# Peer Mentoring as an Intervention Strategy with At-Risk Elementary Students: Results of a Two-Year Study

#### **Evaluation Team:**

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#### Community Partners:

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# Purpose of the Program

- To examine the effectiveness of a peer mentoring program on at-risk elementary school students.
  - School Factors:
    - promotion rates
    - attitudes about school
    - unexcused absences
    - disciplinary referrals
  - □ Personal Factors:
    - self-confidence and interpersonal relationships
    - substance use
- To examine the effects of being a mentor on the leadership skills of high school youth.



# **Target Population**

#### Mentees

 Elementary Students (4<sup>th</sup> & 5<sup>th</sup> Grade) Identified as "at-risk" enrolled in five public schools in St. Augustine, Florida (St. Johns County Public Schools)

#### Mentors

 High School Student volunteers enrolled at four public schools in St. Augustine, Florida (St. Johns County Public Schools)

#### Program Duration

□ Two consecutive school years (2005-06, 2006-07)



#### Treatment

- After receiving 6 hours of mentor coaching, each HS volunteer mentor was matched with a 4<sup>th</sup> or 5<sup>th</sup> grade student same sex mentee
- Mentoring sessions were conducted after school for 1 hour per week throughout each school year
- Training, coordination and supervision was provided by an trained staff from EPIC Community Services (an independent community service agency)



## **Evaluation Design**

- Convenience Sample
  - Both mentors and mentees were volunteers
- Pretest versus Posttest Assessments
  - Previous year data were used as the pretest/baseline for the school based indicators
  - Independent instruments were administer at the beginning and end of each program year
- Non-control group design



#### Data Instruments and Sources\*

- Elementary Substance Use Survey
  - 16 item alcohol, tobacco, marijuana, inhalants and other illegal drug use questionnaire
- Elementary Mentee Self-Assessment
  - 17 item self-confidence and interpersonal relationships focused questionnaire
- HS Mentor's Evaluation of Mentee Assessment
  - 17 item questionnaire addressing self confidence, interpersonal relationships, school behaviors and substance use
- Youth Leadership Inventory
  - □ 26 item self assessment questionnaire
- School Records
  - □ GPA, unexcused absences and disciplinary referrals

<sup>\*</sup> Prior to survey administration, validity are reliability studies were conducted on each instrument



#### **Evaluation Questions**

- 1. What percent of student/mentor matches are sustained for a period of 12 months?
  - ☐ GPRA\* Target 25%
- 2. What percent of the mentored students demonstrate improvement in core academic subjects as measured by grade point average?
  - ☐ GPRA Target 15%
- 3. What percentage of the mentored students have a reduction in disciplinary referrals and unexcused absences from school?
  - □ GREPA Target 30%

<sup>\*</sup> Some performance targets were set as prescribed by the Office of Safe and Drug Free schools to be in compliance with the Government Performance and Results Act (GPRA).

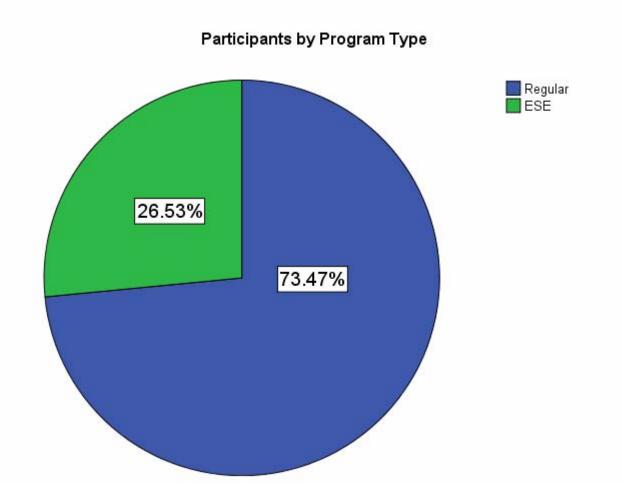


### Evaluation Questions (2 of 2)

- 4. Among the elementary student mentees, is there a statistically significant reduction in substance use?
- 5. Among the elementary student mentees, is there a statistically significant increase in selfconfidence and interpersonal relationships?
- 6. Among the high school student mentors, is there a statistically significant increase in leadership skills?



