THE EFFECTS OF A MENTORING PROGRAM ON AT-RISK YOUTH

Lisa M. Keating, Michelle A. Tomishima, Sharon Foster, and Michael Alessandri

ABSTRACT

This study examined an intensive mentoring program that focuses on youth deemed at-risk for juvenile delinquency or mental illness. Mothers and teachers completed the Child Behavior Checklist, and youth completed the Hopelessness Scale for Children, the Piers-Harris Self-Concept Scale, and the Self-Report Delinquency Scale. The youth (ages 10 to 17) either participated in the mentoring program (intervention, $n = 34$) or remained on the waiting list (nonintervention, $n = 34$) for 6 months. Repeated-measures ANOVAs assessed changes from preintervention to postintervention and indicated significant improvement in problematic behaviors for the intervention group. Mentoring appeared to affect African American youth differently than Caucasian and Latino youth. There were no significant interactions involving gender. The findings of this study supported the positive influence of mentoring on at-risk youth.

Mentoring programs for at-risk youth are growing at a rapid pace across the United States. Youth mentoring programs differ in their curricula, but most emphasize the relationship between a disadvantaged or troubled younger and a caring adult. The relationship generally involves spending quality time together and providing support and guidance, with the aim of helping the young person better negotiate life’s difficulties. To date, the literature on mentoring is mixed and little research has adequately assessed the efficacy of mentoring programs.

The term “at-risk” is generally used to describe youth who come from single-parent homes, who show signs of emotional or behavioral problems, and who lack the support to navigate developmental tasks successfully. As adults, they have a disproportionately high incidence of divorce, chronic unemployment, physical and psychiatric problems.

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substance abuse, demands on the welfare system, and further criminal activity (Patterson, DeBaryshe, & Ramsey, 1989). The toll of these problems is costly not only to the individual but also to society in terms of health care, welfare, and legal costs. Conversely, the average cost per child per year for a well-run mentoring program is approximately $1,000 (Grossman & Garry, 1997), and is believed to prevent or minimize a need for other social services in the future. The U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, estimates that between 5 and 15 million children could benefit from being matched with a mentor (Grossman & Garry, 1997).

There are many theoretical reasons to expect that mentorship will help troubled youth, mostly within a social support framework. Kashani, Reid, and Rosenberg (1989) found that youth who reported lower levels of social support were more withdrawn, hopeless about their future, inattentive, and harmful to others than were youth who reported higher levels of social support. Mentoring may provide some of this social support and, hence, improve youth functioning. In addition, some theories of juvenile delinquency suggest that youth develop delinquent behavior patterns because they have not identified with appropriate role models in their environment (Hawkins & Weis, 1985). Mentors can serve as models with whom youth might identify, leading to increased socially appropriate behavior and reduced delinquent behavior. Furthermore, the resiliency literature suggests that the children who are most likely to survive abusive and neglectful upbringings are those who seek healthier relationships outside the home (Stein et al., 2000; Rutter, 1987, 1995). Mentoring may provide resilient youth with such relationships.

However, the research to date has produced discrepant findings about the effects of mentoring (Royse, 1998; Grossman & Garry, 1997; Tierney & Grossman, 1995; Slicker & Palmer, 1993; Frecknall & Luks, 1992). The inconsistent results may be attributed to the fact that the mentoring movement is still in its infancy, and that research in this field is also relatively new. Additionally, much of it is methodologically flawed and limited in its conclusions, relying exclusively on self-report data or using instruments that do not have adequate reliability and validity. Most mentoring programs rely on volunteers and donations, and the cost of funding well-run research often exceeds a mentoring program’s limited budget. Further, some programs require mentors to meet with mentees only one to two times per month, which perhaps is insufficient to provide at-risk youth with the support they need. Programs requiring more frequent face-to-face contact may be more likely to be effective. Or, as some have suggested, perhaps mentoring simply does not work.
Big Brothers/Big Sisters may be the best-known volunteer mentoring program in the United States, matching at-risk youth with adult mentors. In one of the largest studies in the field (Tierney & Grossman, 1995), 959 youth who asked to be matched with a Big Brother/Big Sister during 1992–1993 were randomly assigned to one of two groups: a mentoring group or a control group (the latter youth were put on the 18-month waiting list). Both groups were interviewed when they applied for the program and 18 months later, and completed self-report indices. The study examined several broad areas that mentoring might affect: antisocial activities, academic performance, attitudes and behaviors, relationships with family, relationships with friends, self-concept, and social and cultural enrichment. The results indicated that "littles" (mentees) who met with their "bigs" (mentors) regularly for about a year were 46% less likely than the control group to start using illegal drugs, 27% less likely to start drinking, 52% less likely to skip a day of school, and 37% less likely to skip a class. In addition, the mentees were likely to be more trusting of their parents or guardians and less likely to lie to them, as well as to feel more supported and less criticized by their peers and friends. More than 70% of big-little matches met at least 3 times a month for more than 3 hours at a time, and nearly half met once a week. Tierney and Grossman (1995) concluded that high-intensity programs can work, specifically those with more one-on-one contact (typically meeting 3 times per month for 4 hours per meeting, with additional contact by phone).

