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Author(s):	**Bibhuti K. Sar, Ph.D., Emma M. Sterrett, Ph.D.**
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Investigation of the effectiveness of a developmental mentoring model as an intervention/prevention strategy for juveniles of varying levels of risk for delinquency among middle school youth in Metro Louisville

Bibhuti K. Sar, PhD
Emma M. Sterrett, PhD

Kent School of Social Work
University of Louisville
Louisville, KY 40292

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Abstract

The overall goal of this project was to evaluate whether cross-age mentoring is an effective model for use with middle school children at varying degrees of risk for juvenile delinquency. Middle school youth (6th graders) with at least one other risk factor for juvenile delinquency were recruited to receive mentoring from high school juniors and seniors trained as mentors. Mentees received one of three conditions: relational, instrumental or risk reduction. A quasi-experimental research design with data collection at baseline, program completion, and at 3 months post program completion was implemented. Data was collected on a set of indictors prior to program start-up, program completion, and three-months post program completion.

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Introduction

Juvenile delinquency is a major social problem facing the field of human services. Mentoring has great potential for prevention of juvenile delinquency (e.g., Elliot, 1994; Keating, Tomishima, Foster, & Alessandri, 2002; King, Vidourcek, Davis, & McClellan, 2002; McGill, Mihalic, & Grotpeter, 1997). DuBois, Holloway, Valentine, and Cooper's (2002) meta-analysis of 59 mentoring studies found mean effect sizes of .14 (fixed effects) and .18 (random effects). However, effect sizes were significantly larger (ds = .24,.25) for mentoring programs that implemented best practices, i.e., monitoring program implementation, ongoing training and supervision for mentors, clear expectations for contact frequency and length, and involving parents. Programs that included youth based on environmental risk factors (e.g., socioeconomic disadvantage) had larger effects (DuBois, Holloway, Valentine, and Cooper, 2002).

One such comprehensive mentoring approach is *cross age developmental mentoring.* Developmental mentoring is a structured, cross-age (high school students mentor younger students), school-based approach that aims to promote children's development by increasing connectedness to self, others, and society (Karcher, 2005). The mentoring relationship is seen as the primary way in which mentees develop in the areas of self-esteem, connectedness, identity, and academic attitudes. In a randomized study, Karcher (2005) found connectedness to school and parents were greater for mentees participating in a developmental mentoring program than for the comparison group. Results suggest that the experience with the mentor best explained changes in mentees' self-management, self-esteem, and social skills; not solely exposure to mentoring curricula. Studies of cross-age mentoring programs have consistently reported positive impact on mentees, including: improvements in mentees' attitudes toward and connectedness to school and peers (Bowman & Myrick, 1987; Karcher, 2005), academic achievement (Karcher, Davis, & Powell, 2002), behavior problems (Bowman & Myrick, 1987), social skills (Karcher, 2005; Noll, 1997).

The research reported here investigated the impact of cross-age developmental mentoring on youth at risk for juvenile delinquency. In particular, youth who are truant, are poor achievers in school, lack positive peer relationships, and/or at risk or have been victimized through abuse and neglect. These factors were selected because of the established link between juvenile delinquency and truancy (e.g., Brier, 1995; Elliott, Huizinga, & Menard, 1989; Elliott &Voss, 1974; Fagan & Pabon, 1990; Herrenkohl et al., 2001; Maguin & Loeber, 1996; Thornberry, Moore, & Christenson, 1985), poor academic achievement (e.g., Farrington & Loeber, 1999; Herrenkohl et al., 2000), lack of positive peer relationships (e.g., Elliott & Menard, 1996; Elliott, 1994; Patterson & Bank, 1989; Patterson, Capaldi, & Bank, 1991; Higgins & Piquer, 2010), and victimization through abuse and neglect (English, Widom, & Brandford, 2002; Stewart, Dennison, & Waterson, 2002)

Methodology

Design. A longitudinal, quasi-experimental design was used to test the value of cross-age developmental mentoring. Mentors (high school seniors and juniors) were recruited from a high school and trained in and delivered in one of the following configurations of mentoring: 1) *relational approach* (starting with mentoring that focus on Self, Friends, Reading, Peers, Teacher, and then culture); 2) *Instrumental approach* (starts with mentoring that focuses on goal-directed, future oriented, adult/conventional people, and then moves toward more relational culture, teachers, reading, peers, friends, and self)**;** 3) *risk reduction approach* (a specific educational program designed to address risk factors for juvenile delinquency: truancy, poor academic achievement, poor peer relationships, and victimization through maltreatment). The

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first two approaches are from the curriculum developed by Karcher (2005) and the latter was developed by the authors based on the format used by Karcher in his curriculum but with content specific to addressing risk factors as listed above. Mentors were matched (seniors, juniors) with sixth grade students as suggested by Karcher (2008). In order to better control for confounding variables that may be school specific, schools were randomly assigned to a condition as described above. All mentees at a particular school received one of the conditions above. All the programs were implemented as a 4 month (one semester) approach in year 1 at all schools and as an 8 month (full school year) program in all schools in year 2.

Sample. School personnel (i.e. teachers, counselors, youth services coordinators, administrators) were provided flyers with information on the research study. School personnel shared this information with families. Families who were interested in participating shared their contact information with the school and agreed to be contacted or contacted the researchers directly to learn more about the research. A member of the research team made contact with the family and reviewed the research and discussed consent procedures, and enrollment into the study. *Mentees' selection.* Middle school youth (6th graders) with at least one r risk factor identified by school personnel (poor academic performance-below average or failing in core subjects, poor peer relationships as identified by school personnel, at risk for or history of victimization, and school absences-meeting the number of absences criteria for being identified at risk for or actually being truant) for juvenile delinquency were recruited to participate in the study. *Mentors'selection.* Flyers were distributed to students by school personnel. Criteria for selection included good academic standing (B or better average), identified/ recommended/ screened by school personnel (i.e. teacher, counselor, principal, youth services coordinator, CO-OP teacher) as having potential for leadership and mentoring potential. Interested students and their families were provided with information about the research. A member of the research team made contact and reviewed the research and discussed consent procedures, and enrollment into study. *Parents* of selected mentees were asked to participate in the research by completing set of surveys prior to after the mentoring program ended. *Teachers.* The 6th grade teachers identified as having the best knowledge of those 6th graders participating in mentoring were contacted to complete surveys. Teachers were identified once students participating in the study had been identified.

Measures- Mentee. A set of measures were proposed. These include *Mentee Demographics:* These are gender, race/ethnicity, current grade, grades, level of academic performance as well as school history including attitudes about school. *School performance* was assessed by looking at course grades as reported by students. *Behavior problems* was measured by the Behavior Rating Index for Children (BRIC) (Stiffman, Orme, Evans, Feldman, Keeney, 1984), a 13 item, Likert scale that measures the degree of children's behavior problems. It has good internal consistency (.80 to .86), and can be used by children to self-assess their behavior. *Family Functioning* was measured pre- and post-program completion and will be operationalized by the 5-item Family APGAR Questionnaire designed to measure the extent of family relationship problems from the perspective of family members. *Connectedness* was measured using the Hemingway Measure of Preadolescent Connectedness (Version 3, Karcher, 2001). The *Hemingway* includes 78 statements about preadolescents' degree of involvement/activity, attitude/affection for their parents, friends, school, and reading. A sample item for activity/involvement is "I work hard at school." A sample item for attitude/affection is "I enjoy spending time with my friends." The measure uses an interval scale from 1 (*not true*) to 4 (*very true*). The inter-item reliability for the subscales ranged from .73 for Friends to .89 for Reading.

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Total Connectedness reflected the average of all three subscales. (Karcher, 2001; Karcher & Lee, 2002). *Self-esteem* was measured by The Rosenberg Self-Esteem Scale. This is a 10-item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree regarding positive and negative views of self. *Engagement in delinquency behaviors* was measured by 11 items specifically asking about behaviors indicative of delinquency that were used in the Pittsburg Youth Study. Respondents are also asked if they have ever engaged in these behaviors to assess their actual engagement in these behaviors. *Relationship satisfaction* was measured by 8 items (extremely dissatisfied=1 to extremely satisfied=7) developed for this study that ask about life and relationship with family, parents, friends, siblings, teacher and school. Mentor demographics. *Satisfaction with mentoring and with mentoring program* was measured by 4 items (on a 1=not satisfied to 5=very satisfied) focusing on mentoring received, mentoring relationship, mentoring activities, and overall satisfaction. ***Measures- Family.*** *Satisfaction with mentoring and with mentoring program* is measured by 4 items (on a 1=not satisfied to 5=very satisfied) focusing on mentoring received, mentoring relationship, mentoring activities, and overall satisfaction. ***Measures-Mentors:*** *Satisfaction with training* will be measured at post-training using the modified version of the 12-item Level One Training Evaluation Scale (Barbee & Barber, 1995), which includes measures of utility and affective reactions. *Satisfaction with mentoring and with mentoring program* is measured by 4 items (on a 1=not satisfied to 5=very satisfied) focusing on mentoring received, mentoring relationship, mentoring activities, and overall satisfaction. ***Teacher measures.*** *Teacher Demographics:* These include gender, race & ethnicity, years teaching. *Assessment of Child's Behavior:* This will be measured by the teacher's version of Behavior Rating Index for Children (BRIC) (Stiffman, Orme, Evans, Feldman, Keeney, 1984), a 13 item, Likert scale that measures the degree of children's behavior problems. It has good internal consistency (.80 to .86), and can be used teachers to assess their student's behavior. *Child's Connectedness* will be measured using the Teacher's version of Hemingway Measure of Preadolescent Connectedness (Karcher, 2001; Karcher & Lee, 2002). A number of other measures were initially proposed in addition to those described above. However because of low response rate or incompleteness of the survey items, those measures were not analyzed and thus not included in this narrative.

