge of the other person and better understanding of the other’s experience; 4) the sense of worth that comes from the connection and
impact on the other; and 5) a desire for increased connection and concern for the other’s well-being (Miller & Stiver, 1997).

Relational-cultural theory emphasizes the importance of connections between people and how experiences in relationships with others foster growth and mutual empowerment. Liang, Tracy, Taylor, and Williams (2002) used relational theory to evaluate mentoring relationships for young women and found that the nature and quality of the mentoring relationship were predictive of better outcomes on measures for self-esteem, loneliness, and stress. Liang et al. suggest that relationship characteristics may have more importance in facilitating positive outcomes than the structural aspects of mentoring programs, such as frequency of contact (2002). The authors encourage further exploration as to how empathy, engagement, and authenticity are key aspects in mentoring relationships, as well as on how to integrate these skills into mentor training.

Spencer, Jordan, and Sazama (2004) conducted a qualitative examination, informed by relational-cultural theory, on how relationships with adults impact youth. The study yielded information about youths’ own perspective on relationships with adults in their lives, including parents, teachers, older siblings, etc. Youth reported that adults who engendered mutuality and respect in the relationship were experienced as genuinely caring for them, rather than feeling as though they had to behave or succeed in certain ways to obtain approval (Spencer et al., 2004). The youth reported most enjoying time “to just have fun with adults without the pressure of a task to accomplish or a lesson to be learned” (p. 356). While the authors observed that many of the youth in their study had experienced difficulties in relationships with adults, it was a practically universal desire
to have supportive relationships with adults, something that was not always available to them (Spencer et al., 2004).

These findings exemplify not only the importance of supportive and growth-enhancing relationships for youth, but also that the youth themselves seem to be asking for such relationships, not only for someone to have fun with, but for an adult who can be mutually engaging, authentic, and empathic. These concepts are important because they appear to produce relationships that are meaningful and effective. When youth feel positively about a relationship and report gaining benefits from certain types of relationships, such information can be applied to supporting and fostering quality mentoring relationships. Relational-cultural theory provides an important background for pursuing further study related to how to facilitate supportive relationships for youth. While the current study did not examine the quality of the mentoring relationships, the hypotheses for the study are based on the premise, supported by relational-cultural theory, that growth-promoting relationships are essential for youth, especially youth in foster care who often have limited connections with nurturing and supportive adults. If the basis for these relationships is not strong and mutual empathy and mutual empowerment are not given time to develop, the impact of the mentoring relationship on behavioral outcomes may be negligible.

Positive Youth Development

Positive youth development appears in the literature both as a type of program, as well as a theory for supporting youth (Kuperminc et al., 2005; Larson, 2006). Positive youth development and youth mentoring programs are being increasingly integrated in
order to facilitate maximum outcomes for youth (Higginbotham, Harris, Marshall, & Lee, 2007; Kuperminc et al., 2005). When combined, the multi-component result offers a wide array of programming and interventions including didactic, experiential, and relational activities (Kuperminc et al., 2005). The theoretical approach involves engaging a youth’s inner motivation and helping to sustain it in the face of everyday obstacles that youth confront that may derail their best intentions (Larson, 2006). The mentor plays a specific role in understanding the process of internal motivation, as well as how to empower and support youth to pursue their own sense of agency (Larson, 2006).

In the current study, youth received mentoring within the context of a larger therapeutic program, the Systems of Care (SOC) program, that is designed to maintain youth in their foster care placements (i.e., facilitate placement stability). The components of the SOC program include a variety of types of counseling (i.e., individual, family), therapeutic mentoring, recreational activities, and social and life skills training. In addition, the SOC clinicians facilitate referrals and linkage to external resources, such as tutoring, as needed. The program is focused on building off the youth and foster parent strengths in order to facilitate positive outcomes. Therefore, the positive youth development approach provides a useful perspective from which to evaluate and critique the integration of the SOC and therapeutic mentoring programs. This section will first explore the components and characteristics of positive youth development programs. A description of the complementary nature of positive youth development and mentoring programs will follow. Finally, the strengths and limitations of applying positive youth development theory to the current study will be discussed.
Positive youth development programs typically design interventions that both work to prevent future problems as well as promote positive youth behavior (Catalano et al., 2004). In order to achieve these results, the interventions are based on building competencies in social, emotional, behavioral, and cognitive arenas, as well as facilitating healthy relationships with peers, family, and adults. Effective youth development programs provide a structured, consistent approach to service delivery, with interventions lasting at least 9 months (Catalano et al., 2004).

Positive youth development programs define certain types of outcomes for youth. The areas addressed by these programs include a focus on academic and social areas, self-identity, connection with community, family, and peers, character, and nurturing compassion for others (Roth & Brooks-Gunn, 2003). These are important areas for youth to develop because they are crucial for living and interacting constructively within a community and as an adult (Roth & Brooks-Gunn, 2003). In addition, these goals are similar to those that foster care and mentoring programs aspire to in supporting foster youth.

In a review of youth development programs, Roth and Brooks-Gunn (2003) found that the distinguishing factor for youth development programs as compared to other youth programs is atmosphere. The environment of youth development programs is supportive and empowering and aimed to provide youth with enhanced experiences in other settings as well, not only to improve specific characteristics in the youth themselves (Roth & Brooks-Gunn, 2003). In youth development programs, an emphasis is placed on viewing youth as resources with to-be-realized potential, and not as problems that need correction.
This is accomplished through “individual attention, cultural appropriateness, and the choice and responsibility given to adolescents” (Roth & Brooks-Gunn, 2003, p. 172). The atmosphere in positive youth development programs strives to resemble a caring family “where knowledgeable and supportive adults empower adolescents to develop their competencies” (Roth & Brooks-Gunn, 2003, p. 172).

While attachment and relational-cultural theories focus on relationship-based development and experiences within caregiving relationships, positive youth development focuses on the interpersonal environment in which a youth develops. The theory emphasizes providing the scaffold for youth to grow within. Positive youth development also utilizes the strengths-based philosophy that many mentoring programs incorporate into their interventions (Roth & Brooks-Gunn, 2003).

Reed Larson integrates positive youth development and mentoring to highlight an important framework for motivating and supporting youth (Larson, 2006). He discusses a particular philosophy regarding motivating youth “to be constructive agents of their own development” with the mentor’s role being to “support the positive potentials within young people” (Larson, 2006, p. 677). He describes two kinds of scaffolding as models that can be applied to mentoring relationships: instrumental and motivational. Instrumental scaffolding involves an “expert” (mentor) providing suggestions, modeling, and cues to a “novice” (mentee) for assistance in learning something new. The mentor is not directive, and provides opportunities for learning that are adjusted as needed to the mentees capacity at a given time. This model emphasizes the mentee discovering their own motivation, or agency, to accomplish tasks while also developing an understanding
for the longer-term implications in resolving the issue (Larson, 2006). Motivational scaffolding involves “modeling enthusiasm and communicating confidence that a youth’s efforts will lead to a desired end” (Larson, 2006, p. 685). Mentors can help youth sustain their efforts in achieving a particular task “by helping them to set achievable challenges and goals” (Larson, 2006, p. 685). In addition, the mentoring intervention may provide benefits in an area of a youth’s life that encourages them to make better use of the rest of the components the program has to offer. The time a youth spends with a mentor can serve as time to practice the skills learned through the didactic curriculum of a positive youth development program, as well as provide reinforcement for the lessons learned (Kuperminc et al., 2005).

The positive youth development model has particular utility for youth in foster care who typically do not receive the same sustained caregiving support throughout childhood and adolescence as other youth (Collins, 2001). Due to multiple disruptions in their living environments and school placements, youth in foster care experience multiple transitions, without consistent guidance or social support. These youth can benefit from the strengths-based, multi-component youth development approach that builds off a youth’s resiliency and capacity to rely on other supportive relationships (Collins, 2001).

While the positive youth development approach also offers a useful complement to the attachment and relational-cultural theories, it lacks an explanation for the etiology of youth’s behavioral and relationship difficulties that are important for understanding how to best address them through interventions. Nonetheless, its focus on the programmatic components surrounding mentoring, and on the didactic features that
mentoring relationships can benefit from once a positive relationship has developed, make this approach a useful complement to attachment and relational-cultural theories.

*Social Learning Theory*

Social learning theory is important to consider in framing and interpreting youth mentoring outcomes because it focuses on the modeling of behavior and how both role model and mentee must be actively engaged in the process in order for the relationship to be meaningful and produce results (Bandura, 1986). Learning takes place not just by doing, but also by observing another’s behavior and then creating “mental models” of the results or consequences of those behaviors without having the actual experience (Hamilton & Hamilton, 2005). However, in order to learn from observation, an individual must be able to process the information in a specific way. The processes outlined by Bandura (1986) include attentional processes, retention processes, production processes, and motivational processes:

*Attentional processes* regulate exploration and perception of modeled activities; through *retention processes*, transitory experiences are converted for memory representation into symbolic conceptions that serve as internal models for response correction; *production processes* govern the organization of constituent subskills into new response patterns; and *motivation processes* determine whether or not observationally acquired competencies will be put to use (Bandura, 1986, p. 51).

In the context of mentoring, this emphasis suggests that the mentee must be adequately engaged in the interaction with the mentor in order for experiences with the mentor or observing the mentor to be meaningful enough to convert those experiences into a memory and then into an internal model that guides the mentee’s responses to similar situations. In other words, the mentee cannot simply observe and passively absorb the
information presented or modeled by a mentor. The mentee needs to be self-motivated and curious about the environment and then be able to develop “meaningful perceptions from ongoing modeled events” (Bandura, 1986, p. 53). The strengths of this approach are that it provides a basis from which to move beyond the engagement phase of a relationship and into the facilitation of concrete tasks. This may necessitate an integration of the frameworks outlined in this section in order to both engage the youth in a productive and nurturing environment in order to then teach skills and role model behavior. Larson (2006) explains that it is the combination of a youth’s internal motivation to change, combined with external support for the activation and ongoing engagement of a youth’s internal motivation that allow youth to sustain changes made through the help of a mentoring relationship.

Summary

Attachment theory, relational-cultural theory, positive youth development, and social learning theory are helpful frameworks for understanding the empirical findings in regards to the relationships, as well as structure, through which outcomes for youth are facilitated. These models provide guidelines for how to develop effective interventions and facilitate change in mentoring programs.

Theoretical frameworks play an important role in understanding and applying research findings to practice. For the purposes of this study, the four theoretical frameworks as discussed above lend a different, yet complementary perspective to how mentoring programs work on an individual and programmatic level. Attachment and relational-cultural theories provide an understanding of how emotional difficulties can
develop early in life based on relationship experiences, and explain how mentoring relationships have the potential to alter early patterns as a result of engaging in a positive and nurturing relationship with an alternative caregiver (i.e., the mentor). Positive youth development provides the concrete, programmatic structure that mirrors best practices for mentoring programs and emphasizes the strengths-based, preventive approach that successful mentoring programs can utilize. Larson (2006) explains how mentors provide the motivation and support to facilitate youth outcomes, as well as modeling enthusiasm in order to sustain youth’s progress. Social learning theory exemplifies how behavioral changes in youth occur through an active and mutually engaged process of role modeling and exposure to healthy interactions with their mentors.
CHAPTER THREE

METHOD

Problem Formulation

For the purposes of this study, the definition of therapeutic mentoring is informed by attachment theory (Ainsworth, 1989; Bowlby, 1988), relational-cultural theory (Miller & Stiver, 1997), the best practice characteristics supported in the mentoring outcomes meta-analysis conducted by DuBois and colleagues (2002), and the definition of developmental mentoring set forth by Morrow and Styles (1995) and Deutsch and Spencer (2009). Therapeutic mentoring in the context of the current study included regular and consistent mentoring sessions performed by screened, trained, and paid staff members with a minimum of a high school education, and often some undergraduate or graduate study. Each mentor-mentee match was monitored and supervised by a Master’s level social worker. The intervention was regular and consistent in that, as defined by best practices (DuBois et al., 2002), an expectation for the frequency and length of the mentoring intervention was pre-determined and closely monitored. In addition, mentors were trained in regards to the special emotional and behavioral challenges faced by foster youth and encouraged to use empathy and engagement to foster a meaningful relationship with their mentees. Mentors and mentees met on average once per week for an average of 3-5 hours. The length of the relationship varied from 2-3 months up to 18 months.
Specific behavioral outcomes are important in understanding both the impacts of mentoring as well as the effects of change on youth in foster care. These areas are behavior problems (Zinn, DeCoursey, Goerge, & Courtney, 2006), peer relationships (Rhodes et al., 1999), educational challenges (Courtney & Dworsky, 2006), and community involvement (Eccles & Barber, 1999). The emotional and behavioral functioning outcomes that were measured for this study related to youth functioning within his or her family and living situation, as well as the youth’s experience with trauma and his or her ability to cope with traumatic experiences. Peer relationships were measured by items related to social skills and relationship functioning, including whether the youth demonstrated the ability to make and maintain friendships within the past 30 days. Community involvement items included recreation and acculturation. Recreation was assessed based on whether the youth “has identified and utilizes positive leisure time activities” (M. Lyons, 2006, p. 9). Finally, academic performance included school functioning as rated on three different items: School Behavior (youth’s behavior at school), School Achievement (rates level of academic achievement and whether youth is having moderate to significant problems with achievement), and School Attendance (assesses degree to which youth attends school) (M. Lyons, 2006).