Frecknall and Luks (1992) assessed parents' impressions of the impact of the New York City Big Brothers/Big Sisters program on their children. Of the 135 surveys mailed to parents, 76 were returned (56%). Seven outcome variables were assessed: school attendance, grades, getting along with family members, getting along with friends, self-esteem, staying out of trouble, and being more responsible. On average, 63% of the parents reported that their children were "greatly improved." Of those children, 47% improved school grades, 49% improved school attendance, 55% got along better with family members, 70% got along better with friends, 83% had improved self-esteem, 58% had fewer behavior problems, and 60% became more responsible. "Some improvement" was reported by 14% of the parents. The length of time in a mentoring relationship was positively correlated with success. For children in the program for 1 to 2 years, reported success was 69%; for those in the program for 2 to 3 years it was 90%. However, there was no control or comparison group.

In contrast, Royse (1998) reported nonsignificant results in a 4-year mentoring project developed specifically for high-risk African American adolescents. Using an experimental design, this study assessed
differences between intervention and control group participants in self-reports of self-esteem and attitudes toward drugs and alcohol, as well as school records of grades, attendance, and disciplinary infractions. Although 36 youth received mentoring for 6 months or longer, no statistically significant differences between mentored and nonmentored youth were found on any variables.

Similarly, Nelson and Valliant (1993) did not find any statistically significant differences in the self-esteem of boys awaiting assignment of a Big Brother (n = 6), compared to that of those from intact, middle-class, two-parent families (n = 27), those participating in the Big Brothers program for at least 3 years (n = 9), and a group of young offenders residing in an open-custody facility (n = 18). However, depression scores, assessed by the Minnesota Multiphasic Personality Inventory (MMPI), for those awaiting a Big Brother and those in the group home were more elevated than for boys from intact families and those involved with a Big Brother for at least 3 years. Boys in the young offenders group and those with no adult male substitutes scored significantly higher on assaultiveness than did boys with a Big Brother. The small sample and quasi-experimental nature of this study limited its conclusions, however.

Slicker and Palmer (1993) studied the effectiveness of pairing a mentor with adolescents deemed at-risk for school dropout. They compared 32 at-risk tenth-grade students who were paired with a mentor (recruited from school personnel) to 32 at-risk students without a mentor. At the end of 6 months, there were no significant differences in dropout rates between the two groups. There was a significant difference in self-concept scores favoring the control group. When the students were divided into those who received effective mentoring (n = 9), rated by numerically scaled logs kept by the mentor and evaluations by the mentee, and those who were ineffectively mentored (n = 13), the effectively mentored group demonstrated an increase in grade point average that approached statistical significance (p = .06), although the small sample size prohibited firm conclusions. Likewise, 100% of the effectively mentored participants returned to school the next year, while only 74% of the control group and 69% of the ineffectively mentored students returned. It was concluded that monitoring of direct contact between mentor and mentee is crucial in understanding the effectiveness of mentoring.

These data suggest that without intense contact, mentoring is not effective. Further, this overview helps to highlight the difficulties in researching the effectiveness of mentoring. For example, mentoring programs focus on different populations (delinquents, the mentally ill, children in dysfunctional families, school dropouts); use mentoring to
achieve different goals (prevention of delinquent behaviors, prevention of development of mental illness, improvement of school attendance and grades); and vary in the training, monitoring, and time requirements of volunteers. Compounding this problem is the tendency of the mentoring research to rely on self-report indices, to use nonrandom assignment to treatment versus control groups, and to not obtain data about the intensity of treatment, or mentoring contact, which took place.

