

Abstract

THE EFFECTS OF A MENTORING PROGRAM ON THE BEHAVIOR
RATING OF CHILDREN

by

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December, 2009

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Many researchers have concluded that mentoring relationships are beneficial to children; however, research results are generally based on information collected from school officials and parents. While both sources are often accurate, the perspective of the child has seldom been considered in determining the effectiveness of mentoring. Since the child is the one being served, it is most logical to take his/her thoughts and beliefs into account. Therefore, the purpose of this study was to determine if mentoring influences mentee behavior, as measured by the Behavior Rating Index for Children (BRIC). The BRIC scores reported by the child and parent were tested to determine if their perspectives of child behavior were congruent. Data were collected during an after-school mentoring program using trained undergraduate students as mentors. Data analysis included descriptive statistics and Wilcoxon Signed Rank Tests to evaluate the change in BRIC scores and congruence between child and parent scores.

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THE EFFECTS OF A MENTORING PROGRAM ON THE BEHAVIOR
RATING OF CHILDREN

A Thesis

Presented To

the Faculty of the Department of Recreation and Leisure Studies

East Carolina University

In Partial Fulfillment

of the Requirements for the Degree of

Masters of Science

by

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December, 2009

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TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION	1
Purpose of Study.....	2
Research Questions.....	2
Limitations.....	3
Non-Random Subjects.....	4
Non-Random Mentors.....	4
Scheduling.....	5
Delimitations.....	5
Assumptions.....	5
Concepts Defined.....	6
CHAPTER 2: REVIEW OF LITERATURE.....	8
Social Learning Theory	8
Social Support.....	9
Resilience.....	11
Mentoring.....	13
Characteristics of Mentoring Relationships.....	13
Benefits of Mentoring Relationships.....	14
Factors for Success.....	21
Factors for Cessation	22
Conclusion.....	23
CHAPTER 3: RESEARCH METHODS.....	24
Setting & Population.....	26
Key Variables.....	28
Research Questions.....	30
Summary of Methods.....	31
CHAPTER 4: RESULTS.....	32
Sample.....	32
Pre-Study Descriptive Statistics.....	33
Post-Study Descriptive Statistics.....	34
Wilcoxon Analysis.....	35
Summary.....	45
CHAPTER 5: CONCLUSIONS.....	46
Limitations.....	46
Research Questions and Implications.....	48
Implications for Recreational Therapy Practice.....	49

Recommendations.....	50
Research Agency Coordination and Commitment.....	51
Communications with Parents and Guardians.....	51
The Mentoring Program.....	52
Final Thoughts.....	54
REFERENCES.....	56
APPENDIX A: MENTOR AGREEMENT FORM.....	63
APPENDIX B: OUTLINE OF MENTORING ORIENTATION.....	65
APPENDIX C: PARENTAL CONSENT FORM.....	66
APPENDIX D: MINOR ASSENT FORM.....	68
APPENDIX E: SAMPLE MENTORING LOG.....	70
APPENDIX F: BEHAVIOR RATING INDEX FOR CHILDREN.....	71
APPENDIX G: OUTLINE OF MENTOR TRAINING MODULE.....	72
APPENDIX H: INSTITUTIONAL REVIEW BOARD LETTER.....	76

LIST OF TABLES

1. Mentee Outcomes.....	17
2. Gender Distribution of Mentees.....	32
3. Age Distribution of Mentees.....	33
4. Gender Distribution of Parents/Guardians.....	33
5. Pre-Study BRIC Scores.....	34
6. Post-Study BRIC Scores.....	35
7. Units of Mentoring Received.....	35
8. Pre- and Post-Study Child BRIC Scores.....	36
9. Statistics for Pre- and Post-Study Child BRIC Scores.....	37
10. Pre- and Post-Study Parent BRIC Scores.....	38
11. Statistics for Pre- and Post- Study Parent BRIC Scores.....	39
12. Pre-Study Child and Parent BRIC Scores.....	40
13. Post-Study Child and Parent BRIC Scores.....	41
14. Statistics for Pre-Study Parent and Child BRIC Scores.....	42
15. Statistics for Post-Study Parent and Child BRIC Scores.....	44

CHAPTER 1: INTRODUCTION

Thirty-one million youth were actively under the jurisdiction of juvenile courts nationally in 2000. Of those, 80% were between the ages of 10 and 15. The use of out of home placements (e.g., detention centers, rehabilitation facilities, etc.) has increased 34% between 1985 and 2004 (Stahl et al., 2007), creating a situation where public monies are being used to fund costly treatments for youths. The crimes committed by youth bestow lasting effects on the community, such as fear, that change the perceptions of and respect for many American communities. Researchers have pinpointed a variety of factors that have increased the likelihood of a youth being involved in crime, like living in poverty or in a dangerous neighborhood (Ludwig, Laub, & Steinberg, 2000). Researchers have also identified factors for prevention such as positive social support (Bal, Crombez, Van Oost, & Debourdeaudhuij, 2003; Bowen & Chapman, 1996; Furstenberg & Hughes, 1995) and resilience (Dumont & Provost, 1999; Grossman & Tierney, 1998; Luthar, 1991; LoSciuto, Rajala, Townsend, & Taylor, 1996), which can be instilled by a mentoring program. Mentoring is an effective option for the treatment of at-risk youth that is becoming more widely used nationally; research indicates that these relationships are beneficial to the child in a variety of ways (Davidson, Redner, Blakely, Mitchell, & Emshoff, 1987; LoSciuto et al., 1996; Grossman & Tierney, 1998).

A quality mentoring program has many of the characteristics of a quality recreational therapy intervention. Mentoring programs often use recreational pursuits to help the mentee/child achieve functional outcomes such as anger/stress management, leisure education, and self-esteem. Due to these similarities, it is necessary to research the

effectiveness of a mentoring program overall as well as the effectiveness of each component of the program in order to determine whether it would be an appropriate and cost-effective intervention strategy for recreational therapists to utilize in a variety of settings.

Purpose of Study

Given the lack of research on mentoring, the purpose of this study was to determine if gender (whether the mentee and the mentor are of the same gender), amount of mentoring received, and activities used during mentoring positively influenced mentee behavior, as measured by the Behavior Rating Index for Children. Determining the impact of the identified variables could offer guidance in the establishment and implementation of mentoring programs. A conceptual model could then be developed based on the findings to identify factors that had the largest impact on improvements in mentee behavior.

Research Questions

The study was conducted to address three research questions; a brief rationale for each is included.

Research Question 1: Does the number of units of one-on-one mentoring have an impact on mentee behavior, as measured by the BRIC?

While several studies have established that mentoring is an effective intervention (Zimmerman, Bingenheimer, & Notaro, 2002; LoSciuto et al., 1996), research has not conclusively established a quantity at which mentoring becomes effective. Through

logging the units (one unit is equivalent to fifteen minutes) of mentoring received, a correlation could be used to determine if a level of one-on-one mentoring influenced mentee behavior ratings.

Research Question 2: Does gender congruence of mentor/mentees impact mentee behavior, as measured by the BRIC?

Several studies conducted by researchers have had samples that were limited to same gender mentoring relationships (Grossman & Rhodes, 2002; Grossman & Tierney, 1998). While researchers believe this to be the most therapeutic relationship, it was important to also look at mentoring relationships in which the mentor and mentee are of different genders.

Research Question 3: Does activity type during one-on-one mentoring positively influence mentee behavior, as measured by the BRIC?

Although mentoring has been established as an effective treatment, little emphasis had been placed on the type of activities in which the mentors and mentees participate. By charting the activities engaged in by the mentor/mentee pairs, dominant activities could emerge that are more influential to the mentee's behavior.

Limitations

Study measures were based on the services provided at the Henry Fork Service Center. The Center provides a minimal after-school program in which children are able to receive a snack and adult supervision during the afternoon hours. Although the Center provides no structured programming, several factors that emerged that may have limited this study.

Non-Random Subjects

A variety of circumstances made it impossible for children to be randomly chosen for the sample. First, the home environment of the children was a factor; many of the participants were from unstable backgrounds that influenced the amount of time they spent at the Henry Fork Service Center. It was also not uncommon for children to move in and out of the Center's service area several times during the school year; therefore, several children re-enrolled at the Center too late to participate in the study.

The pre-intervention behaviors exhibited by the mentees were also a limitation. Center staff had the authority to suspend children from the program based on their behavior, so a mentee could be suspended for up to two weeks because of aggressive behaviors. Such a suspension would not allow a child to participate in the study, thus excluding children with behavior problems. While the daily attendance at the Center was approximately 50 children, there were only an average of 17 children in attendance on a daily basis who were within the age range for the study; the sample, therefore, was restricted to 11 participants.

Non-Random Mentors

Another limitation to the research was the mentors. Data were collected in the spring because the mentors, students from Ferrum College, had more time to dedicate to mentoring during that semester. As with any volunteer, the mentors could have chosen to no longer be involved in the project. Researchers (DuBois & Neville, 1997) have suggested that college students are not the ideal mentors because of time constraints.

Although the College already had a partnership established with the Center, many prospective mentors chose not to commit due to time constraints. Furthermore, all mentors received training before mentoring began. While all mentors received the training, there was no guarantee mentors would act in accordance with the training, which presented an additional limitation.

Scheduling

Conflicting schedules were also problematic. The Franklin County School System, in which the participants were enrolled, had a different vacation schedule than the College. The Center was not open on vacation days, so the mentees were not available for mentoring at those times. These opposing schedules were also affected by weather conditions; historically the public school system had been more liberal than the College with school closings or cancellations, which became evident during the recruitment process, as the school system was closed for several days.

Delimitations

This research cannot be generalized to any other populations. Therefore, results of this research were limited to the participants at the Henry Fork Service Center.

Assumptions

Certain assumptions were also made in this research. The primary assumption was that mentees and parents would accurately complete the BRIC. Mentees completed the

BRIC with the assistance of the researcher to ensure comprehension. Parents completed the BRIC independently, but the researcher made herself available if needed.

All mentors completed an online training program prior to the study and were required to pass a short examination. Following this training, it was assumed that the mentors would all remain equally engaged and professional for the duration of the mentoring relationship.

Concepts Defined

At-risk youth. Children who are predisposed to academic deficits, social deficits, and/or illicit behavior because of adverse living conditions affecting their overall well-being (Furstenberg & Hughes, 1995). For the purposes of this study, children enrolled at the Henry Fork Service Center's afterschool program were at-risk because of, at minimum, their adverse living conditions (Henry Fork Service Center, 2006).