These specific outcomes were chosen for this study because they encompass the major areas of interpersonal functioning: individual (emotional and behavioral functioning), interactions with others (peer), academic functioning, and community involvement that have been shown by research to have significant impacts on an individual’s functioning, beginning in childhood and leading well into adulthood. In
addition, previous research has suggested that each of these areas promote and facilitate positive outcomes in other areas. For instance, positive peer relationships have been shown to have significant mediator effects on academic adjustment, parent-child relationships, and self-esteem (Bolger et al., 1998; Rhodes et al., 2000; Rhodes et al., 1999). Quality of attachment has also been found to predict behavior and school achievement problems (Marcus, 1991).

Research Questions and Aims

This study set out to examine whether a group of foster youth who received therapeutic mentoring, in addition to other services, improved on outcomes as compared to a group of foster youth who received the same array of services as mentored youth (including placement stabilization interventions such as individual and family counseling, school advocacy, and case management), but not mentoring. The research questions are asked in relation to outcomes for emotional and behavioral functioning, peer relationships, academic performance, and community involvement, and are as follows:

RQ1: What are the differences on behavioral outcomes between four groups of foster youth, three groups who received different amounts of therapeutic mentoring (for 6 months, 12 months, or 18 months), and one group who did not receive any therapeutic mentoring, while participating in a specialized foster care program? By analyzing quantitative data from the Child and Adolescent Needs and Strengths (CANS) measure, the possible effects of therapeutic mentoring were examined in relation to important areas of functioning for youth who received therapeutic mentoring as compared to those who did not. It was hypothesized that foster youth who received therapeutic mentoring would
show significant differences in a positive direction on outcomes as compared to foster youth without mentors.

**RQ2: Is the length of the therapeutic mentoring relationship (i.e., up to 6 months, 12 months, or 18 months) associated with the level of improvement from intake to discharge?** Mentored youth were divided into three groups: those mentored up to 6 months, mentored 12 months, and mentored up to 18 months. A comparison between the three groups sought information about how progress on outcomes and length of mentoring relationship are associated. It was hypothesized that foster youth can benefit measurably from a therapeutic mentoring relationship that endures for more than twelve months and is designed to specifically address the symptoms experienced by youth in foster care.

**Program Description**

The current study took place within a social service agency in a large metropolitan area in the Midwestern United States. The program under study, called the System of Care (SOC) program, exists through a contract between private agencies and the state’s Department of Children and Family Services (DCFS). The SOC program provides in-home family and individual counseling, advocacy, case management, and referral and linkage to foster families referred by their DCFS caseworkers for being at risk of placement disruption. The SOC service is designed as a short-term, crisis intervention-type of service in that the typical length of service is 6-9 months. The current study is a naturalistic design in that all activities described below took place in the natural course of program delivery, including the evaluation and data collection. This
dissertation project utilized existing data from the agency’s Continuous Quality Improvement (CQI) efforts.

As a part of the program’s typical function, assessment and treatment planning were completed by an SOC clinician to determine which therapeutic and concrete services the youth, the foster family, and the biological family needed to stabilize the foster care placement and to assist in achieving permanency for the youth (i.e., find the most stable and long-term placement option possible, which may mean returning the youth to his or her biological family, when warranted). The two primary goals of the SOC program are to maintain placement stability for foster youth and to improve the youths’ emotional and behavioral functioning before discharge from the SOC program.

Within the SOC program, an additional service available to foster families was therapeutic mentoring. Clinicians referred their clients to mentoring after identifying whether the youth was assessed as able to benefit from a mentoring relationship. This decision was typically made via an initial clinical assessment by the clinician, which may have included consulting the CANS measure, specifically the Talents and Interest item. The Talents and Interest item “refers to hobbies, skills, artistic interests and talents that are positive ways that kids can spend time and also gives them pleasure and a positive sense of themselves” (M. Lyons, 2006, p. 8). If youth were rated on this item as having talents and interests that could be further developed, they were typically referred for therapeutic mentoring. The rating for the Strengths items on the CANS identifies whether an area of strength has already been developed and can be further built upon or is an area that is not at all developed and would warrant significant effort in order to identify and
build strengths in that area. Therefore, the clinician assessed whether a youth needed assistance building on an existing interest or talent, or in identifying and fostering a new interest or undiscovered talent. For example, a clinician might identify that a youth with an interest in a specific area (e.g., music, art, cars, etc.) could benefit from a mentoring relationship to further develop the interest in a constructive way into a hobby or talent. A mentor could assist in this effort by encouraging and supporting the youth by visiting museums or festivals together and discussing the topic of interest, as well as the potential obstacles to pursuing this interest. Therapeutic mentors have a special understanding of the environmental roadblocks faced by this population of youth and can sympathize as well as carefully encourage those activities or hobbies that are feasible for a particular youth. The clinician may have also referred a youth to the mentoring program when it was evident that there were tensions in the family and the youth needed additional resources or supports due to a lack of natural supports in the youth’s environment. All youth in the program received supportive individual and family therapy, linkage and referral to community resources, and advocacy within a number of systems (e.g., child welfare, school) from a Master’s level clinician.

After referral, an appropriate mentor was sought for that client. The mentoring program supervisor worked to match each referred youth with an available mentor or else recruited for a new mentor for the client. Matches were based on clinician requests (e.g., male or female, energetic, nurturing) and the clinical judgment of the supervisor regarding the youth’s and mentor’s strengths and weaknesses. Therapeutic mentors were screened, interviewed, hired, and oriented by a team of Master’s level supervisors with
specific training and expertise in hiring quality childcare staff. Before starting work, all therapeutic mentors received an individual orientation (2-3 hours) with their assigned supervisor. The orientation included an overview of the program’s policies and practices and initial concepts regarding responding therapeutically to youth and using a strengths-based approach. In addition, all mentors participated in at least 10 hours of training within their first six months of employment, and ongoing training throughout their tenure at the agency (i.e., quarterly 3-hour in-service trainings). Training topics included strengths-based approaches to working with children with emotional and behavioral disorders, how to engage youth in constructive activities, professionalism and boundaries, therapeutic crisis intervention techniques, and abuse and neglect reporting protocol.

Mentors had contact with their supervisor and the mentee’s clinician in a variety of ways. Weekly logs were submitted to the program supervisor that detailed each mentoring session and its interventions. The program supervisor would contact the mentor to discuss any aspects of the weekly log that required follow-up or discussion. In addition, mentors were in contact via weekly or monthly emails, phone calls, or in-person meetings.

Mentors had a minimum requirement of once per month contact with their supervisor via phone or in-person. These contacts consisted of discussion of issues that arose during mentoring outings, support and modeling for the mentors regarding empathic and empowering responses, and problem-solving regarding potential abuse/neglect reporting or family interventions regarding other conflicts that the mentor brought to the clinician’s attention for possible intervention (e.g., sibling issues, negative parent responses to youth’s behavior, police involvement with family).
Therapeutic mentors typically had a minimum of a high school education, and often some undergraduate or graduate study. Each mentor-mentee match was monitored and supervised by a Master’s level social worker. The typical retention rate for therapeutic mentors was one year. During the time employed in the TM program, mentors remained matched with the same youth, once assigned. It was unlikely that a mentor would end with a youth before the youth was discharged from the SOC program, therefore youth typically only had one mentor during their time in the SOC program.

Once a mentor was identified for a particular youth, a pre-placement meeting was facilitated in the client’s home by the clinician to introduce the mentor to the family, review program guidelines, and discuss goals for the mentoring relationship. After the pre-placement meeting, the mentor and mentee generally met on a consistent schedule (e.g., the same day and time each week) for an average of 3-5 hours each time. The length of the relationship was based on the client’s achievement of treatment goals set by the clinician and through consultation with the mentoring program supervisor. The typical length of time for the mentoring relationships was 6-9 months. Activities were primarily initiated and planned within the mentor-mentee relationship, but mentors were also given the opportunity to seek the support of the clinician and supervisor in planning activities whenever necessary.

Mentors were trained to put significant effort into facilitating activities in which the majority of the mentoring time was spent engaging in interactional activities, such as cultural events, playing basketball, walking by the lake, and sharing meals. Emphasis was on the relationship with the mentor as the healing component, not on the activity. The
employee manual given to all mentors in the program at orientation states, “facilitate positive experiences whenever possible.” In addition, the employee manual stresses how to engage youth in activities based on their own interests, guidelines for engaging conversational skills and open-ended questions, and the importance of providing youth with choices in order to empower them during activities to express their own views and desires. The mentors were then instructed on how to best respond to both appropriate and inappropriate requests by mentees, including behavior management and therapeutic crisis intervention training. Emphasis was placed on using an empathic, therapeutic-style of engagement and intervention, as well as termination process. Mentors were instructed to give youth several weeks notice when it was time for the mentoring relationship to end and to discuss with the youth that future contact would not be allowed. Youth were instead encouraged to contact their clinician if they needed assistance after termination from the program.

After each session with their mentee, mentors completed a client log. The client log included narrative information about the interactions with the mentee, how the mentee responded, and how future sessions might address the mentee’s individual goals. The narrative data was not analyzed for the current study; however, the client log also included a record of the hours of each session. Documentation of the date and duration of each session are taken from the client log and logged in the agency’s electronic data management system, where the data for this project was collected and stored. In order to ensure that the hours were logged accurately, supervisors compared the mentor timesheets with the client log hours for consistency. In addition, all mentor hours were
entered into a separate DCFS database, which was audited at least annually for accuracy. The agency is accredited by the Council on Accreditation (COA), an accrediting body that holds the agency to set standards for record-keeping and service delivery. In addition, the program staff conducted quarterly Continuous Quality Improvement (CQI) meetings to review the program’s logic model and to ensure implementation and outcomes were consistent with the program’s philosophy and goals. This is an important component of ensuring the program’s strength and fidelity are accurately assessed (DuBois, Doolittle, Yates, Silverthorn, & Kraemer Tebes, 2006).

Sample

The population studied was 262 youth living in foster care, aged infant to 20 years, who had been assessed as being at-risk of placement disruption by their Department of Children and Family Services (DCFS) caseworker. The youth were then referred to the System of Care (SOC) program at a private agency located in a large urban setting. A majority of the youth who participated in the current study were African American (76%), followed by Hispanic (9.9%), Caucasian (5.3%), multiracial (4.2%), Other (3.1%) and Unknown (1.4%). The subjects were served in the SOC program from July 1, 2005 to December 31, 2008. All youth served during this time period included 690 youth. Cases were selected for the current study based on subjects with eligible CANS measures completed at the appropriate time periods (baseline, six months, etc.). The total number with eligible CANS consisted of 262 youth.
Instrumentation

The outcome measure used for the present study was the Child and Adolescent Needs and Strengths (CANS) tool (see Appendix A) (J. Lyons et al., 1999; J. Lyons, Weiner, & Buddin Lyons, 2004). The CANS was developed to provide a solid, strengths-based assessment of an individual’s needs, as well as a tool that can be used for planning interventions and services. The CANS can be used to assess clients’ prospectively, or it can be used in collecting information from archival data (Anderson, Lyons, Giles, Price, & Estle, 2003). It was based on a tool originally developed to make decisions in psychiatric hospital or residential settings for children. The initial intent was to design a measure that helped make clinical decisions for expensive interventions regarding mental health services and for quality improvement related to crisis assessment and intervention (J. Lyons et al., 1999).

