

The Journal

OF AT-RISK ISSUES

Volume 16
Number 2



A Publication of the National Dropout Prevention Center/Network

The Journal OF AT-RISK ISSUES

Editor

Rebecca A. Robles-Piña
Sam Houston State University

Associate Editor

Gregory Hickman
Arizona State University

Editorial Associate

Marty Duckenfield
National Dropout Prevention
Center/Network

Editorial Assistant

Merry Chrestman
National Dropout Prevention
Center/Network

The Journal of At-Risk Issues

(ISSN1098-1608) is published biannually 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

Editorial Responsibility

Opinions expressed in *The Journal of At-Risk Issues* do not necessarily reflect those of the National Dropout Prevention Center/Network or the Editors. Authors bear the responsibility for accuracy of content in their articles.

© 2011 by NDPC/N

The Journal of At-Risk Issues

Editor

Rebecca A. Robles-Piña
Sam Houston State University

Associate Editor

Gregory Hickman
Arizona State University

Founding Editor

Ann Reitzammer
Huntingdon College (Ret.)

Garland S. Alcock

ACCEPT, Inc.

Steven Aragon

University of Illinois-
Champaign-Urbana

Kathy Beland

School Connect

Sheyla Blumen

Catholic University of Peru

Jorge Gonzalez

Texas A&M University

Anthony Harris

Mercer University

Sandra Harris

Lamar University

Donna Copsey Haydey

The University of Winnipeg

Janice Jones

Cardinal Stritch University

William Kritsonis

Prairie View A&M

Joseph B. Ryan

Clemson University

Susanna Skidmore

Sam Houston State University

Alexandra Trout

University of Nebraska-Lincoln

SPECIFICATIONS for MANUSCRIPT SUBMISSION

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.

Format:

Manuscripts should follow the guidelines of the *Publication Manual of the American Psychological Association* (6th ed.). Manuscripts should not exceed 25 typed, double-spaced, consecutively numbered pages, including all cited references. Submitted manuscripts which do not follow APA referencing will be returned to the author without editorial review. Illustrative materials, including charts, tables, figures, etc., should be clearly labeled with a minimum of 1 and 1/2 inch margins.

Submission:

Submit electronically in Microsoft Word, including an abstract, and send to the editor at edu_rar@shsu.edu for editorial review. Manuscripts should also include a cover page with the following information: the full manuscript title; the author's full name, title, depart-

ment, institution or professional affiliation, return mailing address, email address, and telephone number; and the full names of coauthors with their titles, departments, institution or professional affiliations, mailing addresses, and email addresses. Do not include any identifying information in the text pages. All appropriate manuscripts will be submitted to a blind review by three reviewers. Manuscripts may be submitted at any time for review. If accepted, authors will be notified of publication. There is no publication fee.

Book Reviews:

Authors are encouraged to submit appropriate book reviews for publication consideration. Please include the following: an objective review of no more than five, double-spaced pages; full name of the book and author(s); and publisher including city, state, date of publication, ISBN number, and cost.

Submit Manuscripts to:

Dr. Rebecca A. Robles-Piña, Editor
edu_rar@shsu.edu

Table of Contents

Articles

Behavioral and Emotional Outcomes of an In-Home Parent Training Intervention for Young Children

Kristin Duppong Hurley, Annette K. Griffith, Kathryn J. Casey,

Stephanie Ingram, and Amy Simpson 1

The Relationship Between Ninth-Grade Retention and On-Time Graduation in a Southeast Texas High School

Jennifer N. Bornsheuer, Monica A. Polonyi, Malitta Andrews, Brenda Fore,

and Anthony J. Onwuegbuzie..... 9

Early Identification of Potential High School Dropouts: An Investigation of the Relationship Among At-Risk Status, Wellness, Perceived Stress, and Mattering

Jan C. Lemon and Joshua C. Watson 17

An Evaluation of Past Special Education Programs and Services Provided to Incarcerated Young Offenders

Lawrence Ingalls, Helen Hammond, and Robert P. Trussell 25

Behavioral and Emotional Outcomes of an In-Home Parent Training Intervention for Young Children

Kristin Duppong Hurley, Annette K. Griffith, Kathryn J. Casey, Stephanie Ingram, and Amy Simpson

Abstract: *This study examined the effects of the Boys Town In-Home Family Program on improving child behavior and parenting skills. The three-month parenting intervention was delivered to parents in their homes. All children were referred to the program by school personnel. Of the 107 families that enrolled in the study, 79% completed the intervention. Pre-post assessments of child behavior indicated significant improvements on Internalizing and Externalizing problem behavior as measured by the Child Behavior Checklist. Significant gains were found on all child, family, and school behavior subscales of the parent version of Behavioral Emotional Rating Scale. Service provider ratings of child problems and parental capabilities (as assessed by the North Carolina Family Assessment Scale) also demonstrated significant improvement from intake to discharge. These results indicate that the In-Home Family Program is a promising approach for serving at-risk children and their families.*

Introduction

Many children have difficulties with emotional, mental, or behavioral problems. There are a variety of methods to address child problem behaviors, ranging from individual therapy, to classroom management techniques, to parental training. One successful approach, especially with young children, is parent training interventions that help parents learn skills to improve their child's behavior (Farrington & Welsh, 2003; Maughan, Christiansen, Jenson, Olympia, & Clark, 2005; Piquero, Farrington, Welsh, Tremblay, & Jennings, 2008). Most parenting interventions involve group-based sessions or self-paced books or videos, yet these approaches have significant problems with parents that do not complete the sessions or are not actively engaged in the services (Peters, Calam, & Harrington, 2005). One method for improving parental engagement is to provide services in a more accessible format, such as delivering services to parents in their home addressing their specific parenting problems. This focus on individualized and home-based services may lead to improved child behavior outcomes.

Many children who engage in disruptive problem behavior tend to come from families who demonstrate inconsistent and punitive parenting practices, experience considerable stress, and have frequent changes in family structure (Fergusson & Lynskey, 1998; Short & Brokaw, 1994). The stress of this environment often results in poor parenting practices, which have been associated with children experiencing academic failure, peer rejection, and emotional distress (Pettit, Bates, & Dodge, 1993;

Stormshak, Bierman, McMahon, & Lengua, 2000). Due to the impact a child's parent has on his or her behavior, a large number of programs have been developed to teach parents how to address their child's behavior appropriately.

The common focus of parent training is to teach parents to replace their negative parenting practices with practices that help reduce the likelihood of problem behavior and increase the likelihood of appropriate child behavior. There is a large literature base supporting the effectiveness of these parenting programs in addressing problem behavior from childhood into adolescence (Farrington & Welsh, 2003; Maughan et al., 2005; Piquero et al., 2008). For example, studies have shown that programs training parents in behavior-management and monitoring have reduced conduct and opposition problems in the preschool years (Shaw, Dishion, Supplee, Gardner, & Arnds, 2006; Webster-Stratton, 1984), antisocial behavior during the middle childhood years (Patterson, Dishion, & Chamberlain, 1993), and problem behavior and substance abuse in early adolescence (Dishion, Nelson, & Kavanagh, 2003).

While parenting programs have been successful in reducing children's problem behavior, there are a number of challenges in delivering these services (Powell, Fixsen, Dunlap, Smith, & Fox, 2007; Prinz & Sanders, 2007). One difficulty is getting parents to participate in programs. Despite the clear need for parents who demonstrate poor parenting skills to receive treatment, very few participate in parenting/family interventions (Zubrick et al., 1995). Prinz and Sanders identified some common barriers to participation including a set level of program intensity where parents may spend more time involved

in the intervention than necessary, having to deal with a number of service providers prior to receiving treatment, and possible stigmatization, because many parenting programs are designed and marketed to low-income families. In addition, Prinz and Miller (1994) found that families with greater levels of adversity were more likely to drop out of programs that did not address other areas of their lives (i.e., focused on child behavior only). This research suggests that families are more engaged in programs that offer treatment based on their individual needs, offer a direct connection to treatment providers, and target all parents as opposed to one specific group.