The present research attempted to address these concerns by conducting a quasi-experimental efficacy study of an existing intensive mentoring program. The chosen mentorship program was examined because of its work with an at-risk population and its well-implemented training program for mentors, as well as its focus on community involvement. The goal of the agency offering this program is to prevent the onset of a delinquent lifestyle or mental illness. Assuming that a child’s mental health and number of delinquent acts can most accurately be assessed by obtaining reports from various sources, mothers, teachers, and youth all participated in this study. It assessed youth involvement in a mentoring program for a 6-month period.

To examine the effects of mentoring with an at-risk population, data on several of the predictor variables related to later delinquency were obtained. Psychometrically sound instruments were chosen to assess internalizing and externalizing behaviors, number of delinquent acts, and how the youth felt about himself or herself. The concepts of internalizing and externalizing behaviors were chosen as a means of obtaining information about broad ranges of behaviors that signify emotional and behavioral problems, both of which are highly associated with later delinquency and mental illness (Loeber, 1990; Patterson, Capaldi, & Bank, 1991). For instance, internalizing behaviors indicate problems with anxiety, depression, withdrawal, and somatic complaints. Conversely, externalizing behaviors are directed toward others and entail observable acts that indicate aggression and delinquency (Achenbach & Edelbrock, 1991).

METHOD

Participants

Youth matched with a mentor for 6 months comprised the intervention group (n = 34) while youth placed on the waiting list comprised the nonintervention group (n = 34). Participants were between the ages of 10 and 17 years (M = 13.07, SD = 2.07); 65% were male and 35% were female. Thirty-two percent were identified as Caucasian,
24% as African American, 37% as Latino, 3% as Asian, and 3% as "other." Only one participant identified himself as American Indian.

Procedure
At the onset of the study, all youth who were currently on the waiting list, and their parents, were contacted about the research study and encouraged to participate. They were advised that they would complete instruments at two separate assessment periods, 6 months apart. "Preintervention" was used to denote the first assessment period, in which data were collected for both intervention and nonintervention participants. "Postintervention" was used to denote the second phase of data collection, in which intervention group participants had been matched with a mentor for 6 months and nonintervention group participants had been on the waiting list for 6 months. For their participation, mothers received two free movie passes and youth received a $5 McDonalds gift certificate.

When a young person on the waiting list was matched with a mentor, he or she became part of the intervention group. Within 2 weeks of the match, the youngster and parent completed all of the preintervention instruments.

One drawback to the study was the nonrandom assignment to intervention and nonintervention groups. However, program guidelines for placing youth with mentors did not bias the assignment of youth to intervention or nonintervention conditions. The program's procedure is to match a young person and adult based on gender, ethnicity, age, geographical location, and common interests, with both the youngster and adult being asked for their preferences in these categories. In conjunction, another young person from the waiting list, matched as close as possible on gender, ethnicity, and age, was selected for the nonintervention group. He or she, as well as the parent, completed all of the preintervention instruments within 2 weeks of being placed in the nonintervention group. The consecutive placement of youth into the intervention and nonintervention groups helped to control for history effects.

Preintervention and postintervention interviews were conducted by undergraduate and graduate students at a local university. All interviewers were thoroughly trained to administer the questionnaires according to proper procedures. During the preintervention interview, each youngster and his or her mother signed consent forms. Youth completed the Hopelessness Scale for Children, the Self-Report Delinquency Scale, and the Piers-Harris Self-Concept Scale. Mothers completed the Child Behavior Checklist, a demographic questionnaire, and the Eyberg Child Behavior Inventory (administered for possible post
hoc analyses). The young person’s homeroom teacher was contacted to complete the Teacher Report Form of the Child Behavior Checklist.