The CANS can also be used for quality improvement and monitoring (J. Lyons et al., 1999). It was developed as an alternative to psychometric or clinimetric approaches to measurement. Instead, the CANS was developed as part of the Communication Model of measurement, meaning it was designed to be used as a communication tool between all interested parties (e.g., service recipients, providers, administrators, and evaluators) regarding the client’s needs, progress, goals, and outcomes (J. Lyons et al., 2004).

According to Lyons and colleagues, “The dimensions and objective anchors used in the CANS-MH were developed by focus groups with a variety of participants including families, family advocates, representatives of the provider community, mental health case workers and staff” (J. Lyons et al., 1999, p. 3).
Dimensions are made up of areas of need or areas of strength on the CANS and use a 4-point scale to indicate what level of intervention is necessary for each area of need or strength. A rating of ‘0’ is used for items where there is no evidence of a problem or that the issue does not require any action. A ‘1’ rating indicates that the issue should be observed or monitored, or possibly that preventive action can be taken. A rating of ‘2’ or ‘3’ indicates an area that needs to be addressed in service planning or requires immediate action. The ratings are based on a youth’s functioning over the past 30 days and information is gathered “after routine service contact, a semistructured interview, or a review of notes from case files” (J. Lyons et al., 2004, p. 466).

The CANS can be used as a treatment planning tool or as a retrospective assessment tool. Each item on the tool can stand alone and does not need to be used in conjunction with a series of other items. Items can also be combined into dimensions or scales as a way to enhance the measure’s sensitivity to change (as was done in the current study) (J. Lyons et al., 2004). Scale scores are “sensitive to change after a minimum of 3 months of service delivery” (J. Lyons et al., 2004, p. 469).

The current study utilized 10 CANS scale scores to assess behavioral change for foster youth at six-month intervals in service delivery. The 10 scales were: CANS Total Score, CANS Child Score, Caregiver Needs and Strengths Score, Trauma Experiences, Traumatic Stress Symptoms, Child Strengths, Life Domain Functioning, Acculturation, Child Behavioral/Emotional Needs, and Child Risk Behaviors. Each scale contains a minimum of 4 up to a maximum of 14 individual items that relate to the overall scale. A summary of the items contained in each scale is outlined below. The item definitions
were abstracted from “CANS-Comprehensive Illinois Department of Children and Family Services version: Glossary of Items” (M. Lyons, 2006).

The CANS Total score and CANS Child score refer to a composite score of all items on the CANS. The CANS Child score is the total of scores on all items except the Caregiver Needs and Strengths score. The Caregiver Needs and Strengths score includes items that rate the caregiver who the child is living with when the assessment is completed. The items assess the current caregiver’s needs and strengths in the areas of physical problems, mental health, substance abuse, and ability to advocate and provide a safe environment for the child.

Trauma Experiences are designed to be static scores on whether a child has experienced a particular type of trauma, such as sexual, physical, emotional abuse, and neglect, as well as medical trauma (exposure to intrusive medical procedures), and family, school, or community violence. The items on the Trauma Experiences scale are not expected to change unless a new trauma occurs or if historical trauma is identified that had not been previously known. Traumatic Stress Symptoms relate to how the child expresses the trauma they may have experienced. Individual items include whether a child has intrusive memories of a traumatic event (i.e., re-experiencing), avoidance, numbing, or dissociation in response to the experience of trauma. Re-experiencing can be expressed in a number of ways, including night terrors, flashbacks, and for children who have experienced aggressive or violent acts, reactive aggressive or violent behavior (M. Lyons, 2006). Avoidance occurs when a youth avoids people or places that remind him or her of a traumatic experience. Numbing is a possible way some youth respond to trauma.
by avoiding feelings or having a reduced capacity to feel, both emotionally and physically. Dissociation is an extreme symptom of trauma and occurs when an individual seems to detach from awareness (M. Lyons, 2006).

Child Strengths Scale items assess which areas of strength can be built on and which may need further development. The areas assessed include family, interpersonal, educational, vocational, talents and interests, spiritual/religious, community life, and relationship permanence. These items utilize a different rating system than the other items on the CANS. A ‘0’ indicates a significant strength that could become the “centerpiece in service planning” (M. Lyons, 2006, p. 6). A ‘1’ indicates there is strength in this area and could become an aspect of the treatment plan. A ‘2’ indicates a potential strength but requires development. Finally, a rating of ‘3’ indicates that there is not an identified strength in the particular area and suggests significant effort could be put forth to identify and build strengths in that area.

The Life Domain Functioning scale includes items related to a child’s functioning in the areas of family, peer relationships, social skills, recreational activities, school behavior, achievement, and attendance. The Acculturation scale looks at language and the child and family’s ability to communicate, cultural identity, and cultural stress related to any tension, misunderstandings or hostility a child may face related to cultural identity. Emotional and Behavioral Needs relates to whether a child is diagnosed with significant mental health challenges such as depression, ADHD, anxiety, conduct disorders, or substance abuse. The Risk Behaviors scale measures the level of suicide risk, and other areas of self-harm or harm to others.
The CANS has been tested for interrater reliability among researchers and researchers and clinicians (Anderson et al., 2003). This examination resulted in .81 interrater reliability between clinicians and researchers and .85 among researchers for the total score. Interrater reliability between caseworkers and researchers for each dimension were: .72 for problem presentation, .76 for risk behaviors, .85 for functioning, .75 for care intensity and organization, .75 for caregiver needs and strengths, and .77 for child/adolescent strengths (Anderson et al., 2003). In addition, as part of the CANS training for professionals, sample CANS assessments were turned in at the end of each training in 5 different locations across the United States. Out of a sample of 188 sample CANS, .76 reliability for the total CANS score was identified (J. Lyons et al., 2004). In another study, reviewers were trained to complete the CANS using archival records. For 19 reviewers, .83 average reliability was concluded. This means that the CANS “demonstrates both concurrent validity and predictive validity in initial studies” and has been shown to be effective in evaluating outcomes for children and families (J. Lyons et al., 2004, p. 473).

When the items and scales for the CANS was compared to the Child and Adolescent Functional Assessment Scale (CAFAS) ratings, the results were “positive, significant, and [had] moderate to high correlations” (Dilley, Weiner, Lyons, & Martinovich, 2003, p. 9). In addition, this study found that items on both scales had concurrent validity and maintained divergent validity for subscales meant to “measure different aspects of functioning” (Dilley et al., 2003, p. 11).
Limitations to the CANS tool are that it requires ongoing training and monitoring to ensure reliability. Also, the CANS is less sensitive to change than other measures due to the way the items are constructed (i.e., they are “modular” and can stand alone as individual items, and the items are rated based on a child’s functioning over the past 20 days), particularly over short periods of time (J. Lyons et al., 2004). However, when the items are combined to create dimensions, or scales, the sensitivity to change is enhanced and requires a minimum of three months of service delivery to rate change reliably. For the purposes of this study, reliability across clinicians is closely monitored and training is offered on a regular basis. In addition, the individual items were combined to create scales in measuring outcomes and only included youth with a minimum of 6 months of service delivery for each measure completed (other than at baseline).

While other measures were available for the current research, the CANS measure was chosen as opposed to other measures because of its utility in rating a youth’s functioning at multiple points in time. Due to the shorter-term nature of the SOC program, it was important to have a tool that could consistently and comprehensively rate the youth’s functioning at baseline, every 6 months, and at discharge. The other measures available for this research obtained data from diverse perspectives. These measures included the Child Behavior Checklist (CBCL) from the caregivers’ perspective and the Youth Information Form (YIF) and Youth Self Report (YSR) from the youths’ perspective. While these measures would lend additional valuable information to future study, the measures were not completed as consistently as the CANS measure was for the sample in this study and would not have provided as complete a picture as the CANS if
used on their own. However, if included as a whole in a collection of outcome measures on the same sample, the information from these additional measures would lend an important supplementary picture in understanding the findings of the current study.

Research Design

The current study compared the outcomes of groups of youth who received varying amounts of the therapeutic mentoring intervention (between subjects measures factor) over six-month increments (repeated measures factor). The youth, aged 0-20 years old, who had been referred to a supportive foster care program within a large social service agency in the Midwestern United States were evaluated on outcome measures using the Child and Adolescent Needs and Strengths (CANS) tool. The initial CANS was completed by the youths’ SOC clinician after an intake interview with the youth and his/her family. The clinician completed the CANS in paper form and submitted it for data entry into the agency’s electronic data management system or the clinician entered the data directly into the electronic data management system. The data was then aggregated and de-identified for the purpose of this study.

Youth in the SOC program were assessed on the CANS at six-month intervals, starting with a baseline assessment at intake into the program. This study assessed the change in 10 CANS domains in six-month intervals (i.e., at baseline, 6 months, 12 months, and 18 months). Subject groups were compared and defined based on the amount of therapeutic mentoring (TM) received during the six-month intervals. This design was chosen in order to compare the efficacy of groups receiving varying amounts of intervention (therapeutic mentoring), as well as to determine if the length of time in the
program made a difference on program effects. The design consisted of three successive analyses over time using the same grouping variables. The two subsequent analyses served as a replication of the prior analyses.

The analysis is structured this way in order to allow pre- and post-measures to accurately assess youth who may have been getting a variety of services at different points in time. For example, if the analysis plan only took a pre- and post-measure for youth at intake and discharge in the SOC program, it would not capture youth who may have received a different amount of TM at different times over the course of their stay in SOC. The current analysis plans allows outcomes to be looked at for different times for different participants at a regular interval since the TM intervention could begin at any point during an youth’s stay in the SOC program. This also structures the analysis to have two subsequent analyses that are replications of the prior analysis. In other words, the analysis can determine whether similar effects hold over in later time periods. Another benefit of this design is that it captures effects in earlier time periods for youth who may drop out of the program before subsequent analyses are conducted. The analysis plan is outlined below.

Model 1: Change from baseline to 6 months

In order to assess effects associated with TM, subjects were assigned to groups based on the number of hours of TM received during the 6 months between baseline and the first CANS assessment. Specifically, a TM factor was employed to create the experimental groups using the following four designations: (1) No TM during or prior to the interval, (2) Prior TM, (3) Limited TM, and (4) Substantial TM. Category 2, “Prior
TM”, refers to subjects with TM prior to the baseline CANS, but no TM within the experimental 0 to 6 month interval. A median split was applied to billed TM hours during the 0 to 6 month interval to generate categories 3 and 4. The median split was utilized in order to establish two balanced groups for comparison.

Analytic Model 1A: Mixed design ANOVA. The four groups above were compared on unadjusted change via a mixed design ANOVA (between subjects factor = TM group; within subjects factor = baseline vs. time 1). All significant ANOVA effects were evaluated with post hoc pairwise comparisons.

Analytic Model 1B: Correlated samples t-tests within group. These tests evaluated whether non-zero change on any CANS scale existed within each group.

Analytic Model 1C: ANCOVA. The four groups above were compared on adjusted change via a one-factor ANCOVA (between subjects factor = TM group; covariate = baseline CANS; outcome CANS = time 1 CANS). These models compared the four groups on adjusted change (i.e., change for a theoretical case beginning at the same score at baseline on the outcome of interest). Again, t-tests comparing adjusted post-test means of all TM groups were conducted. All significant ANCOVA effects were evaluated with post hoc pairwise comparisons.

Model 2: Change from baseline to 12 months

The TM factor was modified to reflect the pattern of TM utilization in the broader, 12 month interval. Specifically, a TM factor was generated with four categories: (1) No TM during or prior to the intervention, (2) Prior TM, (3) Limited TM, and (4) Substantial TM. Category 2, “Prior TM”, refers to subjects with TM during the baseline
to 6 month period, but no recent TM within the 6 to 12 month interval. For subjects with TM during the 6 to 12 month interval, categories 3 and 4 were again differentiated based on the amount of TM hours billed during this interval. Again, a median split was the basis for this differentiation, in order to create two balanced TM groups to compare.

Analytic Models 2A, 2B, and 2C. These models assessed the effect of TM from baseline to 12 months. They precisely parallel the structure of analyses previously described.

Model 3: Change from baseline to 18 months

The TM factor was again modified to reflect the pattern of TM utilization in the broader, 18-month interval. Four categories were considered, except the definition of “Prior TM” was based on TM during the 0 to 12 month interval, and TM hours billed during the 12 to 18 month interval were the basis for the median split separating Limited and Substantial TM.

Analytic Models 3A, 3B, and 3C. These models assessed the effect of TM from baseline to 18 months. They precisely parallel the structure of analyses previously described.
CHAPTER FOUR

FINDINGS

The findings of the current study are detailed below. First, the demographics of the subjects will be summarized. Next, the groups will be compared based on CANS scores and the amount of therapeutic mentoring each received during six-month intervals (0-6 months, 6-12 months, 12-18 months). Finally, the findings regarding both of the research questions will be reported, which will offer information about the overall group as well as further comparison between the four groups.