Thus, the purpose of this study was to evaluate the effectiveness of a parent training program that provides in-home individualized services. Specifically, the goals of the study were to examine the pre-post changes in child behavior and parenting skills for families that participated in a home-based parent management program as well as the participation rates in the program.

Method

Description of In-Home Family Program

The Boys Town In-Home Family Program is an early intervention program designed to focus on youth problem behavior in the school and home. School guidance counselors and teachers referred children who demonstrated problem behavior, such as aggression, noncompliance, and opposition. After enrollment in the program, families received weekly services from a Family Consultant for three to four months. While Family Consultants were available to families' 24-hours per day, they typically met in the home with their families two to four hours per week.

The intervention consisted of two phases, assessment and intervention. In the assessment phase, the Family Consultant worked with the family to identify the most problematic areas of functioning and the areas most in need of change. At the first meeting with families, Family Consultants conducted an informal interview to identify significant issues in the family's environment. Next, Family Consultants and family members developed a Service Plan, which included specific goals for the child and family, intervention strategies, and a plan for progress monitoring. During the intervention phase, Family Consultants taught families the necessary skills to meet their specific goals or areas of need (e.g., addressing a child's oppositional behaviors, improving family roles and relationships). Once the family was able to demonstrate knowledge of a particular skill, Family Consultants monitored and supported the family's progress until they became self-sufficient in that skill area. Finally, Family Consultants promoted mastery and generalization of the skills taught during the intervention. Family Consultants began to reduce their time spent with the family and encourage independent use of the skills in different situations. Throughout their work with families, the Family Consultants provided biweekly updates about the child's progress to school staff.

Boys Town trained Family Consultants during a two-week in-service. In Week One, Family Consultants learned about the Boys Town model, their role with the families, and a detailed description of the In-Home Family Program processes from engagement, assessment, service plan development, and the skills (e.g., active listening, exploration) needed to effectively intervene with families. In the second week, they learned how to teach specific skills (e.g., praising a child, using calming down

strategies) to families along with understanding confidentiality and safety/emergency procedures. Family Consultants demonstrated mastery of the basic behavior skills sets through role-playing and the completion of exams.

Participant Recruitment

Eligibility. Local schools in Palm Beach County referred children to the Boys Town In-Home Family Program. Children were identified by schools based on the following criteria: (a) resided in Palm Beach County; (b) attended a participating public school; and (c) were at risk for school failure or displayed persistent problem behavior (e.g., fighting, tantrums, noncompliant). The child also could not have a history of mental health diagnosis, aside from ADHD, or be currently receiving court-ordered services. Referrals to the program primarily came from the child's classroom teacher or guidance counselor. Families were eligible to participate in the study if they enrolled in services between October 1, 2007, and June 1, 2008, spoke primarily English or Spanish, and had a target child who was between the ages of five and 12 years old who had been living with them for at least four weeks prior to the start of services. Two initial eligibility checks were conducted, one during the intake/enrollment phone call when family meetings were scheduled and another during the consultant's initial interview with the family.

Consent. The families who met eligibility criteria were asked for their consent to participate during their intake interview with the Family Consultant. During this interview, Consultants provided a brief overview of the study, the time requirements, and the rights of participants prior to asking for consent. Those who chose to participate received a \$20.00 gift card at pretesting and another \$20.00 gift card at posttesting for their time.

Participants

One hundred and seven families agreed to participate in the study. The majority of the target children in the families were male (85 %). The mean age of the target children at admission was eight years old. The children were in elementary school, with the majority in kindergarten to third grade (71 %). Roughly 11 % had been retained a grade, 7 % had been suspended from school, and 20 % had received special education services. The percent of children with prior out-of-home placements was 19 %. Fifty-one percent of children had attended more than one elementary school.

Based on parental reports using the Children Health Services Screen (Ascher, Farmer, Burns, & Angold, 1996), most of the children received at least one type of mental health service in their lifetimes (53 %). The most commonly reported service used was "Other Professional Help (49 %)" which included assistance such as counselors, social services, and school guidance counselors. Twelve percent of children received "Nonprofessional Help" such as hotlines, self-help groups, or friends. A small percentage of the children received "Out-patient Services (8 %)," which included mental health services, community mental health centers, and private professional treatment. Few children had received "Inpatient Services (4 %)" such as psychiatric hospitals, group homes, or detoxification units.

Sixty-five percent of families reported an annual income below \$15,000 and averaged 2.7 members per household, suggesting that

many were below the federal poverty guidelines (U.S. Department of Health and Human Services, 2009). The majority of families were Hispanic (45%), followed by African American (37%), Caucasian (15%), and two or more races (3%).

Data Collection

Family Consultants participated in two days of extensive training prior to initiating interviews for the study. During these sessions, Family Consultants were provided with scripts on how to introduce the study and ask for families' participation and were trained on all aspects of the data collection process. Family Consultants conducted approximately one-hour long interviews with their families at intake and discharge. The interviews consisted of three measures assessing child behavior, child strengths, and services provided to the child for mental health or behavioral reasons. The directions and items for each measure were read aloud for both English and Spanish speaking families. Family Consultants working with Spanish speaking families were fluent in the language.

Measures

Child Behavior Checklist (CBCL). The CBCL (Achenbach & Rescorla, 2001) is a well-known reliable measure of child problem behavior which asks 113 questions. The CBCL provides information on a number of specific subscales. For this study, the Internalizing and Externalizing broadband scales and overall Total Problem Behavior T-scores were used. Normal T-scores for these scales are 59 or below, borderline scores between 60 and 63, and scores 64 and higher are considered clinical. The CBCL test-retest and internal consistency values for the Total Problems, Externalizing, and Internalizing broadband scales ranged from .72 to .95 and .65 to .92, respectively (Achenbach & Rescorla, 2001). The CBCL was administered to the child's guardian at both intake and discharge.

Behavioral and Emotional Rating Scale-Second Edition (BERS-2). The BERS-2 (Epstein, 2004) uses a strength-based approach to describe the behavioral and emotional status of a child. The BERS-2 includes 52 items and provides five subscale scores (i.e., Interpersonal Strength, Family Involvement, Intrapersonal Strength, School Functioning, and Affective Strength) and one composite score (i.e., Strength Index). The BERS subscales are interpreted as below average (1 - 5), average (6 - 12) and above average (13 - 20). The BERS strength index is scored as below average for scores 89 or lower, average for scores 90 - 110, and above average for scores 111 or higher. The BERS test-retest and internal consistency values for the five scales and total strength index ranged from .82 to .95 and .85 to .99, respectively (Epstein, 2004). The BERS Parent Rating Scale was administered to the child's guardian at both intake and discharge.

North Carolina Family Assessment Scale (NCFAS). The NCFAS (Kirk & Reed-Ashcraft, 2001) is a 25-item practice-based measure designed to assess five domains of family functioning (i.e., Environment, Parental Capabilities, Family Interactions, Family Safety, and Child Well-Being). Each item and subscale is scored on a six-point scale from "serious problem" to "clear strength." For this study, results from the Parental Capabilities and Child Well-Being scales are reported. Reliability coefficients for Parental Capabilities were .83 at intake and .91 at discharge and for Child Well-Being were .93 at both intake and

discharge (Reed-Ashcraft, Kirk, & Fraser, 2001). Family Consultants completed this assessment at both intake and discharge.

Treatment Implementation

Treatment integrity was assessed via observations by trained program experts who rated implementation of specific components of the model within four domains: Teaching Components (20 items), Relationship Building (12 items), Professionalism and Safety (4 items), and Natural Therapy Systems (4 items). The items were rated on a five-point scale ranging from incorrect implementation, to adequate implementation, to excellent implementation. Eighty-three treatment integrity observations of Family Consultants were completed with an average observation time of 75 minutes. Eighty-eight percent of staff met competency (an "adequate" rating or higher) within the Teaching Components domain, 76.5% met competency for Relationship Building, 92.6% in Professionalism and Safety, and 93.1% for the Natural Therapy Systems domain.