Behavior Rating Index for Children (BRIC). A 13 item questionnaire with a Likert-type scale which was completed by the parents and mentees to evaluate mentee behavior pre- and post-study (Stiffman, Orme, Evans, Feldman, & Keeney, 1984).

Mentee. A youth who regularly meets with a mentor (Manza & Wiley, 2005). In this case, a mentee was a child between the ages of seven and fifteen who was enrolled at the Henry Fork Service Center and received mentoring by a Ferrum College student between March 9 and April 3, 2009.

Mentor. An individual who is available to serve as a positive influence for the mentee (Manza & Wiley, 2005). In this case, the mentors were students from Ferrum College volunteering to participate in this study.

Mentoring relationship. “A structured and trusting relationship that brings young people together with caring individuals who offer guidance, support, and encouragement aimed at developing the competence and character of the mentee” (Manza & Wiley, 2005, p.9).

Units of mentoring. Time a mentee/child and mentor engage in mentoring; for the purposes of this research, a unit was equivalent to fifteen minutes.

CHAPTER 2: REVIEW OF LITERATURE

Youth crime is a serious issue for the court systems, with thirty-one million youth under the jurisdiction of juvenile courts nationally in 2000 alone (Ludwig et al., 2000). As the problem intensifies, the use of out of home placements increases which places a burden on taxpayers. Researchers have identified factors that encourage delinquency, as well as factors that may prevent delinquent behavior. Social support (Bal et al., 2003; Bowen & Chapman, 1996; Furstenberg & Hughes, 1995) and resilience (Dumont & Provost, 1999; Grossman & Tierney, 1998; LoSciuto et al., 1996; Luthar, 1991) are two of the factors identified for prevention, both of which can be addressed in a mentoring program.

A mentor, an individual older than the youth who is available to serve as a positive example and facilitate change in the youth, may be the key to pacifying his or her involvement in crime. Not only may the presence of a mentor directly benefit youth, but also the larger community (Ludwig et al., 2000). In the sections to come, social learning theory, social support, resilience, and mentoring will be discussed as they pertain to this study.

Social Learning Theory

Social learning theory, also known as social cognitive theory, is based on the concept that individuals are capable of learning simply by observation. These behaviors can be learned from a situation or a person. According to Bandura (1977), social learning theory emphasizes that individuals make decisions based on what he/she observe others

doing because he/she gains reinforcement from imitating the actions of another person or group (Kail & Cavanaugh, 2004).

Bandura identified four conditions that should be present in order for an individual to successfully learn and model a new behavior. The first is “attention,” simply if the individual does not pay attention, he/she will not learn the behavior. Second is “retention” which refers to the individual having the cognitive skills to remember the behavior after observation. “Motor reproduction” is also required; the individual must have the physical capability to carry out the behavior, and lastly, the individual must have the “motivation” to exhibit the behavior. This motivation can be internal or external and the consequences need not be immediate (Ormrod, 1999). In relation to the mentoring phenomena, it is possible that the mentee will learn new and positive behaviors from the mentor.

Social Support

Bowen and Chapman (1996) defined social support as a person’s social environment that includes neighbors, teachers, parents, and friends. While the majority of a youth’s social support is believed to come from parents, when that is lacking it is necessary for the youth to find support elsewhere (Furstenberg & Hughes, 1995; Furukawa, I. Sarason, & B. Sarason, 1998). Positive social support, such as that from a mentor, can greatly benefit the youth as well as the community-at-large (Ludwig et al., 2000).

Furstenberg and Hughes (1995) researched the effect that social capital has on youth development. Social capital was defined as “the complex and variegated social mechanisms that parents garner to advance their children’s chances of success” (Furstenberg & Hughes, 1995, p. 581). The actual study was part of a larger 20 year project, but this research focused on the youth (n = 252) who were born to school-aged mothers in the initial part of the study. Using interviews with the youth and open-ended questionnaires, the authors assessed the amount of social capital given to the youths by their mothers and how that contributed to the youths’ success. Seven indicators were used to define success: (a) a high school diploma/a passing grade on the General Educational Development (GED) exam; (b) enrollment in college; (c) three months or more of employment experience; (d) financial stability; (e) for females, reaching the age of 19 before becoming pregnant; (f) for males, no serious criminal activity (not arrested or admitted engagement in criminal activity in the past year); and (g) mental stability. These seven factors were linked to both social capital and socioeconomic success, and the authors believe that these successes were linked to the social bonding training their mothers were given during the initial study 20 years prior (Furstenberg & Hughes, 1995).

Furukawa et al. (1998) reported the importance of social support for youth who were placed in unfamiliar environments. The study of Japanese exchange students (n = 242) assessed a youth’s perceived level of social support in their home country and related it to his or her mental health during an exchange period. The students with a perceived level of strong social support reported significantly fewer psychological

problems in their host country than the students who did not have a high level of social support.

Social support was more influential on youth than “specific risk factors or stressor life events” (Bowen & Chapman, 1996, pp. 661-662). The researchers focused on middle and high school students (n = 207) who were defined as at-risk by school or social services personnel and who participated in the Community in Schools (CIS) program. CIS is an intervention program that includes in-school activities as well as community supports for parents and students. Results indicated that social support, in the form of a mentor, significantly minimized the effects of a dangerous neighborhood and increased the youth’s ability to adapt to a variety of circumstances.

Bal et al. (2003) surveyed youth (n = 820) regarding their perceived level of social support, traumatic life events, and behavioral problems. In addition, the socioeconomic status of their families was also assessed. The researchers reported that if the youth felt social support was available; they were 37.2% less likely to have symptoms of trauma.

Resilience

Resilience is defined as “the capacity of individuals to cope successfully with significant change, adversity or risk. This capacity can change over time and may be enhanced by protective factors within the person and the environment” (Lee & Cranford, 2008, p. 213). Researchers have indicated that resilience is perhaps the most important factor that facilitates growth in youth who were brought up in adverse circumstances

(Dumont & Provost, 1999; Luthar, 1991). With that said, research has focused on factors that facilitate and those that extinguish resilience in youth.

Luthar (1991) investigated the psychopathology related to resilient youth. She paid ninth grade students (n = 144) who were labeled “at-risk” in an inner city school to complete a questionnaire that evaluated their stress, competence, and internalizing symptoms. In addition to the questionnaires, grade reports, teacher ratings, and peer ratings were assessed. Her findings indicated that a youth’s ability to socially express himself or herself, develop a healthy ego, experience negative life events, and retain an internal locus of control were protective factors that favored resilience. On the other hand, positive life events and above average intelligence rendered a youth more vulnerable. Although negative life events may encourage resilience, they also increased the likelihood that a youth will be depressed or anxious.

Dumont and Provost (1999) compiled the results of questionnaires completed by eighth and eleventh grade students (n = 297) regarding their perceived level of depression and frequency of daily hassles. Four categories of youth were developed from their findings: (a) 28% of respondents were well-adjusted (those with low levels of depression and daily hassles), (b) 16% of respondents were resilient (those with low levels of depression, but high levels of daily hassles), (c) 11% of respondents were vulnerable (those with high levels of both depression and daily hassles), and (d) 45% of respondents were non-adjusted (those with high levels of depression and low levels of daily hassles). Researchers claimed that self-esteem was the most successful predictor of category

placement, and the resilient youth was the one who was confident enough to encounter daily hassles and still not become depressed.

Mentoring

Mentoring research questions its efficacy, as well as identifying factors for its success. Before benefits can be addressed, however, characteristics of mentoring relationships must be understood. This section will outline the characteristics of mentoring relationships, perceived benefits of mentoring, as well as factors that encourage success and those that lead to premature relationship cessation.

Characteristics of Mentoring Relationships

In 2001, Lucas tracked the progress of female mentoring pairs ($n = 10$) at six different afterschool programs in New England. The mentors met with sixth grade females for an hour once weekly for one academic year. After analyzing qualitative data from interviews, Lucas reported seven common themes: (a) two unique individuals who met for one purpose, (b) the mentor tried to recreate the experience they had with a mentor previously, (c) the mentor was often caught in a role between authority figure and friend, (d) mentoring was most successful when the mentee was comfortable in the environment, (e) collaborative tasks encouraged relationship closeness in the form of a common experience, (f) mentor often tried to expand their role by giving gifts to the mentee, and (g) the mentor was shocked by the mentee's upbringing.

Dallos and Comley-Ross (2005) investigated the relationship meanings anticipated by mentors and mentees. Interviews were conducted with 13-17 year old youth (n = 6) referred to a mentoring program by social services. Research was supplemented by facilitated group discussions with the mentors and other agency support staff. The qualitative research analyzed the themes of all the conversations and five main themes emerged: (a) a good object/mentor, (b) good relationship, (c) attachment, (d) building trust, and (e) facilitating change.

Laursen and Birmingham (2003) interviewed youth (n = 23) in an attempt to identify traits they felt contributed to their mentor being a “caring adult.” The qualitative research was prompted by the findings of previous researchers who suggested a caring relationship could serve as a protective factor for the youth. The researchers identified seven characteristics present in most mentors: trust, attention, empathy, availability, affirmation, respect, and virtue.

Benefits of Mentoring Relationships

Mentoring research focuses heavily on the perceived benefits of mentoring relationships to the mentee. Davidson et al. (1987) researched the effects of community-based diversion programs on male juvenile offenders. The study looked at juvenile offenders (n = 200) and the effects five years with a mentor had on their lives. The mentor met with the mentee in his home and in the community, including recreational facilities. “The results indicated no evidence of differential effectiveness between specific

contents of intervention” (p. 73). The researchers concluded that contact with the mentor, not the activity, had a positive effect on the juvenile.

Slicker and Palmer (1993) studied the effects of a mentoring program on at-risk tenth graders (n = 64). School personnel mentored 32 students, while an equally sized control group was wait-listed during the study. As a criterion for student selection, grade point average was used to identify those students most at-risk for failing or dropping out of school. The Piers-Harris Children’s Self-Concept Scale, grade point average, and school drop-out status were assessed prior to the study, and again after six months. While mentoring was not demonstrated to directly reduce drop-out rates or increase academic achievement, the youth who were mentored did have an improved self-concept at the conclusion of the study.