Demographics

The sample for the current study started with a total of 690 youth served in the SOC program from July 1, 2005 to December 31, 2008. A selection process determined that a total of 255 youth had CANS measures for the baseline to six-month time period. In the six- to twelve-month time period, the sample decreased to a total of 106 youth measured; and the final time period (12-18 months) included a total of 27 youth. The total unduplicated sample resulted in 262 youth (see Table 2). Of these youth the majority were African American (199, 76%). The remaining subjects were Hispanic (26, 9.9%), Caucasian (14, 5.3%), multiracial (11, 4.2%), Other (8, 3.1%) and Unknown (4, 1.4%). The most prevalent age range was 11-15 years old, followed by 6-10 years old.
Table 2  Demographics of Overall Sample

<table>
<thead>
<tr>
<th></th>
<th>Frequencies</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>44</td>
<td>16.8</td>
</tr>
<tr>
<td>6-10</td>
<td>72</td>
<td>27.4</td>
</tr>
<tr>
<td>11-15</td>
<td>87</td>
<td>33.2</td>
</tr>
<tr>
<td>16-20</td>
<td>59</td>
<td>22.5</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>199</td>
<td>75.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>26</td>
<td>9.9</td>
</tr>
<tr>
<td>Caucasian</td>
<td>14</td>
<td>5.3</td>
</tr>
<tr>
<td>Multiracial</td>
<td>11</td>
<td>4.2</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>3.1</td>
</tr>
<tr>
<td>Unknown</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>124</td>
<td>47.3</td>
</tr>
<tr>
<td>Male</td>
<td>138</td>
<td>52.7</td>
</tr>
</tbody>
</table>

The demographics for subjects served in the 3 different time periods are as follows. In the first group (0-6 months), 47% of the youth were female and 53% were male. In the second group (6-12 months), gender differences were split at 50% male, 50% female. Finally, the third group contained 37% female and 63% male (see Table 3). A total of 112 youth received TM during the study period. A majority (92%) of youth studied received TM for 9 months or less. Only 2 subjects received TM in all three time periods (0-6 months, 6-12 months, and 12-18 months).
Table 3  Demographics by Group

<table>
<thead>
<tr>
<th></th>
<th>Model 1 (n=255)</th>
<th>Model 2 (n=106)</th>
<th>Model 3 (n=27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>40 (15.7%)</td>
<td>19 (17.9%)</td>
<td>4 (14.8%)</td>
</tr>
<tr>
<td>6-10</td>
<td>76 (29.8%)</td>
<td>28 (26.4%)</td>
<td>5 (18.5%)</td>
</tr>
<tr>
<td>11-15</td>
<td>86 (33.7%)</td>
<td>33 (31.1%)</td>
<td>13 (48.1%)</td>
</tr>
<tr>
<td>16-20</td>
<td>53 (20.8%)</td>
<td>26 (24.5%)</td>
<td>5 (18.5%)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>193 (75.7%)</td>
<td>81 (76.4%)</td>
<td>21 (77.8%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>28 (11%)</td>
<td>11 (10.4%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Caucasian</td>
<td>14 (5.5%)</td>
<td>4 (3.8%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Multiracial</td>
<td>10 (3.9%)</td>
<td>5 (4.7%)</td>
<td>2 (7.4%)</td>
</tr>
<tr>
<td>Other</td>
<td>4 (1.6%)</td>
<td>n/a</td>
<td>4 (14.8%)</td>
</tr>
<tr>
<td>Unknown</td>
<td>6 (2.4%)</td>
<td>1 (.7%)</td>
<td>n/a</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>120 (47%)</td>
<td>53 (50%)</td>
<td>10 (37%)</td>
</tr>
<tr>
<td>Male</td>
<td>135 (53%)</td>
<td>53 (50%)</td>
<td>17 (63%)</td>
</tr>
</tbody>
</table>

Results

The analysis was conducted according to the research design (see above). Each of three experimental models was analyzed using a mixed design ANOVA, correlated samples t-tests within group, and a one-way between-subjects ANCOVA. Post hoc pairwise comparison tests were conducted to determine which specific groups differed significantly on a given scale. The four groups of subjects were analyzed based on 10 CANS scale scores, that included: CANS Total Score, CANS Child Score, Caregiver Needs and Strengths Score, Trauma Experiences, Traumatic Stress Symptoms, Child Strengths, Life Domain Functioning, Acculturation, Child Behavioral/Emotional Needs, and Child Risk Behaviors.
Model 1 (change from baseline to 6 months)

For Model 1, the four groups compared were: (1) ‘No TM’ (received no therapeutic mentoring during or prior to this time interval), (2) ‘Prior TM’ (received therapeutic mentoring prior to the baseline CANS, but not within the 0 to 6 month interval), (3) ‘Limited TM’ and (4) ‘Substantial TM’ (refer to amount of therapeutic mentoring received during the baseline to 6 months interval). ‘Limited’ and ‘Substantial’ amounts of therapeutic mentoring were determined by splitting the number of hours provided at the median in order to have two balanced groups to compare.

Analyses revealed a significant difference in the Life Domain Functioning Scale (\(F(3,254) = 2.86, p = .038\)) (see Tables 4 and 5). The post hoc pairwise comparison indicated that the Substantial TM group (\(t = 2.03, p = .043\)) and the No TM group (\(t = 2.91, p = .004\)) improved more than the Limited TM group (see Table 6). The treatment group (mentored youth) benefited from a ‘Substantial’ amount of TM in those areas assessed by the Life Domain Functioning Scale including family functioning, social functioning, recreational activities, school behavior, school achievement, and school attendance. However, the group that received a ‘Limited’ amount of TM fared worse than the other two groups. The ‘Prior TM’ group only consisted of 2 subjects and therefore do not contribute valid findings to this analysis.
Table 4 Life Domain Functioning Scale ANOVA Results (Model 1)

<table>
<thead>
<tr>
<th>Group</th>
<th>Frq</th>
<th>Pre (SD)</th>
<th>Post (SD)</th>
<th>Δ</th>
<th>Within $t^a (p)$</th>
<th>$F^b (p)$</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>No TM</td>
<td>175</td>
<td>6.22</td>
<td>5.18</td>
<td>-1.04</td>
<td>-5.74 (&lt;.001)</td>
<td>2.86 (0.038)</td>
<td>3.3%</td>
</tr>
<tr>
<td>Prior TM</td>
<td>2</td>
<td>8.33</td>
<td>7.08</td>
<td>-1.25</td>
<td>-1.0 (ns)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited TM</td>
<td>40</td>
<td>6.32</td>
<td>6.49</td>
<td>0.17</td>
<td>0.42 (ns)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substantial TM</td>
<td>38</td>
<td>5.85</td>
<td>4.92</td>
<td>-0.92</td>
<td>-2.72 (0.01)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a Correlated samples t-tests within mentorship groups.
*b Mixed ANOVA F-tests evaluating mentorship group differences in unadjusted change.

Table 5 Life Domain Functioning Scale ANCOVA Results (Model 1)

<table>
<thead>
<tr>
<th>Group</th>
<th>Frq</th>
<th>Pre</th>
<th>Post</th>
<th>Δ</th>
<th>$F^c (p)$</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>No TM</td>
<td>175</td>
<td>6.20</td>
<td>5.16</td>
<td>-1.03</td>
<td>3.30 (0.021)</td>
<td>3.8%</td>
</tr>
<tr>
<td>Prior TM</td>
<td>2</td>
<td>6.20</td>
<td>5.42</td>
<td>-0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited TM</td>
<td>40</td>
<td>6.20</td>
<td>6.39</td>
<td>0.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substantial TM</td>
<td>38</td>
<td>6.20</td>
<td>5.20</td>
<td>-1.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*c ANCOVA F-test evaluating mentorship groups differences in adjusted change.
Table 6  Life Domain Functioning Scale Post Hoc Pairwise Comparison (Model 1)

<table>
<thead>
<tr>
<th>Unadjusted Change Comparisons</th>
<th>Adjusted Change Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A: Prior vs No Lim Sub vs Prior Sub vs Lim</td>
</tr>
<tr>
<td>Change A</td>
<td>Prior vs No Lim Sub vs Prior Sub vs Lim</td>
</tr>
<tr>
<td>Change B</td>
<td>Prior vs No Lim Sub vs Prior Sub vs Lim</td>
</tr>
<tr>
<td>A-B</td>
<td>Prior vs No Lim Sub vs Prior Sub vs Lim</td>
</tr>
<tr>
<td>t</td>
<td>Prior vs No Lim Sub vs Prior Sub vs Lim</td>
</tr>
<tr>
<td>p</td>
<td>Prior vs No Lim Sub vs Prior Sub vs Lim</td>
</tr>
</tbody>
</table>

Model 2 (change from baseline to 12 months)

For Model 2, the four groups compared were: (1) ‘No TM’ (received no therapeutic mentoring during or prior to this time interval), (2) ‘Prior TM’, (3) ‘Limited TM’, and (4) ‘Substantial TM’. ‘Prior TM’ in this model refers to subjects who received therapeutic mentoring during the baseline to 6 month period, but not within the 6 to 12 month interval. For subjects with TM during the 6 to 12 month interval, categories 3 and 4 were again differentiated based on the amount of hours of therapeutic mentoring billed during this interval. Again, a median split was the basis for this differentiation, in order to create two balanced TM groups to compare.

Analyses revealed a significant difference in the Acculturation scale, \( F(3,102) = 3.50, p = .018 \) (see Tables 7 and 8). The Acculturation scale includes the items: Language, Identity, Ritual, and Cultural Stress. The post hoc pairwise comparison indicated that Prior TM improved more significantly than No TM \( (t = 3.17, p = .002) \) and Limited TM \( (t = 2.46, p = .016) \), and Substantial TM \( (t = 2.60, p = .011) \) (see Table 9).
However, this scale may have produced skewed results due to outlier scores. A majority of the subjects were rated as not needing intervention in the areas listed under the Acculturation scale and it appears that four outliers scores in the Prior TM group skewed the results to make it appear there was a significant change from baseline to 12 months, when indeed that is not representative of the entire group. Therefore, for the purposes of this study, no significant differences were found on any scale at the 12-month point (Model 2) in the program.

Table 7  Acculturation Scale ANOVA Results (Model 2)

<table>
<thead>
<tr>
<th>Group</th>
<th>Frq</th>
<th>Pre</th>
<th>Post</th>
<th>Δ</th>
<th>Within t (p)</th>
<th>F (p)</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(SD)</td>
<td>(SD)</td>
<td></td>
<td>a</td>
<td>b</td>
<td></td>
</tr>
<tr>
<td>No TM</td>
<td>61</td>
<td>1.72</td>
<td>1.43</td>
<td>-0.29</td>
<td>-1.19 (ns)</td>
<td>3.50</td>
<td>9.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(3.7)</td>
<td>(3.5)</td>
<td></td>
<td></td>
<td>(0.018)</td>
<td></td>
</tr>
<tr>
<td>Prior TM</td>
<td>12</td>
<td>5.21</td>
<td>2.50</td>
<td>-2.71</td>
<td>-2.24 (0.047)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7.6)</td>
<td>(6.4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited TM</td>
<td>11</td>
<td>2.73</td>
<td>2.50</td>
<td>-0.23</td>
<td>-1.00 (ns)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7.5)</td>
<td>(7.5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substantial TM</td>
<td>22</td>
<td>2.16</td>
<td>1.70</td>
<td>-0.45</td>
<td>-0.72 (ns)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(6.1)</td>
<td>(5.4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Correlated samples t-tests within mentorship groups.
b Mixed ANOVA F-tests evaluating mentorship group differences in unadjusted change.