# Elementary Participants by Program Type

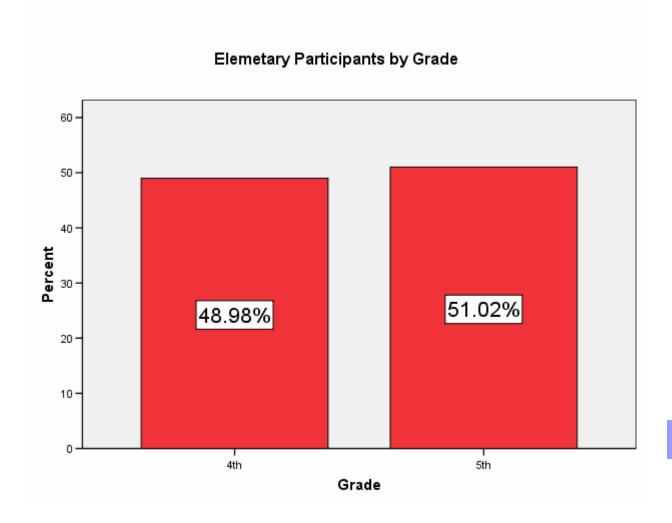


Over 25% of the participants were classified as being enrolled in Exceptional Education Programs

48 Total Participants



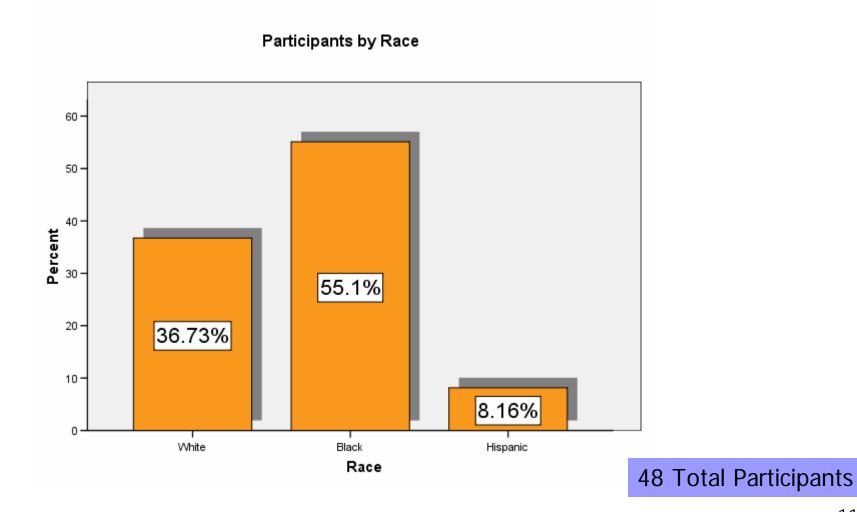
### Elementary Participants by Grade



48 Total Participants



### Elementary Participants by Race





# Results What percent of student/mentor matches are sustained for a period of 12 months?

Performance Measure: Percentage of student matches sustained for 12 months.									
Year	Year GPRA Target Actual Performance Data								
	Mentees	Ratio	%	Raw Number	Ratio	%			
Year 1	60	15/60	25%	25	0/25	0.0			
Year 2	60	15/60	25%	23	1/23	4.3%			

This was a difficult goal for the project because it operated as a school-based project and was impacted by the 9 month school year cycle. Both years the project <u>failed to meet</u> the GPRA target goal.

Overall, 48 elementary students were matched with a high school mentor for at least one month. Two students continued participation from the 1st year with one having a sustained match for 8 months and the other for 20 months. Over the 2 year project period, 8.7% of the student-mentor matches were sustained for 1-3 months, 47.8% were sustained for 4-6 months, 39.1% were sustained for 7-9 months and 4.3% were sustained for 12 months or more (4.3%)



#### What percent of the mentored students demonstrate improvement in core academic subjects as measured by grade point average?

Performance Measure: Grade Point Average										
Year	GPRA Target Actual Performance Data									
	Mentees	Ratio	%	Raw Number	Ratio	%				
Year 1	60	9/60	15%	13	13/25	52.0%				
Year 2	60	9/60	15%	10	10/23	43.5%				

In calculating academic performance data, the project adopted the Florida Department of Education definition of reading and mathematics as "core academic subjects" at the elementary school level. Using the traditional scale of A = 4 and S/U = 1, a "GPA" measure was calculated using the prior year's average as the pretest. Both years the project exceeded the GPRA target goal.

Over the 2yr period, 48% of the students demonstrated an increase in the core academic subjects of reading and mathematics, 43% remained about the same and 9% of the students experienced a decrease in academic performance.

13



# What percentage of the mentored students have a reduction in unexcused absences from school?

Performance Measure: Unexcused Absences									
Year	Year GPRA Target Actual Performance Data								
	Mentees	Ratio	%	Raw Number	Ratio	%			
Year 1	60	18/60	30%	19	19/25	76.0%			
Year 2	60	18/60	30%	8	8/23	34.7%			

The school district's definition for unexcused absences was used by the project. Each student's previous year's attendance record was used as the pretest/baseline. Both years the project <u>exceeded</u> the GPRA target goal.