Data Analysis

Data were analyzed to determine whether there were significant differences for child behavior from pretest to posttest. Paired sample *t*-tests were conducted to establish if mean scores on the dependent measures prior to services were significantly different from mean scores following services. Cohen's *d* effect sizes were calculated to determine the magnitude of the differences. Non-parametric Wilcoxon tests were conducted to evaluate whether there were significant differences between the Parent Capabilities and Child Well-Being domains of the North Carolina Family Assessment Scale from pre- to posttesting.

Results

The primary purpose of this study was to document the changes that occurred in child behavior and parenting skills following participation in the Boys Town In-Home Family Program. Of the 107 families enrolled in the study, 85 (79%) completed the program. The families were enrolled for an average of 80 days, ranging from 21 to 119. The average number of direct contact hours with a Family Consultant was 23 hours, with 7% of families having 12 or less service hours, 21% between 13-19 hours, 48% between 20-30 hours, 15% over 30 hours, and 9% of families had missing data on this variable. Complete sets of both intake and discharge data were collected for 75 families, thus the outcome analyses focus on the results for these 75 families.

Parental Ratings of Child Behavior

Table 1 presents intake and discharge means, *t* values, and effect size (*d*) for the CBCL. Significant differences were found on both broadband and the Total Problems scales of the CBCL from intake to discharge. At intake, 40% (Internalizing), 62% (Externalizing), and 56% (Total Problems) of children presented within the borderline or clinical ranges. At discharge, only 20% (Internalizing), 31% (Externalizing), and 25% (Total Problems) had scores within the borderline or clinical ranges. Based on Cohen's standards of effect size (Cohen, 1988), large effects (over 0.80) were found from intake to discharge for Externalizing and Total Problems scales. Thus, following participation in the program, the children demonstrated fewer internalizing issues

Table 1

CBCL and BERS Ratings From Intake to Discharge

	Intake		Discharge		Effect Size	
	N = 73 ¹		N = 73 ¹		<i>t</i>	<i>d</i>
	M	SD	M	SD		
CBCL						
Internalizing	56.59	11.40	49.07	10.80	6.43*	.68
Externalizing	62.59	8.96	53.23	11.82	8.32*	.90
Total Problems	61.29	10.02	50.48	13.18	8.73*	.93
BERS						
Interpersonal Strength	8.42	2.95	10.42	2.94	6.02**	.68
Family Involvement	8.99	2.48	10.32	2.62	4.24**	.52
Intrapersonal Strength	9.95	3.14	11.55	3.45	4.02**	.48
School Functioning	8.18	2.84	10.23	2.79	7.41**	.73
Affective Strength	9.97	2.95	11.38	2.77	4.04**	.40
Strength Index	93.67	15.31	105.11	17.53	6.19**	.70

Note. M = 50, SD = 10. Scores for CBCL Subscales are: Normal T < 60, Borderline T > 60 & ≤ 63, and Clinical T > 63. Scores for the BERS subscales: Below Average 1 - 5, Average 6 - 12, and Above Average 13 - 20. Scores for the Strength Index: Below Average ≤ 89, Average 90 - 110, and Above Average ≥ 111.

¹Missing data on two families.

*Statistically significant at Bonferroni alpha of .016.

**Statistically significant at Bonferroni alpha of .008.

such as depression, moodiness, and anxiety as well as externalizing issues such as rule-breaking, defiance, and aggression.

For the BERS, significant differences were found on all subscales and the Strength Index from intake to discharge (see Table 1). At intake, 39 % (Interpersonal Strength), 26 % (Family Involvement), 22 % (Intrapersonal Strength), 44 % (School Functioning), 27 % (Affective Strength), and 42 % (Strength Index) of children presented in the below average range. At discharge, 19 % (Interpersonal Strength), 14 % (Family Involvement), 12 % (Intrapersonal Strength), 19 % (School Functioning), 12 % (Affective Strength), and 25 % (Strength Index) had scores in the below average range. Medium effects were found from intake to discharge on the Strength Index and every subscale, with the exception of Affective Strength, which had a small effect.

Family Consultant Ratings of Families

Table 2 presents the findings from the North Carolina Family Assessment Scale (NCFAS). There were statistically significant improvements from intake to discharge for every item in the Child Well-Being domain. The largest gain was for the Child's Behavior item, which had an increase from 11 % to 83 % of families scoring in the adequate to clear strength range. The item ratings for School Performance and Relationship with Caregivers also had substantial improvements (26 % intake to 86 % discharge) in the percentage of families demonstrating strengths. Looking at the overall score for the Child Well-Being

domain, 25 % of families had adequate or clear strengths at intake which increased to 88 % of families at discharge.

The Parental Capabilities domain of the NCFAS also demonstrated statistically significant improvements from intake to discharge for every item (see Table 2). The largest improvements were found for Disciplinary Practices, which increased from 36 % of families having an adequate or clear strength score at intake to 86 % at discharge. There was a similar increase in the Provision of Development/Enrichment Opportunities, from 49 % at intake to 91 % at discharge. Examining the overall Parental Capabilities domain score, 57 % of families had an adequate or clear strength score at intake, compared to 95 % of families at discharge.

Discussion

Changes in Children's Problem Behavior

The primary goals of this study were to document the changes that occurred in child behavior and parenting skills following family participation in Boys Town In-Home Family Program. While only children without a history of mental health diagnoses (aside from ADHD) were served by this program, over half of the children were identified with borderline or clinical levels of child problem behavior. Despite the elevated emotional and behavioral risks for the children, there were significant improvements at posttest, with large to medium effect sizes across almost all subscales and total scores for all of the

Table 2

NCFAS Consultant Ratings at Intake and Discharge

						Wilcoxon Signed Ranks Z-score
	n	Intake		Discharge		
		M	SD	M	SD	
NCFAS Child Well-Being Domain						
Children's Mental Health	57	2.91	1.11	3.89	0.98	5.10**
Children's Behavior	57	1.67	0.89	3.35	0.99	6.08**
School Performance	57	2.26	1.11	3.63	1.03	5.70**
Relationship with Caregiver	57	2.04	1.00	3.58	0.92	5.80**
Relationship with Sibling(s)	45	2.27	0.96	4.09	1.04	5.23**
Relationship with Peer(s)	55	2.31	0.98	3.71	1.13	5.43**
Motivation to Maintain the Family	56	3.13	1.11	3.88	0.88	4.09**
Overall	56	2.07	0.83	3.59	0.93	6.00**
NCFAS Parental Capabilities Domain						
Supervision of Children	56	3.43	1.19	4.38	0.78	4.83**
Disciplinary Practices	50	2.22	1.00	3.68	1.00	5.85**
Provision of Development/Enrichment Opportunities	57	2.75	1.09	3.68	0.93	5.29**
Caregiver Mental Health	56	3.36	1.17	4.00	0.89	3.94**
Caregiver Physical Health	56	3.45	1.02	3.91	0.88	3.23**
Caregiver Use of Drugs/Alcohol	56	3.95	1.07	4.43	0.78	2.49*
Overall	57	3.12	1.23	3.98	0.88	4.69**

Note. The NCFAS was scored on a six-point scale, ranging from zero (serious problem) to five (clear strength).

* $p < .01$.

** $p < .001$.

child and parent report outcome measures. The number of youth with clinical or borderline total CBCL scores declined from 56 % at intake to only 25 % at discharge. Significant improvements were also found for the BERS, with the largest effect in the school functioning domain. These findings were also replicated in the NCFAS Family Consultant's rating of the Child's Well-Being, with significant improvements from intake to discharge across the domain, with the largest gains in Child Behavior, Relationship with Caregiver, and School Performance. Also according to the NCFAS ratings, significant gains were found for every item of the Parental Capabilities domain, with the greatest gains in Disciplinary Practices and Provision of Enrichment Opportunities.