Table 8  Acculturation Scale ANCOVA Results (Model 2)

<table>
<thead>
<tr>
<th>Group</th>
<th>Frq</th>
<th>Pre</th>
<th>Post</th>
<th>Δ</th>
<th>Partial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(SD)</td>
<td>(SD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No TM</td>
<td>61</td>
<td>2.31</td>
<td>1.91</td>
<td>-0.40</td>
<td>2.25 (0.087)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.3%</td>
</tr>
<tr>
<td>Prior TM</td>
<td>12</td>
<td>2.31</td>
<td>0.15</td>
<td>-2.17</td>
<td></td>
</tr>
<tr>
<td>Limited TM</td>
<td>11</td>
<td>2.31</td>
<td>2.16</td>
<td>-0.15</td>
<td></td>
</tr>
<tr>
<td>Substantial TM</td>
<td>22</td>
<td>2.31</td>
<td>1.83</td>
<td>-0.48</td>
<td></td>
</tr>
</tbody>
</table>

c ANCOVA F-test evaluating mentorship groups differences in adjusted change.
Table 9 Acculturation Scale Post Hoc Pairwise Comparison (Model 2)

<table>
<thead>
<tr>
<th></th>
<th>Unadjusted Change Comparisons</th>
<th>Adjusted Change Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A: Prior vs No</td>
<td>Lim vs No</td>
</tr>
<tr>
<td>Change A</td>
<td>-2.71</td>
<td>-0.23</td>
</tr>
<tr>
<td>Change B</td>
<td>-0.29</td>
<td>-0.29</td>
</tr>
<tr>
<td>A-B</td>
<td>-2.42</td>
<td>0.06</td>
</tr>
<tr>
<td>t</td>
<td>-3.17</td>
<td>0.08</td>
</tr>
<tr>
<td>p</td>
<td>0.002 (ns)</td>
<td>(ns)</td>
</tr>
</tbody>
</table>

Model 3 (change from baseline to 18 months)

Outcomes in the third time period are based on small sample sizes and so should be interpreted with caution. The definition of the four groups is identical to the groups compared in Model 1 and Model 2, except that ‘Prior TM’ was based on therapeutic mentoring received during the 0 to 12 month interval, and therapeutic mentoring hours billed during the 12 to 18 month interval were the basis for the median split separating Limited and Substantial TM.

The scores that showed significant difference between groups in Model 3 were on the Trauma Experiences ($F(3, 23) = 4.03, p = .019$) (see Table 10 and 11) and Traumatic Stress Symptoms Scales ($F(3,23) = 3.80, p = .024$) (see Table 13 and 14). The post hoc pairwise comparison for Trauma Experiences revealed that both Substantial TM ($t = 3.20, p = .004$) and Limited TM ($t = 2.35, p = .028$) groups improved significantly more than the No TM group (see Table 12). The post hoc pairwise comparison for Traumatic Stress
Symptoms revealed a significant difference showing that the Substantial TM group improved significantly more than the No TM group ($t = 3.10, p = .005$) (see Table 15).

The Trauma Experiences Scale contains items such as sexual, physical, and emotional abuse, neglect, community violence, and traumatic grief/separation. The Traumatic Stress Symptoms scale contains the items: adjustment to trauma, re-experiencing, avoidance, numbing, and dissociation.

Table 10  Trauma Experiences Scale ANOVA Results (Model 3)

<table>
<thead>
<tr>
<th>Group</th>
<th>Frq</th>
<th>Pre (SD)</th>
<th>Post (SD)</th>
<th>$\Delta$</th>
<th>$t^a$ (p)</th>
<th>$F^b$ (p)</th>
<th>$\eta^2$ %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No TM</td>
<td>14</td>
<td>5.93 (1.9)</td>
<td>7.64 (2.2)</td>
<td>1.70</td>
<td>4.21 (0.001)</td>
<td>4.03 (0.019)</td>
<td>34.5%</td>
</tr>
<tr>
<td>Prior TM</td>
<td>4</td>
<td>7.88 (0.7)</td>
<td>7.88 (0.7)</td>
<td>0</td>
<td>0 (ns)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited TM</td>
<td>3</td>
<td>4.87 (0.9)</td>
<td>4.36 (0.4)</td>
<td>-0.51</td>
<td>-2.00 (0.184)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substantial TM</td>
<td>6</td>
<td>6.03 (2.0)</td>
<td>4.87 (2.3)</td>
<td>-1.15</td>
<td>-0.93 (ns)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a* Correlated samples t-tests within mentorship groups.  
*b* Mixed ANOVA F-tests evaluating mentorship group differences in unadjusted change.

Table 11  Trauma Experiences Scale ANCOVA Results (Model 3)

<table>
<thead>
<tr>
<th>Group</th>
<th>Frq</th>
<th>Pre</th>
<th>Post</th>
<th>$\Delta$</th>
<th>$F^c$ (p)</th>
<th>$\eta^2$ %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No TM</td>
<td>14</td>
<td>6.13</td>
<td>7.75</td>
<td>1.63</td>
<td>4.62 (0.012)</td>
<td>38.6%</td>
</tr>
<tr>
<td>Prior TM</td>
<td>4</td>
<td>6.13</td>
<td>6.83</td>
<td>0.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited TM</td>
<td>3</td>
<td>6.13</td>
<td>5.11</td>
<td>-1.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substantial TM</td>
<td>6</td>
<td>6.13</td>
<td>4.93</td>
<td>-1.19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*c* ANCOVA F-test evaluating mentorship groups differences in adjusted change.
Table 12  Trauma Experiences Scale Post Hoc Pairwise Comparison (Model 3)

<table>
<thead>
<tr>
<th>Change A</th>
<th>A: Prior vs No</th>
<th>Lim vs No</th>
<th>Sub vs Prior</th>
<th>Sub vs Lim</th>
<th>B: Prior vs No</th>
<th>Lim vs No</th>
<th>Sub vs Prior</th>
<th>Sub vs Lim</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>-0.51</td>
<td>-1.15</td>
<td>-0.51</td>
<td>-1.15</td>
<td>0.71</td>
<td>-1.02</td>
<td>-1.19</td>
<td>-1.19</td>
</tr>
<tr>
<td>1.70</td>
<td>1.70</td>
<td>1.70</td>
<td>0.00</td>
<td>0.00</td>
<td>1.63</td>
<td>1.63</td>
<td>1.63</td>
<td>0.71</td>
</tr>
<tr>
<td>Sub vs Prior</td>
<td>-0.51</td>
<td>-1.15</td>
<td>-0.51</td>
<td>-1.15</td>
<td>-0.92</td>
<td>-2.64</td>
<td>-2.82</td>
<td>-1.72</td>
</tr>
<tr>
<td>Sub vs Lim</td>
<td>-1.02</td>
<td>-1.19</td>
<td>-1.19</td>
<td>-1.19</td>
<td>-0.87</td>
<td>-2.35</td>
<td>-3.33</td>
<td>-1.17</td>
</tr>
<tr>
<td>Sub vs Prior</td>
<td>-1.19</td>
<td>-1.19</td>
<td>-1.19</td>
<td>-1.19</td>
<td>-1.02</td>
<td>-1.90</td>
<td>-0.18</td>
<td></td>
</tr>
<tr>
<td>Sub vs Lim</td>
<td>-1.19</td>
<td>-1.19</td>
<td>-1.19</td>
<td>-1.19</td>
<td>-1.02</td>
<td>-1.90</td>
<td>-0.18</td>
<td></td>
</tr>
</tbody>
</table>

Table 13  Traumatic Stress Symptoms Scale ANOVA Results (Model 3)

<table>
<thead>
<tr>
<th>Group</th>
<th>Freq</th>
<th>Pre (SD)</th>
<th>Post (SD)</th>
<th>Δ</th>
<th>Within t&lt;sup&gt;a&lt;/sup&gt; (p)</th>
<th>t&lt;sup&gt;b&lt;/sup&gt; (p)</th>
<th>η&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>No TM</td>
<td>14</td>
<td>4.29 (3.1)</td>
<td>6.57 (3.5)</td>
<td>2.29</td>
<td>2.83 (0.16)</td>
<td>3.80 (0.024)</td>
<td>33.1%</td>
</tr>
<tr>
<td>Prior TM</td>
<td>4</td>
<td>4.63 (4.3)</td>
<td>6.00 (1.6)</td>
<td>1.38</td>
<td>0.64 (ns)</td>
<td>-5.00 (0.038)</td>
<td>-</td>
</tr>
<tr>
<td>Limited TM</td>
<td>3</td>
<td>5.83 (3.3)</td>
<td>3.33 (3.1)</td>
<td>-2.50</td>
<td>-1.48 (0.198)</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Substantial TM</td>
<td>6</td>
<td>8.42 (4.8)</td>
<td>4.67 (3.5)</td>
<td>-3.75</td>
<td>1.89 (0.16)</td>
<td>3.80 (0.024)</td>
<td>20.5%</td>
</tr>
</tbody>
</table>

<sup>a</sup> Correlated samples t-tests within mentorship groups.
<sup>b</sup> Mixed ANOVA F-tests evaluating mentorship group differences in unadjusted change.

Table 14  Traumatic Stress Symptoms Scale ANCOVA Results (Model 3)

<table>
<thead>
<tr>
<th>Group</th>
<th>Freq</th>
<th>Pre</th>
<th>Post</th>
<th>Δ</th>
<th>F&lt;sup&gt;c&lt;/sup&gt; (p)</th>
<th>η&lt;sup&gt;2&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>No TM</td>
<td>14</td>
<td>5.43</td>
<td>6.92</td>
<td>1.50</td>
<td>1.89 (0.16)</td>
<td>20.5%</td>
</tr>
<tr>
<td>Prior TM</td>
<td>4</td>
<td>5.43</td>
<td>6.25</td>
<td>0.82</td>
<td>1.89 (0.16)</td>
<td>20.5%</td>
</tr>
<tr>
<td>Limited TM</td>
<td>3</td>
<td>5.43</td>
<td>3.21</td>
<td>-2.22</td>
<td>1.89 (0.16)</td>
<td>20.5%</td>
</tr>
<tr>
<td>Substantial TM</td>
<td>6</td>
<td>5.43</td>
<td>3.74</td>
<td>-1.68</td>
<td>1.89 (0.16)</td>
<td>20.5%</td>
</tr>
</tbody>
</table>

<sup>c</sup> ANCOVA F-test evaluating mentorship groups differences in adjusted change.
Table 15       Traumatic Stress Symptoms Scale Post Hoc Pairwise Comparison (Model 3)

<table>
<thead>
<tr>
<th>Unadjusted Change Comparisons</th>
<th>Adjusted Change Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prior vs No</td>
</tr>
<tr>
<td>Change A</td>
<td>Prior vs No</td>
</tr>
<tr>
<td>A</td>
<td>1.38  -2.50</td>
</tr>
<tr>
<td>B</td>
<td>2.29  2.29</td>
</tr>
<tr>
<td>A-B</td>
<td>-0.91 -4.79</td>
</tr>
<tr>
<td>t</td>
<td>-0.40 -1.88</td>
</tr>
<tr>
<td>p</td>
<td>(ns)  0.072</td>
</tr>
</tbody>
</table>

Study Limitations

There are several limitations that came to light during the course of this study that are important to consider and may restrict the ability to apply these findings to other mentoring programs. The first limitation is related to program design and population. The program under study provided therapeutic mentoring, as well as other therapeutic services, specifically to youth living in foster care. Therefore, the findings of this study may not be easily replicable to mentoring programs for other populations of youth. In addition, the mentors in this study were all paid mentors. While it is not yet clear whether there is a significant difference between programs that use volunteer or paid mentors, there may be enough of a difference to limit the applicability of these findings to a volunteer mentoring program.

In evaluating behavioral outcomes, it is virtually impossible to determine causality (e.g., whether the relationship causes the changes in the child’s external behavior versus a number of other unknown factors that can have an impact on the youth
during the same time period). At most, correlations can be detected between behaviors at
different points in time or between groups of subjects. One of the ways this can be
addressed is to use additional outcome measures, and utilize measures of youth and
mentor ratings. This would allow triangulation of the data, and enhance the understanding
of the intervention’s impact on youth.

Sample

The small sample size limited the ability to fully compare the groups. The
comparison group (No TM) had the largest number of subjects (n = 175) for first six
month period measured. The No TM group showed a similar rate of improvement to the
Substantial TM group on the Life Domain Functioning scale. One possible explanation
for this outcome may be a result of the No TM group being substantially larger than the
other groups (Limited TM, n = 40, Substantial TM, n = 38), and therefore more change
was evident for the No TM group. For the third six month period measured, sample sizes
were very small, resulting in a limited opportunity to make comparisons between the
groups and to generalize the findings (No TM, n = 14, Prior TM, n = 4, Limited TM, n =
3, Substantial TM, n = 6).

