Winter 2006

The Journal
OF AT-RISK ISSUES

National Dropout Prevention Center/Network
College of Health, Education, and Human Development
Clemson University, 209 Martin Street, Clemson, SC 29631-1555

www.dropoutprevention.org

Volume 12
Number 1

A Publication of the National Dropout Prevention Center/Network

The Journal
OF AT-RISK ISSUES

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The Journal of At-Risk Issues (ISSN1098-1608) is published bi-annually by the National Dropout Prevention Center/Network, College of Health, Education, and Human Development at Clemson University, 209 Martin Street, Clemson, SC 29631-1555,Telephone 864.656.2599, Fax 864.656.0136, **www.dropoutprevention.org**

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Focus:

Manuscripts should be original works not previously published nor concurrently submitted for publication to other journals. Manuscripts should be written clearly and concisely for a diverse audience, especially educational professionals in K-12 and higher education. Topics appropriate for *The Journal of At-Risk Issues* include, but are not limited to, research and practice, dropout prevention strategies, school restructuring, social and cultural reform, family issues, tracking, youth in at-risk situations, literacy, school violence, alternative education, cooperative learning, learning styles, community involvement in education, and dropout recovery.

Research reports describe original studies that have applied applications. Group designs, single-subject designs, qualitative methods, mixed methods design, and other appropriate strategies are welcome. Review articles provide qualitative and/or quantitative syntheses of published and unpublished research and other information that yields important perspectives about at-risk populations. Such articles should stress applied implications.

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Article

An Analysis of Academic Achievement and School Behavior Problems as Indices of Program Effectiveness Among Adolescents Enrolled in a Youth-Based Mentoring Program

Gregory P. Hickman and Ingrid J. Garvey

Abstract: *Using official school records, this study examined a sample of 447 students enrolled in a large Cincinnati youth-based mentoring program. Repeated measures analyses of variance were used to examine grade point average (GPA), grade retention, reading and math proficiency, and expulsions before and after program entry as indices of program effectiveness. These analyses revealed significant reductions in GPA, grade retention, expulsions, and proficiency scores, results opposite of those expected. More specifically, the analyses failed to support evidence of program effectiveness. This lack of improvement suggests that high-profile, at-risk adolescents may not benefit from a unidimensional approach of mentoring as these youth encounter an ecology of intrapersonal, school, family, peer, and community problems that mentoring alone may not be able to change. Implications are drawn for program designers.*

Across the United States, adolescents regularly experience a myriad of academic and school behavioral problems. Although these students subscribe to a wide array of troubling academic outcomes, the educational problems typically encountered include (a) low academic achievement, (b) school dropout, (c) low proficiency scores, (d) school absences, (e) disciplinary infractions, and (f) grade retention (Reglin, 1998; Royse, 1998).

Slavin, Karweit, and Madden (1989) defined at-risk students as those who, based on identified characteristics or needs, are unlikely to graduate from secondary school. Research has demonstrated that adolescents who receive poor grades and experience trouble at school tend to (a) have inadequate family relationships; (b) live in low-income families that are financially desperate or struggling; and (c) live in family structures other than two-parent families (Keating, Tomishima, Foster, & Alessandri, 2002; McLearn, Colasanto, & Schoen, 1998). Perhaps the continual experiences of economic stress, inadequate family relationships, and negative environmental forces combined with the stressful and uncertain environment of inner-city life may be too overwhelming for such adolescents to endure without the succor of a mentoring adult.

Currently, area schools are attempting to help such adolescents; however, many are overburdened with a variety of issues and problems. In many urban schools, guidance counselors often carry a caseload in excess of 600 students (Cincinnati Youth Collaborative, 1999). Given these heavy caseloads, mentoring programs have been designed to enhance the possibility for adolescents to experience much needed support, guidance, encouragement, and direction (Einolf, 1995; Grant-Thompson & Atkinson, 1997; Reglin, 1998; Royse, 1998).

Over the last decade, community organizations such as Big Brothers/Big Sisters, Aspire, The Commonwealth Fund, and Cincinnati Youth Collaborative have supported efforts to organize, design, test, and evaluate the positive impact that mentoring has had on the lives of today's youth (Blinn-Pike, Kuscehl, McDaniel, Mingus, & Mutti,1998; Blocher, 1993; OJJDP, 1997; Sipe, 2002). The basic premise of mentoring is to provide at-risk adolescents a mature adult role model who can offer support, nurturing, and guidance outside the immediate or extended family, thereby reducing the probability of such youth experiencing and engaging in academic and problematic behaviors (Anderson, 1994; Blinn-Pike et al., 1998; Reglin, 1998).

Although it would appear on the surface that mentoring at-risk inner-city adolescents should yield positive results, in reality very few mentoring programs have empirically and longitudinally evaluated the impact of mentoring on the academic and school behavior of these youth (Hair, Moore, & Jekielek, 2002; Slicker & Palmer, 1993). Indeed, the few studies that have been conducted tend to be descriptive, exploratory, and/or self-reportive in nature (Blinn-Pike et al., 1998; DuBois & Neville, 1997; Dubois, Holloway, Valentine, & Cooper, 2002). While research continues to demonstrate that mentoring plays an integral role in the development of adolescents, few studies, if any, have examined official school records of academic achievement and behavioral outcome variables both before and after program enrollment. The purpose of this study, therefore, is to examine the academic achievement and school behavior

problems of inner-city adolescents both before and after they enter a mentoring program. Such an approach will enable the researchers to determine with greater certainty if the mentoring program had a significant impact on the outcome variables of this study.

The State of Mentoring

Mentoring programs currently abound in various aspects of our society (Ensher & Murphy, 1997). The National Mentoring Database currently lists more than 1,700 organizations that support mentoring activities (DuBois et al., 2002). According to the *Commonwealth Fund 1998 Survey of Adults Mentoring Young People*, mentors report high rates of success in helping at-risk youth overcome such problems as negative feelings, substance abuse, poor grades, physical and sexual abuse, and trouble in school (McLearn, Colasanto, & Schoen, 1998). Specifically, a study conducted by Philadelphia's Sponsor-a-Scholar (SAS) found that students involved in a mentoring relationship were three times more likely to enroll in postsecondary educational institutions than the comparison group (Johnson, 1998).

An 18-month study conducted by Grossman and Tierney (1998) found that 571 mentored youth were 46% less likely to initiate drug use and that 33% were less likely to hit other youth compared to the controls. For minority mentored youth, 70% were less likely to initiate drug use, and 27% were less likely to engage in alcohol than the controls. Furthermore, mentored youth skipped only half as many school days and engaged in more homework than the controls. Finally, relationships between mentored youth and their parents and peers improved compared to controls (Grossman & Tierney, 1998; Keating et al., 2002).

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) designed the Juvenile Mentoring Program (JUMP) to reduce the delinquency and improve school attendance of at-risk adolescents (OJJDP, 1997). In a study funded by JUMP, the Cincinnati Youth Collaborative (CYC) matched 136 at-risk youth with mentors from various professional organizations to reduce problem behavior and increase academic achievement. Initial findings after one year report approximately 70% improved both academically and socially (OJJDP, 1997). Other research supports that mentor-mentee relationships that exceed one year tend to experience positive results (Grossman & Rhodes, 2002).

Although this country is teeming with mentoring programs, very few supply thorough evaluations providing empirical evidence of program effectiveness. Even scarcer are evaluative studies that report mixed and/or negative findings of mentoring programs. Royse (1998) evaluated the Brothers' Project, a mentoring project involving high-risk minority adolescents designed to increase school performance and reduce drug and alcohol use as well as trouble with the law. Results found there were no significant increases in grade point averages between the mentor and control groups. Although there was a slightly decreased trend in minor discipline infractions for the mentor groups, the findings were not statistically significant. These findings were offset by a slightly increased trend toward major disciplinary infractions, also not statistically significant. In addition, no differences were statistically significant between the mentor and control groups in the number of school absences (Keating et al., 2002; Royse, 1998).

Although the research related to mentoring programs seems ambiguous, one thing seems clear: Mentoring programs are being commissioned across various domains within our communities. For example, it is common practice for churches, elementary and secondary schools, colleges and universities, and various community organizations to utilize judicious peer and adult mentors to share their experiences, guidance, and support with injudicious at-risk youth (McLearn et al., 1998; Reglin, 1998). Despite bold claims of success, very few such programs have taken a pre- and post-test empirical approach for examining program effectiveness.

Research Questions

For the study reported here, several research questions were examined for evaluating program effectiveness. First, do academic achievement (i.e., GPA, grade retention, and proficiency tests) and school behavior problems (i.e., expulsions) of at-risk adolescents improve after enrollment in the mentoring program? Second, is there a relationship between academic achievement and school behavior problems of at-risk adolescents relating to the grade level of entry into the mentoring program? Third, is there a relationship between academic achievement and school behavior problems of at-risk adolescents based on the duration of time spent in the mentoring program? Finally, is there a relationship between academic achievement and school behavior problems based on the gender of the participants enrolled in the mentoring program?

Method

Participants

Official school data from the Cincinnati Public School System was provided for a sample of 447 adolescent youth enrolled in a large Cincinnati youth-based mentoring program. Female participants constituted 61.1% of the sample and male participants 38.9%. The participants ranged in age from 10 to 18 years, with a mean age of 15.20 years. The ethnic distribution of the participants included African-American (79.4%), Caucasian (19.9%), and Asian (.7%) adolescent youth. The grade levels of participants on entry into the program ranged from 72.9% in high school (i.e., 9th through 12th grades); 23.5% in middle school (i.e., 7th and 8th grades); and 3.6% in elementary school (i.e., pre-kindergarten through 6th grades). A complete demographic profile of the participants is presented in Table 1.

Procedures

Participants in this study were students enrolled in both the Cincinnati Public School (CPS) System and a large Cincinnati youth-based mentoring program during any given time period from 1988 to 1998. They were all identified at-risk via teachers' academic and behavioral observation reports. For the purposes of this study, at risk was defined as those students who have demonstrated academic and/or school behavioral problems that render them less likely to graduate from high school.

Table 1

Descriptive Statistics for Background Characteristics

Variable	n	Percent
Gender		
Male	174	38.9
Female	273	61.1
Ethnicity		
African-American	355	79.4
Caucasian	89	19.9
Asian	3	.7
Grade Level Started Program		
High School	326	72.9
Middle School	105	23.5
Elementary	16	3.6
Duration In Program		
4-6 Months	21	4.7
7-12 Months	53	11.9
1 Year Plus	373	83.4
Program Results		
Graduated High School	299	66.9
Dropped out of School	46	10.3
Dropped out of Program	102	22.8

In a collaborative effort, the mentoring program and CPS provided data for all participants in this study as they tracked official school records such as grade point average, grade retention, proficiency test scores, and expulsions over this 10-year period. Only those students who were matched with a volunteer mentor from the local community were tracked, recorded, and evaluated.

All mentors were recruited, screened, and trained before the matching process was conducted. Mentors, who ranged in age from 21-65 years, underwent a police check and were fingerprinted. Attendance at adolescent development seminars, which were offered on a quarterly basis, were required before mentors could begin their duties. Thereafter attendance was optional for those mentors desiring additional training.

To ensure a positive match, both mentor and mentee interests were evaluated by mentoring program representatives. Once a prospective match was identified, an introductory interview was arranged for the two to decide if either was interested in proceeding further. If both parties agreed, the mentor-mentee relationship began. There was no set curriculum that the mentors followed when meeting with their mentees. The two met approximately twice monthly. Typical activities included one-on-one personal attention, such as playing games, attending sporting events and movies, going to dinner, and working on homework.

All participants in this study were officially categorized as "inactive" according to the mentoring program. To be classified as such, the participant could have graduated from high school, dropped out of school, or voluntarily dropped out of the mentoring program. Once a person was deemed "inactive," data was no longer collected by CPS through the mentoring program. Each variable was collected at different points and times over the 10-year period. For example, grade point average was collected on a quarterly basis, while grade retention, proficiency scores, and expulsions were collected annually.

Measures

The variables, which were measured and obtained via official school records from the Cincinnati Public School System, included the following: (a) grade point average, (b) proficiency test scores, (c) grade retention, and (d) expulsions. Pre- and post-values were gathered by summing all the data points (e.g., academic quarters or academic years) before and after enrollment in the mentoring program. After the pre- and post-values were gathered and the data summed, standardized mean values were calculated. As a result, the measures are presented as quarterly or yearly standardized means based upon their respective method of data collection.

Grade Point Average (GPA). GPA was measured as the student's academic performance based on their class grades determined according to the official Cincinnati Public School grading system (0.0 – 4.0 scale). To calculate the overall GPA both before and after program entry, official grade point averages were aggregated and divided by the total number of respective quarters. For example, if a participant earned a 3.85 and a 3.75 GPA prior to program entry, their quarterly standardized GPA mean prior to program entry would be 3.80. If a participant earned a 3.70 and a 3.60 GPA after program entry, their quarterly standardized GPA mean after program entry would be 3.65.

Proficiency Test Scores. Math and Reading Proficiency tests are given to all students enrolled in the Cincinnati Public School System on a yearly basis. A normal curve equivalent score of 50 reflected a current match to a student's grade level. Scores ranged from 1 – 99 with a mean of 50 and a standard deviation of 21. To determine standardized proficiency mean scores, the researcher aggregated the values both before and after program entry, and divided by the number of corresponding yearly tests both before and after program entry. For example, if a participant had a math proficiency score of 48 prior to program entry and earned math proficiency scores of 45 and 43 after program entry, the yearly standardized math proficiency mean would be 48 prior to program entry and 44 after program entry.

Grade Retention. Grade retention was measured by examining official school records for the student's advancement or lack of advancement to the next grade level. School records reflected yearly the grade level of the student at every given year over the student's academic tenure. For example, a student's records may have appeared as such: 1993 – seventh grade, 1994 – eighth grade, 1995 – eighth grade, 1996 – ninth grade, 1997 – ninth grade. Examining such records, the researcher was able to deduce that the student had a total of two years of grade retention as he/she repeated eighth and ninth

grades. To determine a yearly standardized grade retention mean, the researcher summed yearly grade retentions both before and after program entry and divided by yearly grade retentions both before and after program entry. For example, if a participant had been retained once within three years before program entry data, the before program entry standardized grade retention mean would be 0.33 grades per year. If that same participant had been retained once within two years after program entry, the after program entry standardized grade retention mean would be 0.50 grades per year.