Data Collection. Data was collected from: mentee, family, mentor, and teacher. Data collection was attempted at 3 times: baseline (after recruitment to mentoring and prior to receiving any mentoring), at the end of the mentoring, and at 3-months post-mentoring (only from mentees and their families). All measures were paper and pencil and were administered at school sites for mentors, mentees, and teachers. Families completed measures at scheduled meetings or received measures via mailings.

Consent Procedures . Prior to the collection of data, the research proposal was submitted to the University of Louisville IRB as well as the local school system's IRB for review and approval. Once IRB approval was granted by both institutions, data collection took place.

RESULTS

Year 1

The mentoring programs (relational, instrumental, risk reduction) were implemented over a 4 month (one semester) period in Year 1. A description of the curriculums used is provided at the end of this document.

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Mentees

What is the profile of mentees that participated in mentoring during the 1st year of the program? The table below lists the characteristics of 1st year mentees across the three schools. On the whole, they were majority male, African American, tended to be the middle child, and between the ages of 11 and 13. Most of the mentees reported as being good to fair students with "B" grades. Few of them liked coming to school "a lot", participated in three or more school activities, or reported skipped school. However, between 36% to 50% reported they had been suspended from school.

Year 1 Mentee Sample Demographics

Characteristics		School 1 (Relational) (n=22)		School 2 (Instrumental) (n=22)		School 3 (Risk Reduction) (n=22)	
		n	%	n	%	n	%
Gender	Male	13	59	10	45.5	13	59.1
	Female	4	18.2	10	45.5	9	40.9
	missing	5	22.7	2	9.1	---	---
Race/Ethnicity	African American	10	45.5	13	59.1	16	72.7
	White	6	27.3	5	22.7	2	9.1
	Other	1	4.5	2	9.1	4	18.1
	missing	5	22.7	2	9.1	---	---
Age	10	---	---	---	---	---	---
	11	8	36.4	8	36.4	10	45.5
	12	8	36.4	10	45.5	10	45.5
	13	1	4.5	2	9.1	2	9.1
	missing	5	22.7	2	9.1	---	---
Birth Order	Oldest	2	9.1	2	9.1	1	4.5
	Middle	9	40.9	8	36.4	17	77.3
	Youngest	4	18.2	8	36.4	3	13.6
	missing	7	31.8	4	18.2	1	4.5
Type of Student (self-reported)	Excellent	3	13.6	4	18.2	4	18.2
	Good	7	31.8	11	50	10	45.5
	Fair	7	31.8	3	13.6	6	27.3
	Poor	---	---	1	4.5	1	4.5
	Missing	5	22.7	3	13.6	1	4.5
Type of Grades (self-reported) [More than 100% due to more than one response possible]	A's	9	40.9	11	50.0	11	50.0
	B's	12	54.5	13	59.1	17	77.3
	C's	8	36.4	11	50.0	11	50.0
	D's	5	22.7	5	22.7	3	13.6
	F's	---	---	2	9.1	---	---
Like Coming to School	A lot	1	4.5	1	4.5	---	---
	Most of the time	4	18.2	5	22.7	8	36.4
	Some of the time	5	22.7	8	36.4	8	36.4
	A little of the time	5	22.7	1	4.5	4	18.2
	Don't like at all	2	9.1	5	22.7	2	9.1
	missing	5	22.7	2	9.1	---	---

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#of School Activities Participating in	Zero	6	27.3	10	45.5	6	27.3
	One	6	27.3	6	27.3	9	40.9
	Two	5	22.7	1	4.5	3	13.6
	Three	---	---	---	---	---	---
	Four or more	---	---	---	---	4	18.1
	missing	5	22.7	5	22.7	---	---
Skipped School	Yes	2	9.1	---	---	4	18.2
	No	14	63.6	19	86.4	18	81.8
	Missing	6	27.3	3	13.6	---	---
Suspensions from School	Yes	8	36.4	11	50.0	9	40.9
	No	8	36.4	8	36.4	13	59.1
	Missing	6	27.3	3	13.6	---	---

Were mentees satisfied with the mentoring they received? Overall, mentees participating in the three types of mentoring rated the mentoring received fairly high (above a 3.5 on a scale of 1-5 with 5 being higher level of satisfaction) across the various aspect of satisfaction. On the various aspects of mentoring satisfaction, mentees receiving risk reduction mentoring had the highest average satisfaction ratings, mentees receiving instrumental mentoring had the lowest average satisfaction ratings, and mentees receiving relational mentoring were in the middle of these two in regards to their average satisfaction ratings. When compared to each other, mentees across the three types of mentoring only significantly differed on one aspect of mentoring, their overall satisfaction with the mentoring program. Mentees participating in risk reduction reported significantly higher overall satisfaction with mentoring than mentees participating in instrumental mentoring. No such significant difference was found between any other groups.

Satisfaction with Mentoring (Year 1)

Aspect of Mentoring	Type of Mentoring	N	Mean	SD	F	Sig.
How satisfied are you with the mentoring you received?	Relational	16	4.56	.89	1.344	.270
	Instrumental	18	4.22	1.26		
	Risk Reduction	18	4.72	.46		
	Total	52	4.50	.93		
How satisfied are you with the mentoring relationship you have with your mentor?	Relational	16	4.62	.71	1.168	.319
	Instrumental	18	4.22	1.21		
	Risk Reduction	18	4.66	.84		
	Total	52	4.50	.96		
How satisfied are you with the mentoring activities you participated in?	Relational	16	4.12	1.14	.824	.444
	Instrumental	18	3.77	1.26		
	Risk Reduction	18	4.22	.80		
	Total	52	4.03	1.08		
Overall, how satisfied are you with the mentoring program?	Relational	16	4.62	.71	3.990	.025*
	Instrumental*	18	3.83	1.42		
	Risk Reduction*	18	4.72	.75		
	Total	52	4.38	1.08		

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Was there any significant change in outcomes (academic rating, satisfaction, connectedness) reported by mentees from beginning (at pretest) to end of the program (posttest) as a result of participating in mentoring? Paired t-tests conducted (see table below) revealed that mentees participating in mentoring with a relational approach had the most number of outcomes with significant change from pretest to posttest in comparison to mentees receiving instrumental or risk reduction mentoring. However, the significant change observed was in the expected direction (higher scores at posttest) in only in one aspect, satisfaction with family life (relational approach) and satisfaction with sibling relationships (risk reduction). These results should be interpreted cautiously given the small sample available for analysis.

Outcomes by Intervention from Pretest to Posttest (Year 1)
[Only those measures with significant findings are reported]

Mentoring Intervention	Measure	N	Pre-test		Post-test				
			mean	SD	mean	SD	*t*	*df*	*p*
Relational	Excellent, good, fair, or poor student	14	2.29	.726	1.78	.801	-2.463	13	.029
	Satisfaction with family life	13	5.84	1.21	6.46	.518	2.309	12	.040
	Connectedness to kids from other cultures	13	13.61	1.85	11.84	3.36	-2.530	12	.026
	Connectedness to Father	10	17.90	1.44	16.30	2.00	-2.667	9	.026
	Teacher's perception of mentee's connectedness to peers	9	21.55	2.74	19.11	2.71	-3.119	8	.014
Instrumental	Teacher's perception of mentee's connectedness to peers	10	20.80	3.15	19.00	3.05	-3.139	9	.012
Risk Reduction	Satisfaction with sibling relationships	16	5.62	1.14	6.25	.683	2.179	15	.046

Was there any significant change in wellbeing (reported behavioral problems, self-esteem, family functioning, or number of delinquency type of behaviors engaged in) reported by mentees from beginning (at pretest) to end of the program (posttest) as a result of participating in mentoring? The table below reports the results of paired t-tests conducted on completed responses from mentees across the three types of mentoring implemented in year 1. The results indicate that only family wellbeing/functioning as measured by the Family APGAR was found to be reported to be higher at the end of the program participation for mentees participating in relational mentoring. This higher score was statistically significant. These

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results should be interpreted cautiously given the small sample with complete data available for analysis.

Wellbeing Outcomes by Intervention from Pretest to Posttest (Year 1)

Intervention	Measure	N	Pre-test		Post-test				
			mean	SD	mean	SD	t	df	p
Relational	Child Behavior Rating Index (BRIC)	10	28.00	21.88	30.25	22.95	.247	9	.810
	Self-Esteem (Rosenberg self-esteem scale)	7	30.28	5.43	29.85	4.33	-.359	6	.732
	Family Functioning (Family APGAR)	12	12.91	1.78	14.33	1.43	2.237	11	.047*
	#of delinquency type of behaviors engaged in	12	2.00	3.13	1.25	1.28	-1.192	11	.258
Instrumental	Child Behavior Rating Index (BRIC)	11	30.68	26.12	35.00	18.77	.934	10	.372
	Self-Esteem (Rosenberg self-esteem scale)	14	30.21	3.98	31.42	6.32	.729	13	.479
	Family Functioning (Family APGAR)	11	12.27	2.32	12.72	2.32	.809	10	.437
	#of delinquency type of behaviors engaged in	18	1.66	2.05	.722	1.07	-1.752	17	.098
Risk Reduction	Child Behavior Rating Index (BRIC)	14	38.21	14.15	37.5	23.5	-.120	13	.906
	Self-Esteem (Rosenberg self-esteem scale)	13	33.07	3.45	33.00	5.21	-.098	12	.924
	Family Functioning (Family APGAR)	14	12.57	2.10	13.00	1.79	.611	13	.551
	#of delinquency type of behaviors engaged in	16	1.06	.928	1.75	2.04	1.546	15	.143

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Were there any significant differences between types of mentoring received and pre-post change in relationship satisfaction? Types of mentoring were compared on change scores for various domains of satisfaction. Change scores were computed (by subtracting pretest scores from post scores). ANOVAs were performed to analyze differences in change scores across the three mentoring types. The results did not indicate any statistically significance difference in relationship satisfaction change scores. In other words, there was no statistically significant difference between types of mentoring received and change in satisfaction domains (see table below).