Once the young person had been actively involved in the intervention program for 6 months or had been on the waiting list for 6 months, he or she completed the postintervention interview, the Hopelessness Scale, the Self-Report Delinquency Scale, the Self-Concept Scale, and the Social Support Questionnaire-Self-Report. Parents and current teachers again completed the Child Behavior Checklist. Data were collected over a 15-month period. There were no missing data for youth or parents. However, at preintervention five teachers did not complete questionnaires, and at postintervention eight teachers did not.

**Mentoring Integrity Assessment**

According to the program’s procedures, mentors reported the number of hours spent each week with the youth with whom they were paired, as well as the activities they completed while they were together. The administrators of the program verified this information with each youngster at their monthly meetings. Administrators also verified that none of the pairs had dissolved, and therefore all the data collected on the intervention group were used.

**Program Description**

The mentoring program, located in the western United States, is privately funded through donations from local individuals and corporations, and through grants from private foundations. Participants are children and adolescents from the community who are deemed at-risk by the professional who refers them. In order to be referred, their behavior has to come to the attention of a concerned adult, such as a school counselor or principal, or an agency, such as the County Probation Department, Child Protective Services, Youth Services Bureau or the County Mental Health Departments. Reasons for referral include fighting and other behavior problems in the school or community, emotional problems, poor grades or school attendance, theft, vandalism, or other minor crimes. Youth involved in serious delinquent behavior were referred to other programs.

Adults who participated in the program live in the community and are interested in spending one-on-one time with a young person who is experiencing difficulties. These adults must be over the age of 18 and are screened extensively for both their commitment to the program and their appropriateness for involvement with an at-risk youngster. They attend training sessions designed to educate them about child development, the warning signs of child abuse, problems the young
person is likely to be experiencing, and how to interact effectively with the youngster with whom they are matched. Volunteers are also required to attend seminars and to check in with program counselors each week to report on their mentoring activities.

Once youth are referred to the program, they are placed on a waiting list. Being matched with an adult mentor can take anywhere from 2 weeks to 2 years. Youth on the waiting list attend one monthly group activity with the other youth on the list, until they are matched with an adult according to gender, ethnicity, age, geographical location, and common interests, as well as preferences in these categories.

The program has two components: one focuses on matches with adult volunteers from the community ("community matches"), while the other concentrates on matches with local university students ("university matches"). The difference between the two is that the community matches last a minimum of 1 year, while the university matches last a minimum of 6 months. Once a youngster and adult have been matched, they both commit to their "friendship" for the required time of either 6 months (university matches) or 1 year (community matches). Most relationships continue past the required time commitment, but involvement by program administrators is minimal once the participants' commitment time has been completed. This study used youth participating in both university and community matches.

During the 6 to 12 months of intervention, the youth (referred to in the program as "Junior Friends") and the adults with whom they are matched (referred to as "Senior Friends") spend a minimum of 3 hours together each week. The majority of this time is spent in activities such as going to a sporting event, the movies, or a park. In addition to the 3 hours of individual interaction, the adults and youth participate together in group activities sponsored by the program (i.e., recreational outings, community service projects, cultural events, and educational experiences). Improving social interaction skills is stressed during these group activities, as well as in the relationship between the youth and adults. Another component of the program is life skills training. A monthly seminar, conducted by local professionals, educates youth on topics such as child abuse prevention, drug and alcohol abuse, cross-cultural awareness, health, nutrition, and school problems. Thus, this program offers services above and beyond the mentoring relationship.

Measures

The independent variable in this study was participation in mentoring (intervention) versus nonparticipation, that is, being on the waiting list (nonintervention). The intervention and nonintervention groups were contrasted using the following dependent variables: inte-
nalizing and externalizing behaviors reported by teachers and mothers, self-report of delinquent behaviors, self-concept, hopelessness, and reports of available social support. The following measures were utilized.

**Child Behavior Checklist (CBCL).** The CBCL (Achenbach & Edelbrock, 1991) is a 113-item measure designed to obtain standardized data on a child's range of behavioral competencies and problems as reported by his or her parents and teachers. It has been used extensively in research on child psychopathology. The instrument is well standardized and has adequate reliability and validity for both the teacher and parent report forms; test-retest reliability for total behavior problems was .93. For the purposes of this study, internalizing and externalizing subscale scores were used to compare each youngster's behavior at preintervention and postintervention. Both the teacher and parent report forms were used.