Expulsions. Expulsions were measured by examining official school records of both the total number of times and days a student was expelled. In order to determine yearly standardized expulsion times and expulsion days a student was expelled before and after program entry, the researcher aggregated yearly expulsion times and expulsion days both before and after program entry and divided by the number of years a student was enrolled before and after program entry. For example, if a participant was expelled twice in one year prior to program entry, their yearly-standardized times of expulsions would be twice per year. However, if a participant was expelled six times in two years after program entry, their yearly standardized times of expulsions would be three times per year. The same technique was applied to the total days of expulsions within an academic calendar year.

Data Analysis

For the purposes of this study, the dependent variables (i.e., GPA, grade retention, proficiency scores, and expulsions) were examined before (Time 1) and after (Time 2) entry into the mentoring program. The pre-mean values of the variables served as the independent variables and the post-mean values served as the dependent variables. Separate repeated measures analysis of variance (ANOVA) models examined the pre- to post-mean differences of program (i.e., program participation) as a main effect and duration in program, grade level entry of the program, and gender as interaction effects. Duration in the program was categorized as 4-6 months, 7-12 months, and 12 months plus. A minimum duration of four months was used in this study because mentees needed at least one quarter of program enrollment to acquire a grade point average. Grade level entering the program was categorized according to the grade levels at which the mentees started the program, meaning elementary participants were in grades six and below, middle school participants in grades seven and eight, and high school participants in grades nine through twelve. The gender of the participants was categorized as either male or female based on official school records. Finally, it was hypothesized that the participants enrolled in the mentoring program would benefit academically and behaviorally from their experiences in the mentoring program. More specifically, academic achievement would increase and behavioral problems would decrease.

Results

Participants in the mentoring program ranged from 10 to 18 years of age, with a mean age of 15.20 years. Participants spent on average 26.09 months in the mentoring program, with the duration of time of individual participants ranging from four to 65 months. Of those who participated in this study, 66.9% graduated from high school, while 33.1% either dropped out of high school or the mentoring program. The means, standard deviations, and range of the independent variables (i.e., pre-values of GPA, grade retention, math and reading proficiency scores, and total days and times of expulsion) and the dependent variables (i.e. post-values of GPA, grade retention, math and reading proficiency scores, total days and times of expulsion) derived from repeated measures analyses of variance are presented in Table 2.

Table 2

Sample Frequency Statistics of Outcome Variables

Variable	n	Before Mean	After Mean	Before SD	After SD
Grade Point Average	447	2.242	1.997	.682	.849
Grade Retention	447	.04	.14	.10	.24
Math Proficiency Scores	447	49.16	44.57	16.86	18.31
Reading Proficiency Scores	447	46.41	45.74	15.67	17.14
Total Expulsions	447	.06	.11	.16	.20
Days of Expulsions	447	.44	1.35	1.53	3.89

Note. Grade Point Average means are per quarter means. All other variables means are per year means.

Grade Point Average

It was hypothesized that the grade point averages of the participants would be higher after mentoring than before. The Gender X Grade Level X Duration X Program (pre- and post-values of program participation) ANOVA showed that program participation had a significant main effect, $F(1,432) = 14.96$, $p < .001$. The GPA scores of the participants were significantly lower at the end of the program than prior to entry, $M = 2.242$, $SD = .682$ at Time 1; $M = 1.997$, $SD = .849$ at Time 2. Duration in the program, grade level of entry, and gender had no significant main or interaction effects on GPA.

Grade Retention

It was hypothesized that participant grade retention after mentoring would be lower than before. The Gender X Grade Level X Duration X Program (pre- and post-values of program participation) ANOVA showed that program participation had a significant main effect, $F(1,432) = 20.91$, $p < .001$. The grade retention scores of the participants were significantly higher at the end of the program than before, $M = .03$, $SD = .09$ at Time 1; $M = .14$, $SD = .23$

at Time 2. Duration in program, grade level of entry, and gender had no significant main or interaction effects on grade retention.

Math Proficiency

It was hypothesized that math proficiency scores of the participants would be higher after mentoring than before. The Gender X Grade Level X Duration X Program (pre- and post-values of program participation) ANOVA showed that program participation had a significant main effect, $F(1,432) = 13.80$, $p < .001$. This main effect was qualified by an interaction effect of Program X Duration, $F(1, 432) = 3.17$, $p < .043$. The math proficiency scores of the participants were significantly lower at the end of the program than their prior scores. Planned comparison of the pre- to the post-mean differences was evaluated at each level (4-6 months, 7-12 months, 12 months plus) of duration in program using paired t-tests. Analysis of the means indicated that this significant difference remained only for adolescents who were in the program for less than 7 months, $M = 45.46$, $SD = 19.64$ at Time 1; $M = 36.36$, $SD = 19.47$ at Time 2. Grade level entering the program and gender had no significant main or interaction effects on math proficiency scores.

Reading Proficiency

It was hypothesized that reading proficiency scores of the participants would be higher after mentoring than before. The Gender X Grade Level X Duration X Program (pre- and post- values of program participation) ANOVA showed that program participation did not have a significant main effect, $F(1,432) = 3.79$, $p < .052$. Although not significant, the reading proficiency scores of the participants at the end of the program were lower than their prior scores, $M = 41$, $SD = 15.67$ at Time 1; $M = 45.73$, $SD = 17.14$ at Time 2. Duration in the program, grade level entering the program, and gender had no significant main or interaction effects on reading proficiency scores.

Total Expulsions

It was hypothesized that total expulsions of the participants would be lower after mentoring than before mentoring. The Gender X Grade Level X Duration X Program (pre- and post-values of program participation) ANOVA showed that program participation had a significant main effect, $F(1,432) = 5.10$, $p < .024$. This main effect was qualified by an interaction effect of Program X Gender, $F(1,432) = 6.33$, $p < .012$. The total expulsions of the participants were significantly higher at the end of the program than their prior scores. The planned comparison of the pre- and post-mean differences were evaluated at each level (male and female) of gender using paired t-tests. Analysis of the means showed that this significant difference remained only for male adolescents, $M = .06$, $SD = .157$ at Time 1; $M = .15$, $SD = .228$ at Time 2. Duration in the program and grade level of entry had no significant main or interaction effects on total expulsions.

Days of Expulsions

It was hypothesized that days of expulsions of the participants would be lower after mentoring than before. The Gender X Grade Level X Duration X Program (pre and post) ANOVA showed that program participation had a significant main effect, $F(1,432) = 26.16$, $p < .001$. This main effect was qualified by a significant interaction effect between Program X Grade Level, $F(1,432) = 11.36$, $p < .001$. The days of expulsions scores of the participants were significantly higher at the end of the program than their prior scores, $M = .44$, $SD = 1.52$ at Time 1; $M = 1.35$, $SD = 3.89$ at Time 2. The planned comparison of pre- to post-mean differences was evaluated at each level (elementary, middle school, and high school) of grade level of entry into the mentoring program. Analysis of the means showed that this significant difference remained only for those adolescents enrolled in the mentoring program during elementary school, $M = .23$, $SD = .628$ at Time 1; $M = 3.45$, $SD = 7.01$ at Time 2.

This main effect was also qualified by a significant interaction effect between Program X Duration, $F(1, 432) = 5.41$, $p < .005$. The days of expulsion scores for the participants were significantly higher at the end of the program than prior to entry, $M = .44$, $SD = 1.52$ at Time 1; $M = 1.35$, $SD = 3.89$ at Time 2. The planned comparison of pre- to post-mean differences was evaluated at each level (4-6 months, 7-12 months, 12 months plus) of duration in the program through paired t-tests. The analysis of the means showed that this significant difference remained only for those adolescents in the program longer than 12 months, $M = .31$, $SD = 1.24$ at Time 1; $M = 1.23$, $SD = 3.65$ at Time 2.

Finally, this main effect was qualified by a significant interaction effect between Program X Gender, $F(1, 432) = 7.97$, $p < .005$. The days of expulsions scores of the participants were significantly higher at the end of the program than prior to their entry, $M = .44$, $SD = 1.52$ at Time 1; $M = 1.35$, $SD = 3.89$ at Time 2. The planned comparison of pre- to post-mean differences was evaluated at each level (male and female) of gender through paired t-tests. Analysis of the means showed that this significant difference remained only for male adolescents, $M = .54$, $SD = 1.742$ at Time 1; $M = 2.03$, $SD = 4.745$ at Time 2.

Discussion

The repeated measures design demonstrated that the mentoring program in and by itself was ineffective at reducing academic-related problem behaviors (i.e., expulsions) and increasing academic achievement (i.e., GPA, grade retention, and proficiency scores). Although it was hypothesized that the duration in program would be related to reduced problematic behaviors and increased academic achievement, results demonstrated this factor (i.e., approximately 26 months) in the program was insignificant across most variables as an indicator of program effectiveness. In fact, on the contrary, the longer the participants were engaged in the program, the more days of expulsions and lower math proficiency scores they experienced. Ironically, this evaluative study contradicts research that previously indicated a positive relationship between duration in mentoring programs and corresponding outcome variables of interest (Grossman & Rhodes 2002; OJJDP, 1997).

It was suggested that grade level of program entry would be related to improved academic and behavioral outcomes. Although this factor was significantly related to changes in total expulsion days, these changes were in an unanticipated direction. For example, the earlier the grade levels at entry, the more days of expulsions participants experienced after they entered the program. Such findings support the extensive research suggesting adolescents exhibiting academic

and behavior problems at early ages continue down a life path of problematic behavior (Kazdin, 1995; Moffitt, 1993; Sampson & Laub, 1993; Slaughter, Kashani, & Holmes, 2001).

Gender was also examined as a germane predictor across the variables in question. This study supported the wealth of research consistently demonstrating gender differences in academic and behavior problems among adolescents (Connell, Spencer, & Aber, 1994). More specifically, being male was predictive of increased expulsions and grade retention and lowered GPA's among participants after controlling for program entry scores. Such findings support educational statistics from the U.S. Department of Education that identifies being born male as one of the strongest indicators of academic-related problems (Coley, 1995; National Center for Education Statistics [NCES], 1996, 1998). Furthermore, such findings support research that indicates being born male is the strongest predictor of academic and problem behaviors across the life span (Kazdin, 1995).

The most significant indicators of program effectiveness were the pre-outcome characteristics adolescents brought to the program. For example, main effects were found between pre- and post-values of the variables in question except for reading proficiency scores. However, inspection of the mean differences between pre- to post-value differences suggested an unanticipated direction. Given that duration in program and grade level entry provided minimal significance supports the extensive research that has demonstrated a child's predisposition for academic and behavioral characteristics as the main determinates of academic and behavioral outcomes (Jessor, 1993; Masten & Coatsworth, 1998; Rak & Patterson, 1996; Wang, 1997).

Consequently, it appears the mentoring program was ineffective as all outcome variables pointed in the opposite direction expected. Indeed, participants' grade point averages as well as math and reading proficiency test scores significantly dropped after time in the mentoring program. Moreover, grade retention and expulsions significantly increased after the participants entered the mentoring program. Such findings are puzzling, as national trends recorded by the U.S. Department of Education indicate an overall upward trend geographically and nationally among high school adolescents (Ingels, 1994; National Assessment of Educational Progress [NAEP], 1996; NCES, 1998).

However, these results do not mean that all high-risk adolescents decline academically and behaviorally over time. Research has consistently found that children and adolescents who experience heightened levels of poverty; parental abuse and/or neglect; deviant peer groups; temperamental difficulties; and lower levels of parental warmth and support, intelligence, and academic and behavioral skills tend to experience a downward spiral of negative life events (Garmezy, 1991; Luthar & Zigler, 1991; Moffitt, 1993; Sampson & Laub, 1993). "High-profile" youth, such as those in this study, tend to be identified early by teachers, parents, peers, and therapists as adolescents who are clearly on a developmental path of life-persistent problematic behavior (Dishion, French, & Patterson, 1995; Slaughter et al., 2001).

Further analysis of the standardized mean differences of those who graduated from high school compared to those who quit the program or dropped out of school reveals salient differences. Specifically, those who quit the program entered it at a mean age of 14.8 years and those who dropped out of school entered the program at a mean age of 14.68 years. However, those who graduated from high school entered the program at a mean age of 15.44 years. Such descriptive statistics support research demonstrating those children who are identified earlier in life are more at risk and prone for academic failure (Kazdin, 1995; Moffitt, 1993; Sampson & Laub, 1993). In addition, those who graduated from high school entered the mentoring program with a 2.434 mean GPA, which dropped to 2.352 after they entered the program. Those who quit the program entered the mentoring program with a 2.242 mean GPA, which fell to 1.414 after they entered the mentoring program. Finally, those who dropped out of school entered the program with a 1.749 mean GPA, which dropped to 0.979.

The high school graduates in this study entered the program with a mean grade retention per year of 0.01, becoming 0.05 after program entry. However, those who quit the program entered the program with a mean grade retention per year of 0.07, which increased to 0.29 after program entry. Moreover, those who dropped out of high school entered the program with a mean grade retention of 0.08, which rose to 0.41 after program entry.

High school graduates had mean math scores of 52.55 and reading scores of 49.50 before they entered the program and mean math scores of 48.58 and reading scores of 49.24 after they entered the program. Those who quit the program had mean math scores of 42.63 and reading scores of 41.04 before they entered the program and mean math scores of 37.04 and reading scores of 39.31 after they entered the program. Finally, those who dropped out of high school had mean math scores of 41.59 and reading scores of 38.24 before they entered the program and mean math scores of 35.26 and reading scores of 37.24 after they entered the program.

Finally, high school graduates entered the mentoring program with an annual mean of 0.05 total expulsions and 0.31 expulsion days, increasing to 0.07 total expulsions and 0.81 expulsion days after they entered the mentoring program. Those who quit the mentoring program entered with an annual mean of 0.07 total expulsions and 0.60 expulsion days, rising to an annual mean of 0.16 total expulsions and 1.65 expulsion days. Finally, high school dropouts entered the mentoring program with an annual mean of 0.14 total expulsions and 0.89 expulsion days, increasing to an annual mean of 0.20 total expulsions and 4.18 expulsion days per year. See Table 3 for complete comparisons.