LoSciuto et al. (1996) evaluated the effectiveness of an intergenerational mentoring program, “Across Ages.” The study included middle schoolers (n = 500) from dangerous neighborhoods enrolled in the program. One-third of the youth received Positive Youth Development curriculum based interventions (lectures, community service, parent workshops, etc.), another third were involved in the interventions and paired with a mentor, and the remaining third were on a wait-list and served as the control group. The youth involved in the mentoring component were paired with older adults (over 55 years of age) with whom they met for four hours a week. Results indicated that youth in the group that received the curriculum and had a mentor: (a) improved their attitudes toward academics and future plans (m = 2.96); (b) were more

knowledgeable about and respected the elderly ($m = 2.50$); (c) were less likely to abuse drugs ($m = .16$); and (d) were more likely to do community service ($m = .54$).

Grossman and Tierney (1998) studied the success of the Big Brothers Big Sisters Program. Mentoring relationships were studied and a control group was created using participants remaining on a waiting list ($n = 1,138$). The youths ranged in age from 11-13 years old and the majority received public assistance. The average mentor was around 30 years old and the majority were college graduates and/or professionals. The results of the eighteen-month study found that the youth who met with their mentors three to four times monthly were less likely to use drugs ($m = 11.47$), inflict physical harm ($m = 2.68$), or skip school ($m = .90$). In addition, they perceived higher levels of scholastic performance ($m = 2.63$) and had better relationships with their families ($m = 70.65$).

Again, using Grossman and Tierney's (1998) data set, Langhout, Rhodes, and Osbourne (2004) evaluated the impact of different levels of mentoring relationships. Telephone interviews were conducted with the mentees in the original study ($n = 1,138$), with questions focusing on the mentor-mentee relationship. Using their responses four categories of mentoring relationships were created based on the amount of activity with the mentor: moderate, unconditionally supportive, active, and low-key. Each of the categories suggested different mentee outcomes:

Table 1

Mentee Outcomes

Moderate	Unconditionally Supportive	Active	Low-Key
increased self-worth	increased alienation	increased emotional	decreased conflict
increased school competence		increased intimacy	decreased inequality
decreased alienation		increased school competence	
decreased inequality			
decreased conflict			

(Langhout et al., 2004, p. 302)

Rhodes, Grossman, and Resch (2000) formulated a conceptual model illustrating the effects of mentoring relationships on youth using a data set collected by Grossman and Tierney (1998). The survey looked at youth ($n = 1,138$) enrolled in the Big Brother Big Sisters program, half of whom were mentored and the other half were on a waiting list. The researchers analyzed the youth prior to treatment and again eighteen months later. Mentored youth had significantly fewer school absences ($t = 3.45$; $p < .01$), improved their relationships with parents ($t = -1.96$; $p < .05$), and were more scholastically competent ($t = -3.18$; $p < .01$). Improvements were also seen in self-worth, school value, scholastic competence, and grades, although they were not statistically significant. In addition, parent-child relationships improved, presumably because there was less stress on the relationship.

Barron-McKeagney, Woody, and D'Souza (2001) surveyed third through sixth grade students and their mothers ($n = 44$ pairs) enrolled in the Family Mentoring

Program. The Family Mentoring Program was designed for youth in underserved neighborhoods and provided mentoring for the youth, workshops for their mothers, and social activities. Surveys were completed pre- and post-intervention and the researchers found that the youth had improved their social skills and decreased inappropriate behaviors. In addition, their mothers reported an improved perception of their youth in cooperation ($t = 2.39, p \leq .05$), and a decrease in assertion ($t = 2.77, p \leq .05$), but no significant differences in responsibility and self control.

Jackson (2002) investigated the effects of a mentoring program on the behavior of young adolescents receiving mentoring. Pairs of mentors and mentees ($N = 13$) that met fifteen hours a week were used in the study and the mentees were rated using the Behavior Assessment System for Children (BASC). Parents reported a decrease in internalizing behavior as well as externalizing behavior, but teachers saw no academic improvements. At baseline, students had an average 7.5 infractions in three months, while post study, the number was reduced to 1.5 with only one of the thirteen children still exhibiting regular behavior problems.

Zimmerman et al. (2002) investigated the benefits of natural mentors, those mentoring relationships that develop without help from an outside agency. Youth with a grade point average below 3.0 and no known disabilities ($n = 770$) were surveyed and 53.8% stated they had a natural mentor; 48% of those natural mentors were non-family members like teachers, coaches, and neighbors. These youth were less likely to smoke marijuana ($m = 3.90$) or be involved in nonviolent ($m = 1.19$) or violent ($m = 1.27$)

delinquency. They were also more likely to have a positive attitude toward school and to choose better friends.

Gur and Miller (2004) assessed the impact of a mentoring program on compliance with other treatments for juvenile offenders. Adolescent males referred for treatment by the judicial system ($n = 79$) were matched based on demographics with a mentor with whom they engaged in counseling, outings, and recreational activities. The boys who met with a mentor at least six times in six months were more likely to remain involved in other interventions than those in the control group.

Whiting and Mallory (2007) used college and nursing students as mentors in their assessment of the benefits of mentoring on high-risk 5th and 6th grade students ($n = 79$). Males in the treatment group exhibited a decrease in anxiety/depression and aggressiveness as well as an increase in social skills and attentiveness, while females only showed improvement in social skills. When a “total score” was calculated, there was an improvement in the treatment group as a whole ($p > .095$) while scores dropped among the students who were not mentored, as judged by the mentors.

The majority of mentoring literature verifies that it is beneficial, but there is literature that questions the effectiveness of mentoring. McPartland and Nettles (1991) studied the Project RAISE program, paying particular attention to the mentoring aspect. Seven community partners were each responsible for working with middle schoolers ($n = 80$) who were referred to the program because of low test scores and a high school absence rate. The community partners chose their own plan of action, with three of the

partners choosing a mentoring program and a life skill curriculum. Youth in the RAISE program were more likely to improve their school attendance ($t = -3.04$) and grades ($t = 1.60$) than similar youth not in the program, but their scores and attendance were still below the school district's averages. In addition, mentoring was not identified as a consistent predictor of success; only two of the three top community partner programs included a mentoring component.

Abbott, Meredith, and Self-Kelly (1997) analyzed the effect of mentoring on self-competence, scholastic achievement, emotional and social problems, and parent-child relationships. The study looked at boys 8-14 years old living in single parent homes with no known disabling conditions ($n = 44$). Self-report questionnaires were administered pre- and post-treatment. The researchers found that weekly companionship was not a significant factor because there was no substantial improvement in grades, behavior, or parent-child relationship. Although their hypothesis was not confirmed, the authors suggested that the sample may have been too small.

Ahrens, DuBois, Richardson, Fan, and Lozano (2008) addressed the possible future benefits of having a natural mentor on youth in the foster care setting. Youth in foster care under the age of eighteen ($N = 310$) were included in the study; those who admitted having a natural mentor for at least two years ($N = 160$) were compared to 150 youth in the system without a mentor. The findings suggested that mentored youth were likely to have better outcomes as evidenced by being less likely to have suicidal

tendencies ($p = 0.14$), a diagnosis of a sexually transmitted disease ($p = 0.07$), or report abusive behavior inflicted on others ($p = .04$).

Factors for Success

While research on the benefits of mentoring is helpful, it is necessary to pinpoint factors that facilitate the most effective mentoring relationship. DuBois and Neville (1997) contrasted mentors from a Big Brother Big Sister (BBBS) program with mentors in a service-learning course at a university. Mentors in the BBBS program and their 8-16 years old mentees ($n = 27$) were surveyed monthly for six months in the form of a mailed questionnaire. In the same study, forty-one undergraduate students enrolled in the service learning course were mentoring 14-19 year olds and completed an in-class survey twelve weeks into their placement. All mentors and mentees were matched by gender. It was concluded that mentors in the BBBS program perceived greater benefits in the relationship (65%) than the undergraduate students (20%). From this, a number of factors were recognized that influence perceived benefits including length of relationship, amount of contact with his/her mentee, and emotional closeness to mentee. Relationship obstacles and contact with staff were determined to negatively impact these relationships. In addition, mentors who used a variety of conversation topics (e.g., behavior, social relationships, casual conversation, sports/athletics, educational, and cultural) with their mentees were most effective.

Rhodes, Reddy, Roffman, and Grossman (2005) developed and evaluated the Youth-Mentor Relationship Questionnaire. The questionnaire, which contained 74 items,

aimed at identifying factors related to mentoring relationship quality, was completed by youth from a Big Brothers Big Sisters Program (N = 347). The participants were ages 5-18 and 40% of them were no longer in active mentoring relationships. Upon analysis and comparison, four factors were identified that accounted for 34% of the variance. The four factors were: “not dissatisfied” (reliability = 0.74), “helped to cope” (reliability = 0.81), “not unhappy” (reliability = 0.85), and “trust not broken” (reliability = 0.81).

Factors for Cessation

Combating premature relationship cessation is also of importance to mentoring organizations. Parra, DuBois, Neville, Pugh-Lilly, and Povinelli (2002) researched factors that influence the length of a mentoring relationship. Using surveys and phone interviews to study gender matched mentoring relationships (n = 50) the researchers were able to identify mentor competence as a primary factor. “Mentors who are more knowledgeable and confident tend to have greater success overcoming difficulties in their relationships with youth, establishing regular patterns of contact, and cultivating close effective ties” (p. 383). Additionally, relationships in which an agency staff member was constantly involved were more likely to fail than the rest, presumably because the mentor called in support staff because he/she did not feel comfortable in the situation.

Grossman and Rhodes (2002) identified factors that led to the premature cessation of mentoring relationships in the Big Brothers Big Sisters Program. The study classified mentoring relationships (n = 400) between a mentor and a 10-16 year old mentee of the same gender; 6% of relationships studied lasted less than three months, 13% lasted three

to six months, 36% lasted six months to one year, and 45% lasted over a year. Factors referred to as part of a “hazard rate” were identified to predict the length of the relationships between mentors and mentees. Mentees who meet the following criteria were less likely to be in a lasting relationship: between 13-16 years old ($c = 0.50$; $p = 0.001$), female ($c = 0.36$; $p = 0.08$), scholastically inept ($c = 0.35$; $p = 0.05$), dependent on adults ($c = 0.67$; $p = 0.002$), psychologically impaired ($c = 2.63$; $p = 0.0001$), or with a history of abuse ($c = 0.42$; $p = 0.03$). Likewise, if the mentors were between the ages of 26-30 and married ($c = 1.05$; $p = 0.01$), they were less likely to continue with their mentee.