Relationship Satisfaction by Type of Mentoring

Change in	Type of Mentoring	N	Mean	SD	F	Sig.
life satisfaction	Relational	13	.076	.493	.963	.390
	Instrumental	17	.764	1.82		
	Risk reduction	16	.375	1.25		
	Total	46	.434	1.36		
family life satisfaction	Relational	13	.615	.960	.464	.632
	Instrumental	16	.750	2.26		
	Risk reduction	15	.200	1.26		
	Total	44	.522	1.62		
satisfaction with sibling relationships	Relational	11	.454	.820	1.540	.227
	Instrumental	17	-.176	1.77		
	Risk reduction	16	.625	1.14		
	Total	44	.272	1.38		
satisfaction with relationship with mother	Relational	13	-.307	1.10	2.070	.139
	Instrumental	17	.941	2.16		
	Risk reduction	15	-.066	1.86		
	Total	45	.244	1.86		
Satisfaction with relationship with father	Relational	12	-.083	.996	1.056	.358
	Instrumental	15	.533	2.23		
	Risk reduction	15	-.400	1.76		
	Total	42	.023	1.78		

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Were there any significant differences between types of mentoring received and satisfaction with various aspects of school? Types of mentoring were compared on change scores for satisfaction related to various aspects of school. Change scores were computed (by subtracting pretest scores from post scores) and ANOVAs were performed. The results did not indicate any statistically significance difference in school related satisfaction change scores. In other words, there was no statistically significant difference in change scores between types of mentoring received and satisfaction with various aspects of school.

Satisfaction change related to various aspects of school -Year 1

Change in	Type of Mentoring	N	Mean	SD	F	Sig.
Satisfaction with relationship with teachers	Relational	13	.307	1.60	.345	.710
	Instrumental	16	.062	1.69		
	Risk reduction	16	.562	1.78		
	Total	45	.311	1.67		
Satisfaction with school	Relational	13	.769	1.83	1.755	.185
	Instrumental	17	.882	1.83		
	Risk reduction	16	-.375	2.50		
	Total	46	.413	2.12		
Self- rating as student (excellent, good, fair, poor)	Relational	14	-.500	.759	.640	.532
	Instrumental	16	-.250	.683		
	Risk reduction	16	-.187	.910		
	Total	46	-.304	.785		
Liking school	Relational	14	-.500	1.22	.553	.579
	Instrumental	16	.000	1.21		
	Risk reduction	16	-.062	1.69		
	Total	46	-.173	1.38		

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Were there any significant differences between types of mentoring received and change (post-pre) in wellbeing? Types of mentoring were compared on change scores for various domains of wellbeing. Change scores were computed (by subtracting pretest scores from post scores) and ANOVAs were performed. No statistically significant relationship was detected between types of mentoring received and change in wellbeing.

A Comparison of Wellbeing Change (Year 1)

Measure	**Type of Mentoring**	**N**	**Mean**	**SD**	**F**	**Sig.**
Behavior Rating Index for Children(BRIC)	Relational	10	2.25	28.78	.157	.855
	Instrumental	11	4.31	15.33		
	Risk Reduction	14	-.714	22.28		
	Total	35	1.71	21.97		
Family APGAR	Relational	12	1.41	2.19	.743	.483
	Instrumental	11	.454	1.86		
	Risk Reduction	14	.428	2.62		
	Total	37	.756	2.26		
Self-Esteem (Rosenberg Self-Esteem Scale)	Relational	7	-.428	3.15	.399	.674
	Instrumental	14	1.21	6.22		
	Risk Reduction	13	-.076	2.84		
	Total	34	.382	4.53		
#of delinquency type of behaviors engaged in	Relational	12	-.750	2.17	2.90	.066
	Instrumental	18	-.944	2.28		
	Risk Reduction	16	.687	1.77		
	Total	46	-.326	2.18		

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Were there any significant differences between types of mentoring received and pre-post change in connectedness? Types of mentoring were compared on change scores for various domains of connectedness as measured by the Hemingway Measure of Preadolescent Connectedness (Karcher, 2001; Karcher & Lee, 2002). Change scores were computed (by subtracting pretest scores from post scores) and ANOVAs were performed. Connectedness to mother (change scores) among mentees in the relational mentoring was statistically different (decrease) than change in connectedness to mother (change scores --increase) for mentees in risk reduction mentoring. In addition, mentees in instrumental mentoring did not statistically differ from relational and risk reduction mentoring participants in regards to change in connectedness to mother, although both instrumental and risk reduction had increased (change scores) connectedness to mother (see table below).

Change in Connectedness (Hemmingway) (Year 1)

Connectedness to (subscale):	Type of Mentoring	N	Mean	SD	F	Sig.
Neighborhood	Relational	2	-3.00	11.31	1.314	.308
	Instrumental	6	5.83	7.83		
	Risk Reduction	6	7.16	6.85		
	Total	14	5.14	7.98		
Friends	Relational	11	2.00	3.19	.329	.721
	Instrumental	16	1.25	5.09		
	Risk Reduction	15	.600	4.20		
	Total	42	1.21	4.28		
Self	Relational	9	-.222	2.63	1.210	.311
	Instrumental	15	1.86	4.71		
	Risk Reduction	13	2.84	5.36		
	Total	37	1.70	4.60		
Parents	Relational	10	.300	2.00	1.945	.158
	Instrumental	15	2.33	4.35		
	Risk Reduction	14	.142	2.56		
	Total	39	1.02	3.35		
Siblings	Relational	10	.000	1.69	1.571	.222
	Instrumental	15	-.933	5.00		
	Risk Reduction	14	1.71	4.06		
	Total	39	.256	4.11		
School	Relational	9	1.00	2.69	.603	.553
	Instrumental	16	-.250	4.18		
	Risk Reduction	15	1.40	5.13		
	Total	40	.650	4.27		
Peers	Relational	6	.833	3.48	.469	.630
	Instrumental	13	-.692	4.00		
	Risk Reduction	14	.571	4.01		

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	Total	33	.121	3.86		
Teachers	Relational	12	-1.08	4.07	.481	.622
	Instrumental	14	-.642	4.36		
	Risk Reduction	16	.500	4.81		
	Total	42	-.333	4.40		
Future	Relational	10	-.200	4.15	.544	.585
	Instrumental	14	2.57	5.38		
	Risk Reduction	16	2.37	3.61		
	Total	40	1.80	4.47		
Reading	Relational	11	.272	4.29	.956	.394
	Instrumental	15	-1.60	2.94		
	Risk Reduction	13	-.846	3.07		
	Total	39	-.820	3.40		
Kids from other cultures	Relational	13	-1.76	2.52	1.967	.153
	Instrumental	16	-.062	3.19		
	Risk Reduction	15	.333	3.01		
	Total	44	-.431	3.01		
Religion	Relational	11	.545	1.63	.031	.970
	Instrumental	16	.312	3.73		
	Risk Reduction	13	.538	2.40		
	Total	40	.450	2.80		
Boyfriend/girlfriend	Relational	10	-.500	6.20	.129	.880
	Instrumental	14	-1.42	5.21		
	Risk Reduction	10	-.300	6.42		
	Total	34	-.823	5.72		
Mother	Relational	11	-1.81	3.70	3.791	.031*
	Instrumental	18	1.00	3.02		
	Risk Reduction	13	1.30	2.46		
	Total	42	.357	3.26		
Father	Relational	10	-1.60	1.89	2.389	.107
	Instrumental	14	-.785	2.39		
	Risk Reduction	12	.750	3.22		
	Total	36	-.500	2.68		

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For youth who had participated in the three types of mentoring program, is there any difference in their reported wellbeing at 6 month follow-up? Relational mentoring participants had statistically significant higher family APGAR (wellbeing/functioning) scores than participants in risk reduction mentoring but not those in instrumental mentoring. There was no statistically significant difference in family APGAR (wellbeing/functioning) scores between the risk reduction and instrumental mentoring groups. No group differences were found in other domains of wellbeing that were examined (see table below).

Wellbeing 6-month Follow-Up (Year 1)

Measure	Type of Mentoring	N	Mean	SD	F	Sig.
Behavior Rating Index for Children(BRIC)	Relational	12	26.25	15.68	.750	.479
	Instrumental	15	34.16	18.33		
	Risk Reduction	15	33.33	19.38		
	Total	42	31.60	17.91		
Family APGAR (functioning)	Relational	12	14.41	1.44	3.497	.039*
	Instrumental	15	12.93	1.83		
	Risk Reduction	21	12.47	2.44		
	Total	48	13.10	2.15		
Self-Esteem (Rosenberg Self-Esteem Scale)	Relational	10	34.40	4.50	2.651	.084
	Instrumental	11	29.90	5.20		
	Risk Reduction	18	30.22	5.33		
	Total	39	31.20	5.31		
#of delinquency type of behaviors engaged in	Relational	12	1.25	1.05	1.418	.253
	Instrumental	15	.60	.82		
	Risk Reduction	20	1.10	1.25		
	Total	47	.97	1.09		

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For youth who had participated in the three types of mentoring program, is there any difference in their reported relationship satisfaction at 6 month follow-up? Relational mentoring participants had statistically significant higher family life satisfaction and relationship satisfaction with mother scores than participants in instrumental mentoring but not those in risk reduction mentoring. There was no statistically significant difference in family life satisfaction or relationship satisfaction with mother scores between the risk reduction and instrumental mentoring groups.