These descriptive statistics clearly demonstrate that such high-profile students tend to experience more negative academic and behavioral problems than "borderline" high school graduates who are late-starters and do not experience the magnitude of ecological problems indicative of high-profile youth. Furthermore, although such descriptive statistics are not inferential, they do suggest that perhaps those "high-profile" adolescents confounded the findings from the repeated measures analyses. In other words, if the mentoring program were comprised of "borderline" adolescents who were identified as at risk later in life as opposed to earlier, the analyses would not demonstrate the same significant unanticipated direction. Rather, the findings, although slightly declined, would not be significant. Hence, the mentoring program appears to statistically help or slow down the spiral of problematic behaviors for those "borderline" adolescents compared to those "high profile" at-risk adolescents identified earlier in life.

Table 3

Frequency Statistics of Outcome Variables

MALES					
Variable	n	Before Mean	After Mean	Before SD	After SD
Grade Point Average	174	2.107	1.800	.683	.840
Grade Retention	174	.04	.20	.11	.26
Math Proficiency Scores	174	47.53	42.71	17.55	20.77
Reading Proficiency Scores	174	44.70	43.43	17.16	18.90
Total Expulsions	174	.07	.15	.16	.23
Days of Expulsions	174	.54	2.03	1.74	4.75
FEMALES					
Variable	n	Before Mean	After Mean	Before SD	After SD
Grade Point Average	273	2.328	2.122	.667	.832
Grade Retention	273	.04	.11	.10	.22
Math Proficiency Scores	273	50.19	45.76	16.35	16.48
Reading Proficiency Scores	273	47.50	47.20	14.57	15.78
Total Expulsions	273	.06	.15	.16	.23
Days of Expulsions	273	.38	.92	1.37	3.17

Conclusions and Implications

Although this study yielded several insights into the effectiveness of a specific mentoring effort, several weaknesses limit generalization. This study used a within-subjects design. Although the participants provided their own control group, an external control group comprised of at-risk adolescents subscribed to the "waiting list" for mentors could have provided comparison data that may have enhanced the certainty of program effectiveness.

To increase mentoring program effectiveness, research designers should look to include demographic information on both mentor and mentee. This study was unable to examine how mentor income, SES, and occupational, educational, and prior experiences of mentoring at-risk adolescents impacted program effectiveness. Perhaps, those adolescents with experienced mentors benefited from such prior experiences. It may be possible that a mentor who had more experience, occupational flexibility, and diverse interests provided greater opportunities and positive interactions with an at-risk mentee.

It is also imperative that scientists explore the nature of mentoring relationships or the types of activities between mentor and mentee as behavior is often embedded within social interactions derived from relationships (Dishion et al., 1995). The limited amount of research focused on this phenomenon asserts that positive satisfaction in the mentoring relationship is related to congruent mentor/mentee expectations and moderate levels of activity, structure, and support (Langhout, Rhodes, & Osborne, 2004; Splane, 2004). If this holds true, then program effectiveness may be related to the maturation nature of the mentor-mentee relationship.

In spite of these limitations, the findings of this study suggest strengths and future directions for researchers and developers of adolescent mentoring programs. First, this study used official school records. Previous mentoring studies have relied on biased and error-prone techniques such as teacher-report, self-report, and parental-report data (Dubois et al., 2002; McLearn et al., 1998; Office of Juvenile Justice and Deliquency Prevention [OJJDP], 1997; Queen, 1994). Second, the evaluation of the mentoring program was based on empirical evidence. Such an evaluative process advances the literature in the arena of mentoring programs, as the majority of program evaluations have relied on frequency statistics for determining program effectiveness (Koff & Ward, 1990; McCortie, 1991; McKenna, 1990).

Indeed, frequency statistics can be misleading. Some mentoring programs report that they lower problematic academic and behavioral variables. However, such program analyses may overlook standardized means. For example, for a program to claim it reduces suspensions or expulsions, the length of duration both before and after participants enter the program would have to be standardized. A student who has 20 expulsion days over a two-year period (i.e., 10 expulsion days per year) before entering the program is much different from the same student with 15 expulsion days after spending one year in the mentoring program. Future program designers may want to consider and incorporate standardized means into their empirical analyses in order to increase confidence in program effectiveness.

Similarly, this program advances the literature by empirically examining data both before and after entry into the mentoring program. Without baseline data, certainty of program effectiveness remains inconclusive. Indeed, this study saliently demonstrates the importance of obtaining baseline data, as all pre-variable values of interest declined in this study.

Yet another advancement of this study was its design and length. The majority of mentoring evaluations tend to be short-term as indicated by the many studies examining program effectiveness from one academic quarter to eighteen months (Grossman & Tierney, 1998; O'Connor, 1995; OJJDP, 1997; Queen, 1994).

Mentoring programs are not a panacea. To be effective, program objectives should be aimed toward an appropriate audience (Andrews & Hickman, 1998). Community-based intervention programs such as mentoring programs appear to be more effective for at-risk adolescents who exhibit less severe problematic characteristics than those high-profile adolescents at risk for problematic behaviors. Although designers create mentoring programs with at-risk adolescents in mind, perhaps such programs cannot help all at-risk adolescent youth.

Adolescents identified as at risk earlier in life, exhibiting heightened academic and behavioral problems, may need assistance and comprehensive strategies sooner than 14 or 15 years of age. Indeed, the descriptive statistics of this study demonstrate and support the idea of better identifying an "appropriate" audience for diversion and intervention programs.

The intentions of mentoring programs are honest, sincere, and altruistic. However, severe at-risk adolescents who experience continued ecological problems might not benefit from mentoring programs. Such programs fail to relieve or change the ecological risk factors experienced by youth. Mentoring programs that are carefully designed and implemented can be effective and reap positive benefits. However, unless mentoring programs incorporate an ecological approach, then such negative results may be irreversible and inevitable. Mentoring is not a "quick fix" (Royse, 1998). Mentoring relationships, like any other, needs time to grow and prosper to be beneficial. When adolescents have positive relationships with their ecological surroundings, their chances of successful academic and behavioral development increase.

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Article

Partnerships in Systems of Care: An Early Intervention Pilot Project With Education

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Abstract: *The purpose of this paper is to describe a pilot project that developed out of a partnership between a community-based system of care and a large urban school district. This pilot, created to serve children who are at risk for developing more serious emotional and behavioral challenges and their families, is unique for several reasons. First, it was established to provide an often missing focus on preventative family-focused, strengths-based services. Second, this project has evolved from reliance on external grant funding to being fiscally sustained by the partner school district. Finally, it represents a collaborative venture that capitalizes on the pivotal role of schools as partners in interagency systems of care. In addition to describing the project pilot and its relationship to the Dawn Project, an established system of care in the same community, this article also presents findings from a preliminary study that examined and compared teacher and caregiver perspectives about the pilot during its first year of operation. Findings suggest that several demographic characteristics differentiate children in the pilot from children in the Dawn Project system of care and that both caregivers and teachers generally have positive perceptions about the pilot project.*

The various systems and agencies that serve children with emotional and behavioral challenges and their families are continually challenged to assure that appropriate levels and types of services and supports, both formal and informal, are coordinated and directed toward common goals (Robertson, Anderson, & Meyer, 2004; Stroul, 1996). In an effort to respond meaningfully to the persistent and complex issues often impacting these children, their families, and the service systems and agencies that serve them, the federal government created the Comprehensive Community Mental Health Services for Children and Their Families Program (Duchnowski, Kutash, & Friedman, 2002). This initiative continues to promote service provision based on a set of values (strengths-focused, family-driven, community-based, and grounded in cultural competence), which are associated with system of care (Stroul & Friedman, 1986) and wraparound approaches (VanDenBerg & Grealish, 1996). Originally defined almost two decades ago as "a comprehensive spectrum of mental health and other necessary services which are organized into a coordinated network to meet the multiple and changing needs of children and families" (Stroul & Friedman, 1986; p. 3), systems of care appear to be emerging as the surrogate national child mental health policy in lieu of an official federal one (Hernandez, 2003). While implementation can take various forms across different communities, the core values and philosophical underpinnings of systems of care and wraparound remain constant (Stroul, 2003). Simply put, these approaches create proactive mechanisms that allow schools, families, and community agencies to collaborate and build on strengths to meet children's individual needs at home and in the community instead of relying on more restrictive options such as residential services (Burns & Goldman, 1998; Eber, Osuch, & Redditt, 1996; Stroul & Freidman, 1986).

As our understanding of how to collaborate across systems and coordinate services for children with emotional and behavioral challenges continues to grow, focus is shifting toward how these approaches can be better connected with schools and educational concerns (Eber, Sugai, Smith, & Scott, 2002). Some researchers have noted associations between system of care involvement and improved school functioning (Rosenblatt & Rosenblatt, 1999). Researchers and stakeholders also have been interested in relationships between system of care participation and specific aspects of school functioning, including attendance, academic performance, and school behavior. For example, the Center for Mental Health Services reported that both attendance and academic performance improved significantly for students participating in systems of care (Center for Mental Health Services [CMHS], 1998). Specifically, this study found that from enrollment to 12 months, the percentage of students attending school on a regular basis (defined as attending more than 75% of the time) increased from 75% to 85%. During the same period, the percentage of students whose school grades were rated as average or above average increased from 55% to 67%. A similar summary of findings from the national evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program also reported that school performance and attendance improved from enrollment to two years (Manteuffel, Stephens, &

Santiago, 2002). In an exploratory qualitative study that examined the relationship between system of care participation and school functioning, Anderson, Meyer, and Somers (in press) interviewed and compared the perceptions of 10 dyad pairs of caregivers and teachers whose children/students had participated in a system of care for one year. The authors found that although caregivers were generally more positive than teachers, both groups reported improved school functioning relative to system of care involvement, with both observing greater improvement in behavior than in academics.

Schools are increasingly focusing on both the prevention of emotional and behavioral challenges as well as providing prompt and effective interventions when such problems occur (McCurdy, Mannella, & Eldridge, 2003). Educators, for example, need to be able to focus on prevention while simultaneously intervening quickly and effectively for children identified with emotional and behavioral challenges. However, because so many of the issues impacting children with emotional and behavioral challenges are connected to factors external to schools, such as poverty (Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005), effective responses need to be cross-disciplinary. Historically, the problem for schools is that they were not designed to address needs extending beyond their walls (Knitzer, Steinberg, & Fleisch, 1990). Thus, practitioners and researchers have explored methods in which systems of care and wraparound approaches can be used to enhance and extend the ability of schools to prevent and intervene in emotional and behavioral challenges from a cross-disciplinary framework (Eber et al., 2002).

Development of an Early Intervention Pilot Project

The Dawn Project. One nationally recognized system of care, the Dawn Project, has developed programs specifically designed to intervene early in the lives of children and youth with serious emotional and behavioral challenges. This project was implemented in 1997 as an interagency community collaboration designed to serve a specific population of children and youth with serious emotional and behavioral challenges in Marion County, Indiana, which includes the greater Indianapolis metropolitan area (Dawn Project, 2004; Indiana Division of Mental Health, 1999). To date, the Dawn Project has served approximately 1,000 young people and their families in Marion County. Evaluation findings from a longitudinal study of this Project (Anderson, Wright, Kooreman, Mohr, & Russell, 2003) found that the average age at the time of enrollment is about 13 years. Approximately 65% of the participants are male (n = 428), and of this group, 53% are African-American, biracial, or from another minority group (n = 228) and 47% Caucasian (n = 200). Among females (n = 230), 59% are African-American, biracial or from another minority group (n = 135), and 41% Caucasian (n = 95). Additional examination of the Dawn Project participants has shown that at the time of enrollment, children have already experienced a wide range of concerns, including conduct/law-enforcement problems (63%); physical, sexual, or emotional abuse (52%); family-related problems (51%); and school-related difficulties (52%) (see Table 1). Evaluation findings of the Dawn Project have demonstrated improvements in clinical functioning and reduction in the restrictiveness of living arrangements over time, as well as lower rates of recidivism for youth who have successfully completed the program (Anderson et al., 2003). Follow-up studies have both substantiated and extended these findings with larger samples over a wider range of indicators and across longer periods of time (for the complete set of evaluation findings, see Dawn Project, 2004).

The IPS Pilot. Within a few years after the creation of the Dawn Project, stakeholders began to realize that its eligibility criteria actually created barriers to the offering of system of care services to children who had less intensive needs. In response, system partners utilized a six-year federal demonstration grant awarded to Marion County by the Center for Mental Health Services to provide system of care services to children who had not yet reached the clinical threshold required for enrollment in the regular Dawn Project. Several lower intensity, at-risk pilot projects were initiated, one in conjunction with the Indianapolis Public Schools (IPS).

In a very real sense, the IPS Pilot began out of necessity. The Indiana State Department of Education (IDOE) was an original partner in the Dawn Project system of care start-up in 1997. Indiana has a budget line item for residential dollars allowing school districts to apply to the IDOE Division of Exceptional Learners for funding for children who need out-of-home services. However, because of the state rules and regulations governing this funding stream, the IDOE referral process can be cumbersome and lengthy. Moreover, a district has to go through this agency for authorization to make any adjustments to the initial application. In fact, the primary responsibility of one IPS employee is to complete IDOE applications and work with the state to make changes to existing service arrangements. Obviously, situations necessitating this kind of funding can be quite time-sensitive, with a child and family often in immediate need of support. Thus, one of the immediate goals for the IPS pilot was to make the referral process for Dawn Project services both more responsive and efficient. The IDOE Division of Exceptional Learners has been supportive of the pilot, recognizing that school districts need to replace the state in taking ownership for their children at risk for residential placement.

The IPS pilot provides a support network based on the system of care principles (i.e., strengths-based, family-driven, culturally competent, community-based) for children who are not at the degree of severity required for regular Dawn referral. IPS does not have to wait until a child has been referred to a residential psychiatric setting or become involved with multiple systems to begin providing the structure and support of the Dawn Project system of care. Moreover, not only has IPS eliminated the bureaucracy associated with state funding, stakeholders believe the pilot ultimately will save the district money by reducing what often become long-term, expensive stays in residential settings. Expenditure levels in the pilot are set at $1,809 per youth per month, an amount substantially lower than the regular Dawn Project case rate of $4,256 per month.