Conclusion

Social support, encouragement from another individual, and resilience are essential in order for youth to lead healthy, successful lives. However, many youth are showing deficits and this correlates with juvenile delinquency. Mentoring programs are a way for recreational therapists to provide these necessary elements while utilizing social learning theory, but the programs must be appropriately designed to maximize effectiveness. Programs should focus on personality traits of the mentor and mentee, preconceived notions, relationship type, as well as length of relationship, in order to ensure maximum effectiveness.

CHAPTER 3: RESEARCH METHODS

This chapter explains the research methods that were used during this study including a discussion of the setting, population, variables, data collection, and analysis. Originally, the purpose of the study was to determine if gender (whether the child/mentee and the mentor were of the same gender), amount of mentoring received, and activities used during mentoring positively influenced mentee behavior. This researcher believed that determining the impact of the identified variables would offer guidance for the establishment and implementation of future mentoring programs; a conceptual model may have then been developed based on the findings to pinpoint the factors that would have the largest impact on improvements in mentee behavior. A variety of barriers along the way made it necessary to deviate from this design.

In the initial planning stages for this study, a community service program at Ferrum College agreed to supply the mentors for the research study. This was an ideal situation because the mentors, who would be supplied, were students who were funded through a work study program, and were required to complete nearly twenty hours of community service per week. These mentors would have been most appropriate because, as indicated in the literature, mentors who are externally motivated (often through monetary contributions) have a tendency to be more reliable mentors (LoSciuto et al., 1996). Less than a month prior to the scheduled beginning of the study, this program chose to no longer participate in the research and the researcher had to again attempt to recruit mentors for the study. This researcher sent campus-wide emails to all students at the College in an attempt to identify those individuals who would be willing to

participate. Nearly forty students at the institution agreed to participate in the study, but when the study began, only three of the original mentors followed through with their commitment. Additional mentors were female students from a sorority on campus who were required to participate in this study as part of the sorority's dedication to community service.

Another major setback was the inconsistencies at the research site. During the initial planning, the long time director of the Henry Fork Service Center agreed to participate in the research and this researcher prepared to begin data collection, in early January. Nearly two weeks prior to the scheduled beginning of data collection the director resigned from her position and left the facility without notice. A new director took her place nearly one month later and it was necessary for this researcher to propose the project again to the new director and wait for her approval, as well as approval from the newly formed Board of Directors. Upon the director's approval, this researcher was told that there were nearly fifty children enrolled at the Center who would be eligible to participate in the research; once data collection began it was obvious this was not the case, but this researcher chose to continue with the project.

Due to the sample size being much smaller than anticipated, it was not possible to analyze activity type or effectively analyze units of mentoring, as enough units would not be accrued during the research period. It was also impossible to analyze the impact of gender effectively as all mentors were female. Because of these setbacks, this researcher chose to focus analysis on a much broader question: Does a mentoring program influence a change in child/mentee behavior? With that said, the purpose of this study was to first

determine if mentoring influenced mentee behavior as measured by the Behavior Rating Index for Children (BRIC). Secondly, the revised study tested if the child and parent behavior ratings, as measured by the BRIC, pre- and post-study were congruent. In the sections to come this researcher will outline the key variables and revised research questions for this study.

Setting & Population

This study was conducted in Franklin County, Virginia which is home to approximately 50,000 residents (Franklin County Quick Facts, 2008), located in the southwestern part of Virginia. The county's economy was depressed. The average household income is \$10,000 less than the state average, and more than 10% of residents are living below poverty, based on United States Census standards (Franklin County Quick Facts, 2008). More specifically, the mentees for this study were youth who resided in the southern portion of the county.

The southern section of the county hosted the Henry Fork Service Center, which serves as a refuge for the children in the community. The Center ran a preschool program as well as an afterschool program for children ages five to eighteen. The approximately 30 children who attended daily arrived at the Center around 3:00 pm and were provided with a snack and a safe environment, but little structured programming until they departed at 5:30 pm (Henry Fork Service Center, 2006). Enrollment is based on residency; children reside in the Doe Run area of the county, the poorest section of the county. Twenty-nine percent of Doe Run's residents live below poverty (based on national averages) and 63% of the children was eligible for free/reduced lunch (Public

School Review, 2009; Rocky Mount, 1999). Only children from the afterschool program between the ages of seven and fifteen were included in the study.

Ferrum College is also located in the county and is a small private institution with approximately 1,000 students. Mentors were students living the College's motto of "Not Self, But Others" by volunteering at the Center (About Our College, 2006). Many of the mentors were recruited from Big Buddy/Little Buddy, a campus organization that partnered with the Center regularly. The Big Buddy/Little Buddy program was comprised of approximately twenty students who planned two activities a month for the children at the Center. In addition, several of these students volunteered as mentors at the Center during the week prior to the study. All mentors completed an online mentor training program and gave written consent to the researcher prior to beginning mentorship (See Appendix A). See Appendix B for an outline of the mentoring program, which was effective practices identified by the National Mentoring Partnership (Findley & Townsend, 1998).

All youth who attended the Henry Fork Service Center's afterschool program who were between the ages of seven and fifteen were invited to participate in the study. Necessary paperwork for participation, including child assent, parental consent, and a description of the project, were provided in the introductory packet given to all youth within that age range who attended the facility (See Appendices C & D). Upon receiving consent from the parents and assent from the youth (now referred to as mentees), mentors began interacting with mentees at least twice a week.

Key Variables

The primary variable being addressed was the behavior rating of the mentee. There may be variance between the pre- and post-behavior ratings from the child and/or parent, variance between the parent and child behavior rating scores pre- and/or post-, and variance between the scores for individual questions. Mentee behavior was assessed pre-treatment and post-treatment using the Behavior Rating Index for Children (BRIC) (See Appendix F). The BRIC was designed to quantify the severity of problem behaviors in children ages 7-15 years of age. The 13 item questionnaire assessed how often the child engaged in certain activities on a scale of 1-5, “5” being all or most of the time and “1” being rarely or never. The questions asked how often the child:

1. Feels happy or relaxed
2. Hides his/her thoughts from other people
3. Says or does really strange things
4. Doesn't pay attention when he/she should
5. Quits a job or task without finishing
6. Gets along well with other people
7. Hits, pushes, or hurts others
8. Gets along poorly with others
9. Gets very upset
10. Compliments or helps someone
11. Feels sick
12. Cheats
13. Loses his/her temper.

Questions 1, 6, and 10 were included to give the assessment a more positive tone and detect extreme responses; the three questions were not used in the calculation of the total score. The total score was calculated using the formula $S = (Y-N) (100) / 4N$, where “Y” was the raw score and “N” was the number of questions completed (Fischer &

Corcoran, 2007). This formula created a possible range of 0 - 100; children with scores above 30 were at risk for having a “clinically significant behavior disorder” (Stiffman, et al., 1984, p. 89) and should be referred for more elaborate testing.

The BRIC has been tested to establish its validity, consistency, and reliability. The BRIC’s concurrent validity was .65 ($p < .001$) and had construct validity ($r = .76$, $p < .001$). For internal consistency, parents had an alpha of .81 and children had an alpha of .80. The results for reliability were somewhat skewed. Parents had a test-retest reliability of .72 ($p < .0001$), while children (ages 7-15) had a lower rate of .50. Reliability, however, did rise to .58 when only children over the age of twelve were included, providing evidence that younger children may not be able to accurately gauge their behavior. However, the BRIC, the thirteen item questionnaire, has been compared to the 118-item Child Behavior Checklist and the scores correlated to .76 ($p < .001$) (Fischer & Corcoran, 2007).

This questionnaire was chosen for several reasons. For this study, the BRIC was completed by the mentees as well as the mentee’s parent/guardian; therefore, both respondents were answering the same questions. The BRIC addressed important issues without being time consuming or difficult to understand, and required only three minutes to complete (Stiffman et al., 1984). Finally, many of the parents who were involved in the study had limited literacy and the BRIC scale was most easily understood.

The other primary variable in this study were units of mentoring. A unit of mentoring was defined as the time a child/mentee and mentor spend engaged in

mentoring. For the purposes of this study a unit was equivalent to fifteen minutes, as the children/mentees and the mentors may arrive/depart from the Center at different times.

Research Questions

The revised effort attempted to address three alternate research questions as follows:

1. Does a planned mentoring program effect a change in mentee behavior from the child's perspective, as measured by the BRIC?
2. Does a planned mentoring program effect a change in mentee behavior from the parent or guardian's perspective, as measured by the BRIC?
3. Is there a difference between parent and child ratings of mentee behavior following a planned mentoring program, as measured by the BRIC?

All research questions were addressed using the BRIC completed by the mentees and parents pre- and post-study. The BRIC was completed within one week prior to the beginning of the study by the parents at the same time parental consent was obtained. On the first day of mentoring, the researcher assisted each child in completing the BRIC. After four weeks in the mentoring program, the parents were again contacted to complete the BRIC and the children were again assisted by the researcher to complete the tool a final time.

Summary of Methods

The mentoring relationship consisted of children enrolled at the Henry Fork Service Center (HFSC) and undergraduate students at Ferrum College. The mentors, students from the College, were recruited using on campus advertisements as well as recommendations from faculty and student organizations. Upon recruitment, mentors completed a training module and a short quiz; this information was presented using the ANGEL™ Learning Management Suite, an online program employed by the college.

The Board of Directors at the HFSC was in support of the project and the children were invited to participate via a letter sent home to their parents/guardians. The researcher made herself available to the parents/guardians to answer questions. If a child assented and the parent/guardian consented, the child was enrolled in the study and the parent was asked to complete the preliminary BRIC questionnaire. Parents were contacted three times to get an acceptable return rate; all parents returned the initial BRIC. Upon return of the BRIC, children were introduced to the mentors participating in the study and mentoring began. The researcher assisted the mentee in completing the BRIC. Mentees were then assigned an identification code to ensure anonymity of all mentee information, as the name of the child was removed. Mentoring occurred during after-school hours (with the exception of weather related school closings and holidays). Upon completion of the four-week mentoring program, the parents and mentees completed the BRIC questionnaire a second time.

CHAPTER 4: RESULTS

The revised purpose of the study was to determine if mentoring influenced mentee behavior, as measured by the Behavior Rating Index for Children (BRIC). Secondly, the study tested if the child and parent BRIC scores pre- and post-study were congruent. The results section will provide descriptive statistics of the mentees and parents followed by an analysis of each research question.