The gains of our sample across all behavioral and emotional domains were also significant when compared to the literature on parent-training interventions. A recent meta-analysis of behavioral parent training found the average effect size for within-subjects designs using individual consultation as the primary type of intervention was .43 (Maughan et al., 2005). The average effect size in the current study was .67, suggesting a substantial effect in comparison to other parenting programs. Therefore, the results provide a strong rationale

that the Boys Town In-Home Family Program potentially contributed to positive changes in children's problem behavior.

Moreover, the fact that school functioning and performance improved for both the BERS and the NCFAS suggests that these improvements were seen outside of the family sphere and carried over successfully into the school domain. One possible explanation for this improvement in school functioning is that the program focuses on a parent training component which raises parent's expectations for their child's behavior at home and in other social situations. Likewise, there is a school component encouraging parental involvement in homework and school activities. Finally, Family Consultants modeled for parents a biweekly contact with their child's teacher, which likely improved school-to-home communication. Research on school-based interventions for parents has suggested those elements as simple as enhancing communication and collaboration between parents and school staff can increase parental monitoring and at-risk children's academic and social success (Heller & Fantuzzo, 1993). Thus, the modeled school and home communication, involvement in their child's homework, and focus on improved parenting skills may explain the effects found both at home and in school-based settings.

One of the key difficulties of any prevention or intervention program is getting involvement to participate in the program. In many intervention programs, clients discontinue services before completing them. This is especially true for parent training programs, which find that about 40 - 60 % of parents who enroll in services fail to complete them (Peters et al., 2005). In contrast, the Boys Town In-Home Family Program had high participation in services, with 79 % of families enrolled in the study completing the program. This high participation rate suggests that an individualized and in-home approach to providing services may increase family investment, and as a result, participation in services.

Limitations

There are several limitations to this study that should be noted. As is the case in much of applied research, this study did not have the resources for a comparison group. Future research would benefit from the use of clients in comparison or wait-list groups to determine the benefits of this program over wait list or services as usual conditions. The large pre-post effect sizes found in this study certainly suggest that there is likely some benefit to children and families from the intervention, but additional experimental research is necessary. Second, standardized follow-up data were not collected on the families to determine whether the children maintained their behavioral gains following discharge. Third, this study was conducted in a single county in Florida, which may affect the generalizability of these results to children in other geographic regions. Fourth, it was beyond the scope of this study to examine if the behaviors observed by parents and Family Consultants could also be observed by other respondents in the school (e.g., teachers). Future research would benefit from collecting pre, post, and follow-up information from teachers regarding the youth's behavioral and emotional functioning. Finally, due to cost restraints, the treatment providers assisted in the data collection, which has the potential to influence data responses of guardians.

Future Research

Based on the findings from the current study and limitations mentioned above, there are several areas to investigate in future studies. First, changes in child behavior after family participation in the Boys Town In-Home Family Program should be evaluated with a more rigorous experimental design, include multiple informants, and collect follow-up data using standardized instruments. It is essential that a comparison group be included, to examine the degree of change without the In-Home Family Program intervention. It is useful to have multiple informants for the measures to help eliminate potential response bias, such as assessing both parents and teachers on the outcome measures. Follow-up data collection would examine if the changes endure over time.

Second, it is essential that future studies examine the degree of family participation in the intervention and the factors that influence their level of engagement in the program (Nix, Bierman, & McMahon, 2009). This program had an impressive 79 % completion rate for families enrolled in the study. It is uncertain what components of the program are related to this high participation rate, but future studies should focus on what aspects of the program and characteristics of participants predict parental attendance and engagement. Likewise,

it would be helpful to assess the acceptability of the intervention to the parents, the degree to which they can implement the skills they have been taught, and assess how much of the intervention parents continue to use after completing services. All of these issues would help further the understanding of how to improve services for parent training programs. This line of research would also begin to provide information on the key ingredients of parent training interventions that contribute to client engagement and improved youth and family outcomes.

Implications for Practice

This study has several implications for mental health professionals, including service delivery approaches for parenting programs and potential impacts of a home-based program on a child's behavior at school. The first important implication of this research is the finding that working one-on-one with families in their home for a few hours a week on basic parent behavior management skills may have substantial impacts on parenting methods and child behavior. It may be that this in-home delivery method helps to encourage parent engagement in the program and the subsequent large gains in outcomes. Perhaps this is due to the convenience of the sessions for the parents, or possibly it is the ability to practice the material on their own children with a parenting "coach" present. Nonetheless, future research is needed to determine the role of method of delivery (e.g., parent classes, in-home services, telephone coaching) has on parent engagement and subsequent family outcomes. Finally, the results of this study imply that a parent-based intervention could have effects on child behavior outside of the home, such as at school. This suggests that interventions that address child behavior in the home and target the parent may also have effects on child behavior in the classroom, expanding the potential impact of the brief parenting interventions.

References

- Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for ASEBA school-age forms and profiles*. Burlington: University of Vermont, Research Center for Children, Youth, & Families.
- Ascher, B. H., Farmer, E. M. Z., Burns, B. J., & Angold, A. (1996). The Child and Adolescent Services Assessment (CASA): Description and psychometrics. *Journal of Emotional and Behavioral Disorders*, 4(1), 12-20. doi: 10.1177/106342669600400102
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum.
- Dishion, T. J., Nelson, S. E., & Kavanagh, K. (2003). The family check-up with high-risk young adolescents: Preventing early-onset substance use by parent monitoring. *Behavior Therapy*, 34(4), 553-571. doi:10.1016/S0005-7894(03)80035-7
- Epstein, M. H. (2004). *Behavioral and Emotional Rating Scale: A strength based approach to assessment-second edition*. Austin, TX: PRO-ED.
- Farrington, D. P., & Welsh, B. C. (2003). Family-based prevention of offending: A meta-analysis. *The Australian and New Zealand Journal of Criminology*, 36(2), 127-151.
- Fergusson, D. M., & Lynskey, M. T. (1998). Conduct problems in childhood and psychosocial outcomes in young adulthood: A prospective study. *Journal of Emotional and Behavioral Disorders*, 6(1), 2-18. doi: 10.1177/106342669800600101