When a child enters the IPS pilot, a child and family team is formed, with the family as the principal decision-making partner. These teams are comprised of the child, one or more family members, a service coordinator, and representatives from the various agencies involved with the family. Teams meet regularly and are responsible for developing a multi-domain service plan for the child and family, monitoring progress, and making necessary adjustments to the plan as challenges are overcome or new needs arise. The goal is to prevent the development of further problems and the need for more restrictive,

Table 1

Comparison of Participants in the Regular Dawn Project and in the IPS Pilot

	Regular Dawn (*N* = 658)		IPS Pilot (*N* = 33)			
	N	*%*	*N*	*%*	*_2*	*P*
Males	428	(65.1)	28	(84.8)	5.73*	.02
Minority	228	(34.7)	21	(63.6)	5.01*	.03
Caucasian	200	(30.4)	7	(21.2)		
Females	230	(34.9)	5	(15.2)		
Minority	135	(20.5)	3	(9.1)		
Caucasian	95	(14.4)	2	(6.1)		
	M	*SD*	*M*	*SD*	*T*	*P*
Age	12.95	2.56	11.75	2.56	2.62**	.01
CAFAS Score	94.24	55.25	87.67	23.73	.65	.52
	N	*(%)*	*N*	*(%)*	*_2*	*P*
Risk Factor						
Mental health	257	(39.1)	18	(54.5)	3.15	.08
School	344	(52.3)	32	(97.0)	25.30**	.00
Alcohol/drugs	93	(14.1)	0	(0.0)	5.39*	.02
Family concerns	341	(51.2)	10	(30.3)	5.82*	.02
Abuse	345	(52.4)	6	(18.2)	14.75**	.00
Delinquency	413	(62.8)	21	(63.6)	.01	.92
	M	*SD*	*M*	*SD*	*T*	*P*
Total Risk Factors	4.83	2.40	3.78	1.39	2.44*	.015

Note. Indicates significant differences between IPS Pilot and typical dawn.
*p < .01.
**p < .05

and more expensive, services. In addition to focusing on building and strengthening natural supports (e.g., family expectations for performing well in school), typical types of interventions used in the pilot project include service coordination, respite care (e.g., time for the caregivers to get out of the house), behavioral services (e.g., mental health counseling), and mentoring (e.g., individualized supports designed to help a child succeed in school). Other services in the pilot might include educational consultation to build relationships between parents and schools, summer camp opportunities, incentive money, financial assistance with living expenses such as utilities and car repairs, family recreational activities, clothing, and supported employment. Placement costs, which typically involve longer-term living arrangements (i.e., residential treatment, foster care, group home, arranged living with a relative, shelter care, or supported independent living), are not covered as part of pilot project participation. For situations in which more intensive services (e.g., restrictive placement) become necessary, children can be transferred from the pilot to the Dawn Project.

Methodology

Currently, there is little research available to guide either the development or study of systems of care in schools. Therefore, in addition to describing the development and organization of the IPS pilot, this paper also presents findings from a preliminary study that examined the degree to which the characteristics of the first cohort of children served by the IPS pilot differed from children in the regular Dawn Project. The study also explored and compared teacher and caregiver perceptions about the pilot during its first year of operation.

Setting. The setting for this study is Indianapolis, Indiana, the largest city in the state and home to approximately 860,000 residents, 23% of whom are between the ages of 12 and 21. Indianapolis Public Schools (IPS) is among the 30 largest school districts in the country, with over 38,000 students. Currently, the student population is approximately 58% African-American, 28% Caucasian, 10% Hispanic, and 2% Multiracial. Approximately 77% of students receive free lunch services, while another 12% qualify for reduced lunch. Approximately 25% of the families in the district live below the poverty line, with 28% reporting less than a high school education. Additionally, IPS

provides special education services for just less than 20% of its student population, or approximately 7,500 students.

IPS is working to become a model urban school district in this country, with a mission to "teach all our students within a safe environment resulting in graduates who are knowledgeable, responsible, productive, employable citizens" (Indianapolis Public Schools, 2003-2004). In recent years, it has developed a variety of pilot programs designed to improve the outcomes of children with emotional and behavioral challenges as well as children who are at risk for developing such problems, including schoolwide positive behavior supports, full-service schools, intensive mentoring, equestrian programs, conflict resolution interventions, and others.

Program referral. The referral process for the IPS pilot is simple: the teacher, parent, school social worker, and principal send a referral to the regional special education supervisor, who then reviews the application and, if appropriate, sends it to the IPS special education leadership team for final review and approval. The leadership team is comprised of the regional supervisors and support staff (a behavior specialist and a curriculum and instructional specialist) for each of the five regions of IPS (a region includes a high school and its catchment area) and the Director of Special Education and Student Services. This team has the advantage of providing a broad overview of all the supplemental services available in the district and functions as a gatekeeper for all special education-related, high-end service requests. Because this pilot project is funded by special education dollars, the only additional criterion for enrollment is that referred children already have the special education label emotional disturbance, as defined in the Individuals with Disabilities Education Act (IDEA) Amendment of 1997 (20 U.S.C., 1997). Once the team approves an application, a service coordinator begins working with the family within a week of approval.

Data collection. Data for this study, made available by Dawn Project and IPS personnel, were compiled from the Dawn Project's computerized information management system, The Clinical Manager (TCM) (Clinical Data Solutions, 1998), and a survey given to the parents and teachers of the first cohort of children and families (N = 33) who participated in the pilot project. Scores from the Child and Adolescent Functional Assessment Scale (CAFAS), a clinical assessment instrument (Hodges, 1996), were gathered from TCM, as were demographic variables and the risk information about participants in the IPS pilot project (see Table 1).

To understand better caregiver and teacher perceptions of the pilot so that program improvements could be made, IPS personnel constructed and implemented a survey. This survey consisted of two sections: (a) 11 Likert questions (see Table 2), rated on a 4-point scale (1—strongly agree, 2—agree, 3—disagree, 4—strongly disagree); and (b) four open-ended questions: (1) Why did your child/student enter the IPS pilot? (2) Do you feel supported in helping your child/student learn as a result of the IPS pilot? (3) What is working well with the pilot? (4) What areas could be improved? Development of the survey, which was designed and then administered by Dawn Project and IPS personnel, included input from parents, program administrators, program evaluators, Dawn Project service coordinators, teachers, and other school personnel. This survey was then given to the parents and teachers of all of the children in the IPS pilot project (N = 33, as of summer 2003). Of the 33 caregivers and teachers who were sent the questionnaire, 25 (76%) caregivers and 29 (88%) teachers returned completed surveys.

Analytic strategies. The analyses for this study included both quantitative and qualitative approaches. For the quantitative analyses, we used descriptive statistics, t-tests, and chi squares to describe and compare the population of regular Dawn Project youth (N = 658) to youth in the pilot project (N = 33). Because there is limited information available to guide the selection of predictor variables that might differentiate youth in the pilot from the larger regular Dawn Project, basic demographic variables were selected for these analyses. Thus, specific comparison variables for this aspect of the study included gender, race, and age at enrollment. In addition, presenting problems at enrollment were also included in an effort to understand the degree to which the challenges facing youth upon entry into these programs could be differentiated. To compare the CAFAS scores of children in the pilot with children in the regular Dawn Project, t-tests were used. Next, caregiver and teacher responses to each of the Likert questions were averaged and compared with paired means t-tests using SPSS (SPSS, Inc., 2002). Finally, qualitative analyses were used to explore the four open-ended questions. Specifically, content analysis was used to uncover themes in the responses by breaking the data into manageable parts and searching for coherent patterns (Bogdan & Biklen, 1998; Miles & Huberman, 1994). Because this study was purely exploratory, no a priori hypotheses or theoretical orientation guided the analyses.

Description of the children in the pilot. Table 1 presents demographic and clinical profiles and comparisons of children in the IPS pilot (N = 33) and the children in the regular Dawn Project (N = 658) as of summer 2003. The profile of IPS pilot children indicate that approximately 85% of the group was male (n = 28) and of this group, 75% (n = 21) were African-American, biracial, or from another minority group. Among females (n = 5), three children were African-American, biracial or from another minority group, while two were Caucasian (see Table 1). The average age at the time of enrollment in the pilot was 11.75 years.

With regard to clinical functioning, all children in the Dawn Project are assessed by their service coordinators at enrollment and at six-month intervals until disenrollment, using the CAFAS (Hodges, 1996). This instrument provides a measure of functional impairment, with scores in the 50-100 range indicating moderate levels of impairment in functioning. At enrollment, children in the IPS pilot had average scores of 87.67 (SD = 23.73). Finally, the various challenges experienced by children in the IPS pilot at the time they entered the program were systematically recorded by service coordinators as part of the intake process. The most commonly reported concerns at enrollment included school-related difficulties (97%), delinquency (64%), and mental health concerns (55%).

Findings

First results from the descriptive comparison of the characteristics of the children in the pilot and the regular Dawn Project are given, followed by a discussion of the findings from the Likert questions and finally the results of the open-ended questions. These findings are based on the surveys that were completed and returned by both caregivers and teachers. Of the first 33 children who participated in the IPS pilot, 25 pairs of completed surveys (i.e., both a caregiver and a

Table 2

Comparison of Parent and Teacher Survey Responses by Item.

	Pairs Available	Average Score		Difference	SD	T-test
		Parent	Teacher			
I am learning to better understand and use strengths-based approaches	21	1.71	2.38	-.67	1.28	-2.39*
I am learning to better access services.	21	1.90	2.33	-.43	1.17	-1.69
Team meetings have been helpful as a means for everyone to communicate.	21	1.62	2.00	-.38	1.02	-1.71
Families are more meaningfully involved in the team process.	21	1.76	2.10	-.33	.97	-1.58
Different providers are working together better.	21	1.81	2.10	-.29	1.06	-1.24
Teachers and other team members are both understanding and respectful of family and school culture (the way a family does things or a classroom operates).	24	1.83	2.04	-.21	1.10	-.93
Your child/student has made positive adjustment at school this year (involvement in school activities, increased homework, getting along with peers).	22	1.91	2.50	-.59	1.33	-2.08*
The communication between home and school has improved.	21	1.76	2.10	-.33	1.16	-1.32
Your child/student has better school attendance.	20	1.80	2.10	-.30	1.34	-1.00
Your child/student has better behavior at school (i.e., fewer suspensions, discipline reports).	23	2.13	2.43	-.30	1.49	-.98
Your child/student is getting better grades.	18	1.94	2.39	-.44	1.15	-1.64

Note. Lower average score indicates higher level of agreement: 1—strongly agree; 2—agree; 3—disagree; 4—strongly disagree. Percentages that do not add up to 100 are due to rounding.

* $p < .05$.

teacher returned a survey for the same child) were returned and used for these analyses. If either the parent or the caregiver for a specific child did not answer a particular question, then that respondent pair was excluded from the subsequent analysis for that question.

Comparison of Pilot Project and Regular Dawn Project Participants

There are several characteristics differentiating children in the pilot (N = 33) from children in the regular Dawn Project (N = 658). First, compared to the regular Dawn Project, children in the pilot are more likely to be male (X2 (1, N = 691) = 5.73, p = .02) and more likely to be from a minority background (X2 (1, N = 692) = 3.25, p = .05). Additionally, among males, children in the pilot are more likely to be from a minority background than children in the Dawn Project (X2 (1, N = 691) = 5.01, p = .03). Children in the pilot also are significantly younger (t(690) = 2.62, p = .01) at the time of enrollment than are the youth in the regular Dawn Project.

While there is no statistical difference in the average CAFAS scores at the time of enrollment, children in the pilot present a different profile of challenges at that time than the youth in the regular Dawn Project. Specifically, the pilot children exhibit higher rates of school-related problems (X2 (1, N = 691) = 25.30, p = .00) and lower rates of alcohol/drugs (X2 (1, N = 691) = 5.38, p = .02), family concerns (X2 (1, N = 691) = 5.01, p = .02), and reports of abuse (X2 (1, N = 691) = 5.01, p = .00). When compared to the regular Dawn Project (M = 4.83; SD = 2.40), the pilot group (M = 3.78; SD = 1.39) also exhibits a lower number of aggregate risk factors at the time of enrollment (t(690) = 2.44, p = .02) (see Table 1).

Results From the Likert Questions

Parents. Responses to the Likert questions could vary from 1 to 4 (1—strongly agree; 2—agree; 3—disagree; 4—strongly disagree). Although parent responses (overall M = 1.83) were more positive than teacher responses (overall M = 2.22), the general pattern among all respondents and for all of the questions tended to be positive (see Table 2). For parents, the highest rated items included "Team meetings helpful for everyone to communicate" (1.62), "Learning to better understand and use strengths-based approaches" (1.71), and "Families meaningfully involved in team process" and "Communication between home and school has improved" (both 1.76). The lowest parent items were "Positive adjustment at school" (1.91), "Better grades" (1.94), and "Better behavior at school" (2.13); however, even these three items were positive, indicating that parents agreed with them.

Teachers. For teachers, the highest rated items included "Team meetings helpful for everyone to communicate" (2.00) and "Understanding and respectful of family and school culture" (2.04). Four items, "Families meaningfully involved in team process," "Different providers working together better," "Communication between home and school has improved," and "Better school attendance," were all rated third highest, with means of 2.10. On the other hand, the lowest rated items for teachers were "Better grades" (2.39), "Better behavior at school" (2.43), and "Positive adjustment at school" (2.50).

Comparison of parents and teachers. In comparing the general patterns of parent and teacher responses, both groups rated the following item highest, "Team meetings helpful for everyone to communicate." There were two additional similar items among the highest rated in both groups: "Families meaningfully involved in team process" and "Communication between home and school has improved." The lowest rated items in both groups included "Better grades," "Better behavior at school," and "Positive adjustment at school."

There were only two survey items in which the disparity between the parent and teacher responses reached statistical significance: First, parents (M = 1.71) rated "I am learning to better understand and use strengths-based approaches" significantly higher (t = -2.30, p < .05) than teachers (M = 2.38); and second, parents (M = 1.91) rated "Your child has made positive adjustment at school this year" significantly higher (t = -2.08, p < .05) than teachers (M = 2.50). In fact, among both groups, the teacher rating for "Your child has made positive adjustment at school this year" (M = 2.50) was the lowest of any item; this rating of 2.50 was the only survey response for teachers or parents that did not indicate a minimal level of agreement, its rating falling exactly between agreement and disagreement.

Results From the Open-Ended Questions

The survey also included four open-ended questions to allow parents and teachers to offer additional information about their perceptions of the pilot. Results comparing parent and teacher responses for each question are presented below.

Why did your child/student enter the IPS pilot? Although several teachers said that the placement was made to provide additional supports in school for working with the child, generally teachers were much less clear than parents about why children had entered the pilot. Parents, on the other hand, were more likely to indicate specifically that school-related behavior problems were the primary reason the child was referred to the pilot.