Sample

Approximately 20 children between the ages of 8-13 were invited to participate in the research; 11 agreed to participate. The researcher obtained parental consent from each mentee's parent or guardian before getting assent from the mentee. Of the eleven enrolled in the study, eight were female and three were male (See Table 2); these numbers are proportional to the gender distribution at the Henry Fork Service Center. Participants in this study were between 8 and 13-years-old. The average age of the participants was 10.09 years old (See Table 3.) The gender of the parents was also collected using the parental consent form; only one parent was a male. (See Table 4.)

Table 2
Gender Distribution of Mentees

Gender	Total
Male	3 (27.3%)
Female	8 (72.7%)
Total	11 (100%)

Table 3
Age Distribution of Mentees

Age	Total
8 years	1 (9%)
9 years	4 (37%)
10 years	2 (18%)
11 years	2 (18%)
12 years	1 (9%)
13 years	1 (9%)
Total Mean	10.09

Table 4
Gender Distribution of Parents/Guardians

Gender	Total
Male	1 (9.1%)
Female	10 (90.9%)
Total	11 (100%)

Pre-Study Descriptives: Behavior Rating Index for Children (BRIC)

Prior to the study, all mentees were asked to complete the BRIC with assistance available from the researcher. Scores ranged from 12.50-72.50 (mean = 36.81). The parents also completed the BRIC prior to the study; all eleven parents completed it with scores ranging from 0-55 (mean = 25.75) (See Table 5).

Table 5

Pre-Study BRIC Scores

	Child/Mentee	Parent
N Valid	11	11
Missing	0	0
Mean	36.81	25.90
Median	40.00	22.50
Mode	40.00	20.00
Std. Deviation	17.75	15.09
Range	12.50- 72.50	0-55.00

Note. The scores on the BRIC range from 0-100 and children who achieve a score over 30 should be referred for more elaborate testing, as there is a greater possibility they possess a clinically significant behavioral disorder (Stiffman, et al., 1984).

Post-Study Descriptive Statistics

The mentees completed the BRIC, again with the assistance of the researcher, at the conclusion of the study; ten children completed it with scores ranging from 12.50-52.50 (mean = 31.75). During the last week of the study parents were again contacted to complete the BRIC. Eight parents returned the BRIC as requested, three were not returned. Scores ranged from 5-37.50, with a mean of 18.43 (See Table 6). Additionally, information was collected regarding the amount of mentoring received by each mentee via the mentoring log (Table 7). On average, each mentee received 12.45 units of the mentoring over the four week period, which is equivalent to about three hours of mentoring. The range, however, was 1-36 units.

Table 6
Post-Study BRIC Scores

	Child/Mentee	Parent
N Valid	10	8
Missing	1	3
Mean	31.75	18.43
Median	33.75	17.50
Mode	12.50	17.50
Std. Deviation	13.17	10.25
Range	12.50-52.50	5-37.50

Table 7
Units of Mentoring Received

N Valid	11
Missing	0
Mean	12.4545
Median	11.0000
Std. Deviation	10.03358

Note. A unit of mentoring is equivalent to fifteen minutes.

Wilcoxon Analysis

After data were collected, the researcher analyzed the pre- and post-BRIC scores of the parents and mentees by question using descriptive statistics and a Wilcoxon Signed Rank Test. Significance was determined by running the test, excluding cases list wise. The following sections reveal the findings for each research question.

Research Question 1: Does mentoring significantly predict a change in mentee behavior from the child's perspective, as measured by the BRIC?

A Wilcoxon Signed Ranks Test was conducted to compare the differences between the child's pre and post-mentoring BRIC scores. All assumptions of symmetrical data were not met. The mean rank for positive comparisons was 3.25 and the mean rank for negative comparisons was 6.40. The results indicated that the rank comparisons were not significantly different ($p = .258$), although the scores did change in a positive direction (See Table 8).

Table 8
Pre- and Post-Study Child BRIC Scores

	Pre-Study	Post- Study
Mean	38.00	31.75
Standard Deviation	18.24	13.17
	Asymp. Sig (2-tailed)	.25

A Wilcoxon Signed Ranks Test was conducted for each question in order to compare the differences between the pre- and post-mentoring child BRIC scores by question. The mean ranks for positive and negative comparisons are included in Table 9. The results indicated that the rank comparisons were not significantly different, with the exception of questions three and seven. Children reported that they were less likely to engage in strange behaviors ($p = .031$) or become physically aggressive ($p = .041$) post-

mentoring. While only questions three and seven were significant, all scores improved (See Table 9).

Table 9

Statistics for Pre- and Post-Study Child BRIC Scores

	Pre M	Post M	Pre SD	Post SD	Negative M Rank	Positive M Rank	Asymp. Sig (2-tailed)
2. How often do you hide your thoughts from others?	3.10	3.00	1.663	1.247	4.67	5.67	.493
3. How often do you say or do really strange things?	2.70	1.70	1.418	.674	4.71	3.00	.031
4. How often do you not pay attention when you should?	2.80	2.70	1.619	1.494	2.00	2.00	.564
5. How often do you quit a job or task without finishing it?	2.10	*1.60	.994	*.843	3.13	2.50	.157
7. How often do you hit, push, or hurt someone?	2.70	*1.80	1.702	*1.22	3.00	.00	.041
8. How often do you get along poorly with other people?	2.10	1.90	1.100	1.100	4.00	3.00	.739
9. How often do you get very upset?	3.00	3.30	1.154	1.159	3.00	4.75	.380
11. How often do you feel sick?	*2.00	2.40	*.666	1.173	3.00	3.75	.330
12. How often do you cheat?	*1.30	1.10	*.948	.316	1.00	.00	.317
13. How often do you lose your temper?	3.40	3.20	1.577	1.549	2.50	2.50	.317

Note. All assumptions of symmetrical data were met, except for the responses denoted with an asterisk.

Research Question 2: Does mentoring significantly predict a change in mentee behavior from the parent or guardian's perspective, as measured by the BRIC?

A Wilcoxon Signed Ranks Test was conducted to compare the differences between the parent's pre and post-mentoring BRIC scores. All assumptions of symmetrical data were not met. The mean rank for positive comparisons was 2.50 and the

mean rank for negative comparisons was 3.13. The results indicated that the rank comparisons were not significantly different ($p = .176$), although the scores, on average, did improve post-study. (See Table 10.)

Table 10
Pre- and Post-Study Parent BRIC Scores

	Pre-Study	Post- Study
Mean	22.8125	18.4375
Standard Deviation	13.45877	10.25892
	Asymp. Sig (2-tailed)	.176

A Wilcoxon Signed Ranks Test was conducted for each question in order to compare the differences between the pre and post-mentoring parent BRIC scores. All assumptions of symmetrical data were met, except for the responses denoted with an asterisk in the Table 11. The mean ranks for positive and negative comparisons are also included in Table 11. The results indicated that the rank comparisons were not significantly different (See Table 11).

Table 11

Statistics for Pre and Post-Study Parent BRIC Scores

	Pre M	Post M	Pre SD	Post SD	Negative M Rank	Positive M Rank	Asymp. Sig (2- tailed)
2. How often does your child hide his/her thoughts from others?	3.000	2.875	1.195	1.1259	2.00	4.00	.713
3. How often does your child say or do really strange things?	1.500	1.625	.925	.9161	.00	1.00	.317
4. How often does your child not pay attention when he/she should?	2.875	*2.250	1.457	*.8864	2.83	1.50	.197
5. How often does your child quit a job or task without finishing it?	1.875	1.875	1.246	.9910	1.50	1.50	1.000
7. How often does your child hit, push, or hurt someone?	2.000	*1.375	1.414	*.7440	1.50	.00	.180
8. How often does your child get along poorly with other people?	*1.250	*1.250	*.707	*.3535	1.00	2.00	.655
9. How often does your child get very upset?	2.000	2.000	*.925	1.1952	1.50	1.50	1.000
11. How often does your child feel sick?	*1.625	1.500	*.744	.5345	3.00	2.00	.705
12. How often does your child cheat?	*1.000	1.000	*.000	.0000	.00	.00	1.000
13. How often does your child lose his/her temper?	*2.000	1.714	*1.527	.9511	1.00	.00	.317

Note. All assumptions of symmetrical data were met, except for the responses denoted with an asterisk.

Research Question 3: Do parents and children have significantly different perceptions of child behavior, as measured by the BRIC?

A Wilcoxon Signed Rank Test was utilized to determine if there was a significant difference between mentee and parent scores pre- and post-test as a whole (Tables 12 and 13), and per individual question (Tables 14-15). Questions 1, 6, and 10 were removed prior to data analysis as they were only included in the survey to improve the tone (Stiffman et al., 1984).

A Wilcoxon Signed Ranks Test was conducted to compare the differences between the pre-mentoring child and parent BRIC scores. All assumptions of symmetrical data were met. The mean rank for positive comparisons was 5.92 and the mean rank for negative comparisons was 3.17. The results indicated that the rank comparisons were not significantly different ($p = .123$; See Table 12).

Table 12

Pre-Study Child and Parent BRIC Scores

	Child	Parent
Mean	25.9091	36.8182
Standard Deviation	15.09440	17.75144
	Asymp. Sig (2-tailed)	.123

A Wilcoxon Signed Ranks Test was also conducted to compare the differences between the post-mentoring child and parent BRIC scores. All assumptions of symmetrical data were met. The mean rank for positive comparisons was 4.13 and the mean rank for negative comparisons was 2.25. The results indicated that the rank comparisons were not significantly different ($p = .207$; See Table 13).

Table 13

Post-Study Child and Parent BRIC Scores

	Child	Parent
Mean	28.7500	18.4375
Standard Deviation	13.09307	10.25892
	Asymp. Sig (2-tailed)	.207

A Wilcoxon Signed Ranks Test was conducted for each question in order to compare the differences between the pre-mentoring parent and child BRIC scores. All assumptions of symmetrical data were met, except for the responses denoted with an asterisk in the Table 14. The mean ranks for positive and negative comparisons are also included in the table. The results indicated that the rank comparisons were not significantly different, with the exception of question 13 ($p = .028$). Parents reported that their child lost his/her temper less often than the child reported (See Table 14).