- Heller, L. R., & Fantuzzo, J. W. (1993). Reciprocal peer tutoring and parent partnership: Does parent involvement make a difference? *School Psychology Review*, 22(3), 517-534.
- Kirk, R. S., & Reed-Ashcraft, K. (2001). *North Carolina Family Assessment Scale (NCFAS): Research report*. Buhl, ID: National Family Preservation Network.
- Maughan, D. R., Christiansen, E., Jenson, W. R., Olympia, D., & Clark, E. (2005). Behavioral parent training as a treatment for externalizing behaviors and disruptive behavior disorders: A meta-analysis. *School Psychology Review*, 34(3), 267-286.
- Nix, R. L., Bierman, K. L., & McMahon, R. J. (2009). How attendance and quality of participation affect treatment response to parent management training. *Journal of Consulting and Clinical Psychology*, 77(3), 429-438. doi: 10.1037/a0015028
- Patterson, G. R., Dishion, T. J., & Chamberlain, P. (1993). Outcomes and methodological issues relating to treatment of antisocial children. In T. R. Giles (Ed.), *Effective psychotherapy: A handbook of comparative research* (pp. 43-88). New York, NY: Plenum.
- Peters, S., Calam, R., & Harrington, R. (2005). Maternal attributions and expressed emotion as predictors of attendance at parent management training. *Journal of Child Psychology and Psychiatry*, 46(4), 436-448. doi: 10.1111/j.1469-7610.2004.00365.x
- Pettit, G. S., Bates, J. E., & Dodge, K. A. (1993). Family interaction patterns and children's conduct problems at home and school: A longitudinal perspective. *School Psychology Review*, 22(3), 403-420.
- Piquero, A. R., Farrington, D. P., Welsh, B. C., Tremblay, R., & Jennings, W. G. (2008). Effects of early family/parent training programs on antisocial behavior & delinquency. *Campbell Systematic Reviews*, 11, 1-122.
- Powell, D., Fixsen, D., Dunlap, G., Smith, B., & Fox, L. (2007). A synthesis of knowledge relevant to pathways of service delivery for young children with or at risk of challenging behavior. *Journal of Early Intervention*, 29(2), 81-106. doi:10.1177/105381510702900201
- Prinz, R. J., & Miller, G. E. (1994). Family-based treatment for childhood antisocial behavior: Experimental influences on dropout and engagement. *Journal of Consulting and Clinical Psychology*, 62(3), 645-650.
- Prinz, R. J., & Sanders, M. R. (2007). Adopting a population-level approach to parenting and family support interventions. *Clinical Psychology Review*, 27(6), 739-749. doi:10.1016/j.cpr.2007.01.005
- Reed-Ashcraft, K., Kirk, R., & Fraser, M. (2001). The reliability and validity of the North Carolina Family Assessment Scale. *Research on Social Work Practice*, 11(4), 503-520. doi:10.1177/104973150101100406
- Shaw, D. S., Dishion, T. J., Supplee, L., Gardner, F., & Arnds, K. (2006). Randomized trial of a family-centered approach to the prevention of early conduct problems: 2-year effects of the family check-up in early childhood. *Journal of Consulting and Clinical Psychology*, 74(1), 1-9. doi:10.1037/0022-006X.74.1.1
- Short, R. J., & Brokaw, R. (1994). Externalizing behavior disorders. In R. J. Simeonsson (Ed.), *Risk resilience and prevention: Promoting the well-being of all children* (pp. 203-217). Baltimore, MD: Paul H. Brookes.
- Stormshak, E. A., Bierman, K. L., McMahon, R. J., & Lengua, L. J. (2000). Parenting practices and child disruptive behavior problems in early elementary school. *Journal of Clinical Child and Adolescent Psychology*, 29(1), 17-29. doi: 10.1207/S15374424jccp2901_3
- U.S. Department of Health and Human Services. (2009). *The 2009 HHS poverty guidelines*. Retrieved from <http://aspe.hhs.gov/poverty/09poverty.shtml>
- Webster-Stratton, C. (1984). Randomized trial of two parent training programs for families with conduct disordered children. *Journal of Consulting and Clinical Psychology*, 52(4), 666-678. doi:10.1037/0022-006X.52.4.666
- Zubrick, S. R., Silburn, S. R., Garton, A., Burton, P., Dalby, R., Carlton, J., . . . Lawrence, D. (1995). *Western Australian Child Health Survey: Developing Health and Well-being in the Nineties*. Perth, Western Australia: Australian Bureau of Statistics and the Institute for Child Health Research, 1995. (ISBN 0 642 20754 2).

Authors

Kristin Duppon Hurley, Ph.D., is an Associate Research Professor at the University of Nebraska-Lincoln. Her research interests include improving service delivery of mental health interventions for at-risk youth with a focus on issues surrounding treatment implementation, client engagement, and staff supervision. She works in a variety of treatment settings, including school-based and parent-training prevention programs to behavioral and emotional services provided to youth in group homes.

Annette K. Griffith, Ph.D., is the Director of Momentum Behavioral Health, a behavioral consulting and research company located in Missouri. Dr. Griffith's research interests focus on understanding more about youth with and at-risk of behavior disorders and in examining interventions to help improve their outcomes.

Kathryn J. Casey, Ph.D., is an Assistant Professor at the University of Wisconsin-Whitewater. Her research interests include investigating the needs of at-risk students during their transition from high school and/or residential treatment to community settings, and strategy instruction. Prior to working at the University of Wisconsin-Whitewater she taught youth with emotional and behavior disabilities in middle, high school, and residential settings.

Stephanie Ingram, B.S., is a Senior Research Analyst at the National Research Institute for Child and Family Study for Father Flanagan's Boys' Home. Her research interests include assessment of child and family functioning, child behavior, placement stability, and program fidelity for families being served in the child welfare system.

Amy Simpson, M.A., is the Executive Director of Father Flanagan's Boys Town Florida, Inc., which offers several community-based programs for children and families who are at risk for abuse and neglect, struggling with mental health issues, or involved in the dependency and/or delinquency systems. Ms. Simpson is active in many state and local efforts to improve the lives of children and families in South Florida, including the Florida Coalition for Children and the Healthy Beginnings system.

The Relationship Between Ninth-Grade Retention and On-Time Graduation in a Southeast Texas High School

Jennifer N. Bornsheuer, Monica A. Polonyi, Malitta Andrews, Brenda Fore, and Anthony J. Onwuegbuzie

Abstract: Currently, there are approximately 1.3 million annual high school dropouts who potentially might lose \$355 billion of income over their lifetimes. Effectively addressing retention and dropout issues has far-reaching societal implications. Therefore, this study examined the relationship between ninth-grade retention and on-time graduation. For the purposes of this study, on-time graduation was defined as completion of high school within four years after entering as freshmen. A convenience method of sampling was utilized to measure ninth-grade retention and dropout rates among students ($n = 1,202$) in a Southeast Texas high school. A chi-square analysis determined the relationship between the variables. The findings indicated a statistically significant relationship between ninth-grade retention and on-time graduation, yielding a very large effect size (Cramer's $V = 0.61$). Specifically, ninth-grade students who had been retained were more than six times less likely not to graduate on time than were the ninth-grade students who had not been retained. Implications of these findings are discussed.

Introduction

In the United States, the 1.3 million students who drop out of high school in 2009 will result in a potential loss of \$355 billion over their lifetimes as working adults (Alliance for Excellent Education, 2009). According to the Alliance for Excellent Education, these 1.3 million annual dropouts will subsequently experience more unemployment, utilize government assistance, or spend more time in and out of the prison system than will their counterparts who graduated from high school (Zvoch, 2006). Some researchers (e.g., Jimerson, Anderson, & Whipple, 2002) have concluded that, due to stressed socioeconomic conditions, low parental educational levels, and learning disabilities of students, it is difficult for administrators to effectively combat dropout rates. Family attitudes regarding education, which are not under the control of administrators, have been found to outweigh other mitigating factors affecting graduation (Owings & Magliaro, 1998). Not only do the attitudes of the family affect at-risk students, but the students' engagement in the school process, such as extracurricular activities and parental involvement, also affect these students (Owings & Magliaro, 1998; Zvoch, 2006). However, there are some factors under the control of school administrators that can affect a positive outcome regarding graduation rates (Zvoch, 2006). In particular, retention might be a factor that plays a role in determining whether a student drops out of school (Jimerson et al., 2002).

Incidence of Retention

Many school districts utilize grade retention with the belief that giving students increased time to master skills and concepts needed in later grades allows them to mature socially, and increases their levels of academic performance (Light & Morrison, 1990; Natale, 1991). Roderick (1993) reported that grade retention became increasingly popular in the 1980s in response to the social promotion ideas that were held in the 1970s. A main tenet of social promotion was that students should be promoted based on their age and not based on their levels of performance. For example, a 17-year-old freshman would be promoted despite failing grades simply because he was older than his other classmates. Despite these beliefs about retention, current literature revealed an increased dropout rate at the high school level when students are retained during their freshman years (Bowman, 2005; Jimerson et al., 2002). Although other risk factors play a role in student dropouts, grade retention was one of the strongest predictors (Jimerson et al., 2002).

In 2002 former President George W. Bush signed into legislation the No Child Left Behind (NCLB) Act that was aimed at increasing student academic performance and improving academic standards across the nation (Neild, 2009). Although elements of the NCLB have been beneficial, the mandate heavily influenced test accountability standards (Neild, 2009). The downside to the required standards was increased rates of retention across the United States and, therefore, many

children are being left behind (Leckrone & Griffith, 2006). Since the inception of NCLB, approximately 2.4 million students, or 15 % of the school-aged population, repeat a grade each school year (Silbergliitt, Jimerson, Burns, & Appleton, 2006). Furthermore, Neild (2009) reported that ninth graders, more than any other age group, are at an increased risk for high school dropout. Although research findings have been inconclusive regarding the benefits of retention, this number has steadily risen over the past 30 years (Leckrone & Griffith, 2006). As educators become more concerned with the push for excellence—which possibly means calling for increased requirements, longer school days, and higher standards—the school administration might be driving even more students out of the door.