Relationship Satisfaction at 6-Month Follow-Up (Year 1)

Change in	Type of Mentoring	N	Mean	SD	F	Sig.
life satisfaction	Relational	12	6.50	1.00	2.777	.073
	Instrumental	15	5.26	1.90		
	Risk reduction	20	6.10	1.16		
	Total	47	5.93	1.46		
family life satisfaction	Relational	12	6.66	.88	3.396	.042*
	Instrumental	15	5.40	1.80		
	Risk reduction	20	6.20	1.00		
	Total	47	6.06	1.35		
satisfaction with sibling relationships	Relational	10	6.60	.96	2.950	.064
	Instrumental	15	5.26	1.62		
	Risk reduction	19	6.10	1.41		
	Total	44	5.93	1.46		
satisfaction with relationship with mother	Relational	12	6.91	.28	3.714	.032*
	Instrumental	15	5.73	1.62		
	Risk reduction	20	6.40	.99		
	Total	47	6.31	1.19		
Satisfaction with relationship with father	Relational	12	5.41	2.35	.338	.715
	Instrumental	13	5.30	2.13		
	Risk reduction	20	5.85	1.69		
	Total	45	5.57	1.98		

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Were there any significant differences between types of mentoring received and satisfaction related school at 6-month follow-up? Types of mentoring were compared on various domains of satisfaction related to school. At 6-month follow-up, there was no statistically significant difference in satisfaction related to school and types of mentoring received.

School Satisfaction at 6-Month Follow-Up (Year 1)

School Satisfaction Domain	Type of Mentoring	N	Mean	SD	F	Sig.
Satisfaction with relationship with teachers	Relational	12	5.58	1.31	.960	.391
	Instrumental	15	5.13	1.64		
	Risk reduction	20	4.80	1.60		
	Total	47	5.10	1.54		
Satisfaction with school	Relational	12	4.75	2.00	.732	.487
	Instrumental	15	5.20	1.56		
	Risk reduction	21	4.52	1.50		
	Total	48	4.79	1.64		
Self- rating as student (excellent, good, fair, poor)	Relational	12	1.83	.83	1.093	.344
	Instrumental	15	2.06	.88		
	Risk reduction	20	2.25	.63		
	Total	47	2.08	.77		
Liking school	Relational	12	3.08	1.37	.307	.737
	Instrumental	14	2.71	1.26		
	Risk reduction	21	2.76	1.30		
	Total	47	2.83	1.29		

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Mentors

What is the profile of mentors that participated in mentoring during the 1st year of the program? The table below lists the characteristics of 1st year mentors across the three schools. On the whole, they were majority female, African American or other, tended to be the Oldest child in their family, and between the ages of 16 and 18. Most of them reported being good students with average GPA above 3.0. Few of them liked coming to school "a lot". Majority participated in one or more school activities. Between 9 to 13.6% or reported skipped school. However, between 9% to 27% reported they had been suspended from school.

Mentor Demographics(Year 1)

Characteristics		School 1 (Relational) (n=22)		School 2 (Instrumental) (n=22)		School 3 (Risk Reduction) (n=22)	
		n	%	n	%	n	%
Gender	Male	8	36.4	8	36.4	7	31.8
	Female	14	63.6	14	63.6	15	68.2
	missing	---	---		---	---	---
Race/Ethnicity	African American	9	40.9	8	36.4	8	36.4
	White	10	45.5	12	54.5	8	36.4
	Other	3	13.6	2	9.1	6	27.2
	missing	---		---	---	---	---
Age	15	---	---	---	---	---	---
	16	7	31.8	6	27.3	3	13.6
	17	10	45.5	10	45.5	16	72.7
	18	5	22.7	6	27.3	3	13.6
	missing	---	---	---	---	---	---
Birth Order	Oldest	13	59.1	5	22.7	12	54.5
	Middle	2	9.1	7	31.8	4	18.2
	Youngest	6	27.3	8	36.4	6	27.3
	missing	1	4.5	2	9.1	---	---
Type of Student (self-reported)	Excellent	5	22.7	4	18.2	11	50.0
	Good	16	72.7	16	72.7	11	50.0
	Fair	1	4.5	1	4.5	---	---
	Poor	---	---	---	---	---	---
	Missing	---	---	1	4.5	---	---
Like Coming to School	A lot	5	22.7	2	9.1	10	45.5
	Most of the time	11	50.0	18	81.8	8	36.4
	Some of the time	5	22.7	2	9.1	2	9.1

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	A little of the time	---	---	---	---	1	4.5
	Don't like at all	1	4.5	---	---	1	4.5
	missing	---	---	---	---	---	---
#of School Activities Participating in	Zero	2	9.1	5	22.7	2	9.1
	One	3	13.6	3	13.6	3	13.6
	Two	6	27.3	6	27.3	2	9.1
	Three	5	22.7	2	---	7	31.8
	Four or more	5	22.7	6	27.2	6	27.1
	missing	1	4.5	2	9.1	2	9.1
Skipped School	Yes	2	9.1	2	9.1	3	13.6
	No	20	90.9	20	90.9	19	86.4
	Missing	---	---	---	---	---	---
Suspensions from School	Yes	2	9.1	2	9.1	6	27.3
	No	20	90.1	20	90.9	16	72.7
	Missing	---	---	---	---	---	---
		3.13	.393	3.19	.507	3.18	.421

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Overall, how did mentors evaluate the training they received to become a mentor and the mentoring they provided?(Year 1). Ratings ranged from 3.2 to 5 (range 1 to 5 with 5 being the highest rating) Overall, results indicate that mentors assigned to instrumental mentoring found the mentor training less practical, less important, felt they knew less about what to do as a mentor after the training, less comfortable doing mentoring activities, than mentors assigned to either relational or risk reduction mentoring. Thus, they reported being less prepared to provide mentoring.

After completing the mentoring program, mentors assigned to instrumental mentoring were less likely to be satisfied with the mentoring they provided, the mentoring activities they participated in, and their overall satisfaction with the mentoring program (see table below).

Aspect of training and mentoring		N	Mean	Std. Deviation	F	Sig.
Helpfulness of use of role playing or practice exercises as a part of mentor training	Relational	22	4.045	.9989	2.140	.126
	Instrumental	22	3.614	.8442		
	Risk reduction	22	4.136	.8335		
	Total	66	3.932	.9110		
How helpful was the following? The use of handouts as a part of the program?	Relational	22	4.227	.8691	2.264	.112
	Instrumental	22	3.682	.7799		
	Risk reduction	22	3.864	.9409		
	Total	66	3.924	.8825		
How helpful was the following? The use of lecturing as a part of the program?	Relational	22	3.818	.8528	2.379	.101
	Instrumental	22	3.227	.9726		
	Risk reduction	22	3.773	1.1519		
	Total	66	3.606	1.0210		
How practical was the following? The use of handouts as a component of this program?	Relational	22	4.045	.6530	.864	.426
	Instrumental	22	3.773	.8691		
	Risk reduction	22	4.045	.8439		
	Total	66	3.955	.7929		
How practical was the following? The use of lecturing as a part of the program?	Relational	22	3.864	.8335	.609	.547
	Instrumental	22	3.545	.9625		
	Risk reduction	22	3.591	1.2596		
	Total	66	3.667	1.0278		
How practical was the following? The program overall?	Relational	22	4.818	.3948	3.407	.039*
	Instrumental	22	4.409	.7341		
	Risk reduction	22	4.773	.5284		
	Total	66	4.667	.5905		
To what extent did the training program increase the following? Your knowledge	Relational	22	4.045	.8439	.329	.721
	Instrumental	22	3.818	.9580		
	Risk reduction	22	3.955	.9989		
	Total	66	3.939	.9262		

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To what extent did the training program increase the following? Your skill	Relational	22	4.273	.7673	1.848	.166
	Instrumental	22	3.773	.9726		
	Risk reduction	22	4.091	.8679		
	Total	66	4.045	.8846		
To what extent did the training program increase the following? Your confidence in taking action	Relational	22	4.318	.5679	1.348	.267
	Instrumental	22	3.909	.8679		
	Risk reduction	22	4.136	.9902		
	Total	66	4.121	.8323		
How likely are you to apply the knowledge you learned in this program?	Relational	22	4.500	.6726	2.578	.084
	Instrumental	22	4.227	.8125		
	Risk reduction	22	4.682	.4767		
	Total	66	4.470	.6843		
Overall, how would you rate the importance of the program you have received?	Relational	22	4.545	.6710	3.138	.050*
	Instrumental	22	4.273	.7673		
	Risk reduction	22	4.773	.5284		
	Total	66	4.530	.6843		
As a result of participating in this training: I am comfortable with being a mentor	Relational	22	4.500	.7400	3.683	.031*
	Instrumental	22	4.591	.6661		
	Risk reduction	22	4.955	.2132		
	Total	66	4.682	.6117		
As a result of participating in this training: I know what to do as a mentor	Relational	22	4.136	.8335	2.358	.103
	Instrumental	22	4.500	.6726		
	Risk reduction	22	4.545	.5096		
	Total	66	4.394	.6990		
As a result of participating in this training: I am comfortable doing mentoring activities	Relational	22	4.591	.6661	2.927	.061
	Instrumental	22	4.545	.5958		
	Risk reduction	22	4.909	.2942		
	Total	66	4.682	.5591		
As a result of participating in this training: I am looking forward to working with my mentee	Relational	22	4.773	.5284	2.194	.120
	Instrumental	22	4.818	.3948		
	Risk reduction	22	5.000	.0000		
	Total	66	4.864	.3877		
As a result of participating in this training: I am comfortable with being a mentor	Relational	22	4.864	.3513	2.116	.129
	Instrumental	22	4.818	.3948		
	Risk reduction	22	5.000	.0000		
	Total	66	4.894	.3103		
As a result of participating in this training: I know what to do as a mentor	Relational	22	4.682	.4767	4.493	.015*
	Instrumental	22	4.727	.4558		
	Risk reduction	22	5.000	.0000		
	Total	66	4.803	.4008		
As a result of participating in this training: I am comfortable doing mentoring activities	Relational	22	4.909	.2942	3.192	.048*
	Instrumental	22	4.773	.4289		
	Risk reduction	22	5.000	.0000		