**Demographic Questionnaire.** Created for this study, this questionnaire collected basic family demographic information such as family structure (age and gender of family members), parental education, parental occupation, and other interventions and services family members were receiving.

**Piers-Harris Children's Self-Concept Scale.** This 80-item, self-report questionnaire is designed to assess how children and adolescents, ages 8 to 18 years, feel about themselves. Overall assessment of self-concept is reflected in three summary scores: a total raw score, a percentile score, and an overall stanine score. For this study, the total raw score was used. Test-retest reliability has been assessed in a number of studies, and the median test-retest reliability was .73 over 6-week and 3-month periods. Several studies have also investigated the internal consistency of this scale, and reliability estimates for the total score ranged from .88 to .93 for various subgroups. Estimates of content, criterion-related, and construct validity have been obtained from a number of empirical studies, and support the validity of the scale (Piers, 1984).

**Hopelessness Scale for Children.** This measure asks children to respond either “true” or “false” to 17 statements (Kazdin et al., 1986). Higher scores on this scale reflect more negative expectations for the future and greater hopelessness about current situations. Hopelessness scores correlated positively with depression and negatively with self-esteem and social behavior in a sample of 262 child psychiatric inpatients (Kazdin et al., 1986). Test-retest correlation over 6 weeks was .52. In the present study, the total score was used at both preintervention and postintervention.

**Self-Report Delinquency Scale.** Developed by Elliott, Huizinga, and
Ageton (1985) for the National Youth Survey, this 47-item self-report measure assesses participation in delinquent behaviors (types and amounts). Items can be grouped into three scales assessing index and status offenses (criminal and noncriminal acts) and general delinquency. For this study, the general delinquency scale was used. Reliability and validity, assessed using data from the National Youth Survey, were found to be adequate.

**Social Support Questionnaire—Self-Report.** Developed by Sarason et al. (1987), the 6-item short form of the original 27-item version assesses the number of people an individual believes can be counted on in various situations and the level of satisfaction with that support. The 6-item version has been found to have high internal reliability and validity and to correlate highly with the longer version, and therefore is an acceptable substitute for the longer version. For each question, the individual first states the names of people whom he or she has found to be supportive under a certain type of social situation (e.g., “Whom can you count on to be dependable when you need help?”), and then rates how satisfied he or she is with that support (1 = very dissatisfied to 6 = very satisfied). Results are reported using the N scale, which is the average number of supportive people for each of the items, and the S scale, which is the average level of satisfaction with their support. This study used both the N and S scales for post hoc statistical purposes.

RESULTS

Outliers for the entire data set were assessed using a criterion of ±3 standard deviations from the mean (Tabachnick & Fidell, 1991). Using this criterion, six data points were deleted and the statistical analyses were conducted without outliers. Chi-square analyses and t tests were done on relevant demographic variables to assess differences between the intervention and nonintervention groups before mentoring began (preintervention). No significant differences were found between the groups on the variables of age, gender, ethnicity, socioeconomic status, participation in other programs, or geographical location of primary dwelling. Eighty-seven percent of nonintervention group members were receiving additional services while only 70% of the intervention group were. As might be expected, nonintervention group participants were on the waiting list significantly longer than intervention group members ($M = 10.71$ months versus $8.12$ months, respectively). Analyses of variance were conducted on each dependent variable at preintervention and indicated no significant differences between intervention and nonintervention groups, with the exception of self-reported delin-
quency. On this variable, intervention group participants ($M = 15.45$, $SD = 25.86$) reported significantly fewer delinquent acts than did nonintervention group participants ($M = 30.70$, $SD = 35.93$), $F(1, 66) = 3.91$, $p < .05$.

At preintervention, both nonintervention group and intervention group members were rated by teachers and mothers as being in the clinical range on the Child Behavior Checklist. In contrast, youth reported themselves as being less troubled than a nonclinical (or “normal”) population of children on the variables of self-esteem, hopelessness, and delinquent behavior (Kazdin et al., 1986; Elliott, Huizinga, & Ageson, 1985; Piers, 1984).