Table 14

Statistics for Pre-Study Parent and Child BRIC Scores

	Parent M	Mentee M	Parent SD	Mentee SD	Negative M Rank	Positive M Rank	Asymp. Sig (2- tailed)
2. How often does your child hide his/her thoughts from others?	2.909	3.272	1.221	1.678	3.90	4.25	.340
3. How often does your child say or do really strange things?	2.000	2.727	1.341	1.348	4.25	2.00	.168
4. How often does your child not pay attention when he/she should?	3.090	2.636	1.300	1.629	2.83	4.88	.347
5. How often does your child quit a job or task without finishing it?	2.363	2.000	1.433	1.000	3.50	3.50	.458
7. How often does your child hit, push, or hurt someone?	1.818	2.545	1.250	1.694	4.40	3.00	.161
8. How often does your child get along poorly with other people?	1.363	2.090	.674	1.044	3.80	2.00	.071
9. How often does your child get very upset?	2.090	2.909	1.044	1.136	4.67	4.00	.156
11. How often does your child feel sick?	*1.727	*2.000	*1.009	*.632	4.00	6.00	.366
12. How often does your child cheat?	*1.000	*1.272	*.000	*.904	1.00	.00	.317
13. How often does your child lose his/her temper?	*2.000	3.272	*1.264	1.555	4.79	2.50	.028

Note. All assumptions of symmetrical data were met, except for the responses denoted with an asterisk.

A Wilcoxon Signed Ranks Test was conducted for each question to compare the differences between the post-mentoring parent and child BRIC scores. All assumptions of symmetrical data were met, except for the responses denoted with an asterisk in the Table 15. The mean ranks for positive and negative comparisons are included in Table 15. The results indicated that the rank comparisons were not significantly different (See Table 15).

Table 15

Statistics for Post-Study Parent and Child BRIC Scores

	Parent M	Mentee M	Parent SD	Mentee SD	Negative M Rank	Positive M Rank	Asymp. Sig (2- tailed)
2. How often does your child hide his/her thoughts from others?	*2.875	2.875	*1.125	1.356	2.50	3.75	1.000
3. How often does your child say or do really strange things?	1.625	1.625	.916	.744	3.50	3.50	1.000
4. How often does your child not pay attention when he/she should?	*2.250	2.750	*.886	1.488	3.67	2.00	.336
5. How often does your child quit a job or task without finishing it?	1.875	*1.500	.991	*.755	.00	2.00	.083
7. How often does your child hit, push, or hurt someone?	*1.375	*1.875	*.744	*1.356	2.67	2.00	.257
8. How often does your child get along poorly with other people?	*1.125	1.750	*.353	.886	3.25	2.00	.129
9. How often does your child get very upset?	2.000	3.000	1.195	1.069	5.40	3.00	.196
11. How often does your child feel sick?	1.500	2.125	.534	1.125	2.00	3.25	.129
12. How often does your child cheat?	1.000	1.125	.000	.353	1.00	.00	.317
13. How often does your child lose his/her temper?	1.714	3.142	.951	1.463	2.00	3.80	.072

Note. All assumptions of symmetrical data were met, except for the responses denoted with an asterisk.

Summary

Mentoring programs are designed to provide youth with positive social support to improve the child's quality of life. This research focused on improving the behavior of the mentee through a planned mentoring program. After collecting data from a mentoring program for four weeks, the impact of a planned mentoring program on the behavior ratings of children was determined. The mentees and parents did not report a statistically significant change in behavior, but scores did improve in a positive direction. There was a statistically significant change, however, in how often the child engaged in strange behavior or became physically aggressive post-mentoring, according to the mentee's perceptions.

This research also provided an opportunity to test the congruence of parental and child ratings of behavior as a result of participation in a planned mentoring program. Overall, there was no significant difference between child and parent behavior ratings, pre- or post-study. The only exception was in parent and child pre-mentoring ratings of how often the child lost his/her temper; in this case children reported losing their temper more often than the parent reported.

CHAPTER 5: CONCLUSIONS

This chapter provides conclusions based upon the results discussed in the previous chapter, and possible implications for mentoring programs and the field of recreational therapy. The discussion segment of this chapter offers a summary of the research as well as implications for future researchers. The recommendations segment of this chapter offers practitioners and researchers thoughts for future research.

The revised purpose of this study was to determine if mentoring would influence mentee behavior, as measured by the Behavior Rating Index for Children (BRIC). Secondly, the study tested if child and parent BRIC scores pre- and post-study were congruent. Participants for this study were children ages eight to thirteen who were enrolled at the Henry Fork Service Center, and their parents. The children (mentees) engaged in mentoring with students from Ferrum College for four weeks.

Limitations

Although several limitations were discussed in earlier chapters, additional limitations arose during the study. These limitations included sample size, completion of consent and assent forms, parental language barriers, and potential survey inaccuracy.

The largest limitation to this study was the sample size. Although discussed earlier, it is important to recall that both the children and mentors were recruited at a much smaller level than originally anticipated. There was little this researcher could have done about the small enrollment numbers of the children, as the Center's daily attendance

was significantly lower than originally projected. In addition, this researcher had limited resources from which to recruit mentors, as the college and the surrounding community is very small.

Several children were not enrolled in the study because the parental consent form was not returned to the researcher. These forms may not have been returned for a variety of reasons including the child did not give the form to his/her parent or the parent chose not to have their child participate. In some instances, this researcher believes the forms were not returned because of a language barrier. According to U.S. Census data reports, 6.8% of the county's population is Hispanic (Franklin County Quick Facts, 2008), but this researcher found that a much larger portion of the parents contacted were of Hispanic descent and did not speak English. This limitation resulted in a number of the parents not completing the necessary consent, assent, or BRIC survey, or completing them incorrectly, further limiting the size of the sample.

In addition to the potentially incorrect responses given by those parents who did not speak English, there was an additional risk that parents did not accurately complete the survey. There were instances in the surveys where the parents gave their children the maximum or minimum score and such results were sharply contrasted by the child's reporting. The researcher suspects this could be due to lack of concern or poor education on behalf of the parents. Despite the concern, these data was included in analysis.

Once the study began, other limitations became apparent. For example, several of the youth were only involved in a school sponsored tutoring program two days a week.

This limited the amount of mentoring the subjects were able to receive and could have contributed to any change (or lack thereof) in behavior.

The use of volunteer mentors also proved to be a limitation to this study. Two of the mentors chose not to fulfill their obligations and complete the study, limiting the amount of mentoring hours received by the mentees. Other mentors completed the mentoring log incorrectly, forcing the researcher to follow up with the mentors after the fact, potentially impacting the accuracy of the information.

Research Questions and Implications

Based on the barriers encountered, the revised purpose of the study was to first determine if mentoring influenced mentee behavior, as measured by the Behavior Rating Index for Children (BRIC). Secondly, the study tested if the child and parent behavior ratings, as measured by the BRIC, pre- and post-study were congruent. The researcher asked the following questions:

Research Question 1: Does a planned mentoring program affect a change in mentee behavior from the child's perspective, as measured by the BRIC?

The results indicated that a planned mentoring program did not have a statistically significant effect on child behavior, in relation to the overall BRIC scores or individual survey items, with the exceptions of questions three and seven which dealt with strange behaviors and physical aggression, respectively. This research indicates that mentoring may not effectively illicit a statistically significant change in the child's overall behavior,

from the perception of the child, but does illicit a decrease in reported strange behavior or physical aggression towards peers. However, 8 of 10 pre-post responses had a positive directional change.

Research Question 2: Does a planned mentoring program effect a change in mentee behavior from the parent or guardian's perspective, as measured by the BRIC?

The results indicate that there is no statistically significant change in parent perceptions of child behavior. While the findings were not significant, on average parent perceptions of child behavior did improve pre- and post-study. Given the limitations of this study, it is difficult to speculate why this trend existed. It can be noted that several potential post-test responses had perfect scores.

Research Question 3: Is there a difference between parent and child ratings of mentee behavior following a planned mentoring program, as measured by the BRIC?

The results indicated that parents and children did not have statistically significant different behavior ratings of child behavior, as reported by the BRIC, with the exception of one item related to temper. On average, parents reported their child lost his/her temper less than the child reported.

Implications for Recreational Therapy Practice

Due to the pre-experimental nature of this research, there are few implications for recreational therapy practice. The results, however, may offer some potential for future investigation.

Recreational therapists may consider using the Behavior Rating Index for Children as an assessment tool to use with children and parents alike. While the results cannot be generalized, it appears that parents and children generally have similar ratings of child behavior so this tool could be useful for practitioners when assessing the behavior of children and adolescents.

There are a variety of implications this research could have on the field of recreational therapy, once the research has been more refined. The main potential future implication of this research is the inclusion of mentoring as an intervention into programs. If a mentoring program can be refined and is able to produce statistically significant improvements in child behavior, it could be integrated into recreational therapy practice, especially in those programs that target children and adolescents with emotional/behavioral disorders or self-esteem deficits. A quality mentoring program could be integrated into a variety of programs and settings including long- and short-term out-of-home placements, day treatment, intensive in-home services, or could even be used to lengthen the continuum of least restrictive placements to decrease the likelihood of relapse upon the conclusion of more intensive services.

Recommendations

Based on the results of this study, the following recommendations are made.

Researcher presence on site

When conducting research at any site, it is crucial that the researcher be present whenever possible. This researcher found that despite training the mentors to complete

the paperwork, the mentors often completed the paperwork incorrectly, and the researcher had to follow up with the mentors in order to get accurate information. In addition, the presence of the researcher may have facilitated consistency in mentor/mentee relationships, attendance, and activities.

Research agency coordination and commitment

It is critical that whenever researchers require a partnership with another organization that all parties involved be fully invested throughout the entire study. Coordination issues at both the college volunteer program site and the child after-school program site existed. With the advent of personnel changes, it is essential that a consistent and on-site research coordinator remain involved with the agencies. When difficulties emerge with the agency, more timely problem solving can occur. Prior to beginning such a study, it may also have been beneficial to have the agencies sign contracts outlining their responsibilities, just as the mentors did before beginning mentoring.

Communication with parents/guardians

It is imperative that the researcher have a firm understanding of the research population prior to the study. This researcher underestimated the impact of language and education level when communicating with the parents. Many parents did not understand the information presented to them either because of language barriers or inadequate education. Although the documents given to the parents were written on the level of a 13-year old according to the Flesch-Kincaid readability test, several parents did not understand the document and were hesitant to ask for assistance. This problem could be

remedied by simplifying the consent form and/or providing an orientation for the parents. On the other hand, it may also be helpful to have the consent form and BRIC survey translated into the native language of the parent, in this case Spanish or to have a translator available.