Another limitation related to the study sample is that the comparison group was
not randomly assigned, and youth were referred to mentoring for a variety of reasons,
perhaps most commonly because of a demonstrated ability to make use of the
relationship. Since it is unclear exactly how these groups were chosen, this limits the
power of the conclusions drawn from the outcomes.
Youth and Mentor Characteristics

Another consideration is whether the groups differed enough in terms of level of outside support. Non-mentored youth may have had natural mentors or other community supports during the time the measures were completed. If this was the case, the differences between the groups would be more limited than expected.

Youth characteristics at baseline may have influenced the results since the groups were not randomly assigned. Several factors were considered in the referral of youth to the therapeutic mentoring program, including a clinical assessment of the need for additional support as well as the youth’s ability to make use of a mentoring relationship. Youth who were referred to the TM intervention were generally less troubled youth who may have been better able to make use of the mentoring intervention. This difference in youth characteristics could have had an impact on the outcome of the group comparisons.

The outcomes for the current study showed that youth who received limited mentoring showed no improvement while youth in the No TM showed significant improvement. It is possible that the youth who received limited mentoring were less able to engage with a therapeutic mentor and ended the relationship prematurely or met less regularly than scheduled and therefore showed less improvement overall. The addition of additional data, including youths’ self-report of their experience of the mentoring intervention over time, could provide more detail regarding the quality of the relationship and specific mentor and mentee characteristics that contribute to the overall benefits or detriments of the mentoring intervention. Future studies of mentoring for foster youth might consider a mixed-method approach for evaluating foster youths’ qualitative
experience of mentoring, mentee qualities and characteristics, as well as behavioral outcomes.

*Age*

While mentoring is typically not an intervention studied for youth under six years old, this sample did include 44 subjects under the age of six, or 16.8% of the sample. Additional analysis in the future on this age group might yield interesting results as to whether therapeutic mentoring is applicable for such young children and whether they benefit in specific areas of functioning. A longitudinal study of long-term benefits depending on the age a youth starts receiving mentoring would also contribute valuable information to the prevention literature.

*Selection Bias*

The large number of subjects that were not included in the study present a limitation related to selection bias. During the time period studied (July 1, 2005 to December 21, 2008), 690 youth were provided service in the SOC program. Of that number, 262 were included as participants in the current study. Several reasons may have contributed to the sample of 690 being reduced to 262 participants. First, during the time period under study, the SOC program accepted many more clients for assessment than it actually opened to serve in the program. This means that the initial database accounted for all “Assessment Only” cases during the study period. Second, if subjects did not have at least two CANS measures completed, they were not included in the study. Reasons for not having CANS measures completed vary from clinicians failing to accurately enter the data to families not being available to collect the information. Third, subjects would not
have had two or more CANS completed if they were open very briefly or drop out of the
program. The reasons subjects may have dropped out could vary from moving out of the
program’s catchment area, to not wanting to engage in the service, to not being
appropriate for the program after assessment. The specific reasons are unknown to this
researcher. However, these factors could have a selection effect on the resulting sample.
Due to small sample sizes and several unknown youth and mentor characteristics, as well
as potential selection bias, the ability to generalize to a broader population may be
limited.
CHAPTER FIVE
DISCUSSION

Summary of Results

The analysis of the study data supports previous findings regarding the benefits of youth mentoring, offers some new findings regarding outcomes for foster youth, and raises some questions that should be considered in future research. While the findings of the current study may not be appropriately generalized to a variety of mentoring programs, they contribute to the limited research on mentoring of youth in foster care. A summary of the results is outlined below in relation to the research questions and hypotheses of the current study. The following section will explore the implications of these results and discuss areas for future research.

The research questions addressed in the current study were based on the hypotheses that longer duration and a therapeutic form of mentoring are more effective in impacting positive change for foster youth, beyond what a typical mentoring program might be able to achieve. The research questions for the current study were: 1) What are the differences on behavioral outcomes between four groups of foster youth, three groups who received different amounts of therapeutic mentoring (for 6 months, 12 months, or 18 months) and one group who did not receive any therapeutic mentoring, while participating in a specialized foster care program?; and 2) Is the length of the therapeutic
mentoring relationship (i.e., up to 6 months, 12 months, or 18 months) associated with the level of improvement from intake to discharge?

The objective of the present study was to determine whether differences on outcomes would be evident for foster youth who received TM as related to youth who did not receive TM. Evidence from the analyses revealed that foster youth who receive a substantial amount of TM improved significantly on measures of family and social functioning, and school behavior and achievement. The analysis also suggests that mentored youth who remain in the program longer (up to 18 months) and receive TM improved significantly over non-mentored youth in terms of demonstrating a reduction of the expression of stress symptoms associated with trauma.

The areas where these significant differences were found for mentored groups were in the first 6 months of the program and at 18 months on two different CANS Scales (Life Domain Functioning and Traumatic Stress Symptoms, respectively). However, in the first 6 months of the program, non-mentored youth improved on Life Domain Functioning at about the same rate as youth who received substantial mentoring. Youth with Limited TM did not improve, and this was a significant difference as compared to both Substantial and Limited TM groups. The findings of the analysis are detailed below, and outlined according to the time period the change occurred (i.e., 0-6 months, 0-12 months, or 0-18 months).

In Model 1 (baseline to 6 months), youth who received substantial TM improved significantly over those youth who received limited TM as measured on the Life Domain Functioning Scale, containing items such as family, school and social functioning, and
recreational activities. Youth with limited TM in this time period showed a lack of improvement from baseline to 6 months on the items for the Life Domain Functioning scale. Youth who received no TM also showed significantly more improvement than the limited TM group. Improvement on the Life Domain Functioning Scale for youth with no TM and youth with substantial TM was about the same.

In Model 2 (baseline to 12 months), on measures of acculturation, the youth who received prior TM (received TM in the first six months measured, but not during the 6 to 12 month period) showed a significant improvement over youth who received no, limited, or substantial TM. However, this analysis appears to have been skewed by outliers. This is evident because the baseline mean score for the ‘Prior TM’ group was significantly higher than the baseline mean for all three other groups. Upon further investigation, it was determined that four study participants were given ratings of ‘2’ or ‘3’ on all four items in the Acculturation Scale, while almost all other participants were given ‘0’ ratings, indicating a low level of need in this area. This discrepancy is most likely due to four youth from the same immigrant family getting scores from their clinician that indicated a need for an interpreter. This explains the higher baseline scores for these participants and invalidates the results on this scale. In other words, it is not likely that the change on this scale was a result of the mentoring intervention, but rather that a small number of participants in the Prior TM group were rated as needing immediate attention to this area at baseline, making the differences in outcomes appear significant when they were not.
In Model 3 (baseline to 18 months), on measures of trauma experiences (abuse/neglect, trauma, separation, and community violence) and also the traumatic stress symptoms scale (adjustment to trauma, numbing, dissociation), youth who received substantial TM during this period improved significantly as compared to youth with no TM. In addition, the no TM group actually worsened significantly on this scale. The items included in the traumatic stress symptom scale (i.e., adjustment to trauma, re-experiencing, avoidance, numbing, and dissociation) are designed to assess the youth’s ability to cope with and constructively express the trauma they may have experienced.

While the differences on the Life Domain Functioning and Traumatic Stress Symptoms Scales contribute key findings to the body of mentoring literature, it is useful to explore why differences were not demonstrated in other areas. Several CANS Scales did not show significant differences at any of the mentoring time periods. For instance, the Life Domain Functioning Scale showed significant change in the first 6-month period, but not in later time periods. The scales that showed no significant differences at any of the time periods include the CANS total score (a sum of scores on all items in the CANS), the Caregivers Needs and Strengths Scale, the CANS child score (sum of all CANS items except the Caregivers Needs and Strengths items), the Child’s Strengths Scale, the Behavioral and Emotional Needs Scale, and the Risk Behaviors Scale. Further exploration of significant and non-significant findings, as well as integration with prior research, implications for policy, study limitations, and suggestions for future research are discussed below.
Explanation for Findings

The findings of this dissertation research provide support for the hypothesis that outcomes associated with the presence of therapeutic mentoring, relative to outcomes associated with youth who do not receive therapeutic mentoring, differ. In addition, the evidence supports the hypothesis that longer periods of mentoring, in conjunction with other therapeutic services, appear to produce better outcomes among youth who have been traumatized. The setting for this research was an agency program, Systems of Care (SOC), that provided all program clients with clinical services (e.g., individual, family counseling), advocacy, linkage, and referral services. Therapeutic mentoring was offered as an adjunctive service for some of the youth in the program.

The study sample was divided with 60% of the sample who did not receive any TM (n=156), while 40% of the sample did receive TM (n=116) during the time period studied (July 1, 2005 to December 31, 2008). For youth who did receive TM, the starting point of the TM intervention could have been at any point during their participation in the broader SOC program. For example, a youth who was referred to the TM intervention could have already been participating in SOC services for 3 months. Therefore, the length of the TM intervention overlaps with, and is almost always shorter than, the overall program services provided to the foster youth. Measurements for this study were taken at baseline, 6 months, 12 months, and 18 months based on the youth’s intake date into the SOC program.

The TM intervention, if received, was provided concurrently, but not necessarily with the same intake and discharge dates as for overall SOC participation. As a result, a
majority of mentored youth in this sample received mentoring for up to 9 months (and not 12 months or longer). This is striking considering prior research suggests that mentoring relationships that last less than 12 months are not as effective as longer durations, and in some cases, can be detrimental to youth. The current study evaluated the outcomes of a therapeutic mentoring program that included many of the best practices identified in the mentoring literature; however, this lack of longevity may account for the limited findings of this study.

This section will review how the key findings of the current study support, as well as diverge, from those in prior mentoring research studies. In the current study, youth who received a substantial amount of therapeutic mentoring in their first 6 months in the SOC program showed significant improvement in the areas of family functioning, social functioning, recreational activities, school behavior, school achievement, and school attendance. The improvement for youth receiving TM during the first 6 months in the program is encouraging; however, youth with No TM also improved significantly on the same measures. Youth who received limited TM fared worse than youth who did not receive TM in that they showed no improvement from baseline to 6 months.

Prior research has shown that youth in mentoring relationships for six months or less showed decrements in functioning, particularly on scales of self-worth and academics, and an increase in substance use (Grossman & Rhodes, 2002). Youth in relationships for more than 12 months showed significant increases on measures of self-worth, socialization, academics, and family relationships, and a decrease in substance use (Grossman & Rhodes, 2002). The findings of this dissertation research, in conjunction
with the results of Grossman and Rhodes’ (2002) study, suggest that vulnerable youth must receive a substantial amount of TM in order to benefit from the intervention. Receiving a limited amount is actually worse than not receiving TM at all. Ultimately, the dosage and length of mentoring relationships appears to have a significant impact on the ability for the relationship to affect crucial areas of functioning for vulnerable youth (Grossman & Rhodes, 2002). This was found in both the Grossman and Rhodes (2002) and Rhodes et al. (1999) studies (which may not be surprising given that both studies utilized subjects from the same sample; however, measured different outcomes in some cases).

The lack of improvement for youth who receive a limited amount or shorter duration of mentoring may be a result of youth feeling disappointed in an unsuccessful mentoring relationship and failing to meet regularly with their mentors. Vulnerable youth, such as the foster youth in this study, may have already experienced perceived parental rejection or caregiver inconsistency, and so engaging in and maintaining a mentoring relationship may be particularly difficult for them (Rhodes, 2002). The youth may also be less invested in the mentoring relationship for a variety of reasons. One possible explanation is that youth in shorter or less consistent relationships have a greater number of difficulties to begin with. This may thus cause them not to engage in the relationship due to fears or doubts about being accepted or supported by others. These difficulties may also make it more difficult for a mentor to maintain the relationship, possibly as a result of a lack of confidence or loss of motivation or commitment in response to a perceived disinterest on the mentee’s part (Grossman & Rhodes, 2002;
Rhodes, 2002). Mentoring programs for all types of youth must seriously consider the duration of mentoring relationships as a key ingredient for improving outcomes. This may include exploring additional ways to support mentoring matches and retain mentors for longer periods of time.

In exploring the current study’s findings related to improvements in family, school and social functioning, and recreational activities, a comparison with the Rhodes et al. (1999) study is instructive. In their study on the impacts of mentoring for foster youth, Rhodes et al. (1999) reported a positive impact on social skills and trust in others, as well as peer relationships and self-esteem. Similarly, findings from this dissertation suggest positive outcomes for foster youth who engage in mentoring relationships and also indicate the need for further evaluation of the factors that produce these outcomes.