Table 1 presents the mean scores and standard deviations for intervention and nonintervention groups at preintervention and postintervention measurement times. The simple effects of time (preintervention

<table>
<thead>
<tr>
<th>Measure</th>
<th>Preintervention</th>
<th>Postintervention</th>
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<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Teacher CBCL (Internalizing Scale)</td>
<td>Intervention 62.61 9.42</td>
<td>Nonintervention 59.63 7.04</td>
</tr>
<tr>
<td>Parent CBCL (Internalizing Scale)</td>
<td>Intervention 61.33 8.71</td>
<td>Nonintervention 63.06 6.26</td>
</tr>
<tr>
<td>Teacher CBCL (Externalizing Scale)</td>
<td>Intervention 64.97 6.97</td>
<td>Nonintervention 63.50 8.49</td>
</tr>
<tr>
<td>Parent CBCL (Externalizing Scale)</td>
<td>Intervention 63.18 10.69</td>
<td>Nonintervention 66.18 7.11</td>
</tr>
<tr>
<td>Hopelessness</td>
<td>Intervention 3.67 3.04</td>
<td>Nonintervention 3.68 2.29</td>
</tr>
<tr>
<td>Self-Concept</td>
<td>Intervention 57.71 12.64</td>
<td>Nonintervention 56.79 10.72</td>
</tr>
<tr>
<td>Delinquent Acts</td>
<td>Intervention 15.45 25.86</td>
<td>Nonintervention 30.70 35.93</td>
</tr>
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</table>
to postintervention) were separately tested for the intervention and nonintervention groups with repeated-measures analysis of variance (ANOVA). Additionally, the interactions of condition (intervention vs. nonintervention) and time (preintervention to postintervention) were tested with a $2 \times 2$ repeated-measures ANOVA.

After being in a mentoring relationship for 6 months, there were significant changes in the intervention group on four of the seven measures. Teachers of intervention group members reported that internalizing behaviors at school significantly decreased, while teachers of nonintervention group members did not. The Condition $\times$ Time interaction was significant, $F(1, 58) = 7.51, p < .01$, with a medium magnitude of effect (eta squared = .12). Mothers reported that intervention group members significantly decreased their internalizing behaviors at home, but that nonintervention group members did not. The interaction was significant, $F(1, 65) = 5.55, p < .05$, with a medium magnitude of effect (eta squared = .08).

A similar pattern emerged for externalizing behaviors. Teachers reported that intervention group members significantly decreased their externalizing behaviors at school, but that nonintervention group members did not. There was a significant interaction, $F(1, 58) = 10.98, p < .01$, with a large magnitude of effect (eta squared = .16). Mothers of intervention group members also reported a decrease in externalizing behaviors at home, but mothers of nonintervention group members did not. The interaction was significant, $F(1, 65) = 5.22, p < .05$, with a medium magnitude of effect (eta squared = .07).

Low levels of hopelessness were reported at preintervention for both the intervention and nonintervention groups. The interaction was nonsignificant, $F(1, 66) = 1.87, ns$. Similarly, high levels of self-esteem were reported at preintervention for both the intervention group and nonintervention group. The interaction was nonsignificant, $F(1, 66) = 2.29, ns$. Finally, differences in the amount of self-reported delinquent acts between the intervention and nonintervention groups were evident at preintervention. The interaction did not reach significance, $F(1, 64) = 1.39, p < .07$.

To assess the risk of Type I error generated by conducting seven analyses with an alpha level of $p < .05$, a pattern analysis was implemented. At this alpha level, the intervention group showed significant improvements on six of the seven dependent variables after 6 months of mentoring. Using the normal curve to approximate the binomial probability of six out of seven random findings at $p < .05$, the likelihood of such a pattern occurring by chance is very slight ($z = 6.07, p < .001$). Thus, it is extremely improbable that random fluctuations (i.e., chance) could produce the consistent pattern of results found here.

728
Post hoc ANOVAs were conducted using data from the social support measure. Both the S scale (level of satisfaction in supportive relationships) and the N scale (number of supportive people) were examined. During administration, participants were read the normal list of possible helpful others; however, for intervention group participants, Senior Friend was also listed. On the S scale, intervention group participants ($M = 23.03$, $SD = 7.78$) did not report significantly higher social support satisfaction than did nonintervention group participants ($M = 21.41$, $SD = 3.66$), $F(1, 65) = 1.20$, $ns$. Nor did intervention group participants ($M = 6.74$, $SD = 3.69$) show a significant difference in the number of supportive people in their lives when compared to nonintervention group participants ($M = 6.53$, $SD = 2.23$), $F(1, 65) = .08$, $ns$. However, 54% of intervention group participants listed their mentor as someone who was supportive of them.