The Mentoring Program

When initially developing a mentoring program, it may be beneficial to collaborate with existing programs in the same service area prior to designing a new program. The National Mentoring Project provides a basic outline for starting a mentoring program, but the best practices described are very vague and can be difficult to implement. Because of the vagueness of most mentoring literature, experiencing a program first hand may be most beneficial.

There are also several improvements that can be made to mentoring programs based on these findings. Prior to placing a mentor in a mentoring relationship, it may be beneficial for mentors to receive more systematic training. For the purposes of this study, mentors were asked to complete a training module and a short quiz. Inclusion of more information on mentoring and mentoring best practices should be included to ensure that the mentors are adequately prepared for their placement. By having mentors more prepared, mentors may be more effective in their interactions with the participants. In addition, the use of an on-line training approach may not offer the most effective method for mentor training. Inclusion of both face-to-face and on-line options may better facilitate consistency in service delivery, reporting, and relationship building. There are no published studies that evaluate the use of on-line training of mentors, but researchers

including Davidson et al. (1987), Grossman & Tierney (1998), and Lucas (2001) used the face-to face method.

This research also demonstrates that when using college students as mentors, it is beneficial to choose mentors who are both intrinsically and extrinsically motivated to participate. For example, the mentors who logged the most hours throughout this study were those who were a part of another organization that required a certain number of community service hours to meet the requirements of a scholarship program or a sorority/fraternity. These findings are consistent with the research of DuBois and Neville (1997), who reported that college students do not always make effective mentors unless driven by another source, such as course credit.

Regardless of the make-up of the mentors, in mentoring situations, more units of mentoring should be received before attempting to glean statistical findings. In this study, the average amount of mentoring received was 12.45 units, which equates to just over three hours of mentoring per week for four weeks. In order to increase the likelihood of finding significant results, the units of mentoring received by each child should be increased. This can be accomplished by adding weeks to the study. More units could also be gained if the mentors devoted more time to mentoring each week, adding frequency and intensity to the mentoring approach.

Although mentoring may be a viable way to improve child behavior, it may be worthwhile to investigate the efficacy of other community based programs. Programs such as community support, intensive in-home services, outpatient, and day treatment

may need to be considered where appropriate. Although these programs may differ in structure and intensity, all have the same goal, which is to help the youth remain appropriately engaged in his/her community. This community includes the home, school, offices, stores, and other places in the child's neighborhood that are visited regularly; the child's ability to interact appropriately in this setting is imperative to their success. In other words, all encourage appropriate skills such as community involvement, positive social interactions, and self-esteem.

Final Thoughts

As the use of out-of-home placements continues to rise, it is important to identify community programs that can combat juvenile delinquency and promote healthy development of children at risk of failure. A mentoring program may be a viable intervention option, if structured appropriately, and offered with the right frequency, intensity, and duration. It is also worthwhile to research other community-based programs that may offer more consistency and structure. By identifying viable intervention options within the community, youth can be kept in their homes and can become successful, active participants in their community.

When conducting research, it is also essential that researchers remember to consider the influence "the real world" will play. The bottom line is that when conducting this type of social research, a researcher must rely on assistance from other individuals/agencies at some point. In this instance, the researcher had issues with the reliability of participating agencies as well as with some of the individuals who chose to be mentors which drastically limited the potential impact of the study. When conducting

this type of research, it is imperative that all potential precautions be considered to limit this impact. Such precautions should include utilizing previous research, carefully choosing collaborative agencies, and being in constant communication with all research partners. Despite the inherent risk associated with social research, its role is essential for the advancement of this profession and should be conducted in a manner that is as effective and efficient as possible.

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APPENDIX A: MENTOR AGREEMENT FORM

As a volunteer mentor in the Henry Fork Service Center Mentoring Program, I agree to

- Make a three month commitment to mentoring;
- Attend a training session;
- Be on time for scheduled meetings;
- Notify the program coordinator if I am unable to keep my weekly mentoring requirement of two afternoons (at minimum);
- Engage in the relationship with an open mind;
- Accept assistance from Henry Fork Service Center staff and other mentors as needed;
- Keep discussions with my mentee confidential, unless the child's safety or well-being is at risk or I suspect child abuse;
- Ask program support staff (researcher and assistants) when I need assistance, do not understand something or am having difficulty with my mentoring relationship;
- Notify the program coordinator of any significant change in my mentee; and
- Refrain from contacting or seeing my mentee outside of the established parameters and supervised sites where the program takes place.

If you have any questions or concerns, please feel free to contact Amy Baxter at (757) 621-6966 or by email at asb0103@ecu.edu . You may also contact Dr. Thomas Skalko, faculty supervisor, at (252) 328-0018 or by email at skalkot@ecu.edu. The East Carolina University Institutional Review Board may also be contacted at (252) 744-2914 or by email at umcirb@ecu.edu if you are concerned about how you are being treated.

For the purposes of the research study, I grant my permission for Ms. Amy Baxter to use the mentoring data collected in her research project. I fully understand that the data will be kept completely confidential and will be used only for the purposes of her research study.

Signature

Date

Adapted from The Connecticut Mentoring Partnership, *Business Guide to Youth Mentoring*, and South Windsor Mentoring Program.

APPENDIX B: OUTLINE OF MENTORING ORIENTATION

I: Introduction of Research Project

- A. Goals for orientation
- B. Description of the research study
 - a. Purpose of study
 - b. Tentative mentoring schedule
 - c. Identification of contact persons
- C. Responsibilities of the Mentor

II: Defining the Mentoring Relationship

- A. What is mentoring?
- B. Who are the mentees?
- C. Who are the mentors?
 - a. Best Practices for Mentors
- D. What are the benefits of mentoring relationships?

III: Orientation Wrap-up

- A. Mentors complete “Orientation Quiz”
- B. Mentors review/sign “Mentor Agreement Form”

APPENDIX C: PARENT CONSENT FORM

Dear Parent/Guardian,

I'm presently working on my Masters of Science degree in Recreation Therapy Administration at East Carolina University. As part of my degree requirements, I am planning a research project to take place at the Henry Fork Service Center during the afterschool program. The fundamental goal of this research study is to identify factors in a mentoring relationship that have the greatest effect on child behavior. The factors that will be studied are amount of mentoring received, gender congruence of mentor and mentee, and the type of activities engaged in by the mentoring pair.

As part of this research project, your child is invited to participate in a mentoring program with students from Ferrum College over the next several weeks that will allow me to track the factors of interest. Simply, the activities your child engages in with the college student will be recorded in addition to the factors of age and gender.

As parent/guardian, your assistance will be needed by completing a thirteen question survey before the study and again at the conclusion of the study. This survey will take no more than ten minutes each time. The survey is attached and can be returned with this agreement form.

I am requesting permission from you to allow your child to participate in the mentoring relationship and record his/her information (age, gender, activities engaged in, etc.) for my research study. I am also requesting your assistance in completing a short survey.

Please know that participation is entirely voluntary and your child will not be penalized if you choose not to participate.

If you have any questions or concerns, please feel free to contact me at (757) 621-6966 or by email at asb0103@ecu.edu . You may also contact my faculty supervisor, Dr. Thomas Skalko at (252) 328-0018 or by email at skalkot@ecu.edu. The East Carolina University Institutional Review Board may also be contacted at (252) 744-2914 or by email at umcirb@ecu.edu.

If you permit your child to participate in the study, please return the attached form at your earliest convenience to the Henry Fork Service Center. Thank you for your interest in my research study.

Sincerely,

Amy Baxter

As the parent or guardian of _____,

(write your child's name)

I grant my permission for Ms. Baxter to use my child's information collected during mentoring in her research project regarding mentoring relationships. I fully understand that my child's information will be kept completely confidential and will be used only for the purposes of her research study.

Signature of Parent/Guardian: _____ Date: _____

APPENDIX D: MINOR ASSENT FORM

Title of Research Study: The Effects of a Mentoring Program on the Behavior Rating of Children

Principal Investigator: Amy Baxter

Telephone #: (757) 621-6966

You should ask the study coordinator to explain any words or information that you do not understand.

What is the research study about?

The purpose of this research study is to see if gender, amount of mentoring, and activities engaged in cause changes in mentee behavior.

Who will be in the research study?

This research study will include mentors and mentees. Mentors will be students from Ferrum College who agree to spend time with the children at the Henry Fork Service Center. Mentees are the children at the Henry Fork Service Center enrolled in the afterschool program who are between the ages of seven and fifteen. Parents of mentees will also be involved in the study as they will be asked to complete the Behavior Rating Index for Children (a short survey before the study and at its completion).

What will I be asked to do?

Mentees will be asked to engage in activities (i.e., playing sports, doing homework, etc.) with mentors while at the Henry Fork Service Center.

Where will the research study take place?

The research study will take place during the afterschool program at the Henry Fork Service Center from March 9- April 3, 2009.

How can I participate?

Children can participate as mentees in the study.

What happens if I change my mind about participating?

Participating in this study is your choice. You may stop at any time during the study. No one will be upset with you if you decide not to participate.

Who can answer any questions that I might have later on?

You can talk to Amy Baxter at (757) 621-6966 or asb0103@ecu.edu if you have more questions at any time during the study. You can also call the East Carolina University Institutional Review Board at (252) 744-2914 or umcirb@ecu.edu if you are concerned about how you have been treated in the study.

If I put my name at the end of this form it means I agree to be in this study. I will be given a copy of this form to keep after I sign it and so will my parents.