Do you feel supported in helping your child/student learn as a result of the IPS pilot? Overall, both teachers and parents reported that they felt supported in helping the child to learn as a result of their involvement in the IPS pilot project. However, unlike the parents, teachers felt they needed more support than the pilot was providing to respond effectively to these children's challenges at school.

What is working well with the pilot? Both parents and teachers reported that one-on-one supports and mentoring services were working well, with both groups appreciating the individual support provided through these mechanisms. In addition, parents reported that communication both with school personnel and among all of the team members was a positive aspect of the pilot.

What areas could be improved? Teachers and parents both felt that communication among the various individuals involved with the child could be improved even more. Teachers also suggested that more mentoring and better communication with mentors would improve the project. Parents suggested that more supports needed to be focused directly on the children's problem behaviors.

In general, the patterns of the answers to the open-ended questions reflected the patterns of the answers on the surveys. Both parents and teachers generally indicated positive perceptions of the IPS pilot project; however, on both sets of questions, parents were more pleased and optimistic than teachers about the impact of the pilot on their children. While both parents and teachers felt the pilot

increased and improved home-school collaboration and provided additional supports for children to be successful in school, teachers were more likely to add that more needed to be done.

Discussion

System of care approaches were created to organize and coordinate children's social, educational, and therapeutic services in an effort to overcome the complex and many challenges associated with serious emotional and behavioral problems (Stroul & Friedman, 1986). A hallmark of these approaches is their flexibility in individualizing services as well as their focus on improving naturally occurring supports. The IPS pilot was designed to bypass the restrictive eligibility criteria and intake procedures of the existing system of care so that children with lower levels of need (i.e., at risk for developing more serious challenges) could be served more quickly using these innovative approaches. This study is unique because, to date, little research has examined the prevention and early intervention potential of system of care approaches. Previously unavailable information is provided, including a description of an at-risk pilot project and a comparison of caregiver and teacher perceptions about the pilot.

Several findings from this study warrant further discussion, most importantly the differences in the characteristics of the children in the regular Dawn Project and the children in the pilot project. Specifically, our results indicated that compared to the children in the regular Dawn Project, those in the pilot were younger, more likely to be male, and more likely to be from a minority background. Because the pilot was created to provide services faster than the regular system of care for children at risk of developing more serious problems, finding that this group was younger at enrollment was not surprising. Indeed, this result is encouraging because it demonstrates that the pilot is reaching children about a year and a half earlier than the regular Dawn Project and, as such, appears to be meeting its intended purpose of providing a system of care supports for children deemed to be at risk and their families. Moreover, the average age in the pilot is similar to summaries of national data in which the average age of participants was reported to be 12 years (CMHS, 1998; 1999).

The racial difference between the Dawn Project and the pilot appears to reflect demographic differences between IPS and Marion County. IPS, one of eight school districts in Marion County, serves the urban center of Indianapolis and has the highest percentage of students from minority backgrounds; however, more information is needed to understand whether other factors are also influencing these differences in referral rates in the programs. Gender differences between the two groups appear to be related to the pilot's eligibility criterion limiting enrollment to children labeled with emotional disturbance (ED). In central Indiana, like much of the rest of the nation, there is an overrepresentation of males in the ED category. As Oswald and colleagues (2003) reported, males are much more likely than females to be identified in this category. Nationwide, 62 % of the children served in systems of care are male (CMHS, 1999).

Another difference between the two programs is that children in the pilot exhibit fewer overall risk factors and lower rates of alcohol/drug use, family concerns, and reports of abuse at the time of enrollment than the children in the regular Dawn Project. The lower aggregate number of risk factors, as well as the lower percentages of alcohol/drug use, family concerns, and abuse, may reflect the at-risk nature of the children being served in the pilot project (i.e., these children have fewer challenges) (CMHS, 1999). On the other hand, because this is a school district program, it was not surprising that children in the pilot had more school-related problems at enrollment than children in the regular Dawn Project (see Table 1). Conversely, given the focus on children deemed at risk, we expected to find better overall functioning in the pilot than in the regular system of care, and it is unclear why there was not a significant difference (as measured by the CAFAS). Although average scores indicated less impairment and more homogeneity for children in the pilot, differences between the groups were neither statistically nor clinically (i.e., 20 or more points) significant.

With regard to findings from both the open-ended and Likert questions in this study, we were encouraged that responses were generally positive and constructive, with similar trends from both caregivers and teachers (although for each question caregivers were more positive than teachers). For example, both teachers and caregivers agreed that children had better attendance as a result of participating in the pilot, a finding that also has been suggested by national data trends (Manteuffel et al., 2002). Likewise, it was encouraging to find that both caregivers and teachers were most positive about team meetings, family involvement, and home-school communication; thus, even though both groups suggested that some improvement in this area was possible, it appears relationships between families and educators are getting better as a result of the pilot project. On the other hand, while parents felt that grades had been positively impacted by the pilot (CMHS, 1998), teachers were not as clearly in agreement (Anderson, Meyer et al., in press, for similar results).

Another important finding was that the caregivers appeared to gain a better understanding of strengths-based approaches as a result of participating in the pilot than did the teachers. This result makes sense given that systems of care are designed to help families adopt and use strengths-based perspectives. Indeed, this is a primary goal of Dawn Project service coordinators who organize child and family teams. However, teachers in this study were also part of these teams. Therefore, we must ask why the difference. Strengths-based approaches are not widely practiced in education, a factor which may be at least partially attributed to the fact that schools are built not only around academic performance but also on what happens when such performance falls below expectations (Anderson, Meyer et al., in press). Special education, for example, was created and has operated primarily as a deficit-oriented model (Turnbull & Turnbull, 2001).

Caregivers were also significantly more likely than teachers to view their children as making positive adjustments to school. In fact, teachers rated this point lower than any other survey item for either group. Specifically, while caregivers agreed that their children had adjusted well to school, teachers were unsure about their agreement with this statement. Again, this disparity may reflect differences in beliefs about strengths and deficits, as previously addressed; that is, caregivers may be more likely to hold an optimistic outlook. Another possible explanation, however, is that parents have substantially more knowledge about their children's previous school experiences than teachers, thus allowing them to view the impact of the pilot project through a more complete historical lens (Danielson, 2002).

From this vantage point, parents recognize how much progress their children have made in school over time, while teachers may have only the current school year, or less, from which to judge. Indeed, Anderson et al. (in press) found that a sample of children from the Dawn Project system of care did not stay in the same school from one year to the next.

Limitations and Concluding Remarks

There are several important limitations when considering the findings of this study. First, the pilot project is new, and, as such, these findings must be viewed as formative. We do not know how perceptions of parents and teachers will change as the program matures. Likewise, our sample size was small. Program evaluation theory suggests that early outcomes can be misleading when a program is young and the number of participants small. Second, this study was conducted with data collected from one system of care pilot project in one community, making generalizations to other care systems or communities unclear. However, the pilot was created using the same core values associated with other care systems (Stroul & Friedman, 1986; Stroul, 2003); therefore, given this common philosophical framework, some generalization may be possible.

In spite of these limitations, useful information emerged from this study that can inform current and future practice as well as research. Most importantly, the results of this work support the growing recognition that early intervention and prevention efforts need to be integrated into children's social services and that systems of care may offer a mechanism for doing this (Anderson, Effland, Kooreman, & Wright, in press). The IPS pilot is unique in that it brought together a school district and a system of care. Circumstances that facilitate partnerships among schools and care systems, like this one, focusing on early intervention and prevention, are relatively unique, and, therefore, more program descriptions, evaluation, and research will be needed to understand how to best create and support such efforts. Findings from well-designed studies have the potential to impact substantially current practice and policymaking, which conceivably could lead to better models of early intervention for children, families, and schools. Ultimately, a better scientific understanding of how system of care participation can be used to prevent or disrupt the emergence of emotional and behavioral challenges, as well as improve school functioning, will be of great value for the field.

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Article

Profile of Children Under the Age of 13 in Georgia's Juvenile Justice System

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Abstract: *A significant number of children under the age of 13 come before the juvenile courts in the United States. However, minimal data are available about the characteristics of this population or the appropriate interventions for them. This article provides descriptive and statistical data about a sample of this population in Georgia, information that can be used to guide future research and interventions. Extant records of 84 children under the age of 13 in Georgia who were either detained by or committed to the Georgia Department of Juvenile Justice (DJJ) were examined. Descriptive variables include (a) race, gender, and age; (b) types of charges; (c) juvenile justice placements; (d) educational histories; (e) family histories; (f) mental health; (g) sexual offenses and abuse; and (h) history of involvement with state agencies. Statistical analysis was limited to correlations between age and IQ, age and the number of contacts with the DJJ, and the number of contacts with the DJJ and mental health diagnoses. A discussion about the potential implications of the data is provided along with policy recommendations.*

The news media often depicts an increasing number of young children being involved in disturbing criminal behavior. To some degree, this portrayal is accurate. In 1999, over 218,300 children under the age of 13 were arrested in the United States (McGarrell, 2001), accounting for approximately 16% of all children referred to juvenile courts (Puzzanchaera et al., 2000). Between 1980 and 1994, the number of children under the age of 14 increased disproportionately compared to older youths (Butts & Snyder, 1997). During that time period, arrests of children 12 years and younger grew by 102%, while violent crime arrests for these children increased by 94% and arrests for weapons offenses increased 206% for juveniles aged 12 or younger. Arrest rates for this population were also higher for offenses such as arson, vandalism, sex offenses, and public disorder.

In addition to arrest rates, evidence suggests that juveniles aged 12 or younger are diagnosed as having a disproportionate number of psychiatric disorders. Teplin, Abram, McClelland, Duncan, and Mericle (2002) interviewed 1,829 arrested or detained children in Illinois, finding that of this population, 371 were aged 12 or younger, with more than 52% percent of males and 66% of females being classified as having a disorder. These disorders for males and females, respectively, included disruptive behavior (32.9%, 44.7%), conduct (30.8%, 33%), attention-deficit/hyperactivity (12.5%, 26.6%), substance use (28.3%, 30%), and anxiety (17.7%, 26.6%).

These figures create cause for concern since children between the ages of 7 and 12 who commit delinquent acts are two to three times more likely to become serious offenders than those whose first offense occurs later in life (McGarrell, 2001). According to Snyder and Sickmund (1995), the risk of a subsequent referral to the juvenile court is 60% for children aged 10-12 who have been referred to the court once and 80% for those who have been referred twice. Unfortunately, this population has received minimal attention from the juvenile justice system, possibly because the overall number of offenders in this age group is small as compared to older youth (Butts & Snyder, 1997). Developing an understanding of these children and addressing their needs early hold the potential for reducing both their recidivism and their overall crime rates. The more that researchers and practitioners know about this population, the better they will be able to design interventions that effectively prevent future problems.

As a result, the purpose of this article was to examine the characteristics of 84 children in Georgia under age 13 and involved with the juvenile justice system during 2001. While numerous studies have looked at the characteristics of youth older than 13 in the juvenile justice system, few have examined the characteristics of children under this age (Teplin et al., 2002). The primary goal of this paper was to develop a profile of these children to address this lack of information. By developing this profile, it is hoped the information will help answer the following three questions: (a) What are some of the characteristics of young children involved with the juvenile justice system? (b) What potential steps could have been taken to prevent their involvement with system? and (c) What are the potential implications of these findings?

Method

Historical data were collected on a total of 84 children identified by the Georgia Department of Juvenile Justice (DJJ) as under age 13 and committed to the DJJ (n = 58) or under age 11 and detained by the DJJ (n = 26) during calendar year 2001.[1] These children represented all of the children under the age of 13 who were either committed or detained by the DJJ in 2001. These children, who represented 1-2% of the approximately 4,600 children and youth committed and detained by the Georgia DJJ at that time, came from urban, suburban, and rural settings across the state of Georgia.

Descriptive data were collected from multiple data sources, including (a) the DJJ electronic files on all 84 children (e.g., placement history, charges, court records); (b) the DJJ paper files on 58 of the children (e.g., school records, psychological evaluations, social family histories, the DJJ historical placement records); (c) the Division of Family and Children Services (DFCS) paper files on 46 of the children who were identified as having a DFCS case record (e.g., Child Protective Services histories, school records, health records, psychological evaluations); and (d) Division of Mental Health, Developmental Disabilities, and Addictive Diseases records on children who received publicly funded mental health services (e.g., community enrollments, psychiatric records). Since the mental health records were limited to publicly funded services, they probably underrepresent the true incidence of mental health problems and treatment in these children.

While every effort was made to locate all administrative files for every child in the study, these files may have been incomplete in cases in which the county-level office did not send complete records or the child was involved with agencies outside Georgia. For 23 of the children (27%), there was no additional information beyond that contained in the DJJ's paper files. For six children (7%), no information was found beyond the placement and charge histories. Finally, one independent juvenile court refused to allow access to the records of two children.

Descriptive Findings

This study provides a descriptive profile of children under the age of 13 and committed to the DJJ or under the age of 11 and detained by the DJJ in Georgia. The findings are organized according to (a) race, gender, and age; (b) type of charges; (c) placements within the DJJ, (d) educational histories; (e) family histories; (f) mental health; (g) sexual offenses and abuse; and (h) history of involvement with state agencies.

Race, Gender, and Age

The majority of children (58%) were African-American, a proportion among the 84 children twice as high as one would predict from Georgia's overall population distribution. The proportion of Caucasian children (31%) was half of the predicted level, while the Latino population was proportionate to the State's population at 5%. Eighty-six percent of the children were male and 14% female. Thirty-six percent were age eleven, 24% age ten, 26% age nine, 12% age eight, and 2% age seven.