To examine whether there were gender differences in how the program affected the intervention group, a series of Gender $\times$ Time (preintervention to postintervention) ANOVAs were conducted. None of the interactions were significant, suggesting that the program did not impact boys and girls differently.

Initial examination of Caucasians ($n = 11$), African Americans ($n = 10$), and Latinos ($n = 13$) in the intervention group indicated differences in how mentoring affected youth based upon their ethnicity. Specifically, African American youth and their mothers reported fewer problems before mentoring began, and fewer changes after 6 months of mentoring, than did Caucasians and Latinos, who showed a comparable pattern. Consequently, further analyses were based on a two-group partition of the sample: non-African American group ($n = 24$) versus African American group ($n = 10$).

Time (preintervention to postintervention) $\times$ Ethnicity (African American vs. non-African American) repeated-measures ANOVAs were conducted with the mentoring group on each of the dependent variables. A significant interaction between time and ethnicity was detected in the amounts of internalizing problem behaviors that mothers reported, $F(1, 31) = 5.67$, $p < .05$, and the magnitude of effect can be considered large (eta squared = .16). The non-African American group's scores were in the clinical range at preintervention ($M = 64.74$) but lower after mentoring ($M = 60.13$), while the African American group received lower scores at preintervention ($M = 53.50$) which remained essentially the same at postintervention ($M = 53.90$). A Time $\times$ Ethnicity interaction was also detected in the amounts of externalizing problem behaviors that mothers reported, $F(1, 31) = 6.64$, $p < .01$, and again the magnitude of effect can be considered large (eta squared = .18). The non-African American group's scores fell in the clinical range
at preintervention \( (M = 66.21) \) and were lower after mentoring \( (M = 60.87) \), while the African American group had scores that did not fall in the clinical range before mentoring \( (M = 55.90) \) and did not significantly change after mentoring \( (M = 56.70) \). A near-significant interaction was detected in the degree of hopelessness that youth reported, \( F(1, 32) = 3.47, p < .07 \), and the magnitude of effect can be considered medium (eta squared = .10). The non-African American group’s hopelessness scores at preintervention \( (M = 4.46) \) were significantly higher than at postintervention \( (M = 3.13) \), while the African American group’s scores did not significantly change from preintervention \( (M = 1.80) \) to postintervention \( (M = 2.10) \).

**DISCUSSION**

The youth in this study were deemed at-risk by a concerned professional, who made a referral to the mentoring program. At preintervention, mothers and teachers reported behavioral problems that placed these youth in the clinical range for both internalizing and externalizing behaviors (Achenbach & Edelbrock, 1991), confirming the at-risk categorization. In contrast, the youth responded to questionnaires related to self-concept and hopelessness in ways that resembled nonclinical populations, and they reported fewer delinquent acts than a nonclinical population (Elliot, Huizinga, & Ageton, 1985). Cumulatively, self-reports indicated that the youth were in the nonclinical range both before and after mentoring, which suggests that either they did not see themselves as at-risk or they were not honest about their feelings and behaviors. Because of questions about validity, only tentative conclusions can be drawn from the results of the youth self-reports.

Nonetheless, the clinical implications of this study are noteworthy. The intervention group evidenced significant changes from preintervention to postintervention on four of seven variables, whereas the nonintervention group did not. Mothers’ reports indicated that 6 months of mentoring helped to move intervention group youth from a clinical range of externalizing and internalizing behaviors to a level closer to a nonclinical range. Teachers’ reports added further credibility to the effectiveness of mentoring. Teachers initially reported levels of both internalizing and externalizing behaviors that placed the youth in the clinical range. After mentoring, problem behaviors at school were lower by about one standard deviation, which put the youth nearer to the nonclinical range. Large treatment effects were noted for the variables (based on the teachers’ and parents’ data).
Overall, mentoring was successful in helping to decrease problematic behaviors, suggesting that exposure to caring adults helped youth to feel better about themselves and to engage in less destructive behaviors toward themselves and others. Specifically, the program targeted youth deemed at-risk for a delinquent or mentally ill lifestyle. It seemed to keep young people beginning to evidence behavioral and emotional problems from developing worse symptoms.