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	Total	66	4.894	.3103		
As a result of participating in this training: I am looking forward to working with my mentee	Relational	22	4.955	.2132	.145	.865
	Instrumental	22	4.909	.2942		
	Risk reduction	22	4.909	.4264		
	Total	66	4.924	.3192		

How satisfied are you with the mentoring you provided?	Relational	22	4.636	.7267	3.921	.025*
	Instrumental	22	3.955	1.2527		
	Risk reduction	22	4.591	.5903		
	Total	66	4.394	.9426		
How satisfied are you with the mentoring relationship you have with your mentee?	Relational	22	4.318	1.0414	1.022	.366
	Instrumental	22	4.091	1.1088		
	Risk reduction	22	4.545	1.0108		
	Total	66	4.318	1.0548		
How satisfied are you with the mentoring activities you participated in?	Relational	22	4.091	.6838	3.775	.028*
	Instrumental	22	3.364	1.2168		
	Risk reduction	22	4.091	1.0650		
	Total	66	3.848	1.0560		
Overall, how satisfied are you with the mentoring program?	Relational	22	4.500	.5118	6.362	.003*
	Instrumental	22	3.818	1.0527		
	Risk reduction	22	4.636	.7895		
	Total	66	4.318	.8798		

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Parents

Parents' Satisfaction with Mentoring

In year 1, how satisfied were parents with mentoring received by their child? Very few responses were received from parents of mentees after completion of the mentoring program by their child. And, unfortunately, no responses were received from parents of mentees participating in risk reduction mentoring. The table below indicates that mean satisfaction rating ranged from3.60 to 5.00 (possible range 1-5, with 5 indicating highest level of satisfaction). Unfortunately, no responses were received from parents of mentees participating in risk reduction mentoring.

Parental Satisfaction with Mentoring (Year 1)

Aspects of mentoring	Type of mentoring	n	mean	Standard deviation
How satisfied are you with the mentoring your child has received?	Relational	2	5.00	.000
	Instrumental	5	3.60	1.949
	Risk reduction	0	.	.
	Total	7	4.00	1.732
How satisfied are you with your child's relationship with his or her mentor?	Relational	2	5.00	.0000
	Instrumental	5	3.80	1.788
	Risk reduction	0	.	.
	Total	7	4.14	1.573
How satisfied are you with the mentoring activities your child participated in?	Relational	2	5.00	.0000
	Instrumental	5	4.00	1.414
	Risk reduction	0	.	.
	Total	7	4.28	1.253
Overall, how satisfied are you with the mentoring program?	Relational	2	5.00	.000
	Instrumental	5	3.80	1.788
	Risk reduction	0	.	.
	Total	7	4.14	1.573

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Year 2

Mentees

What is the profile of mentees that participated in mentoring during the 2nd year of the program? The table below lists the characteristics of 2nd year mentees across the three schools. On the whole, they were majority male, African American, tended to be the middle child, and between the ages of 11 and 13. Most of the mentees reported as being good students with "A" grades. Few of them liked coming to school "a lot", participated in two or more school activities, or reported skipped school. Only between 4% to 36% reported they had been suspended from school.

Year 2 Mentee Sample Demographics

Characteristics		School 1 (Relational) (n=25)		School 2 (Instrumental) (n=30)		School 3 (Risk Reduction) (n=31)	
		n	%	n	%	n	%
Gender	Male	12	48.0	19	63.3	16	51.6
	Female	9	36.0	7	23.3	13	41.9
	missing	4	16.0	4	13.3	2	6.5
Race/Ethnicity	African American	7	28.0	13	43.3	25	80.6
	White	8	32.0	6	20.0	---	---
	Other	6	24.0	7	23.4	4	13.0
	missing	4	16.0	4	13.3	2	6.5
Age	10	---	---	1	3.3	---	---
	11	14	56.0	18	60.0	20	64.5
	12	7	28.0	7	23.3	9	29.0
	13	---	---	---	---	---	---
	missing	4	16.0	4	13.3	2	6.5
Birth Order	Oldest	9	36.0	5	16.7	6	19.4
	Middle	7	28.0	9	30.0	7	54.8
	Youngest	4	16.0	11	36.7	6	19.4
	missing	5	20.0	5	16.7	2	6.5
Type of Student (self-reported)	Excellent	6	24.0	4	13.3	9	29.0
	Good	10	40.0	19	63.3	16	51.6
	Fair	5	20.0	3	10.0	3	9.7
	Poor	---	---	---	---	---	---
	Missing	4	16.0	4	13.3	3	9.7
Type of Grades (self-reported) [More than 100% due to more than one response possible]	A's	14	56.0	18	60.0	22	71.0
	B's	13	52.0	17	56.7	21	67.7
	C's	10	40.0	15	50.0	10	32.3
	D's	4	16.0	2	6.7	3	9.7
	F's	---	---	---	---	1	3.2
Like Coming to School	A lot	---	---	1	3.3	6	19.4
	Most of the time	6	24.0	10	33.3	14	45.2
	Some of the time	6	24.0	7	23.3	2	6.5
	A little of the time	6	24.0	5	16.7	4	12.9

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	Don't like at all	3	12.0	3	10.0	3	9.7
	missing	4	16.0	4	13.3	2	6.5
#of School Activities Participating in	Zero	8	32.0	11	36.7	7	22.6
	One	10	40.0	6	20.0	15	48.4
	Two	2	8.0	5	16.7	3	9.7
	Three	1	4.0	2	6.7	2	6.5
	Four or more	---	---	---	---	---	---
	missing	4	16.0	6	20.0	4	12.9
Skipped School	Yes	1	4.0	2	6.7	2	6.5
	No	20	80.0	24	80.0	27	87.1
	Missing	4	16.0	4	13.3	2	6.5
Suspensions from School	Yes	1	4.0	11	36.7	5	16.1
	No	20	80.0	15	50.0	24	77.4
	Missing	---	---	4	13.3	2	6.5

Were mentees satisfied with the mentoring they received? Overall, mentees participating in the three types of mentoring rated the mentoring received fairly high (above a 3.3 on a scale of 1-5 with 5 being higher level of satisfaction) across the various aspect of satisfaction. On three out of four aspects of mentoring satisfaction, mentees receiving risk reduction mentoring had the lowest average satisfaction ratings, compared to other mentoring types. When compared to each other, mentees across the three types of mentoring did not significantly differ on any aspect of mentoring satisfaction.

Satisfaction with Mentoring (Year 2)

Aspect of Mentoring	Type of Mentoring	N	Mean	SD	F	Sig.
How satisfied are you with the mentoring you received?	Relational	16	4.43	.629	.562	.574
	Instrumental	18	4.22	1.06		
	Risk Reduction	17	4.52	.874		
	Total	51	4.39	.873		
How satisfied are you with the mentoring relationship you have with your mentor?	Relational	16	4.50	.730	1.15	.325
	Instrumental	18	4.61	.849		
	Risk Reduction	17	4.17	1.01		
	Total	51	4.43	.877		
How satisfied are you with the mentoring activities you participated in?	Relational	16	4.06	.997	2.54	.089
	Instrumental	18	4.16	.923		
	Risk Reduction	17	3.35	1.45		
	Total	51	3.86	1.18		
Overall, how satisfied are you with the mentoring program?	Relational	16	4.37	.718	1.49	.234
	Instrumental	18	4.16	1.15		
	Risk Reduction	17	3.76	1.14		
	Total	51	4.09	1.04		

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Was there any significant change in outcomes (academic rating, satisfaction, connectedness) reported by mentees from beginning (at pretest) to end of the program (posttest) as a result of participating in mentoring? Paired t-tests conducted (see table below) revealed that mentees participating in mentoring with a relational and instrumental approach had the most number (5) of outcomes with significant change from pretest to posttest in comparison to mentees receiving risk reduction mentoring (4). Out of the 14 measures that were found to be significant, 12 were associated with connectedness. These results should be interpreted cautiously given the small sample with complete data available for analysis.

Outcomes by Intervention from Pretest to Posttest (Year 2)
[Only those measures with significant findings are reported]

Intervention	Measure	N	Pre-test		Post-test				
			mean	SD	mean	SD	t	df	p
Relational	Connectedness to self	16	22.84	5.37	25.43	4.03	3.221	15	.006
	Connectedness to parents	14	23.64	3.31	25.57	1.98	2.161	13	.050
	Connectedness to peers	15	22.93	2.98	21.26	4.21	-2.157	14	.049
	Teacher's perception of connectedness to peers	15	20.26	3.99	21.90	4.71	-2.413	14	.030
	Teacher's perception of connectedness to teachers	14	19.57	4.53	22.35	3.87	-3.150	13	.008
Instrumental	Connectedness to siblings	15	15.60	5.52	18.40	5.75	2.564	14	.022
	Connectedness to school	16	23.00	2.65	19.93	3.27	-3.717	15	.002
	Connectedness to teachers	17	23.70	2.64	20.83	4.34	-2.309	16	.035
	Connectedness to boyfriend/girlfriend	17	15.73	7.32	12.64	7.10	-2.462	16	.026
	Parent's perception of connectedness to school	12	23.58	4.60	20.75	3.79	-3.845	11	.003
Risk Reduction	#of delinquency type of behaviors engaged in	14	.8571	1.09	2.00	1.92	2.511	13	.026
	Connectedness to friends	14	18.42	5.78	21.00	6.10	2.548	13	.024
	Connectedness to peers	14	20.78	3.80	18.07	4.68	-2.233	13	.044
	Parent's stress related to care of child	8	2.18	.587	1.68	.498	-2.430	7	.045

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Was there any significant change in wellbeing (reported behavioral problems, self-esteem, family functioning, or number of delinquency type of behaviors engaged in) reported by mentees from beginning (at pretest) to end of the program (posttest) as a result of participating in mentoring? The table below reports the results of paired t-tests conducted on completed responses from mentees across the three types of mentoring implemented in year 1. The results indicate that self-esteem as measured by the Rosenberg Self-Esteem Scale was found to be reported to be higher at the end of the program participation for mentees participating in relational mentoring. This higher score was statistically significant. There was a significant increase in the number of delinquency type of behaviors engaged in by mentees participating in risk reduction mentoring, rather than a decrease as was expected. These results should be interpreted cautiously given the small sample with complete data available for analysis.