Implications of Retention

The consequences of dropping out of high school are not only severe for students and school administrators, but also for society in general (Ascher, 1987). Our society requires an educated and trained workforce capable of competing in the world marketplace. Indeed, a high school education should be considered the minimum survival kit for coping with today's world (Neild, 2009). Statistics from juvenile courts indicate that dropouts are more likely to engage in criminal activity (Ascher, 1987). In some states, 50 % to 90 % of the prison population dropped out of school (Cassel, 2003; Grossnickle, 1986). Moreover, without adequate training, unemployment rates for dropouts far exceed those of high school graduates, with these rates doubling for Latino and African American youth (Grossnickle, 1986; Marotta & Garcia, 2003).

According to the Texas Education Agency (1996), students who were retained were much more likely to repeat an additional grade. Each time a student repeats a grade the likelihood that the student will drop out of school increases significantly (Bowers, 2010; Grossnickle, 1986; Sparks, Johnson, & Akos, 2010). Additionally, Leckrone and Griffith (2006) suggested that costs come not only at the expense of the student but also to society. When a student is required to complete an extra year of study, estimated tax costs can increase significantly (Leckrone & Griffith, 2006).

Continued research demonstrates that there is no long-term benefit for students who are retained. More specifically, Neild (2009) indicated that although students might perform better immediately after grade retention, the gains are lost within a two- to three-year period. Also, as more *teachers teach to the test*, there is a question whether students are acquiring the skills needed for academic achievement in the subsequent grade levels (Leckrone & Griffith, 2006). For these reasons, it is important that factors relating to the decrease of high school dropout be examined.

Risk Factors for Dropping Out of High School

Evidence is growing indicating that students who fall behind academically during the freshman year have very low odds of earning a high school diploma (Leckrone & Griffith, 2006). Analysis of the progression of students through high school suggests that approximately 30 % of the nation's recent high school dropouts were never promoted beyond the ninth grade (Neild, 2009). The United States school system is characterized by a series of transitions, which hold the potential for students' personal growth. However, students who do

not navigate a school transition well, face the possibility of personal and academic turmoil and even falling off track for promotion and graduation (Lee, Cornell, Gregory, & Fan, 2011; Roderick, 1993). Zvoch (2006) indicated two contributing sources that might lead to student dropout: individual student risk factors and school characteristics.

Individual Student Risk Factors

Risk factors include limited parent educational level, family socioeconomic stresses, previous academic difficulties or failures as measured by performance testing, learning disabilities, absenteeism related to health problems, and negative peer influences (Owings & Migliaro, 1998; Zvoch, 2006). Jimerson et al. (2002) reported that students who were retained more than once during their academic careers were 90 % more likely to drop out than were their promoted peers. Consequently, these findings indicate a need for various interventions within school districts to assist students in graduating from high school with their originating freshman class.

Using data reported by the Current Population Survey (CPS), which is a household survey of educational and economic indicators conducted by the United States Bureau of the Census, Neild (2009) documented that from 1996 to 2003, African American and Latino ninth graders were more than twice as likely as were European American students to repeat ninth grade. Furthermore, this cohort of Latino and African American boys showed a higher ninth-grade retention rate than did Latino and African American girls.

In addition to demographics, Ascher (1987) stated that the difficulties of the transition most heavily affect those students who already suffer from attendance, discipline, and academic problems. Many of these students perceive that high school is too challenging or alien and believe they cannot succeed. These feelings are often exacerbated in students with behavior problems and poor social skills. Bowers (2010) noted similar findings as did Ascher. Bower suggested that grade retention was the most significant factor that led to dropout but that many other variables also played a role in student dropout, including academic achievement, student absences, and family conflict. Poor self-esteem, behavioral problems, and disengagement from the educational school system are also factors associated with retention (Leckrone & Griffith, 2006; Silbergliitt et al., 2006; Zvoch, 2006).

For students who struggled through middle school or who were not sufficiently challenged, ninth grade was where their lack of knowledge and skills finally caught up with them (Neild, 2009). Neild observed that students with poor math and reading skills were more overwhelmed by the academic demands of high school. Once these students began to flounder academically, they became discouraged about ever completing high school. Many of them become truant and eventually drop out completely (Ascher, 1987; Sparks et al., 2010). For students in this situation, probably the primary reason they left school early was that they were attempting to escape failure (Ascher, 1987). Those who dropped out reported that they had simply "given up" because they were too overwhelmed (Ascher, 1987, p. 112). They often felt like it was too late to get help and that their repeated efforts to be successful in school had ended in failure (Grossnickle, 1986). Sparks et al. (2010) noted in their study that there were three main factors that influenced student dropout. Similar to the authors noted above, these authors cited a student being retained in any grade level,

a student who fails an end-of-year course exam, and a student who has a long-term suspension from school is more likely than are other students to drop out.

School Characteristics

The second class of antecedents of student dropout is represented by school characteristics. These characteristics include perceptions and attitudes of the school social climate and overall socioeconomic status of the student body that impact student dropout (Neild, 2009). Traditionally, students are hurried from one 45-minute class to the next. Oftentimes there are no homeroom teachers and students encounter a different set of students and teacher in each class (Zvoch, 2006). These factors can leave students feeling alienated and anonymous (Zvoch, 2006). Because each school subject brings about a different set of teachers, there is little incentive to learn more about how students are performing in other classes (Grossnickle, 1986). Further, high school teachers often do not have the expertise or inclination to work with students who enter high school with weak academic skills (Grossnickle, 1986). As a result, the responsibility for helping the student may fall to the school counselor who may not have the opportunity to observe the student in everyday classes. Research also suggests that administrative issues such as logistics or scheduling that remain unresolved at the beginning of the school year have a negative effect on ninth graders' course performance (Neild, 2009). In a survey, Weiss (2001) noted that 40 % of ninth graders in a large urban district reported that at least one of their classes did not have enough seats for every student. Furthermore, almost 50 % of the ninth graders surveyed reported a teacher change in at least one class. In a survey conducted by Neild (2009), 40 % reported a change in course schedule since beginning the school year. It was reported that ninth graders who experienced more of this turbulence in scheduling and classroom organization at the beginning of the school year earned lower grade point averages (GPAs) and were more likely to drop out before graduation (Deily, 2011; Neild, 2009). Similarly, as noted by Jordan (2001), ninth graders need to "...learn about various important details such as the credit game, attendance policies, exit exams, college boards, and making allies..." (p. 7).

Preventative Strategies

In an article authored by members of the District Administration (2005), the authors reported that the best way to decrease high school dropout is through a combination of prevention, interventions, and continued support. The authors found that a student who is retained and does not receive any support or interventions has a higher likelihood of being a school dropout, and those who are retained twice are four times more likely to drop out than are students who had not been retained (U.S. Department of Education, 2009). Methods in which students can graduate on time after being retained include taking courses during the summer, tutoring, or attending night school. In a meta-analysis of interventions to reduce dropout rates, Jimerson (2001) reported the most effective interventions to be mnemonic strategies to increase students' memory of information, activities to enhance reading comprehension, and behavior modification. Also, direct instruction, evaluations of the learning environment, and early interventions have been shown to be statistically significant in increasing student achievement.

Parental Strategies

Several researchers have studied the link between support systems and school achievement. Overall, the research has indicated that support systems at school and home lead students to stay in school and achieve higher grades (Flaxman & Inger, 1992; Ouellette & Wilkerson, 2008; Zvoch, 2006). Strom and Boster (2007) demonstrated how supportive social networks and supportive family members can decrease the number of dropouts. Consistent with this finding, research has indicated that supportive interactions and communication with significant others can lessen the effects of stressors and daily challenges of a person's experiences (Eckenrode, 1984). Crucial to student achievement is engaging and supportive communication among family members (Flaxman & Inger, 1992). Indeed, Fan and Chen (2001) identified a direct relationship between parental expectations for their child's academic achievement and later school achievement. Parent attitudes, therefore, can influence school behavior, attendance, classroom compliance, and academic achievement (Ouellette & Wilkerson, 2008). Furthermore, parent and family involvement in schools supports academic achievement and school completion (Fan & Chen, 2001; Ouellette & Wilkerson, 2008).