Types of Charges

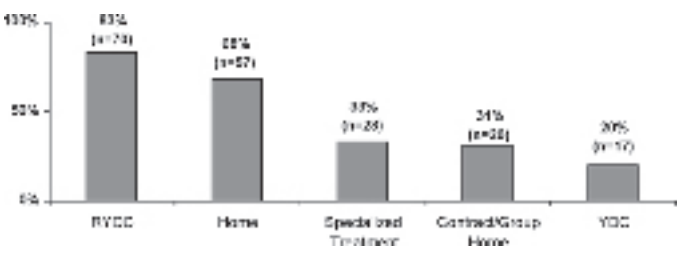
Children committed to or detained by the DJJ were charged with 36 different types of offenses, including violation of probation (n = 21), criminal trespass (n = 15), battery (n = 14), unruly behavior (n = 11), theft by taking (n = 10), disrupting the public (n = 10), simple battery (n = 8), child molestation (n = 8), simple assault (n = 8), and disorderly conduct (n = 8). Forty-three percent of the children had four or more prior contacts with the DJJ. One child had 12 and another 15. Many of the prior charges were relatively minor, including unruly behavior, criminal trespassing, shoplifting, and violation of aftercare. Other charges, offenses related to weapons, assault, or theft/burglary, were more serious than the charges that brought the children into commitment. Thus, a child who was committed for a seemingly minor offense often had a history of more severe behavior.

Among the children detained (n = 26), nearly half were detained upon their first offense (n = 12). Charges in these cases included terroristic threats (n = 2), battery or simple battery (n = 4), simple or aggravated assault (n = 4), and theft (n = 2). Among the 58 children committed to the DJJ, almost one-third were committed upon their first contact with the agency (n = 18). Twelve of the children had only one charge at the time of commitment, while five children had multiple charges. Of those committed for their first offense (n = 21), the most serious crime for almost half the children (47%) was sex crimes (aggravated child molestation, sexual battery, sodomy). Among children committed for a first offense other than sex crimes, the charges included arson, manslaughter, trespassing, battery, and other unspecified charges.

Placement Within Juvenile Facilities

Once involved with the juvenile justice system, the 84 children in this study moved frequently among placements. On average, the children had approximately five placements. Almost 80% of the children (n = 66) had more than one placement, and 10 children had 10 or more. Placements included Regional Youth Detention Centers (RYDCs) and Youth Detention Centers (YDCs). RYDCs generally provide short-term detention for children in their local areas. YDCs, on the other hand, usually provide long-term detention for committed children and children sentenced to special 90-day programs. Committed children averaged 77 days in RYDCs compared to 12 days for detained children. Committed children under age 13 spent an average of 96 days in YDCs. Figure 1 presents the percentage of placements of the 84 children during their involvement with the DJJ.

Figure 1. Types of placements for young offenders.



Educational History

Many of the 84 children had been identified by their schools as having discipline problems or special needs prior to their commitment or detention. Since information was not collected directly from the school district, the numbers probably underestimate these children's special educational needs. Fifty-four percent had a school discipline record (n = 45), and 34 % (n = 29) had an Individualized Educational Program indicating their involvement in special education. Of those in special education, 27 % (n = 23) were identified as having an emotional/behavioral disability. IQ scores were present in the files of 47 of the children. The mean IQ for these was 83, with 8 of the 47 children (17 %) having IQs below 70.

Family History

Records indicate that a high proportion of the 84 children had a family history of criminal activity, incarceration, substance abuse, or mental illness. Figure 2 presents the percentage of children with a family member having those characteristics. A high percentage of these children also witnessed violence and/or suffered abuse in their homes in the form of sexual, physical or emotional abuse; neglect; and/or domestic violence. Figure 3 displays the percentage of children who witnessed violence and/or suffered abuse in their homes.

Figure 2. Family characteristics of young offenders..

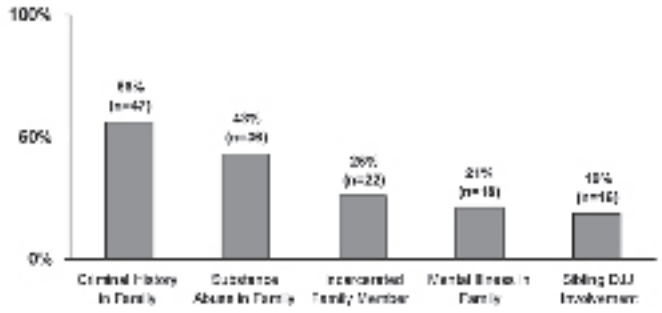
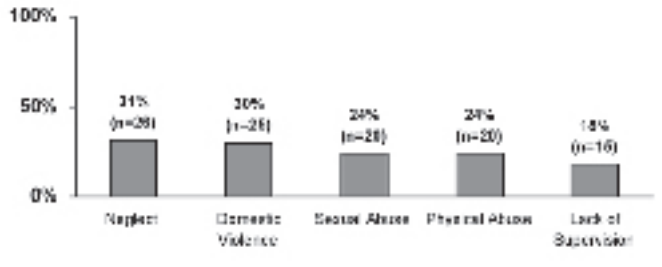


Figure 3. Percentage of young offenders abused or neglected.



Mental Illness

Almost 75 % of the 84 children in this study had at least one diagnosis of a mental illness, with 59 % having two or more. Due to missing information for several children, this figure may underestimate the true incidence of mental disorders. The most common diagnoses were Attention Deficit Hyperactivity (51 %), Conduct Disorder (36 %), Oppositional Defiant Disorder (27 %), and Bipolar Disorder (13 %). Other children displayed psychotic symptoms (n = 7) and Post Traumatic Stress Disorder (n = 7).

More than one-third (n = 33) of the children had a history of psychiatric hospitalization, and two-thirds (n = 56) had received some type of outpatient services in the public sector. Sixty percent (n = 51) of the children were taking medications for mental illnesses: 57 % (n = 48) were taking stimulants, 29 % (n = 24) anti-psychotics, and 7 % (n = 6) anti-hypertensives.

Sexual Offenses and Sexual Abuse

Twenty percent (n = 17) of the 84 children had a history of sexual offenses or of sexual acting out. Of these 17 children, most (n = 14) had committed the offenses against siblings or other relatives. More than half (57 %) of the children who committed sexual offenses were also known victims of sexual abuse.

History of Involvement With State Agencies

Approximately 75 % (n = 63) of the children had been involved with more than one child-serving state agency. Almost 66 % (n = 52) of the children had been involved with the state's Child Protective Service system. More than one-fourth (n = 22) had a placement in foster care, and another third (n = 30) had been involved with Child Protective Services but were not placed in foster care. Nineteen percent (n = 16) had been referred to Georgia's Multi-Agency Team for Children (MATCH), a multidisciplinary team of professionals that arranges residential care for children who are seriously emotionally disturbed and most in need of mental health treatment. Services coordinated by MATCH include Therapeutic Foster Care, Intermediate Residential Treatment, Therapeutic Residential Wilderness Camps, and Intensive Residential Treatment. Providers may be public or private. A child's placement is based on his/her particular level of care based on emotional, behavioral, cognitive, educational, medical, and social needs. The high number of children referred for treatment services through MATCH indicates that these children were known to the child-serving systems. Unfortunately, due to the incompleteness of the files, it is not possible to determine whether these children received the recommended services. In Georgia, MATCH review does not guarantee receipt of services since they are limited by available state funding.

Statistical Findings

In addition to the descriptive findings, several statistical analyses were conducted. All analyses were significant at 0.05 level or below ($p > 0.05$). Table 1 summarizes these data.

Table 1

Correlation Among Characteristics of Young Offenders (N = 84)

	Age at DJJ Contact	IQ Score	No. of Contacts with DJJ	No. of Mental Health Diagnoses
Age at DJJ Contact		.29*	-.25*	.12
IQ Score	.29*		-.20	.13
Number of Contacts with DJJ	-.25*	-.20		.28*
Number of Mental Health Diagnoses	.12	.13	.28*	

*Correlation is significant ($p > 0.05$).

Age and IQ

Forty-seven of the children had an IQ score. The Pearson correlation coefficient calculated for the relationship between age and IQ found a low positive correlation of .29 between the two, indicating a significant linear relationship between the two variables. Children with lower IQs appeared to have a greater chance of being either detained or committed to the DJJ earlier than those with higher IQ scores.

Age and Number of Contacts With the DJJ

Of the 84 children, the Pearson correlation coefficient calculated for the relationship between age and the number of contacts with the DJJ found a low negative correlation of -0.25 between the two: that is, the younger the child, the higher his/her number of previous contacts with the DJJ, perhaps indicating that the courts may avoid detaining or committing younger children to the DJJ unless they have longer previous records. On the other hand, courts may be more willing to send slightly older children to the DJJ even if their history of previous contacts is shorter.

Number of Contacts and Number of Mental Health Diagnoses

The Pearson correlation coefficient calculated for the relationship between the number of contacts and the number of mental health diagnoses found a low positive correlation of .28 between the two. Those with two or more mental health diagnoses (n = 50) were significantly more likely to have more contacts with the DJJ than those with one or no mental health diagnoses.

Discussion

This study of 84 children under the age of 13 and committed to the DJJ or under the age of 11 and detained by the DJJ raises several questions about these children and the services they receive, questions which apply to comparable children nationally. The first question is whether earlier intervention by Georgia's child-serving agencies had the potential to prevent the child's involvement in the DJJ. The data suggest that preventive steps could have been taken. For example, the positive correlation found between the number of contacts with the DJJ and the number of mental health diagnoses suggests that mental health services could have identified these children earlier and provided them with more intensive services prior to coming in contact with the DJJ. Additionally, a negative relationship between age and the number of contacts with the DJJ was found. The youngest children who made contact with the DJJ continued to have problems. Similar to those children with mental health diagnoses, these children should be provided with earlier and more intensive services in hopes of stopping future interactions with the DJJ.

The correlational findings were low, probably due to the same sample size. Further research should be conducted regarding the potential impact of more intensive, and earlier intervention. Specifically, researchers should examine the impact of earlier intervention with children who have mental health diagnoses since these appear to be at greatest risk for future failure and adjudication. When examining the impact of earlier intervention, researchers should consider the type of offense and the length of sentence. While this study did not take this factor into consideration, it could potentially impact future findings.

More than 75% of these children were involved with public child protective and/or mental health services prior to being involved with the DJJ. Records indicated that a third of them were identified as having a disability. In addition, more than half of these children had family members who were known to the state because of incarceration. These children were predictably at higher risk.

Among the 84 children, those with a low IQ were at significant risk. A positive correlation was found between age and IQ, although this correlation was low, probably due to the small sample size. A larger sample size might increase the magnitude of the correlation. The children with low IQ tended to have both earlier and more contacts with the DJJ, and they were often identified as needing special education services. Potentially, child-serving agencies could have prevented future problems and involvement with the DJJ by providing children with these characteristics appropriate help earlier.

A second question is whether collaboration among the multiple public agencies involved in the lives of these children could have improved the services these children received. The data suggest that the agencies in these children's lives did not have detailed information on the child's involvement with the others. Improved collaboration offers the potential to improve the services that children receive while reducing waste from duplication.

A final question is whether the DJJ was an appropriate placement for these children. Placement in a detention center puts these children at risk of victimization by other detainees. Little is known about the long-term effects of placement in such settings on a child's physical and mental development.

Moreover, placement in a detention setting is an additional stressor for these very young children, many of whom already have mental health issues. Being in custody or in a correctional setting can exacerbate symptoms of mental illness, making it more difficult for children with mental illnesses to recover or to function in the absence of prescribed medications.

Many of the children in the sample were taking medications, indicating serious mental health needs. Patients on psychotropic medications need to be closely monitored to assess their effectiveness, to ensure that the dosage level is therapeutic, and to control side effects. Because less is known about effectiveness and dosage in children compared to adults, careful monitoring is even more essential to determine how well the medication is meeting the child's needs. Such monitoring poses challenges in a detention setting, especially if the child is being moved frequently between placements as many of these children were.

Recommendations

Little is known about the impact on very young children (i.e., under the age of 13) placed in detention settings where the average detainee may be twice their age. Additionally, little is known about the best methods of providing these children with effective interventions. The suggestions that follow come from the findings regarding these 84 children in Georgia. However, comparable children nationally might also benefit from such reforms.

Create More Therapeutic Placements

Anecdotal reports suggest that Georgia suffers from a shortage of therapeutic placements for very young children who commit offenses that threaten the public safety (e.g., sex offenses, arson), leading courts to place such children with the DJJ. A better alternative would seem to be placements that could provide specialized therapeutic services to the child while ensuring the safety of both the child and others. Children under the age of 13 are developmentally very different from adolescents, and their treatment needs also may differ substantially. Programs like Restorative Justice (Bazemore & Umbreit, 1994) should be considered as an early response to young offenders (McGarrell, 2001).

Provide Wraparound and Support Services

Disproportionate numbers of children in this study had histories of psychiatric hospitalization, severe abuse, and neglect. Often these children had returned to their homes following interventions without adequate follow-up or support services for themselves or their families. Ideally, such wraparound and support services should be provided to all children and families that could benefit from them. If such services cannot be provided to all who need them, a method should be developed for identifying the children most at risk for future involvement with the juvenile justice system in order to provide targeted services to those children and families. Possible dimensions to include in the risk assessment are factors identified in this study (i.e., history of sexual abuse, mental illness diagnosis or hospitalization, incarcerated family member, below-normal IQ, etc). Children with one or more of these risk factors could be prioritized for follow-up. The details of the priority scoring should be based on input from front-line caseworkers and refined through research and ongoing tracking.

Reduce Caseworker Caseloads

A majority of the 84 children had histories with one or more state agencies prior to encountering the juvenile justice system, most frequently child protective services. If these caseworkers had been able to meet the child's and family's needs through appropriate services at these earlier points in the child's life, then perhaps the child's later involvement with the DJJ might have been prevented. However, caseloads as high as 60 have been reported for Georgia caseworkers, making appropriate assessment and referral to services difficult, if not impossible. Reducing caseworker caseloads to manageable levels is a necessary prerequisite for any prevention strategy.

Increase Interagency Collaboration

It appears that collaboration between the agencies serving these children was inadequate. Each failure of communication represents a lost opportunity for the child in question. In addition, duplicate assessments or services offered to the same family by multiple agencies wastes limited public resources during a time when these resources are scarcer than ever. A key step in increasing cross-agency communication is the development of a single secure electronic database of records of all children who have had contact with the child protective service, mental health, or juvenile justice systems. Such a database could provide access to a child's complete file for authorized individuals from any of the child-serving agencies.

Limitations and Final Thoughts

This study is descriptive and correlational. While these data do not establish causality, they suggest a need to find ways of intervening better and earlier in the lives of these children: the earlier the intervention, the greater the chances that it will be effective (McGarrell, 2001). The data presented here point to areas where further research in more effective intervention is needed.