During the 1<sup>st</sup> project year, 76% participating in the project had one or more unexcused absences, 16% had perfect attendance and 8% missed only one day of school. During the 2<sup>nd</sup> year, the percent of students with one or more unexcused absences dropped to 28.5%, while 9.5% had perfect attendance and 52.3 % missed only 5 days or less during the 180 day school year.



# What percentage of the mentored students have a reduction in disciplinary referrals at school?

Performance Measure: Discipline referrals at school.									
Year	GPRA Target Actual Performance Data								
	Mentees	Ratio	%	Raw Number Ratio %					
Year 1	60	18/6 0	30 %	17	17/25	68.0%			
Year 2	60	18/6 0	30 %	18	18/23	78.3%			

Each student's previous year's discipline record was used at the pretest/baseline. Both years the project <u>exceeded</u> the GPRA target goal.

To qualify for participation in the project a student must have had at least one discipline referral. During the 1<sup>st</sup> project year 68% of the students did not have a discipline referral. The range, among those who did receive a discipline referral was from 1 to 5 with a median of 3 referrals. During the 2<sup>nd</sup> year of the project the range of referrals was from 1 to 10 with a median of 3 referrals.

15



# Among the elementary student mentees, is there a statistically significant reduction in substance use?

	Performance Measure: Elementary Substance Use Survey										
	Percent of Students Who Have Never Used										
		Year 1 N = 25			Year 2 N = 23						
Substance	Pretest Posttest Change				Pretest	Posttest	Change				
Alcohol	81.5	84.6	*		91.3	81.3	-10.9				
Tobacco	100	96.2	*		100	100	*				
Marijuana	100 100 *		*		100	100	*				
Inhalants	92.6	92.3	*		100	100	*				
Other Drugs	92.6	92.3	*		100	100	*				
*No significa	*No significant difference										

There was no significant change in substance use among the elementary students participating in the mentoring program.



# Among the elementary student mentees, is there a statistically significant increase in self-confidence and interpersonal relationships?

Performance Measure: Elementary Menteee Self Assessment Form								
	Mean Subscale and Total Scale Scores							
		Year 1 Year 2						
Scale	Pretest	Posttest	Change		Pretest	Posttest	Change	
Subscale 1: Self-confidence	3.84	4.16	+0.32		3.94	4.60	0.66	
Subscale 2: School Attitude	3.98	3.98	0.0		3.90	4.34	0.44	
Subscale 3: Interpersonal Relations	4.35	4.43	0.08		4.00	4.68	0.68	
Total Scale Score	4.04	4.18	0.14		3.95	4.53	0.58	
Scale: 1(Low) – 5(High)								

There was no significant change in self-confidence, school attitude or interpersonal relations use among the elementary students participating in the mentoring program.



# Among the high school student mentors, is there a statistically significant increase in leadership skills?

Performance Measure: Mentor Youth Leadership Scores									
		Total							
		Minimum	Minimum Maximum Mean						
Year 1	Pretest	2.81	4.85	3.97					
	Posttest	3.04	4.92	4.07	0.10				
Year 2	Pretest	1.65	4.96	3.60					
	Posttest	2.85	0.57**						

Scale: 1(Low) - 5(High);

For the 2<sup>nd</sup> project year, a statistically significant change was found in leadership skills among the high school mentors participating in the program.

<sup>\*\*</sup>A statistically significant difference was found (P< .05)



#### Summary

- Each year the project <u>failed to meet</u> the GPRA target goal of having at lest 25% of the mentor to <u>matches maintained</u> for a minimum of 12 months.
- For both years the project <u>exceeded</u> the GPRA target goal of having at lest 15% of the students realize an improvement in <u>core academic subjects</u> as measured by grade point average
- For both years the project <u>exceeded</u> the GPRA target goal of having at least 30% of the elementary students realize a reduction in <u>unexcused absences</u> from school.
- For both years the project <u>exceeded</u> the GPRA target goal of having at least 30% of the elementary students realize a reductions in <u>disciplinary referrals</u> at school.
- During the two-year project, there was no statistically significant change in substance use among the elementary students participating in the mentoring program.
- During the two-year project, there was no statistically significant change in selfconfidence, school attitude or interpersonal relations among the elementary students participating in the mentoring program.
- During the 2nd project year, <u>a statistically significant change was found in leadership</u> skills among the high school mentors participating in the program.

# A word from our sponsor....



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