Because parent involvement can influence academic achievement, methods have been introduced to encourage parents and the community to play an active role in educational achievement and school completion (Gewertz, 2007; Stanley & Plucker, 2008). Researchers have identified parent training programs, family resource centers, and direct parent involvement as strategies to engage parents in meaningful and supportive roles in their child's education (Flaxman & Inger, 1992; Ouellette & Wilkerson, 2008). Furthermore, as today's technology increases, so do methods of communicating with parents. According to Ouellette and Wilkerson (2008), web-based grade books, e-mail, video conferencing, and school Web sites are tools that can bridge the gap between school and home.

School Strategies

Recent studies have provided insights about strategies, tools, and the effectiveness of school initiatives as they relate to academic achievement. School districts have implemented interventions to decrease the number of dropouts in their student populations (Gehring, 2004; Stanley & Plucker, 2008; Zvoch, 2006). Larger school districts in the United States are beginning to implement creative solutions to deter students from dropping out (Bowman, 2005; Zvoch, 2006). These solutions, which provide alternatives for students who are at risk for dropping out, include providing a communal environment (i.e., learning communities that provide students with smaller learning environments in an attempt to meet the diverse needs of the learner), student mentoring, individualized instruction, interdisciplinary planning, and team teaching (Zvoch, 2006). Bowman outlined possible alternatives to grade retention. The main alternatives noted were changing district policies so that a student cannot be retained, offering summer school to reinforce skills, utilizing various teaching methods to assist students in their particular learning styles, and offering programs for mentoring and tutoring.

In a study by Somers and Piliawsky (2004), the authors measured the effectiveness of a program designed to reduce dropout rates among urban African American adolescents. The authors reported

that there are many directors of programs who claim to reduce dropout rates although not all are successful in achieving their goals. Somers and Piliawsky noted that many dropout prevention programs focus on the individual student's characteristics rather than focusing on making the school meaningful and a priority to the student. The authors suggested peer mentoring and tutoring as a way to engage students in their academic achievement. Other research has shown tutoring to be effective in reducing dropout rates among teenagers and in creating healthy positive interactions among students, peers, and teachers (Fashola & Slavin, 1998). In their study, Somers and Piliawsky engaged 96 ninth-grade students in an after-school tutoring program. In an analysis of the data, the researchers found no statistically significant difference in GPA among two groups of students being compared, specifically, those who were tutored and those who did not participate in the tutoring program. The researchers stated this might be due to outside factors experienced by the students such as peers, work, and dating. The researchers concluded from their study that tutoring that is initiated before the ninth grade transition has a higher likelihood of being successful in reducing dropout rates and raising GPA scores.

Another preventative measure to help reduce dropout rates includes supportive interactions and communication within the school system (Gewertz, 2007; Stanley & Plucker, 2008; Zvoch, 2006). Teachers are resources for students, in that they have the ability to encourage student achievement. Strom and Boster (2007) obtained similar results in that parental expectations were linked to student achievement along with parental participation in school activities, parent-teacher conferences, and helping the student with homework. Moreover, supportive parent-teacher interactions were shown to influence a student's decision to drop out. The researchers stated that more research is needed in the area of supportive interactions among parents, teachers, and students to determine the difference between student success and dropout.

In addition, researchers have observed that if students are going to drop out of school, it is more likely to occur between the eighth- and ninth-grade years (Gewertz, 2007; Leckrone & Griffith, 2006). In *Building a Nation of Ninth-Graders*, the author discussed preventative efforts to increase academic success (Gewertz, 2007). In the hope of strengthening the student-teacher interaction, a Pittsburgh, Pennsylvania, school district initiated a weeklong orientation with one third of their incoming freshmen prior to the start of the academic school year. With this in mind, the school focused on building bonds between the students and teachers to create a feeling of caring, concern, support, and confidence. In addition, the author stressed that the orientation not only focused on emotional components but also included academic activities that stressed literacy, mathematics, and study habits in the hope of preventing the incidence of retention and dropping out (Gewertz, 2007). Reflections made by students after the orientation included, "I like how the teachers care" and "I thought I'd be a number in this school, but then I came here, and teachers are ready to try to learn about you. So I feel good about school" (Gewertz, 2007, p. 48). Such reflections demonstrate the difference that positive relationships can make. Similarly, Gehring (2004) reported that several urban school districts are rethinking traditional methods of restructuring program delivery and retention policies. Specifically,

these methods included reexamining retention standards, introducing career-themed academies where students can learn about various professions, having twilight high schools that support flexible hours for students who work, and providing different graduation plans and credit requirements that meet the unique needs of the student.

Additional research (e.g., Leckrone & Griffith, 2006; Zvoch, 2006) also has identified block scheduling, flexible grouping, smaller class sizes, and multiage grouping as representing useful practices to encourage school completion. According to Zvoch, the academic and social context of the school can either encourage or discourage academic promotion. Therefore, expanded learning options, positive learning environments, and supportive student-teacher interactions are just a few measures that can be implemented by schools.

Implications for Counselors

Counselors and social workers have an important influence on students, administrators, teachers, and family members in promoting student success and developing strategies to prevent retention (Butler, 2003; Leckrone & Griffith, 2006; Suh & Suh, 2007). At the state level, counselors act as advocates for students and raise awareness regarding the educational standards that are being used for retention (Leckrone & Griffith, 2006). Furthermore, by participating in local and state professional organizations, counselors serve as instruments of change as they inform educators and noneducators alike about the increasing statistics related to dropouts (Leckrone & Griffith, 2006). At the school campus level, counselors help teachers and administrators understand the implications of retention (Leckrone & Griffith, 2006). Keeping the end in mind, on-time graduation, the counselor is able to propose alternative services or interventions. Such interventions include flex hours, after-school programs, assigning a mentor to the student, and summer school services (Bowman, 2005; Leckrone & Griffith, 2006). In addition, counselors are not only a resource for students but for faculty and staff as well. Counselors can provide professional development opportunities for administrators and teaching staff helping to foster an understanding of different learning styles, cultural differences among students, and encouraging interventions that promote family involvement. Leckrone and Griffith also noted that it is important for school staff to recognize the detrimental effects that can be associated with disciplinary practices in response to disruptive behavior in the class. These authors suggested that often students who are not performing well academically mask their deficits with disruptive behaviors. Many times the consequence for these behaviors is removal from the classroom or the campus, which can lead to missed instructional time, missed assignments, and thereby repeating the negative cycle for the student. Mental health concerns, such as counseling strategies that specifically improve self-concept feelings of popularity, negative academic self-concept, and anxiety have been shown to particularly benefit Hispanic students who have been retained in ninth grade (Robles-Piña, 2011). Finally, counselors can assist families by initiating workshops and programs that emphasize the importance of education, address family concerns and questions, and provide opportunities for parents to become more active and responsible in their child's education (Flaxman & Inger, 1992; Leckrone & Griffith, 2006).

In conclusion, although the review of the literature suggests that retention leads to a likelihood of high school failure and dropout, there is also support that creative and alternative strategies can help improve academic achievement and maximize graduations rates. School systems can evaluate their environments, delivery of instruction, organizational practices, and teacher-student relationships to determine if their practices are promoting student achievement. Understanding that parent and family involvement is fundamental to academic success, additional initiatives can be explored to expand and to increase parental involvement and to improve parent-child relationships. Finally, school counselors and social workers can be utilized to foster high school students' academic success as well as mental health concerns and serve as liaisons to school faculty and staff, families, and community members.