Little is known about what happens to such young children as they grow up. Do these children continue to stay in the juvenile justice system? If so, what percentage continue in this system and is this rate higher compared to other populations? It is also not known what impact specific earlier intervention might have on these children. Are some earlier interventions better than others? More than likely there is a good chance they will continue to be involved in the juvenile justice system. Unfortunately, one-third to more than half of incarcerated adolescents have identified disabilities including emotional/behavioral disorders, learning disabilities, and mild mental retardation (Quinn, Rutherford, Leone, Osher, & Poirier, 2005; Quinn, Rutherford, & Leone, 2001; Rutherford, Bullis, Wheeler, & Griller-Clark, 2002). It seems logical that if the needs of these children are not addressed while they are young, these issues will continue to manifest into adolescence, even into adulthood.

Finally, the characteristics and needs of this population need to be studied on a larger, multi-state basis. Descriptive and minimal correlational data are presented here. Additionally, the number of children in the study (n = 84) limits the findings. Larger studies should

be conducted to enable researchers to begin unraveling causality and develop more nuanced conclusions.

Endnote

1. The distinction between "commitment" and "detention" is that "commitment" denotes the transfer of legal custody of the child to the state (although, depending on the court's order, the parent may still retain physical custody). Children who have been detained by the state remain in their parents' legal custody, although they are usually in the state's physical custody (e.g., in a detention center or other out-of-home placement). Detention often precedes commitment.

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Article

Examining School Experiences of Youthful Offenders: Where Were the Positive Behavioral and Academic Supports?

Sharon A. Lynch, Philip R. Swicegood, Debra P. Price, and Edwin S. Davis

Abstract: *This study examined the pre-incarceration school experiences of 60 youthful offenders in two Texas prisons. Participants were interviewed to gain an understanding of their previous school experiences. Interviews were evaluated using a constant comparative method consistent with qualitative methodology. Participants reported positive experiences in elementary school, but increasingly negative interactions during middle school led to dropping out before or during their first year of high school. They also described parental involvement that changed from supportive during elementary school to responding to school discipline problems during middle school. Although sports were a favored school activity, participants reported declining participation throughout the years as failing grades and discipline problems mounted. Few had insights into how schools might assist students in coping with academic and social problems. Most participants recommended the increasingly punitive discipline measures which they had experienced.*

Few topics cause greater concern and debate than the growth of violent behavior and illegal actions of delinquent youth. According to the Office of Juvenile Justice and Delinquency Prevention (2004), juveniles under the age of 18 accounted for 17% of all arrests and 15% of all violent crime arrests. The prison system currently houses the fastest growing institutionalized population in the United States. The average cost per year to house and provide services for an offender in prison in Texas is $14,600 (Texas Department of Criminal Justice, 2002a). According to the Children's Defense Fund (2005), the average per capita cost of prisons is more than three times that of public schools. These expenditures constitute a drain on society and underscore the critical need for proactive steps to meet the needs of youth with behavior problems.

For many years, research has documented the association between low achievement in school and delinquency (Brown, 1995; Rutter, Maugham, Mortimore, & Ouston, 1979; West, 1973; Williamson, 1992). In a 40-year study of the variables impacting crime rate, Koski (1996) found that educational achievement had a significant bearing on criminality, with a stronger association than single parent status when median income was a control factor. In this paper, the authors examine this relationship and describe qualitative research data directly obtained from youthful offenders.

Delinquency and School Failure

The typical youthful offender in the Texas Department of Criminal Justice has a reading and education achievement level substantially below age expectancy (Texas Department of Criminal Justice, 2002b). Musick (1995) proposed the following explanations for the relationship between poor functioning in school and juvenile delinquency: (a) juvenile delinquency is a reaction to school failure; (b) delinquency causes the young person to devote less time and energy to school, resulting in increased academic failure; and (c) other background factors (e.g., gang affiliation) cause both juvenile delinquency and school problems.

When considering the explanation of delinquency as a reaction to school failure, Spergel (1995) asserted that delinquents typically have academic deficits which are made public in the school setting, while Malmgren and Leone (2000) reported that chronic delinquency and reoffending are highly correlated with academic achievement and Shrum (2004) found that delinquents typically have academic deficits, with a high percentage demonstrating learning disabilities. Youth who experience school failure dislike school and consider it a place to "hang out" rather than to learn. A cycle of repeated failure, together with a lack of positive environmental supports, increases the probability of criminal vulnerability (Thornberry, Huizinga, & Loeber, 1995).

The second explanation proposes that delinquency causes the individual to invest less time and energy in school, resulting in academic failure (Musick, 1995). Musick described the process by which students who experience repeated academic failure become alienated and subsequently affiliate with other marginal youth who engage in delinquent acts. Klein (1995) reported that gang members were likely to have academic deficits, poor social skills, and little impulse control. These characteristics increase the probability of alienation

from the school. Kodluboy and Evenrud (1993) found that students with academic performance problems, social skills deficits, and lack of connection to the life of the school are more likely to join gangs. When youth affiliate with gangs or other marginalized peers, skipping school, chronic absenteeism, and dropping out are a common progression (Angenent & de Man, 1996). Chronic absenteeism frequently results in failing grades, expulsion, and subsequent academic lag. Many students who experience academic failure become alienated over time and find the hedonistic youth culture more attractive than the social and academic demands of the school setting (Brown, Higgins, & Paulson, 2003). Alienation and participation in this culture increase the opportunities to engage in delinquent behavior (Leone, Mayer, Malmgren, & Meisel, 2000).

An alternative explanation for the relationship between juvenile delinquency and poor school functioning addresses those factors which impact both academic achievement and law-violating behavior. Variables that impact the rates of delinquency and gang affiliation in public schools include the size and resources of the school, the style of school management, and the school's psychosocial climate (Leone et al., 2000). Angenent and de Man (1996) characterized public school environments as placing a strong emphasis on academic achievement, competition, testing, and comparing. Students who function well socially and academically can tolerate this competitive learning environment, but others who have academic problems experience increasing frustration and alienation.

A link between learning disabilities and juvenile delinquency has been frequently debated and discussed (Shrum, 2004). Support for such a relationship comes from earlier longitudinal research (Keilitz & Dunivant, 1986) but has been questioned when experimental controls for gender, ethnicity, and socioeconomic level are in place (Malmgren, Abbott, & Hawkins, 1999). Quinn, Rutherford, Leone, Osher, and Poirier (2005) found that the average prevalence rate of youth with disabling conditions in state juvenile corrections systems was 33.4%. The most frequently reported disabilities were emotional disturbance and learning disabilities. Angenent and de Man (1996) reported that at least one-fourth of juvenile delinquents have learning disabilities and that there is a strong relationship between hyperactivity and delinquency. Youth with hyperactivity and attention problems are likely to have difficulty concentrating, especially in secondary schools where instruction is increasingly abstract.

Individuals with learning disabilities often have problems with social skills (Forness, 1996) and are more likely to get caught when engaging in delinquent behavior. Unruh and Bullis (2005) identified barrier variables descriptive of offenders with disabilities, including a history of running away, suicide risk, and prior abuse and neglect. Larson (1996), who found that youth with learning disabilities were adjudicated at twice the rate of nondisabled youth, proposed several hypotheses related to student characteristics. Many students with learning disabilities have difficulty with cognitive problem solving, a lack associated with social maladjustment and delinquency. Other students with learning disabilities have poor social skills, leading to low self-concept and delinquency. Finally, the effect of the label "learning disability" can result in differential treatment leading to social problems and delinquency (Quinn, et al., 2005). Failure in school begins early and occurs regularly, often provoking negative reactions from teachers (Casey, 2001).

Musick (1995) identified links between schools, problem children, and delinquency. Programs for students with behavior problems often focus on management and control at the expense of academic instruction, emphasizing "curriculum of control" (Nichols, 1994), complete with lengthy handbooks on unacceptable behavior. Mayer and Leone (1999) found that these types of approaches emphasizing punishment, control, and containment may actually exacerbate school disorder, with the construct of alienation being particularly relevant. Brown, Higgins, and Paulson (2003) described four such constructs of alienation involving students: powerlessness to effect their own school and life outcomes; normlessness toward socialized values; lack of meaning of school to their own future; and estrangement from the school, including poor school attendance. Additional research is needed to investigate ways that schools can change to accommodate individual student characteristics and increase connectedness to the school and the educational process (Brown, Higgins, Pierce, Hong, & Thomas, 2003). This is especially important for working-class children and children from lower socioeconomic backgrounds who are at a disadvantage when placed in a school setting reflecting middle-class values and expectations (Delpit, 1993).

Embry (2001) discussed the importance of developing a positive relationship between the family and the schools. Students and parents, especially those from lower socioeconomic backgrounds, often view teachers as an elite class, with little interest in the students. With such a mismatch in backgrounds among the teachers, students, and the media picture of success (cars, clothes, etc.), students and families may have little regard for the school as the pathway to success.

All of the factors which have been discussed here point to the importance of devoting increased effort to studying the school backgrounds of youthful offenders. The investigation reported here examined the previous school experiences of youthful offenders in Texas. Questions involved school, home, and social backgrounds, and participants were queried regarding their views of how schools might help students in trouble. The purpose of the study was to seek a clearer understanding of school factors that impact the lives of these young offenders and to discover their views of how schools might assist students with social difficulties.

Method

Setting

The Texas Department of Criminal Justice operates a massive network of correctional facilities throughout the state. Within the correctional system, Windham School District provides a variety of academic, rehabilitative, and technology programs to meet the needs of incarcerated offenders within 80 prison units. The interviews were conducted in a classroom on site at two prisons where young offenders are incarcerated. Setting A, used for initial, short-term processing prior to movement into general incarceration, is a newer facility, less typical of other incarceration facilities in the state. This facility is more like a dormitory setting except for the double sets of gates and fences topped with razor wire. The physical plant for Setting B is older and more worn.

Participants

Participants in this study were 60 young men, ages 16 through 21, serving sentences in two adult prisons in the Texas Department of Criminal Justice. Of the 60, 26 were African-American, 21 Hispanic, 12 Euro-American, and 1 was classified as "other." The average age of the young men was 18.5 years; the mean nonverbal IQ was 93.3. The youthful offenders involved in this study attended the education programs offered by the institution. The common profile was one of a dropout—typically occurring around grades nine or ten—who was working toward completion of a G.E.D. All were in an educational program, Project Detour, which focused on choices and responsibility for one's decisions. Additionally, participation in a General Educational Development (GED) program was required. The sample constituted 100% of the youthful offenders enrolled in educational classes on the dates the interviews were conducted. Given the scarcity of "free world" contact afforded to incarcerated persons, it is not surprising that all of those who were in the educational program elected to participate.

Before beginning the research, a description of the study and an informed consent letter were provided for the education staff at the prison. The staff then solicited volunteers from the education classes conducted in the prison. All volunteers who were present in the education classes at the prison on the dates of the interviews were interviewed, meaning no offenders present on the dates of the interviews declined participation. The group demographic information for the participants was provided by school staff and is presented in Table 1. Reading scores and educational achievement scores are provided as grade equivalent units from the Test of Adult Basic Education; intelligence quotients are based on the results of a nonverbal IQ test, the Army Beta Test of Intelligence-Revised. The Test of Adult Basic Education was normed on a population of 7,000 adults which included adult and juvenile offenders, adults in vocational/technical training, and 307 college students. Grade equivalents were derived through a structural equating process with the California Achievement Test (Beck, 1998). Because the population for the normative sample differs substantially from that of public schools and the grade equivalents were derived through structural equating, these scores are not comparable to those derived from testing in the public schools. These grade level scores are substantially higher than those found by Malmgren and Leone (2000) in their study of reading intervention with incarcerated youth.

Table 1

Participant Demographic Characteristics

	Total Mean	Unit A Mean	Unit B Mean
Age	18.5	19.5	17.5
Last Grade Reported	9.1	9.0	9.2
Nonverbal IQ	93.3	92.6	93.9
Educational Achievement Grade Level	6.5	6.6	6.4
Reading Grade Level	7.2	7.1	7.3

Procedures

Studying the perspectives of incarcerated youth as they reflected on their educational experiences is consistent with qualitative research traditions established by various researchers engaged in context-specific inquiry (Florio-Ruane, 1987; Lincoln & Guba, 1985; Patton, 2002). The intent of this research is interpretive in that it seeks to examine the "immediate and local meanings" of the participants' actions from their points of view (Erickson, 1986). This study followed the guidelines of a naturalistic paradigm (Lincoln & Guba, 1985; Patton, 2002): a natural setting (reality can be understood only in context), human instruments (dependence on the reports of the human instrument), purposive sampling (the offenders volunteered to participate in this study), inductive data analysis, grounded theory, and emergent design (the questions pertaining to this study grew from a pilot group of six participants and were retooled in response to subsequent interviews and approved by school personnel within the prison system). Interview sessions were scheduled within the school system until redundancy was reached. This investigation involved participation in a field setting. Data were gathered by the four investigators, three from the Teacher Education Program and one from Criminal Justice, on three separate occasions. Interviews were conducted in classroom sites where the youthful offenders were incarcerated. Areas of inquiry included school reading and writing experiences, school discipline, family involvement in education, and the role of education in their futures. Additionally, respondents were questioned regarding the role of the school in preventing and responding to youth with school discipline or academic problems. During each interview session, researchers scheduled a collaborative session to discuss and compare findings, and immediately following each, they met to discuss emerging themes and commonalities in their interviews. The interview protocol is provided in Appendix A.

Each interview was audiotaped, transcribed, and then analyzed using inductive analysis. Subsequent reflection on the interviews by all four researchers was carried out in an attempt to "identify the significance of actions in the events from the various points of view" of the participants (Erickson, 1986). Some of the categories were identified by the researchers as indicated by the questions in the interview protocol; others emerged as a result of participant responses. As themes emerged, they were discussed and evaluated using a constant comparative method consistent with qualitative methodology (Lincoln & Guba, 1985; Patton, 2002). As follow-up interviews were not possible due to the transient nature of the population, member checking took place throughout the interviews. Interviews were analyzed by all four researchers.

Results

Early Public School Experiences

When asked about their public school experiences, most respondents (83%) reported that they liked elementary school, which they remembered as "fun." Some (17%) recalled a favorite teacher who took a personal interest in them, as well as field trips, projects, and activities. A few (15%) remembered teachers who provided personal instruction when they experienced academic difficulties.