The findings of this study add important information to the mentoring literature by providing preliminary data showing that mentoring during a 6-month period can be an effective technique for promoting positive outcomes. However, questions remain about how the mentors effected change. It may be that the mentors’ attention, support, and guidance helped youth to feel better about themselves, to negotiate problems more effectively, and to engage in more age-appropriate tasks. Perhaps the exposure to prosocial activities, both through individual interaction with their mentor and through group activities sponsored by the program, helped to promote a healthier lifestyle. Likewise, the psychoeducational groups youth attended each month may have served to teach them more effective ways of managing their problems, provided a sense of community, and showed them that other youth had similar problems they were trying to overcome.

Curiously, the youth who were matched with a mentor for 6 months did not report more social support than those on the waiting list. In addition, only 54% of the intervention group youth indicated that their mentor was one of the people who were supportive of them. A large percentage of the youth in this study were receiving other assistance, such as school or family counseling, had a parent in therapy, or were participating in another program. Thus, it cannot be assumed that this program alone effected change in the intervention group’s behavior. However, the nonintervention group was actually receiving more services than the intervention group, yet did not evidence significant change. The various components of this mentoring program therefore seem to be the most likely factor that can explain these changes in behavior. Further, both teachers and mothers reported decreases in school-related problem behaviors, yet this particular program places no emphasis on influencing school life. These changes could have occurred as a result of the overall improvements in youth functioning. Alternatively, mentors may have stressed the importance of school.

The findings related to ethnicity must be interpreted with caution due to the small number of African American participants. However, the analyses revealed that non-African Americans, but not African Americans, made improvements in internalizing and externalizing behaviors (as reported by mothers) and in hopelessness. Mothers of Afri-
can American youth reported fewer internalizing and externalizing behaviors (with scores falling in the nonclinical range) than did mothers of non-African American youth both before and after intervention. These low reports of problem behaviors at home by mothers of African American youth raise several questions. Did this pattern occur because these mothers hesitated to respond in ways that would make their children look bad? Did their initial low reports leave little room for reporting improvements at postintervention? Did these youth really have fewer problems, with perhaps extended family providing extra social support which served as a buffer for African American children?

The most important question is whether mentoring helped African American youth and not just non-African American youth. The small sample size, and the fact that the differences were found in post hoc analyses, suggest that the findings regarding ethnic differences should be interpreted with caution. However, the data indicate that the mentoring experience had a different effect for an African American population. It is possible that this type of mentoring requires revision to be more culturally sensitive, specifically to meet the needs of African American youth.

Several limitations of this study should be addressed. Foremost was the nonrandom assignment of youth to an intervention or a nonintervention group. Indicative of possible differences between the groups is that youth in the nonintervention group self-reported twice as many delinquent acts at preintervention compared with youth in the intervention group. Thus, while the program may have led to improvements in functioning for the intervention group, youth in the nonintervention group may not have been as amenable to change. However, because no statistical differences were found between intervention and nonintervention groups on any of the demographic variables before mentoring began, we assume that the groups were fairly similar.

The nonblind design was also problematic. All evaluators were aware that the participants were in a mentoring program for at-risk youth (even those on the waiting list engaged in some group activities). The inclusion of a third at-risk group not involved in the program would have helped clarify whether these youth were being rated differently simply because their parents and teachers knew they were in a mentoring program. In addition, although the findings of this study are promising, long-term follow-up data are needed, particularly to see whether the behavioral improvements remain after the mentorship period is completed.

This program, with its substantial time requirement, psychoeducational component, and group activities, was strictly monitored. Thus, the positive results may not generalize to other, less intensive men-
toring programs. Further research into the effectiveness of mentoring programs can help tease out the components that are necessary for bringing about change in youth. Lastly, this program targets at-risk youth. Programs working with youth who have already adopted a delinquent lifestyle may show different results. Future studies can help determine which youth are most likely to benefit from mentoring, as well as provide information about the developmental stages most amenable to mentoring.

REFERENCES