Outcomes by Intervention from Pretest to Posttest (Year 2)
[Wellbeing Domains]

Intervention	Measure	N	Pre-test		Post-test				
			mean	SD	mean	SD	t	df	p
Relational	Child Behavior Rating Index (BRIC)	15	28.58	14.02	30.66	12.51	.881	14	.393
	Self-Esteem (Rosenberg self-esteem scale)	15	30.00	4.53	35.60	4.27	4.244	14	.001*
	Family Functioning (Family APGAR)	14	11.14	2.41	12.35	2.43	2.144	13	.051
	#of delinquency type of behaviors engaged in	14	1.28	2.94	.642	1.08	-.763	13	.459
Instrumental	Child Behavior Rating Index (BRIC)	18	31.04	13.60	35.69	18.46	1.343	17	.197
	Self-Esteem (Rosenberg self-esteem scale)	15	31.73	6.46	29.46	6.15	-1.459	14	.167
	Family Functioning (Family APGAR)	16	12.68	2.08	11.93	2.83	-1.218	15	.242
	#of delinquency type of behaviors engaged in	18	1.11	.758	1.66	1.90	1.158	17	.263
Risk Reduction	Child Behavior Rating Index (BRIC)	14	32.67	16.48	45.17	29.92	1.480	13	.163
	Self-Esteem (Rosenberg self-esteem scale)	14	31.71	4.63	31.21	5.30	-.343	13	.737
	Family Functioning (Family APGAR)	14	12.92	2.23	12.35	3.24	-.639	13	.534
	#of delinquency type of behaviors engaged in	14	.857	1.09	2.00	1.92	2.511	13	.026*

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Were there any significant differences between types of mentoring received and pre-post change in relationship satisfaction? Types of mentoring were compared on change scores for various domains of satisfaction. Change scores were computed (by subtracting pretest scores from post scores) and ANOVAs were performed. The results did not indicate any statistically significance difference in relationship satisfaction change scores. In other words, there was no statistically significant difference in change scores between types of mentoring received and satisfaction domains.

Relationship Satisfaction by Type of Mentoring (Year 2)

Change in	Type of Mentoring	N	Mean	SD	F	Sig.
life satisfaction	Relational	16	.875	2.60	.832	.441
	Instrumental	18	.000	1.87		
	Risk reduction	15	.133	1.68		
	Total	49	.326	2.08		
family life satisfaction	Relational	16	.937	2.59	1.560	.221
	Instrumental	18	-.333	1.60		
	Risk reduction	15	.400	2.06		
	Total	49	.306	2.13		
satisfaction with sibling relationships	Relational	15	1.20	2.42	.499	.610
	Instrumental	18	.444	1.72		
	Risk reduction	15	.733	2.37		
	Total	48	.770	2.14		
satisfaction with relationship with mother	Relational	16	.437	2.65	.155	.857
	Instrumental	18	.055	1.51		
	Risk reduction	15	.200	1.69		
	Total	49	.224	1.97		
Satisfaction with relationship with father	Relational	16	-.250	2.14	1.554	.222
	Instrumental	17	-1.00	2.44		
	Risk reduction	15	.466	2.44		
	Total	48	-.291	2.37		

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Were there any significant differences between types of mentoring received and satisfaction change (post-pre change) related school? Types of mentoring were compared on change scores for various domains of satisfaction related to school. Change scores were computed (by subtracting pretest scores from post scores) and ANOVAs were performed. The results did not indicate any statistically significance difference in school related satisfaction change scores. In other words, there was no statistically significant difference in change scores between types of mentoring received and school satisfaction domains.

Satisfaction with relationship with teachers	Relational	16	.187	2.19	.579	.565
	Instrumental	18	-.055	1.16		
	Risk reduction	15	.600	1.80		
	Total	49	.224	1.73		
Satisfaction with school	Relational	16	.125	2.27	2.174	.125
	Instrumental	18	-1.11	2.47		
	Risk reduction	15	.533	2.38		
	Total	49	-.204	2.44		
Self- rating as student (excellent, good, fair, poor)	Relational	16	-.187	.403	2.542	.090
	Instrumental	18	.305	.859		
	Risk reduction	14	-.107	.684		
	Total	48	.020	.706		
Liking school	Relational	16	-.312	1.49	1.021	.369
	Instrumental	18	.055	1.43		
	Risk reduction	14	-.642	1.15		

Were there any significant differences between types of mentoring received and change (post-pre) in wellbeing? Types of mentoring were compared on change scores for various domains of wellbeing. Change scores were computed (by subtracting pretest scores from post scores) and ANOVAs were performed. Change in self-esteem score among mentees in the relational mentoring was statistically greater than change in self-esteem scores for mentees in the instrumental and risk reduction mentoring. Mentees in the instrumental and risk reduction mentoring did not statistically differ from each other in change in self-esteem scores.

A Comparison of Wellbeing Change (Year 2)

Measure	Type of Mentoring	N	Mean	SD	F	Sig.
Behavior Rating Index for Children(BRIC)	Relational	15	2.08	9.15	1.05	.358
	Instrumental	18	4.65	14.70		
	Risk Reduction	14	12.50	31.59		
	Total	47	6.17	20.14		
Family APGAR	Relational	14	1.21	2.11	2.36	.107
	Instrumental	16	-.750	2.46		
	Risk Reduction	14	-.571	3.34		
	Total	44	-.068	2.76		

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Self-Esteem (Rosenberg Self-Esteem Scale)	Relational	15	5.60	5.11	8.28	.001*
	Instrumental	15	-2.26	6.01		
	Risk Reduction	14	-.500	5.45		
	Total	44	.977	6.41		
#of delinquency type of behaviors engaged in	Relational	14	-.642	3.15	2.11	.133
	Instrumental	18	.555	2.03		
	Risk Reduction	14	1.14	1.70		
	Total	46	.369	2.40		

Were there any significant differences between types of mentoring received and pre-to post mentoring change in connectedness? Types of mentoring were compared on change scores for various domains of connectedness as measured by the Hemingway Measure of Preadolescent Connectedness (Karcher, 2001; Karcher & Lee, 2002). Change scores were computed (by subtracting pretest scores from post scores) and ANOVAs were performed. Change in connectedness to self scores among mentees in the relational mentoring was statistically different (increase) than change in connectedness to self-scores (decrease) for mentees in the instrumental and risk reduction mentoring. Mentees in the instrumental mentoring did not statistically differ from risk reduction mentoring participants in regards to change in connectedness to self scores, although both instrumental and risk reduction had decreased change in connectedness to self scores.(see table below).

Change in Connectedness (Hemmingway) (Year 2)

Connectedness to (subscale):	Type of Mentoring	N	Mean	SD	F	Sig.
Neighborhood	Relational	5	1.4000	6.65582	.936	.404
	Instrumental	17	-1.4706	5.87492		
	Risk Reduction	8	1.5000	5.12696		
	Total	30	-.2000	5.80368		
Friends	Relational	15	1.2000	4.93095	1.710	.193
	Instrumental	17	-.6471	5.55587		
	Risk Reduction	14	2.5714	3.77674		
	Total	46	.9348	4.94594		
Self	Relational	16	2.5938	3.22086	4.627	.015*
	Instrumental	16	-.7188	3.87285		
	Risk Reduction	16	-1.1875	4.32387		
	Total	48	.2292	4.11789		
Parents	Relational	14	1.9286	3.33891	2.226	.120
	Instrumental	17	-1.1176	4.25562		
	Risk Reduction	16	-.3125	4.49768		

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	Total	47	.0638	4.20354		
Siblings	Relational	15	.2000	3.40588	1.384	.262
	Instrumental	15	2.8000	4.22915		
	Risk Reduction	16	1.1250	5.14943		
	Total	46	1.3696	4.37853		
School	Relational	14	-1.2143	3.86659	2.070	.138
	Instrumental	16	-3.0625	3.29583		
	Risk Reduction	17	-.0882	5.17275		
	Total	47	-1.4362	4.32211		
Peers	Relational	15	-1.6667	2.99205	.655	.524
	Instrumental	17	-.8824	5.31369		
	Risk Reduction	14	-2.7143	4.54767		
	Total	46	-1.6957	4.40136		
Teachers	Relational	14	-.7143	4.49664	.725	.490
	Instrumental	17	-2.8824	5.14639		
	Risk Reduction	16	-1.3750	5.76050		
	Total	47	-1.7234	5.15711		
Future	Relational	14	1.0714	3.98968	.469	.628
	Instrumental	17	-.1765	3.82811		
	Risk Reduction	16	-.0625	3.82045		
	Total	47	.2340	3.82902		
Reading	Relational	16	.3125	3.17739	1.613	.210
	Instrumental	16	1.5625	3.09771		
	Risk Reduction	16	-.2500	3.58701		
	Total	48	.5417	3.31315		
Kids from other cultures	Relational	16	1.6875	3.43936	1.613	.210
	Instrumental	17	.1176	2.14716		
	Risk Reduction	16	.0625	3.06526		
	Total	49	.6122	2.95675		
Religion	Relational	16	.3750	2.52653	1.486	.237
	Instrumental	18	-.5000	2.09341		
	Risk Reduction	15	.7333	1.66762		
	Total	49	.1633	2.15394		
Boyfriend/girlfriend	Relational	12	1.8333	6.78010	2.636	.083
	Instrumental	17	-3.0882	5.17275		
	Risk Reduction	16	-1.7813	5.58262		
	Total	45	-1.3111	5.98700		
Mother	Relational	16	.8125	2.92617	1.496	.234
	Instrumental	18	-.8333	2.70620		

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	Risk Reduction	16	-.4375	2.96578		
	Total	50	-.1800	2.89045		
Father	Relational	15	-1.0667	2.96327	1.320	.278
	Instrumental	17	-.0588	1.63824		
	Risk Reduction	12	.7500	4.07040		
	Total	44	-.1818	2.93553		

For youth who had participated in the three types of mentoring program, Is there any difference in their reported wellbeing at 6 month follow-up? Relational mentoring participants had statistically significant higher self-esteem scores than participants in instrumental mentoring but not those in risk reduction mentoring. There was no statistically significant difference in self-esteem scores between the risk reduction and instrumental mentoring groups. No group differences were found in other domains of wellbeing that were examined (see table below).