The sample of the two studies is first worth exploring. To begin, Rhodes et al. (1999) included 180 foster youth in their evaluation of peer relationships and mentoring, with a majority of the participants being African American (62%), and with a fairly even split between males and females. Youth in the Rhodes et al. study were within the ages of 10 to 15 years, and were randomly assigned to matched groups. Youth in the current study spanned a wider age range (0-20 years), but were demographically similar with a majority of participants being African American (76%) and an even split between males and females (53% and 47%, respectively).

The program characteristics of Rhodes et al.’s study included volunteer mentors as a part of the Big Brothers Big Sisters programs. The current study utilized paid mentors and was based on a model informed by attachment and relational theories. The
methodology differed in that the measures in the Rhodes et al. study were taken from multiple perspectives and designed to evaluate specific outcomes related to peer relationships. Measures were collected from a variety of sources, including parents, youth, and caseworkers. The current study did not have a matched control group as Rhodes et al. study did, but rather a comparison group that was not randomly assigned. The measures for this research did not specifically address youths’ perception of their relationships with peers, and did not obtain information from multiple perspectives. These differences in study design and measures could account for the differences in outcomes, namely the lack of significant findings in the areas of child strengths and risk behaviors in the current study.

Importantly, Rhodes et al. (1999) showed that the nonrelative foster youth in the treatment group of their study demonstrated a decrease in prosocial peer support over time. In contrast, nonfoster youth showed increases in peer relationships. Bolger et al. (1998) similarly found that chronically maltreated youth were most likely not to be accepted by peers. These findings may indicate that regardless of mentoring status, youth in foster care are proportionally more susceptible to significant difficulties in peer relationships than are other youth, even as compared to youth in relative foster care. The challenges that cause foster youth not to benefit from mentoring relationships, assumedly as a result of their elevated emotional needs, may explain the lack of improvement on other scales.

These emotional needs are often related to experiences of trauma and are a particularly important consideration for the population in this study. Foster youth
experience trauma and resulting externalizing behaviors at a higher rate than other at-risk youth (Kortenkamp & Ehrle, 2002). This has led to foster parents having a difficult time parenting and supporting foster youth (Chamberlain et al., 2008). If the findings of the current study, which indicate that adjustment to trauma and trauma symptoms improved for youth in the SOC program for up to 18 months, can be built upon and further explored, the therapeutic mentoring intervention may have particular utility in both attenuating the troubling experiences foster youth have, as well as assisting in the ability for foster parents to maintain these youth for longer periods of time. As noted by Rhodes et al. (1999), while a decrease in trauma symptoms is an encouraging result, “there may be no substitute for high-quality professional intervention for promoting optimal development in such youth” (1999, p. 198). In this case, the foster youth received an intensive therapeutic intervention as well as mentoring. This combination may account for the success in attenuating trauma experiences for youth in the program for the longest duration.

This dissertation research revealed that at 18 months, the No TM group showed declines, as evidenced by the increase in the expression of trauma, such as re-experiencing (i.e., intrusive memories of a traumatic event) and dissociation. The results from the Traumatic Stress Symptoms Scale revealed significant differences, suggesting that the Substantial TM group improved significantly more than the No TM group in this area. It is important to note that the No TM group actually worsened from baseline to 18 months on this scale, while also experiencing an increase of trauma experiences during the same period. This means that the No TM group appears to have experienced
additional trauma, which may explain the worsening of symptoms of traumatic stress. This group experienced a longer period of potential exposure to new trauma, while not receiving additional help. Mentored youth who demonstrated improvement may not have experienced ongoing or additional trauma during the treatment period, thereby allowing them to heal more quickly from past trauma with the support of the TM intervention. This result is meaningful because youth who were rated as having the most severe symptoms of traumatic stress were the same youth who received a substantial amount of therapeutic mentoring and also made the most improvement overall. Youth who received substantial TM during their 18-month stay in the SOC program may have effectively been inoculated over time against the worsening of traumatic symptoms. Therefore, these findings suggest clearly that longer periods of time without the intervention produce significantly poorer outcomes, while receiving substantial TM reduces the impact of trauma on youth.

Overall, the findings of the current study suggest that youth who receive limited therapeutic mentoring do not fare as well as both other mentored youth and also non-mentored youth. Given the severity of the symptoms on the Traumatic Stress Symptoms Scale, it is of particular interest that youth who received therapeutic mentoring showed significant improvement as compared to youth with no therapeutic mentoring, who actually worsened significantly after 18 months.

At this point it is relevant to question why significant differences between groups were not found in more areas than the two discussed above. More significant differences between mentored and non-mentored youth were expected. Since the therapeutic mentoring intervention involves the addition of a positive adult relationship into the lives
of vulnerable youth, it seems intuitive that their outcomes would be enhanced. There are a number of possibilities for this lack of significant findings, some of which have been discussed above. Overall, it is possible that the bond necessary to provide youth with the type of relational support needed to increase functioning was not present. This bond may not have developed in the TM relationships in this study. One reason for this may be that while the mentoring sessions were carefully planned and monitored, perhaps the consistency was less than was assumed due to either youth or mentor absences. Since the majority of youth in this study received mentoring for 9 months or less, the lack of significant findings are very likely a result of not having enough longevity in the mentoring relationships to significantly impact change on a wider range of outcomes.

Previous mentoring studies have found an increase in feelings of self-esteem for foster youth in mentoring relationships (Rhodes et al., 1999), and so it was assumed that youth in the current study would have improved in the area of strengths, in that the mentoring relationship would have helped youth identify and increase strengths, which may in turn increase feelings of self-worth and self-esteem. Findings may not have been significant on the Child’s Strengths Scale due to the way clinicians rate these items. It may not be evident to the clinicians when a youth is developing skills or utilizing strengths in the context of the mentoring relationship. It may also be the case that the comparison group receives the same level of support in this area from other sources (such as the clinician) and therefore the groups did not differ on outcomes. Another possibility is that since the clinicians do not oversee the mentor matches, relying solely on clinician
ratings of youth improvement may not be the most effective or accurate way to measure the change that occurs as a result of the mentor-mentee relationship.

Some of the other areas that did not show significant differences between groups were on the Behavioral and Emotional Needs Scale. This scale primarily measures whether a youth has a significant mental health diagnosis (such as ADHD, depression, or bipolar disorder). It may be that the mentoring relationship is not able to have a particular impact on the symptoms experienced by youth with these types of mental health issues. The same may be said for Risk Behaviors, such as suicide risk, runaway, delinquency, etc. These symptoms may be more significant than the mentoring relationship has the power to overcome. The clinical services provided to all youth in the program (both mentored and non-mentored) may also address these symptoms in a way that produces similar outcomes. Ongoing crises and disruptions could have occurred for youth in either group throughout the time period studied. These disruptions might have decreased the impact of the mentoring intervention and is one of several limitations to studying this population of youth (Britner & Kraimer-Rickaby, 2005).

The experiences of vulnerable youth populations, such as foster youth, can create measurement limitations that should be considered. For instance, youth in foster care may be more likely to experience early terminations due to changing placements. They may also have inconsistent contact with their mentors over the duration of the relationship as a result of personal difficulties (e.g., behavior problems or history of parental rejection) (Britner & Kraimer-Rickaby, 2005; Rhodes, 2002). The current study did not have information about the reasons youth terminated from the SOC program or from the
mentoring relationship. It is possible that a youth who has experienced maltreatment may be even more susceptible to the negative impact of inconsistent contact or failed relationships with adults and this “may make it more difficult for him or her to form a social bond with a mentor” (Britner & Kraimer-Rickaby, 2005, p. 484). Therefore, it may be possible that the full benefits of therapeutic mentoring were not achieved due to premature terminations or lack of consistency. Further examination of how abuse, neglect, and placement histories, and crises or disruptions during the course of the intervention, as well as termination reasons, would provide a more specific context within which to interpret findings for this population (Britner & Kraimer-Rickaby, 2005).

Group assignments may contribute to the lack of significant difference on some of the scale scores. Since random assignment did not occur, it could be that the types of subjects in each group are skewed. For example, if youth with significant emotional and behavioral difficulties were placed more in either the treatment or comparison group, a difference between groups on improvement scores may not be possible to detect. For instance, it is possible that the youth referred to the mentoring program were identified as having more strengths and the ability to make use of a mentoring relationship. Therefore, the mentoring intervention may not show as sizable an impact because these youth would have had better scores at baseline than the youth experiencing more difficulties at baseline. While there are several possible explanations for why certain findings were present and others were not, the lack of differences across multiple domains exemplifies the need for additional research on outcomes in these areas.
Two other considerations for the context of this study relate to the period of time studied and the age range of the participants. First, the time period studied spanned a period of 2 ½ years (July 1, 2005-December 31, 2008). Since this is a fairly wide range of time, it is possible that during this time programmatic and staff changes could have impacted service delivery. While the specific impacts of these changes are unknown, it is important to consider for any program that undergoes changes over time. Second, there was a wide range of ages studied for this project. The youth spanned the ages of 0-20 years. This wide range was accounted for in that therapeutic mentors were educated and monitored in order to tailor the TM intervention for each age group according to the types of need youth have at different developmental stages. For example, a mentor would provide a six-year-old with a safe context within which to develop constructive peer interactions, such as at the playground with the mentor’s support. Focus would also be on providing a trusted adult to whom the youth could turn if there was difficulty in negotiating peer relationships, or other disappointments that he or she felt comfortable to bring to the relationship. For a 17-year-old, the TM relationship might focus on supporting life goals, such as academic or vocational goals. The focus may be on building confidence and enhancing self-esteem in relation to these goals, as well as having a supportive adult to turn to with questions or concerns throughout the process. While the intervention was tailored to these age groups as specified, the range of ages may also have contributed to the moderate findings of the study. Providing the intervention to a more targeted age group may have produced stronger findings.
Theoretical Implications

As relationships are the basis of the mentoring intervention, it is helpful to consider these results in a theoretical context. As noted in the attachment theory literature, as well as the mentoring outcomes research, youth in foster care have experienced difficulties with trust and are wary of turning to adults for help (Mennen & O'Keefe, 2005; Moss et al., 1998; Rhodes et al., 1999). However, as Rhodes et al. discovered, after engaging in mentoring relationships, foster youth have the potential to feel more comfortable and trusting of others (1999). Therefore, it is important to capitalize on this capacity of youth to make use of relationships. Given youth in foster care have particular vulnerabilities to trusting in relationships, a specialized form of mentoring, that draws on theoretical foundations, may have a greater potential for making a difference in the lives of these youth.

Studies utilizing relational-cultural theory have found similar results in that youth who reported having difficulty in relationships with adults continued to report a desire to experience relationships with supportive adults “without the pressure of a task to accomplish or a lesson to be learned” (Spencer et al., 2004, p. 356). When these relationships included mutuality and respect, the youth reported feeling they were genuinely cared for by the adult (Spencer et al., 2004). Youth reported feeling most connected with adults who were open to hearing what they had to say, as well as taking them seriously and setting limits as needed (Spencer et al., 2004). This evidence indicates that outcomes such as those in the present study must be considered alongside the type of relationship the youth is experiencing, as well as the duration of that relationship. It also
shows that youth with prior difficulties in relationships can alter their previously held beliefs about relationships when they experience something new (such as an authentic, empathic, respectful mentor).

While many traditional mentoring programs emphasize the importance of the mentoring relationship as the key component to change for youth, very few are able to implement a therapeutic structure into programming. This effort entails significant support and training for mentors in order to reinforce the therapeutic approach to working with vulnerable youth. Training has been shown to increase mentors’ feelings of efficacy (Parra et al., 2002). In turn, this increased feeling of efficacy appears to lead to consistent patterns of contact with mentees, and “cultivating close, affective ties” (Parra et al., 2002, p. 383). Ongoing mentor support and training, as well as fostering close and nurturing relationships between mentors and youth are important aspects of establishing and maintaining a therapeutic mentoring program.

However, the question remains as to the length of time necessary for an attachment to develop, or for a mentor and mentee to become adequately engaged, in order to facilitate changing a youth’s belief structure about relationships. Research has shown that consistency, duration, and emotional connection all lead to better outcomes (Deutsch & Spencer, 2009; DuBois & Neville, 1997). While the length of the relationship appears to be linked with the ability for mentoring relationships to have an impact on behavioral outcomes, the closeness, authenticity, empathy, and empowerment in mentoring relationships may have more importance than duration or other structural aspects of mentoring programs (Liang et al., 2002). It is possible that longer relationships
could be marked by inconsistency and sporadic meetings. Theoretical frameworks can inform the way programs focus on the most helpful aspects of therapeutic interventions in order to develop mentoring program structures that will most effectively integrate a therapeutic approach.