Participants generally found reading enjoyable, and they saw themselves as successful readers. Most (82%) of these 16 to 21-

year-old offenders, whose mean reading scores were at the seventh grade level, reported that they were "good at reading." Few (13%) remembered much about their initial literacy experiences, with the exception of learning their "ABCs" and "sounding out words." One young man described how instruction changed as he moved up in the grade sequence:

> In elementary they were teaching me good, how to read good and everything—all the way to third and fourth grade. In fifth grade it's hard, 'cause out there, you know, they just give you a book and they don't help you read or nothing. . . It's hard, you know, and that's when I started messing up about then.

Transformation from a Positive to a Negative Experience

In contrast to the perceived level of positive support in elementary school, most youthful offenders (90%) remembered middle school as a negative place. As Johnny described the experience, "I started getting bored in middle school, and I didn't do my work." Table 1 shows that dropping out of school typically occurred during the first year of high school. In the classroom many employed neutralizing behaviors such as "clowning around" or other disruptions. As discipline problems increased, the youth typically affiliated with other alienated youngsters and engaged in increasing levels of antisocial behaviors such as drug use and gang activity.

Some of the young men (15%) related that they competed for status, particularly notoriety, turning to negative alternatives for attention when they were not able to achieve recognition for positive accomplishments. One youthful offender describes this competition to "be somebody," even if by negative means:

> The bad thing was I just wanted to be somebody or a show-off or something like that you know . . . . The things you did that made you a show-off made you think you were a tough guy on campus . . . . There was a lot of pressure to be better than everybody else. Kids think they're something so you want to be better than them . . . . I always liked to be better than everybody else.

Other respondents spoke of gangs, both "regular" and those based on racial prejudice, and some participants reported that they were not challenged academically:

> I like learning though. I like learning if it's something new. I don't like going over the same thing over and over again when I already know it. As far as the teachers, they didn't really point you in the direction you should be going. The only thing they were worried about was doing your work. They didn't really make it fun. It was just there. They just talk at you.

Parent Involvement

During elementary school, most (68%) of the participants reported that their parents came to school for PTO meetings, open house, and school programs. Some youthful offenders (15%) remembered that parents helped with homework, although this was not generally the experience. During middle school, parental interaction with the schools was primarily for disciplinary reasons.

Involvement in School Activities

Most (95%) of the youthful offenders were not involved in clubs or fine arts programs during their years in school. Sports were the primary pursuit, with football the most frequent activity (73%), followed by track (60%) and basketball (47%). A number of participants (30%) related that they were not able to continue with the school sports program due to failing grades and the state's "no pass-no play" policy. This policy appears to have had the unintended effect of excluding at-risk youth from those activities that are most likely to promote prosocial behaviors and school attendance. Virtually all of the youthful offenders (93%) had been sent to alternative schools at some point in their schooling, this placement precluding participation in extracurricular activities.

School Behavioral Interventions

The youthful offenders experienced the gamut of punitive interventions during their years in school. Typical responses to behavior problems in elementary school were paddling (53%), sitting in the corner (23%), or a trip to the principal's office (53%). A number of the participants (87%) reported that they had no problem behavior in elementary school, not experiencing any of these punitive measures until middle school. In middle school, discipline measures commonly included paddling (90%), trips to the principal's office (20%), detention (63%), in-school suspension (87%), alternative schools (83%), suspension (93%), and expulsion (30%). Additional disciplinary measures included Saturday School (7%), community service (3%), boot camps (3%), and juvenile detention centers (20%). Others reported that they had been arrested at school for fighting (10%). When the youthful offenders were asked if alternative schools were effective, the reactions were mixed. Some participants described alternative school as positive, others as negative.

What Can Schools Do To Help?

When asked what schools can do to help students in trouble, most participants (73%) did not see school as being able to help students experiencing serious social and behavioral problems. Suggestions for helping students included listening to them, counseling, reducing racial prejudice, and working with the family, but the vast majority (87%) recommended the same types of punitive interventions that had not been successful in changing their behavior. Another common response was to separate those who do not want to learn from the students who do. Derrick's recommendation was:

> Well, I say punish them or something. Take them that want to learn to a different place or something, and the ones that don't want to learn, they can't really do nothing for them. Everybody got their own mind….You can use it or waste it.

Several participants indicated that the schools had unsuccessfully tried to discipline them, and no alternative solutions were provided. When asked if they would change anything about schools, most had suggestions regarding their school conduct. Others suggested that

school should be more relevant to the students, with instruction related to the students' life experiences. Punitive measures were common (87%). Further, the interviews yielded defined views regarding the use of positive versus punitive behavioral interventions. For example, Leonard advised:

> Well, start on being harder on them, you know. They already got zero tolerance. They got all the gang activity that gets started over clothes or handkerchiefs or what they carry around or how they carry themselves. Take them to the side and give them so much time in SR (in-school suspension) 'cause eventually they will straighten up. So I would tell them to bring back the "pops" (paddling) and they would straighten up after a while.

How Is School Important?

Participants were asked about their opinions of what is most important for students to learn at school. The typical response endorsed basic academic subjects. Other common responses focused on paying attention, responsibility for doing one's work, getting along with others, obeying rules, staying out of trouble, and listening to the teacher. A few participants (13%) had specific recommendations, including drug education, race relations, computer skills, or vocational training.

Interestingly, all participants responded that education was important to their future. Obtaining a GED certificate was a goal of virtually all of the young men. Several wanted to go on to obtain a high school diploma or to go to college after release. Most (82%) expressed a desire to go to a trade school and gain a marketable skill in the workplace. Of particular concern to many of the young men (53%) was the ability to be a provider for their families.

If I Could Go Back

It is possible that the experience of incarceration may promote greater introspection and self-reflection. While this conclusion is tentative, most of the youthful offenders (62%) reported that they would behave differently in school if given the opportunity. Many participants (57%) expressed firm opinions related to issues of personal responsibility. A familiar response indicated that little could be done by anyone other than the individual:

> It's totally up to the person. The school, my parents, policemen—they did everything possible for me. It didn't work—like my mama said to do something. I was going to do what I wanted to do. It's got to be up to the person.

Discussion

The purpose of this study was to gain a clearer understanding of the prior educational experiences of youthful offenders and to seek their insight on how schools can better assist school children with behavioral difficulties. The positive elementary school experiences reported by the participants likely reflect child-centered practices, consistent with the current emphasis on building proactive, supportive learning environments. Elementary teachers typically have fewer students for longer periods of time and, as a result, can direct more attention to individual student needs, both academically and socially. This finding is consistent with Baker's (2005) findings that elementary school teachers reported greater willingness and ability to manage challenging behavior than high school teachers. Respondents in this research remembered concrete learning activities, community experiences such as field trips, and more hands-on learning experiences. Although secondary teachers may work to make learning interesting, assignments generally are oriented toward academic content and activities students perform independently. Also typical of elementary schools was the involvement of parents through student participation in programs and activities.

There is a need to examine those in-school and out-of-school forces that operate to change education from being a positive experience to a negative one. What is clear is that many of the participants were considered to be classroom problems after elementary school and that they gravitated toward those like themselves. The system responded to their academic performance, behavioral nonconformity, and overt rule-breaking by moving them through a punitive discipline system, including corporal punishment. Once the classroom teacher referred a problem to the administration, various punishments were meted out: a talking-to, after-school detention, in-school suspension, weekend detention, limited-time suspension, alternative school, and expulsion. Although these punitive reactive consequences are used frequently, there is little research to indicate their effectiveness with students who have chronic discipline problems (Hyman & Snook, 2000). Research does indicate that intervention is increasingly difficult as students become older, demonstrating the need for preventative early intervention (Walker, 1998).

Lack of Behavioral and Academic Supports

Missing from these descriptions is proactive intervention to prevent the progression to expulsion and secondary teachers who assist in problem solving and planning future behaviors. Although antisocial behavior is quite resistant to change without early intervention (Walker, 1998), the 60 participants did not report any type of social skills instruction or schoolwide behavior intervention programs in response to the question, "How can schools help kids who get into trouble." In describing his secondary school experience, one of the participants seemed to feel that teachers at this level have too many students, problems, and paperwork to have time for students. Although participants spoke more highly of their elementary school experiences, many of the factors associated with successful early intervention programs (Hester et al., 2004) for behavior problems (clear expectations, high rates of engagement, helping students to achieve academic success, reinforcement of positive behavior) were not mentioned in the participants' descriptions of their schooling in response to questions in the interview.

In spite of the fact that none of the responses to these youths prevented them from following the progression from school to prison, when asked, "What can schools do to help kids in trouble," the responses of the offenders were not enlightened. The overwhelming majority prescribed the same kinds of discipline that had not motivated them to change. These responses indicated that modeling punitive measures perpetuates the aversive cycle and that those who experienced ineffective negative strategies will likely use them in their future interactions. Additional problems with punitive methods

include negative emotional side effects, lack of knowledge of socially appropriate alternatives, difficulty with generalization, and control of the behavior only in the presence of the punisher (Zirpoli, 2000).

There were few participants who could articulate the type of intervention or assistance that would have helped them. These offenders seemed to indicate that they did not understand the importance of education to their lives at an earlier age. Although they could not recommend a better way to deal with problem children, they took responsibility for their in-school conduct. There was no attempt to transfer blame for their situation. This finding differs from research with students diagnosed with emotional and behavioral disorders (EBD) who typically have an external locus of control and attempt to shift the blame for their actions to others (Kauffman, 2005). This response may have been influenced by involvement in Project Detour, which emphasizes responsibility and self-direction.

It is interesting to note that the participants reported little involvement in extracurricular activities other than sports. There were no affiliations with art, drama, music, community affairs, math clubs, or science fairs. Many of these students' only avenue of engagement in the school community was sports, and when this activity was removed, few incentives were available to prevent them from affiliating with other marginalized students and eventually dropping out.

Limitations and Conclusion

Due to the transient nature of the prison population, member checking was not possible to verify the interpretation of the participants' interviews. In addition, since this investigation involved only 60 offenders in one state, its findings may not generalize to other populations. However, Texas is a large state with a diverse population, suggesting that this study has important implications for other states with similar demographics. The Test of Adult Basic Education is different from academic tests used in most public schools, so academic levels of the participants are not necessarily comparable to school academic measures. Areas for future research include replication in other geographic areas, as well as investigation of the educational experiences of youth enrolled in alternative educational programs.

This study employed a qualitative methodology addressing the perceptions of youthful offenders regarding their education rather than the actual events in their educational background. Longitudinal studies of youth with ongoing behavior problems are needed to determine what types of educational and social experiences are characteristic of children who are eventually incarcerated. In addition, longitudinal outcome data for alternative educational programs are needed.

When asked about their reading ability, few participants reported difficulty, although the mean reading level for participants was seventh grade. This finding suggests that either (a) the youthful offenders were not able to judge their own abilities accurately or (b) that they were unwilling to disclose their academic deficiencies. Although individuals in the general population also tend to overestimate their literacy abilities (Haigler, Harlow, O'Connor, & Campbell, 1991), additional research is needed to investigate the differences between perceived and actual literacy ability for youthful offenders.

In the past 20 years, there has been an increasing shift in focus from community supervision to lengthy sentences versus supervision and remaining in the community (Stephens, 1997). Ryan (1995) noted that the percentage of offenders involved in adult basic education and vocational programs has decreased over the last two decades. This get-tough attitude toward misbehavior and crime is reflected in the school experiences of the 60 Texas offenders interviewed in this study. Punitive discipline measures, in-school suspension, and alternative schools were commonplace. Most youthful offenders reported signs of academic or conduct problems in middle-school which built momentum over time. Shortly thereafter, they left school or were arrested.

Proactive approaches for identifying incipient behavior disorders and supporting positive behavior have existed for a number of years (Brown, 1997; Farner,1996; McKenzie, 1996), including a "multiple gating" assessment process for early identification (Walker & Severson, 1992), integrated approaches to prevention (Walker, 1998), school-wide behavioral support (Lewis & Sugai, 1999), functional assessment of behavior (O'Neill et al., 1997), social skills instruction (Sugai & Lewis, 1996), teaching nonviolence (Stewart, 1998), spiritually-based programs (Larson, 1996) and small-group mentoring activities (Cartledge & Johnson, 1997). The features characterizing effective schools and successful inclusive secondary schools have been clearly identified by Villa, Thousand, Nevin, and Liston (2005): differentiated instruction, interdisciplinary curriculum, support and accommodations for inclusion, instruction in self-determination, and authentic assessment practices. Transition from elementary to middle school and from middle school to high school should be proactively planned through parent involvement, social supports for incoming students, and increasing collaboration among schools (Mizelle, 2005).

With the focus on research-based methods of instruction and intervention in both the 2002 No Child Left Behind Act and the 2004 Individuals with Disabilities Educational Improvement Act, schools are called upon to implement those practices that have been proven effective in preventing school behavior problems and school dropouts. Some of the universal strategies that focus on primary prevention include stating clear behavioral expectations, proactive classroom management strategies, opportunities for positive attachment to school, consistent use of reinforcement and consequences, and reading improvement programs (Leone et al., 2000). For those students with incipient behavior problems, secondary prevention strategies can be implemented such as small group instruction, social skills instruction, and the use of student-teacher contracts (Leone et al., 2000). When students demonstrate associated academic problems, strategy instruction (Dieker & Little, 2005), as well as direct instruction in reading comprehension strategies (Coutant & Perchemlides, 2005), has been found to be effective. Finally, intense behavioral supports can be provided for those students who demonstrate severe, ongoing behavior problems. Some of the strategies that have been successful in addressing persistent behavior problems include functional behavioral assessment and intervention (Sugai, 2003), wraparound services (Weist & Warner, 1997), and sustainable mental health services (Atkins, Graczyk, Frazier, & Abdul-Adil, 2003). In the juvenile justice system, strength-based approaches, which focus on student abilities rather than deficits, also are gaining favor (Brendtro, Brokenleg, & Van Bockern, 2005). The advantages of even limited success with these proactive interventions would certainly reduce the increasingly negative effects on both the offender and society.

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APPENDIX A

Interview Guide

1. Tell me about your experiences in school.
2. Tell me about your first memories in school.
3. Tell me about your school experience with reading.
4. What were some positive school experiences that you had?
5. What were some negative school experience that you had?
6. What types of punishments were used in your school?
7. What was your family's experience with your schools?
8. What type of experiences did you have with school activities like sports or clubs?
9. What are the most important things that kids should learn in school?
10. How can schools help kids who get into trouble?
11. How does education fit into your future?
12. If you could change one thing in schools, what would that be?