Wellbeing 6-month Follow-Up (Year 2)

Measure	Type of Mentoring	N	Mean	SD	F	Sig.
Behavior Rating Index for Children(BRIC)	Relational	10	20.50	15.75	2.275	.118
	Instrumental	15	32.16	13.75		
	Risk Reduction	12	34.06	18.65		
	Total	37	29.62	16.56		
Family APGAR (functioning)	Relational	11	13.18	2.18	.945	.398
	Instrumental	15	12.00	2.13		
	Risk Reduction	15	12.26	2.34		
	Total	41	12.41	2.22		
Self-Esteem (Rosenberg Self-Esteem Scale)	Relational	8	35.62	4.68	4.026	.028*
	Instrumental	15	29.06	5.76		
	Risk Reduction	11	29.18	6.16		
	Total	34	30.64	6.17		
#of delinquency type of behaviors engaged in	Relational	11	.545	1.21	.800	.457
	Instrumental	15	1.60	2.97		
	Risk Reduction	15	1.06	1.48		
	Total	41	1.12	2.09		

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For youth who had participated in the three types of mentoring program, Is there any difference in their reported relationship satisfaction at 6 month follow-up? Relational mentoring participants had statistically significant higher scores specific to satisfaction with relationship with father than participants in instrumental mentoring but not those in risk reduction mentoring. There was no statistically significant difference in satisfaction with relationship with father between the risk reduction and instrumental mentoring groups. In regards to other satisfaction domains, there was no statistically significant difference among the three types of mentoring compared in the analysis.

Relationship Satisfaction at 6-Month Follow-Up (Year 2)

Change in	Type of Mentoring	N	Mean	SD	F	Sig.
life satisfaction	Relational	11	6.45	.687	1.224	.305
	Instrumental	15	5.66	1.63		
	Risk reduction	15	6.13	1.24		
	Total	41	6.04	1.30		
family life satisfaction	Relational	11	6.54	.687	2.647	.084
	Instrumental	15	5.66	1.11		
	Risk reduction	15	6.13	.990		
	Total	41	6.07	1.00		
satisfaction with sibling relationships	Relational	10	5.80	1.61	.581	.564
	Instrumental	15	5.80	1.08		
	Risk reduction	15	5.26	1.79		
	Total	40	5.60	1.49		
satisfaction with relationship with mother	Relational	11	6.81	.404	2.750	.077
	Instrumental	15	5.40	1.84		
	Risk reduction	14	6.07	1.68		
	Total	40	6.02	1.59		
Satisfaction with relationship with father	Relational	11	6.36	1.80	3.540	.039*
	Instrumental	15	4.20	2.54		
	Risk reduction	13	5.69	1.88		
	Total	39	5.30	2.28		

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Were there any significant differences between types of mentoring received and satisfaction related school at 6-month follow-up? The results did not indicate any statistically significance difference in school related satisfaction at 6-month follow-up. In other words, there was no statistically significant difference in satisfaction related to school and types of mentoring received.

School Satisfaction at 6-Month Follow-Up (Year 2)

Change in	**Type of Mentoring**	**N**	**mean**	**SD**	**F**	**Sig.**
Satisfaction with relationship with teachers	Relational	11	6.09	.700	2.451	.100
	Instrumental	15	5.06	1.57		
	Risk reduction	15	5.80	1.14		
	Total	41	5.61	1.28		
Satisfaction with school	Relational	11	5.81	.981	.673	.516
	Instrumental	15	5.20	1.65		
	Risk reduction	15	5.60	1.35		
	Total	41	5.51	1.38		
Self- rating as student (excellent, good, fair, poor)	Relational	11	1.81	.750	.852	.434
	Instrumental	15	1.93	.798		
	Risk reduction	15	2.20	.774		
	Total	41	2.00	.774		
Liking school	Relational	11	2.36	.924	.003	.997
	Instrumental	15	2.33	1.11		
	Risk reduction	15	2.33	1.17		
	Total	41	2.34	1.06		

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Mentors

What is the profile of mentors that participated in mentoring during the 2nd year of the program? The table below lists the characteristics of 2nd t year mentors across the three schools. On the whole, they were majority female, African American or other, tended to be the oldest child in their family, and between the ages of 16 and 18. Most of the mentees reported as being good students with average GPA above 3.0. Few of them liked coming to school "a lot". Majority participated in one or more school activities. Between 0 to 10% reported that they skipped school. However, between 16% to 20% reported they had been suspended from school.

Mentor Demographics(Year 2)

Characteristics		School 1 (Relational) (n=25)		School 2 (Instrumental) (n=30)		School 3 (Risk Reduction) (n=)	
		n	%	n	%	n	%
Gender	Male	8	32.0	7	23.3	12	38.7
	Female	17	68.0	21	70.0	18	58.1
	missing	---	---	2	6.7	1	3.2
Race/Ethnicity	African American	6	24.0	11	36.7	11	35.5
	White	13	52.0	12	40.0	16	51.6
	Other	6	24.0	5	16.6	3	9.7
	missing	---	---	---	---	1	3.2
Age	15	---	---	2	6.7	---	---
	16	10	40.0	7	23.3	15	48.4
	17	14	56.0	14	46.7	13	41.9
	18	1	4.0	5	16.7	2	6.5
	missing	---	---	2	6.7	1	3.2
Birth Order	Oldest	7	28.0	11	36.7	12	38.7
	Middle	8	32.0	11	36.7	10	32.3
	Youngest	10	40.0	4	13.3	7	22.6
	missing	---	---	4	13.3	2	6.5
Type of Student (self-reported)	Excellent	5	20.0	14	46.7	14	45.2
	Good	18	72.0	14	46.7	15	48.4
	Fair	2	8.0	---	---	---	---
	Poor	---	---	---	---	---	---
	Missing	---	---	2	6.7	---	---
Like Coming to School	A lot	3	12.0	5	16.7	5	16.1
	Most of the time	18	72.0	18	60.0	15	48.4
	Some of the time	3	12.0	5	16.7	7	22.6
	A little of the time	1	4.0	---	---	---	---
	Don't like at all	---	---	---	---	1	3.2
	missing	---	---	2	6.7	3	9.7
#of School Activities Participating in	Zero	4	16.0	7	23.3	1	3.2
	One	3	12.0	5	16.7	8	25.8
	Two	6	24.0	6	20.0	11	35.5
	Three	4	16.0	4	13.3	---	---
	Four or more	7	28.0	5	16.6	7	22.6
	missing	1	4.0	3	10.0	4	12.9

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Skipped School	Yes	0	0.0	3	10.0	3	9.7
	No	25	100	25	83.3	26	83.9
	Missing	---	---	2	6.7	2	6.5
Suspensions from School	Yes	4	16.0	6	20.0	5	16.1
	No	21	84.0	22	73.3	24	77.4
	Missing	---	---	2	6.7	2	6.5
		mean	sd	mean	sd	mean	sd
Grade Point Average		3.29	.545	3.42	.466	3.30	.640

Overall, how did mentors evaluate the training they received to become a mentor and the mentoring they provided?(Year 2). Ratings ranged from 3.6 to 4.96 (range 1 to 5 with 5 being the highest rating) Overall, there was only one significant difference between the mentors across the three types of mentoring they were providing. They differed in their satisfaction with the mentoring program, with mentors in the instrumental mentoring group with overall average lower satisfaction ratings than either relational or risk reduction mentoring.

Comparison of Mentor's Evaluation of Mentor Training and Training Satisfaction Across Mentoring Interventions (Year 2)

		N	Mean	Std. Deviation	F	Sig.
How helpful was the following? The use of role playing or practice exercises as a part of the program?	Relational	25	3.840	.8981	1.588	.211
	Instrumental	29	4.207	.8610		
	Risk reduction	25	4.200	.7638		
	Total	79	4.089	.8502		
How helpful was the following? The use of handouts as a part of the program?	Relational	25	3.840	.9434	.694	.503
	Instrumental	29	4.138	.8752		
	Risk reduction	27	3.889	1.1875		
	Total	81	3.963	1.0055		
How helpful was the following? The use of lecturing as a part of the program?	Relational	25	3.680	1.1804	.067	.935
	Instrumental	29	3.690	1.2565		
	Risk reduction	28	3.786	1.1007		
	Total	82	3.720	1.1682		
How practical was the following? The use of handouts as a component of this program?	Relational	25	3.840	.9434	1.875	.160
	Instrumental	29	4.172	.8048		
	Risk reduction	28	3.714	1.0131		
	Total	82	3.915	.9323		
How practical was the following? The use of lecturing as a part of the program?	Relational	25	3.920	.8622	.216	.806
	Instrumental	29	4.069	.9975		
	Risk reduction	28	3.929	.9786		
	Total	82	3.976	.9425		
How practical was the following? The program overall?	Relational	25	4.480	.7703	.570	.568
	Instrumental	29	4.552	.6859		
	Risk reduction	28	4.679	.6118		
	Total	82	4.573	.6855		
To what extent did the training program increase the following? Your knowledge	Relational	24	3.792	.9315	1.179	.313
	Instrumental	29	4.207	.8610		
	Risk reduction	28	4.071	1.1524		
	Total	81	4.037	.9930		