Each of the theories that form a backdrop for this study, including attachment theory, relational-cultural theory, positive youth development framework, and social learning theory, emphasize the development of a relationship with a trusted adult as one of the key components to facilitating behavioral change. The quality and consistency of that relationship, as well as the duration, have significant implications for youth in mentoring relationships. While the present study did not explore characteristics of the mentoring relationships, the improvement in scales related to social, familial, and academic functioning indicates that these are areas where mentors can potentially have an important impact for foster youth.

**Future Directions**

Research on the impact and effectiveness of youth mentoring has explored many aspects of how this service can be delivered and evaluated. Suggestions for how to improve evaluations of mentoring can lend helpful guidelines to further expand this body of literature. Since the outcomes in this field are promising, though not yet conclusive, further study is warranted. The current study shows the importance of research that considers differences in outcomes for foster youth receiving specialized mentoring and those without mentoring. It also points to the need for more research on mentoring as an adjunctive or complementary service for youth receiving other types of therapeutic
support (e.g., counseling, case management, etc.). More in-depth study of supportive services for youth living in foster care are warranted, and the findings of the current study suggest that there are particular gains to be made in further developing and evaluating therapeutic mentoring for foster youth.

As was demonstrated in this study, future research that focuses on the dosage of mentoring, particularly early in the relationship, may shed light on how early impacts are facilitated for youth. The length of the mentoring relationship has shown an impact on outcomes in prior research, but has not been frequently studied (DuBois et al., 2002). According to Grossman and Rhodes (2002), and the current study, there are significant gains to be made through a better understanding of how the duration of the mentoring relationship impacts outcomes. Programs that are able to facilitate and maintain long-term mentoring relationships (i.e., for 12 months or longer) should carefully evaluate outcomes as compared to shorter relationships, with special attention to the reasons the relationships terminate, as well as to how the quality of the mentoring relationship is associated with successful or unsuccessful relationships.

Additional measures, such as youth and mentor ratings would provide additional perspectives on the impact of the mentoring relationship. Youth and mentors could rate the quality of the relationship, as well as their individual perspectives on change in youth functioning. Youth and mentor ratings could be collected on a weekly basis. In addition, more frequent measures of behavioral outcomes, such as the CANS, would allow for an expanded ability to assess where and when change occurs in the relationship. The addition of potentially useful qualitative data, as well as the youths’ self-report regarding
the quality of the mentoring relationship and their resulting experience of it, would
provide more detail regarding the quality of the relationship and specific mentor and
mentee characteristics that contribute to the overall benefits or detriments of the
mentoring intervention. Future studies of mentoring for foster youth might consider a
mixed-method approach that includes some combination of the following: youth and
mentor ratings, more frequent measurements (e.g., weekly mentor ratings and quarterly
youth and clinician ratings on outcome measures), qualitative data (e.g., youth self-report
of relationship experience and/or mentor’s description of interactions), measures for the
quality of the mentoring relationship, and specific youth and mentor qualities and
characteristics.

Inclusion of mentor ratings and/or youths’ self-report on the development of
strengths and skills, or interests and hobbies, may be a more useful way to measure this
area of youth functioning in future studies. While clinician ratings provide an important,
“objective” third party’s perspective on the impact of the TM relationship, the addition of
the mentor’s rating is a good way to obtain repeated measurements (i.e., each time the
mentor and youth meet) regarding how the relationship and/or youth is progressing. The
added benefit of the mentors’ ratings is that they could be collected weekly as a measure
of progress, much more frequently than the six-month measure of the CANS.

Theoretically, it will also be important to understand how bonds develop between
mentors and youth. For instance, whether it is possible for attachment relationships to
develop between a mentor and youth, and if so, what factors in the facilitation of the
relationship must be present for this to occur. Towards this end, a more explicit
understanding of how youth who are experiencing ongoing crises or trauma, such as placement disruption, continued abuse, or loss of family members are able to make use of relationships, particularly mentoring relationships. Further exploration of youth characteristics, such as length of time in foster care, diagnoses, and history of traumatic experiences would provide useful information as to the types of foster youth most likely to engage in and benefit from mentoring relationships, as well as whether youth who have more significant trauma or youth with higher level coping skills would have different outcomes. In addition, measuring outcomes from multiple perspectives, such as youth, mentor, clinician, case manager, and caregiver would provide more complex information about the impact of the mentoring relationship and clarify how the effects are manifested in other areas of a youth’s life.

Therapeutic mentoring programs need to be carefully developed and consistently monitored to maintain fidelity to the mission and philosophy of a program. Programs that use theoretical concepts and “best practices” are shown to have larger effect sizes (DuBois et al., 2002). Therapeutic mentoring programs should carefully consider the literature on foster youth and the specific areas of difficulties they are challenged with in order to develop specialized approaches and interventions to address these difficulties. For instance, as was shown in the current study, youth with trauma experiences and symptoms may require long-term interventions before they experience relief from these symptoms. Therapeutic mentoring programs need to ensure that they can support their mentors and educate them on these symptoms and how to best support youth struggling with these experiences.
Implications for Policy

Before issues of policy can be addressed, additional study needs to be completed in this area. It is important that the mentoring field use consistent and reliable approaches when exploring the effectiveness of youth mentoring. This is essential in order for the findings to be comparable, rather than competing. For instance, if outcome research shows one type of youth mentoring to be more effective than another (e.g., school-based mentoring vs. community-based mentoring), it needs to be clear that the evaluation approaches were similar so as not to falsely claim to policy makers that one type is “better” than another without solid grounds to make that claim (D. DuBois, personal communication, May 13, 2009).

However, given the preliminary research findings, there are important policy implications for therapeutic mentoring going forward. First, and most importantly, the duration of the mentoring relationship continues to arise as a crucial aspect for facilitating positive outcomes (Grossman & Rhodes, 2002). Therapeutic mentoring programs should find ways to facilitate and support long-term mentoring relationships. As Grossman and Rhodes (2002) discovered, youth with fewer than 12 months of mentoring decline in functioning. The current study also highlighted this finding when youth with No TM improved while youth with Limited TM did not. This finding suggests that receiving No TM is actually better than receiving a limited or inconsistent amount. The significant policy implications of this finding are that youth interventions need to be very carefully planned and implemented. While the TM program under study had several program guidelines in place in order to provide a therapeutic service to foster youth, one of the
most crucial factors, born out in previous research on mentoring, was not present. That factor is a duration of more than 12 months of mentoring in order to facilitate positive outcomes. This also raises an important policy question about where to invest valuable resources and time, and how to prioritize whether resources should be invested in a smaller number of youth who can take advantage of a long-term mentoring relationship rather than providing a potentially harmful lesser amount to a larger group of youth.

Second, mentor training and supervision are vital to creating therapeutic mentoring programs. Mentors need to have the knowledge and skill to respond therapeutically to a population of youth who face significant emotional and behavioral challenges (Britner et al., 2006). In addition, providing compensation to therapeutic mentors may increase their longevity and commitment to their work with youth. This is an area that requires further evaluation, but has promise as a mechanism through which to provide a more specialized, longer-term intervention to youth in foster care. Finally, oversight and monitoring of program delivery is necessary in order to ensure quality and fidelity to the program’s mission (DuBois et al., 2006). When program administrators are focused on screening and thoughtfully making mentor matches, as well as consistently providing support to those matches ongoing, likelihood for successful program results increases (Britner et al., 2006).

Considering the costs of foster care, both financial and emotional, further exploration and development of high quality mentoring programs is a worthwhile venture. It has been consistently documented that youth in foster care are significantly troubled and in need of ongoing, specialized, and preventive care. Given the promising
results mentoring has shown for at-risk and foster youth, ongoing research and advocacy related to mentoring programs for this population are needed.
APPENDIX A:

CHILD AND ADOLESCENT NEEDS AND STRENGTHS (CANS) TOOL
CHILD AND ADOLESCENT NEEDS AND STRENGTHS

Child’s Name:    Date of Birth:    Gender:
Race:    DCFS ID:    LAN:
SOC Agency:    SOC Agency Telephone:
Referral Acceptance Date:    Date of This Assessment:

Please circle all that apply:    New 6-month Interim    Terminate

Current Living Situation:

Psychiatric Diagnosis [DSM-IV Codes]:

Assessor Signature:    Phone #:

Key: 0 = no evidence or no reason to believe that the rated item requires any action.
1 = a need for watchful waiting, monitoring, or possibly preventive action.
2 = a need for action. Some strategy is needed to address the problem/need.
3 = a need for immediate or intensive action. This level indicates an immediate safety concern or a priority for intervention.

TRAUMA EXPERIENCES

1. Sexual Abuse:    8. School Violence:
2. Physical Abuse:    9. Natural or manmade disasters:
3. Emotional Abuse:    10. Traumatic Grief/Separation:
4. Neglect:    11. War Affected:
5. Family Trauma:    12. Terrorism Affected:
6. Family Violence:    13. Witness to Criminal Activity:
7. Community Violence:

TRAUMATIC STRESS SYMPTOM

14. Adjustment to Trauma:    17. Numbing:
15. Re-experiencing:    18. Dissociation:
16. Avoidance:
CHILD STRENGTHS

| Key: | 0 = centerpiece strength. |
|      | 1 = useful strength. |
|      | 2 = identified strength. |
|      | 3 = not yet identified strength. |

19. Family:
20. Interpersonal:
21. Educational:
22. Vocational:
23. Well-being:
24. Optimism:
25. Talents/Interests:
26. Spiritual/Religious:
27. Community Life:
28. Relationship Permanence:

LIFE DOMAIN FUNCTIONING

29. Family:
30. Living Situation:
31. Social Functioning:
32. Developmental:
33. Recreational:
34. Job Functioning:
35. Legal:
36. Medical:
37. Physical:
38. Sexuality:
39. School Behavior:
40. School Achievement:
41. School Attendance:

ACCULTURATION

42. Language:
43. Identity:
44. Ritual:
45. Cultural Stress:

CHILD BEHAVIORAL & EMOTIONAL NEEDS

46. Psychosis:
47. Attention/Impulse:
48. Depression:
49. Anxiety:
50. Oppositional:
51. Conduct:
52. Substance Abuse:
53. Attachment:
54. Eating Disturbance:
55. Affect Dysregulation:
56. Behavioral Regression:
57. Somatization:
58. Anger Control:
CHILD RISK BEHAVIORS

59. Suicide Risk:
60. Self-Mutilation:
61. Other Self Harm:
62. Danger to Others:
63. Sexual Aggression:
64. Runaway:
65. Delinquency
66. Judgment:
67. Fire Setting:
68. Social Behavior:
69. Sexually Reactive Behavior:

Required if child is 5 years or younger, developmentally disabled (DD) at any age, or if any of these are relevant needs regardless of age:

70. Motor:
71. Sensory:
72. Communication:
73. Failure to Thrive:
74. Regulatory Problems:
75. Birth Weight:
76. Pica:
77. Prenatal Care:
78. Substance Exposure:
79. Labor & Delivery:
80. Parent/Sibling Problems:
81. Maternal Availability:
82. Curiosity:
83. Playfulness:

Required if youth is 17 years old or older or if any of these are relevant needs regardless of the youth’s age:

84. Independent Living:
85. Transportation:
86. Parenting Role:
87. Personality Disorder:
88. Intimate Relationships:
89. Medication Compliance:
90. Educational Attainment:
91. Victimization:

CAREGIVER NEEDS and STRENGTHS

Caregiver Name(s):

Caregiver Relationship to Child:

92. Physical:
93. Mental Health:
94. Substance Use:
95. Developmental:
96. Supervision:
97. Involvement:
98. Knowledge:
99. Organization
100. Resources:
101. Residential Stability:
102. Safety:
103. Marital/Partner Violence
104. Posttraumatic Relations:
105. *Parental Criminal Behavior:
*Refers to biological parent

Notes:
REFERENCES


VITA

SARA B. JOHNSON received her Master of Social Work degree from Loyola University Chicago and has over 10 years experience working in administrative, clinical, and academic positions. She is currently Director of Respite Services at Jewish Child and Family Services in Chicago and a staff therapist at Smart Love Family Services. She has worked with children, adolescents, and adults in outpatient and residential settings, providing crisis intervention, case management, substance abuse treatment, and parent counseling, as well as individual, couples, and family psychotherapy. In addition, she has been an adjunct professor in the Social Work program at Loyola University.

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

__________________      ____________________________________
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