Print your name _____

Signature _____ Date _____

APPENDIX E: SAMPLE MENTORING LOG

Child: Suzie SampleIdentification Code: 00001Age: 9 years oldGender: Female Male

Date	Mentor	Activity	Time (in units)*
01/01/01	Maggie Mentor	<input type="checkbox"/> Arts and Crafts <input checked="" type="checkbox"/> Mental/Linguistic <input type="checkbox"/> Music/Drama <input type="checkbox"/> Nature/ Outdoor <input type="checkbox"/> Sports/ Competitive <input type="checkbox"/> Other: <hr/>	3 units
01/01/01	Mark Mentor	<input type="checkbox"/> Arts and Crafts <input type="checkbox"/> Mental/Linguistic <input type="checkbox"/> Music/Drama <input type="checkbox"/> Nature/ Outdoor <input checked="" type="checkbox"/> Sports/ Competitive <input type="checkbox"/> Other: <hr/>	2 units
01/02/01	Maggie Mentor	<input type="checkbox"/> Arts and Crafts <input type="checkbox"/> Mental/Linguistic <input checked="" type="checkbox"/> Music/Drama <input type="checkbox"/> Nature/ Outdoor <input type="checkbox"/> Sports/ Competitive <input type="checkbox"/> Other: <hr/>	4 units
		<input type="checkbox"/> Arts and Crafts <input type="checkbox"/> Mental/Linguistic <input type="checkbox"/> Music/Drama <input type="checkbox"/> Nature/ Outdoor <input type="checkbox"/> Sports/ Competitive <input type="checkbox"/> Other: <hr/>	

* Time is measured in fifteen minute increments. Ex: 30 minutes = 2 units

APPENDIX F: BEHAVIOR RATING INDEX FOR CHILDREN (BRIC)

Child's Name: _____

Date: _____

For each item, please record the number that comes closest to how you observe your child. Record your answer in the space to the left of each item, using the following scale:

1 = Rarely or never

2 = A little of the time

3 = Some of the time

4 = A good part of the time

5 = Most or all of the time

IN GENERAL, HOW OFTEN DOES YOUR CHILD:

- ___ 1. Feel happy or relaxed?
- ___ 2. Hide his/her thoughts from other people?
- ___ 3. Say or do really strange things?
- ___ 4. Not pay attention when he/she should?
- ___ 5. Quit a job or task without finishing it?
- ___ 6. Get along well with other people?
- ___ 7. Hit, push, or hurt someone?
- ___ 8. Get along poorly with other people?
- ___ 9. Get very upset?
- ___ 10. Compliment or help someone?
- ___ 11. Feel sick?
- ___ 12. Cheat?
- ___ 13. Lose his/her temper?

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APPENDIX G: OUTLINE OF MENTOR TRAINING MODULE

The Henry Fork Service Center Mentorship Project



What is the Henry Fork Service Center (HFSC) Mentorship Project?

Mentoring Schedule

- February 26-27- Researcher begins getting parent consent for mentees (children)
- March 9- First day of mentoring
- March 30- NO MENTORING
- March 31- Parents sent final survey
- April 3- Last day of mentoring

- Mentoring occurs Monday-Friday from 3:30-5:30pm (as long as Franklin County Schools are open)

Upon completion of this training module, mentors will...

- Develop a knowledge of the "Henry Fork Service Center Mentorship Project."
- Recognize his/her role within the research project.
- Understand best practices for mentoring relationships.

HFSC Mentorship Project

- A research study being conducted by an East Carolina University graduate student to determine the behavioral effects of a mentoring program on children.
- To purpose of the HFSC Mentorship Project is to determine if:
 - Gender
 - Amount of mentoring received (time)
 - Types of activities used in mentoring will significantly predict change in pro-social behaviors.

Mentorship Project Contact Persons:

- Research Coordinator:
 - Amy Baxter
asbo103@ecu.edu (757)621-6966
Please feel free to contact me with any questions/concerns
- Research Assistant:
 - Lauren Furr (lfurr@ferrum.edu)
- Faculty Sponsor (Ferrum):
 - Dr. Susan Mead (smead@ferrum.edu)

What are my responsibilities in this study?

Responsibility #2

- Log the time you spend with each child and identify the activities you do.
- This log is to be completed by the mentor after working with a child. This log will remain at the HFSC and is to be updated daily.
- Example:

Date	Mentor	Activity	Time (in units)*
03/01/05	Maggie Mentor	<input type="checkbox"/> Arts and Crafts <input checked="" type="checkbox"/> Mental/Linguistic <input type="checkbox"/> Music/Drama <input type="checkbox"/> Nature/ Outdoor <input type="checkbox"/> Sports/ Competitive <input type="checkbox"/> Other: _____	3 units
03/01/05	Mark Mentor	<input type="checkbox"/> Arts and Crafts <input type="checkbox"/> Mental/Linguistic <input type="checkbox"/> Music/Drama <input type="checkbox"/> Nature/ Outdoor <input checked="" type="checkbox"/> Sports/ Competitive <input type="checkbox"/> Other: _____	2 units

**1 unit = 15 minutes

Activities Defined:

- Nature/Outdoor activities: pertaining to activities that involve the use of outdoor space or natural elements.
 - i.e. nature hikes, rock collecting, fishing, bird watching, etc. which are **not** competitive.
- Sports/ Competitive activities: pertaining to sports or activities that involve direct competition.
 - i.e. soccer, football, four-square, etc. but also includes any activity that may be a "contest."

Activity categories adapted from the Leisure Diagnostic Battery (Witt & Ellis, 1989)



Responsibility #1

- As a mentor, it will be your responsibility to spend time with a child at the HFSC **at least** two days a week.
 - Exceptions will be made for both Ferrum College and Franklin County holidays, weather closings, etc.
 - Mentoring is to occur only during the HFSC's afterschool program.
 - While the mentor will not be assigned a child, it is understood that the mentor will focus his/her time on children enrolled in the study.

Activities Defined:

- Arts/ Crafts activities: pertaining to activities that involve creation.
 - i.e. drawing, painting, bead work, etc.
- Mental/Linguistic activities: pertaining to activities encouraging cognitive development.
 - i.e. homework, trivia, reading, etc.
- Music/Drama activities: pertaining to activities of a musical or theatrical nature.
 - i.e. participating in or observing musical ventures, dancing, singing or acting.

Responsibility #3

- Maintain an appropriate relationship with the children you are working with at all times.
 - While at the HFSC, your only focus should be working with a mentee.
 - Focus your full attention on the mentee, do not be distracted by cell phones or other things/people.
 - Do not encourage inappropriate behavior by the mentee.
 - Keep confidentiality with your mentee, unless safety is threatened.

Mentoring Defined

- "Mentoring is a structured and trusting relationship that brings young people together with caring individuals who offer guidance, support and encouragement aimed at developing the competence and character of the mentee." (Chung, 2005)

Who are the Mentors and Mentees?

Who is a Mentor?

- A special type of volunteer!
- A student, in good status, at Ferrum College
- An individual committed to helping a mentee (the at-risk youth) academically, socially, mentally, and physically.
- A mentor is committed to expending the time and energy necessary to help the young person as a role model and most of all, as a friend.

Mentors....

- **Are accessible**- Mentors are available as a resource and a sounding board.
- **Constructive**- Mentors tell the mentee what is being done well or what could be corrected.
- **Supportive**- Mentors encourage mentees to learn and improve, even though it may not always be easy.
- **Care**- Mentors genuinely care about the mentee and ask what is going on in the mentee's life.
- **Admirable**- Mentors are well respected in school organizations, in their community, and especially by the mentee!

Now What?

Who are Mentees?

- For the purposes of this study, mentees are at-risk youth currently enrolled at the Henry Fork Service Center.
- **At Risk Youth**: children whose environment, circumstances, and resulting attitudes make it unlikely that they will complete high school or become a productive member of society.
- In this study, it is likely that the mentees exhibit at least one of the following factors:
 - Discipline problems, detention, suspension
 - Economically disadvantaged
 - Unable to get along with teachers/authority figures
 - Comes from welfare or single-parent household
 - Has emotional or physical disabilities

Mentors....

- **Listen**- Mentors maintain eye contact and give the mentee his/her full attention.
- **Guide**- Mentors help the mentee find his/her way, without being pushy.
- **Are practical**- Mentors give insight about keeping on task and setting goals.
- **Educate**- Mentors share information about themselves and the world around them.
- **Provide insight**- Mentors use their personal experience to help mentees avoid mistakes and learn to make good choices.

What good can I do?

- Research on mentoring has suggested that children/teens involved in mentoring relationships are likely to:
 - Increase school attendance
 - Improve grades and scores on standardized tests
 - Improve relationships with parents/authority figures
 - Improve self-confidence
 - Decrease school suspension
 - Decrease gang involvement
 - Decrease likelihood of drug/alcohol usage
 - Decrease the likelihood of engaging in physical violence

Now that orientation is complete...

- Complete the assessment entitled "Orientation Quiz" on the Angel page.
 - The first question on the quiz will ask if you are still interested in participating in the study, if you have changed your mind simply check "no."
 - You must pass the quiz in order to participate in the study, two attempts are permitted.
- Review the "Mentor Agreement Form," also on Angel, please sign and bring to the HFSC prior to beginning mentoring.
- Check your email regularly for updates.

Resources

- Chung, A.M. (2005). *How to Build A Successful Mentoring Program Using the Elements of Effective Practice*. Alexandria, VA: National Mentoring Partnership.
- Findley, C. et al. (1998). *Community mentoring for adolescent development: Trainer's manual*. Waco: Baylor University Health Education & Wellness.
- Manza, G., et al. (2005). *How to Build a Successful Mentoring Program*. Alexandria: National Mentoring Partnership.
- Witt, P. & Ellis, G. (1989). *The Leisure Diagnostic Battery User's Manual*. State College, PA: Venture Publishing.

APPENDIX H: INSTITUTIONAL REVIEW BOARD APPROVAL LETTER



University and Medical Center Institutional Review Board
 East Carolina University
 Ed Warren Life Sciences Building • 600 Moye Boulevard • LSB 104 • Greenville, NC 27834
 Office 252-744-2914 • Fax 252-744-2284 • www.ecu.edu/irb
 Chair and Director of Biomedical IRB: L. Wiley Nifong, MD
 Chair and Director of Behavioral and Social Science IRB: Susan L. McCammon, PhD

TO: Amy Baxter 2750 Meridian Dr., Apt #2, Greenville, NC 27834

FROM: UMCIRB ~~Letter~~

DATE: February 17, 2009

RE: Expedited Category Research Study

TITLE: "The Effects of a Mentoring Program on the Behavior Rating of Children"

UMCIRB #09-0162

This research study has undergone review and approval using expedited review on 2.14.09. This research study is eligible for review under an expedited category because it is a research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects, 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt.)

The Chairperson (or designee) deemed this **unfunded study no more than minimal risk** requiring a continuing review in **12 months**. Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The investigator must adhere to all reporting requirements for this study.

The above referenced research study has been given approval for the period of **2.14.09 to 2.13.10**. The approval includes the following items:

- Internal Processing Form (dated 2.8.09)
- Letter of Support (dated 2.6.09)
- Behavior Rating Index for Children
- Minor Assent Form
- Mentor Agreement Form
- Parent Consent Form

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

The UMCIRB applies 45 CFR 46, Subparts A-D, to all research reviewed by the UMCIRB regardless of the funding source. 21 CFR 50 and 21 CFR 56 are applied to all research studies under the Food and Drug Administration regulation. The UMCIRB follows applicable International Conference on Harmonisation Good Clinical Practice guidelines.