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To what extent did the training program increase the following? Your skill	Relational	24	3.792	.9771	.387	.680
	Instrumental	29	4.034	.9814		
	Risk reduction	28	3.857	1.1774		
	Total	81	3.901	1.0441		
To what extent did the training program increase the following? Your confidence in taking action	Relational	24	3.833	1.0495	2.264	.111
	Instrumental	29	4.414	.7328		
	Risk reduction	28	4.071	1.1841		
	Total	81	4.123	1.0171		
How likely are you to apply the knowledge you learned in this program?	Relational	24	4.167	.8165	1.027	.363
	Instrumental	29	4.448	.7361		
	Risk reduction	28	4.393	.6853		
	Total	81	4.346	.7443		
Overall, how would you rate the importance of the program you have received?	Relational	24	4.333	.7614	.733	.484
	Instrumental	29	4.552	.6317		
	Risk reduction	28	4.500	.6383		
	Total	81	4.469	.6724		
As a result of participating in this training: I am comfortable with being a mentor	Relational	25	4.640	.9074	.225	.799
	Instrumental	29	4.759	.5110		
	Risk reduction	28	4.679	.5480		
	Total	82	4.695	.6609		
As a result of participating in this training: I know what to do as a mentor	Relational	25	4.680	.6272	.758	.472
	Instrumental	29	4.448	.9097		
	Risk reduction	28	4.464	.6929		
	Total	82	4.524	.7573		
As a result of participating in this training: I am comfortable doing mentoring activities	Relational	25	4.720	.5416	.699	.500
	Instrumental	29	4.724	.4549		
	Risk reduction	28	4.571	.6341		
	Total	82	4.671	.5456		
As a result of participating in this training: I am looking forward to working with my mentee	Relational	25	4.840	.4726	2.415	.096
	Instrumental	28	4.893	.3150		
	Risk reduction	28	4.607	.6853		
	Total	81	4.778	.5244		
As a result of participating in this training: I am comfortable with being a mentor	Relational	24	4.792	.5090	.945	.393
	Instrumental	24	4.542	.9315		
	Risk reduction	29	4.724	.4549		
	Total	77	4.688	.6541		
As a result of participating in this training: I know what to do as a mentor	Relational	24	4.792	.4149	.289	.750
	Instrumental	24	4.708	.5500		
	Risk reduction	29	4.690	.5414		
	Total	77	4.727	.5036		
As a result of participating in this training: I am comfortable doing mentoring activities	Relational	24	4.875	.3378	.767	.468
	Instrumental	24	4.833	.3807		
	Risk reduction	29	4.724	.5914		
	Total	77	4.805	.4599		
As a result of participating in this	Relational	24	4.792	.4149	.261	.771
	Instrumental	24	4.708	.6241		

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training: I am looking forward to working with my mentee	Risk reduction	29	4.690	.5414		
	Total	77	4.727	.5291		
How satisfied are you with the mentoring you provided?	Relational	24	4.333	.8681	.773	.465
	Instrumental	24	4.000	1.0215		
	Risk reduction	29	4.241	.9876		
	Total	77	4.195	.9602		
How satisfied are you with the mentoring relationship you have with your mentee?	Relational	24	3.958	1.3015	.033	.967
	Instrumental	23	4.043	.8779		
	Risk reduction	29	4.000	1.1650		
	Total	76	4.000	1.1195		
How satisfied are you with the mentoring activities you participated in?	Relational	24	4.333	.8681	1.380	.258
	Instrumental	24	3.875	1.1156		
	Risk reduction	29	3.966	1.0516		
	Total	77	4.052	1.0246		
Overall, how satisfied are you with the mentoring program?	Relational	24	4.458	.8330	3.198	.047*
	Instrumental	24	3.917	1.0180		
	Risk reduction	29	4.448	.7361		
	Total	77	4.286	.8864		

Parents

In year 2, How satisfied were parents with mentoring received by their child? The table below shows average satisfaction scores by type of mentoring provided. Parents of youth participating in instrumental mentoring were significantly less satisfied with mentoring their child had received than parents of youth participating in relational mentoring. No statistically significant differences were found between parents of instrumental and risk reduction participants or between parents of relational and risk reduction participants in regards to mentoring received by their child. A similar pattern in findings was found in regards to parents' satisfaction with youth's relationship with his or her mentor.

Parental Satisfaction with Mentoring (Year 2)

Aspects of mentoring	Type of mentoring	n	mean	Standard deviation	F	Sig.
How satisfied are you with the mentoring your child has received?	Relational	13	4.69	.48	3.791	.034*
	Instrumental	13	3.69	1.10		
	Risk reduction	8	4.37	1.18		
	Total	34	4.23	1.01		
How satisfied are you with your child's relationship with his or her mentor?	Relational	13	4.92	.27	4.648	.017*
	Instrumental	13	3.92	1.115		
	Risk reduction	8	4.37	.91		
	Total	34	4.41	.92		
How satisfied are you with the mentoring activities your child participated in?	Relational	13	4.61	.65	1.532	.232
	Instrumental	13	3.92	1.11		
	Risk reduction	8	4.00	1.51		
	Total	34	4.20	1.09		
Overall, how satisfied are you with the mentoring program?	Relational	13	4.76	.43	1.663	.206
	Instrumental	13	4.15	1.06		
	Risk reduction	8	4.25	1.16		
	Total	34	4.41	.92		

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Summary

The overall goal of this project was to evaluate whether cross-age mentoring is an effective model for use with middle school children at varying degrees of risk for juvenile delinquency. Middle school youth (6th graders) with at least one other risk factor for juvenile delinquency were recruited to receive mentoring from high school juniors and seniors trained as mentors. Mentees received one of three conditions: relational, instrumental or risk reduction. A quasi-experimental research design with data collection at baseline, program completion, and at 3 months post program completion was implemented. Data was collected on a set of indictors prior to program start-up, program completion, and three-months post program completion.

In year 1 of this research, mentees tended to be male, minority, and between the ages of 11 and 13. They described themselves as good students despite only a few admitting liking school "a lot". Few reported skipping school but a moderate percentage had been suspended from school. Overall, mentees gave high satisfaction ratings to the mentoring they received.

There was no clear pattern observed between mentoring type and outcomes tracked in this research. However, for Year 1, some interesting non findings include: no statistically significant difference between types of mentoring received and change in satisfaction domains, no statistically significant difference in change scores between types of mentoring received and satisfaction with various aspects related to school, and no statistically significant relationship was detected between types of mentoring received and change in wellbeing.

On the other hand, in Year 1, in regards to connectedness, connectedness to mother (change scores) among mentees in the relational mentoring was statistically different (decrease) than change in connectedness to mother (change scores --increase) for mentees in risk reduction mentoring. Relational mentoring participants had statistically significant higher family APGAR (wellbeing/functioning) scores than participants in risk reduction mentoring but not those in instrumental mentoring. Relational mentoring participants had statistically significant higher family life satisfaction and relationship satisfaction with mother scores than participants in instrumental mentoring but not those in risk reduction mentoring. At 6-month follow-up, there was no statistically significant difference in satisfaction related to various aspects of school and types of mentoring received.

In Year 1, mentors, on the whole, were mostly female, minority, tended to be the oldest child in their family, and between the ages of 16 and 18. Most of them reported as being good students with average GPA above 3.0. Few of them liked coming to school "a lot". Majority participated in one or more school activities. A small percentage reported they had skipped school. However, between 9% to 27% they had been suspended from school. Overall, results indicate that mentors assigned to instrumental mentoring reported being less prepared to provide mentoring. After completing the mentoring program, mentors assigned to instrumental mentoring were less likely to be satisfied with the mentoring they provided, the mentoring activities they participated in, and their overall satisfaction with the mentoring program.

In Year 2 of this research, mentees were mostly male, African American, tended to be the middle child, and between the ages of 11 and 13. Most of them reported as being good students with "A" grades. Few of them liked coming to school "a lot", participated in two or more school activities, or reported skipped school. Between 4% to 36% reported they had been suspended from school. When compared to each other, mentees across the three types of mentoring did not significantly differ on any aspect of mentoring satisfaction.

In regards to outcomes, paired t-tests conducted revealed that out of the 14 measures that were found to be significant, 12 were associated with connectedness. However, results

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indicated that there was no statistically significant difference in change scores between types of mentoring received and relationship satisfaction domains. Also, findings indicate there was no statistically significant difference in change scores between types of mentoring received and school satisfaction.

In Year 2, mentors were mostly female, African American or other, tended to be the oldest child in their family, and between the ages of 16 and 18. Most of them reported as being good students with average GPA above 3.0. Few of them liked coming to school "a lot". Majority participated in one or more school activities. Between 0 to 10% reported that they skipped school. However, between 16% to 20% reported they had been suspended from school. Overall, there was only one significant difference between the mentors across the three types of mentoring they were providing. They differed in their satisfaction with the mentoring program, with mentors in the instrumental mentoring group with overall average lower satisfaction ratings than either relational or risk reduction mentoring.

Parents of youth participating in instrumental mentoring were significantly less satisfied with mentoring their child had received than parents of youth participating in relational mentoring. A similar pattern in findings was found in regards to parents' satisfaction with youth's relationship with his or her mentor.

Finally, these results need to viewed cautiously because the sample sizes for many of the analyses were small, and the quasi nature of the research design also may have influenced the results, possibly skewing the findings. There was also the issue of missing items and misunderstanding by mentees of the survey items. A number of instruments and data from them were not useable due to this misunderstanding that may occurred on the part of mentees when they completed the survey. In future research, youth's verbal, written, and reading levels should be strongly assessed and reviewed in constructing and choosing instruments as well as the method of instruction.

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