Purpose of the Study

Although many researchers have investigated the relationship between retention and dropout rates, only a handful of researchers have examined this association as it pertains to ninth-grade students (Gewertz, 2007; Leckrone & Griffith, 2006; Silberglitt et al., 2006; Zvoch, 2006). The aforementioned researchers explored the variables that led to ninth-grade retention and dropout rates. Minimal research has been conducted on the relationship between retention and graduation within four years. Thus, the purpose of this study was to examine the relationship between ninth-grade retention and on-time graduation in a rural Southeast Texas High School. In our study we defined on-time graduation as completion of high school within four years after entering as a freshman.

Research Question and Hypothesis

The following research question was addressed: What is the relationship between ninth-grade retention and on-time graduation? Similar to the findings from previous researchers (Gewertz, 2007; Leckrone & Griffith, 2006; Zvoch, 2006), we hypothesized that ninth-grade retention would be negatively related to on-time graduation (Jimerson et al., 2002).

Educational Significance

Determining the best methods of addressing the issue of underperforming at-risk high school students was an integral component essential to improving graduation rates (Zvoch, 2006). It was expected that identifying the extent to which ninth-grade retention predicts whether a student graduates from high school would provide information as to how high risk this grade level is for academic achievement.

Method

For the purposes of this study, permission was obtained from the campus principal to access archived graduation data from 2007, 2008, and 2009 academic years. Before the study began, the researchers gained written approval for the study from the Institutional Review Board (IRB) of the institution with which the researchers were affiliated, as well as written approval from the school principal whose student data were used in the study. In this Texas 4A high school, students are promoted to the next grade level only if they have earned

the minimum number of credits necessary for the next grade classification. In this school district, promotion from the ninth grade to the 10th grade was based on the class schedule construct of seven class periods per day, and .05 credits awarded per class, per semester. Credits are earned by obtaining passing semester grades in scheduled classes (i.e., $\frac{1}{2}$ credit per semester class x seven scheduled classes = 3.5 credits per semester, 7 credits per year). In other words, successful freshmen can obtain a total of seven credits to advance to 10th-grade status. However, to facilitate higher ninth-grade promotion rates, this school district has set a minimum of 5.5 credits to advance to the 10th-grade level. The state mandates the number of credits and classes required for graduation; thus, any freshman failing a class, yet still promoted to the 10th-grade, is obligated to recover the credit(s) not passed during their freshman year, as well as any classes not passed subsequent to the freshman year.

Data Collection

This study focused on the population of students who did not obtain the minimum of 5.5 credits to move forward with their class from ninth grade to 10th grade and whether these students were able to overcome this setback, regain the credits, and graduate with their class four years after entering high school as a first-time freshman. Student transcripts were used to review and to determine graduation and retention status. These data provided the number of graduates, number of nongraduates, and the ninth-grade retention rate of graduates and nongraduates. Confidentiality of transcripts was taken into consideration when transcribing the data. Only one researcher collected the data and input the data in PASW 18 (SPSS, Inc., 2009).

Participants

In this study there were a total of 1,202 transcripts analyzed. These transcripts contained demographic, credit, retention, and graduation information. Transcripts were selected on the basis of students being classified as seniors. Within this sample, there were 563 male students and 639 female students. The sample was made up of 25 % White students, 21.3 % African American students, 52.4 % Hispanic students, and 1.2 % Asian students, with 0.1 % reporting another ethnicity. Convenience sampling was utilized due to the location of the school and accessibility of archival transcripts.

Instrumentation

The data were extracted from official transcripts that represented archived data from the school's database, Texas Reports (SCA). Graduation was determined by the number of credits obtained during each school year. Passing grades were determined by individual teachers and automatically transferred to the transcripts. A passing grade was defined as 70 and above. Because grades are automatically downloaded to the transcript program, it was expected that score validity was high. Transcripts for seniors from the academic years 2006-2007, 2007-2008, and 2008-2009 were extracted from the database and analyzed for graduation and retention status by a certified counselor.

Data Analysis

In this study, a quantitative analysis was used in order to determine if a relationship existed between ninth-grade retention and on-time graduation. The independent variable was ninth-grade retention status and the dependent variable was on-time graduation. Transcripts of students classified as seniors during the years of 2006-2007, 2007-2008, and 2008-2009 were analyzed to determine the relationship between on-time graduation and ninth-grade retention. In determining on-time graduation, transcripts were analyzed by noting the year students began high school (freshman year). This relationship was assessed using a chi-square analysis. All data were entered using the PASW 18.0 statistical software package (SPSS, Inc., 2009). Statistical significance was obtained at the $\alpha = .05$ level. Effect sizes also were obtained via a chi-square analysis. Using Cohen's (1988) criteria, effect sizes were measured via Cramer's V, using the following criteria: 0.1 for a small effect size, 0.3 for a moderate effect size, and 0.5 for a large effect size (Cohen, 1988).

Results

The 2 (ninth-grade retention) x 2 (on-time graduation) chi-square analysis revealed a statistically significant relationship between ninth-grade retention and on-time graduation, $\chi^2(2, N = 1202) = 447.64$, $p < .0001$. The analysis indicated that those who were retained in the ninth grade tended not to graduate on time (85.8%), whereas those who were not retained in the ninth grade were more likely to graduate on time (85.5%). The effect size, as measured by Cramer's V, was 0.61. Using Cohen's (1988) criteria, the effect size was very large. In other words, for the total ninth graders who were retained ($n = 211$), 14.2% ($n = 30$) of the time they were likely to experience on-time graduation and 85.7% ($n = 181$) of the time they were not likely to experience on-time graduation. Conversely, for those ninth-grade students who were not retained ($n = 991$), 85.9% ($n = 851$) of the time they were likely to graduate on time and 14.1% ($n = 140$) of the time they were not likely to experience on-time graduation.

These results suggested that there is a greater likelihood that those students who are retained in the ninth grade do not graduate on time with their class, and those students who are not retained in the ninth grade have a higher likelihood of graduating on time from high school. In fact, the odds ratio revealed that students who are retained in the ninth grade were 6.01 times less likely to graduate on time (95% confidence interval = 4.31, 8.38).

Discussion

The focus on school retention and how it impacts high school dropouts became increasingly popular in the 1980s. Roderick (1993) reported that this increase in awareness was in response to the social promotion ideas that were held in the 1970s. Since that time, many community members as well as lawmakers have called for greater accountability for schools in relation to ensuring the successful matriculation of high school students (Zvoch, 2006). In response, state and federal legislatures invested large amounts of financial resources into schools (Neild, 2009). These government agencies examined how state and federal funds were being utilized to develop and to maintain programs that could reduce retention and thus reduce the amount of high school dropout (Neild, 2009).

The findings of this study demonstrated that ninth-grade students, who are retained, have a higher likelihood of not graduating on time with their peers. These findings have several implications for educational researchers and administrative school staff who are concerned with improving high school graduation rates. The implications include: (a) changes with regard to delivery of educational instruction, (b) suggestions for better organizational practices, and (c) examinations of teacher-student relationships to determine if their practices are promoting student achievement. Further implications include understanding how parent and family involvement can be fundamental to academic success, and the utilization of school counselors and social workers to foster academic success among high school students. This study identified a statistically significant link between ninth-grade retention and high school dropout propensity. This finding supports previous results of research conducted in the area of ninth-grade retention and successful matriculation (Gewertz, 2007; Leckrone & Griffith, 2006; Silbergliet et al., 2006; Zvoch, 2006). Those who are interested in school retention issues and how they relate to eventual dropout should find evidence of the relationship between the two variables very useful. Specifically, our results confirmed past researchers' findings that a relationship exists between ninth-grade retention and on-time graduation. Further, our research added to the body of literature in that it focused on students from a large rural high school whereas past researchers examined students from large urban schools.

As in virtually all quantitative studies, there were threats to the external validity of the findings. These threats included population validity, ecological validity, and temporal validity (Onwuegbuzie, 2003). Thus, caution should be used when generalizing these results to other populations. Notwithstanding, the present findings provide administrators with more evidence that ninth-grade retention places a student at risk for dropping out of school. Indeed, based on the confidence interval in the present study, the ninth-grade students who were retained were six to eight times less likely to graduate on time than were students who were not retained.

The present findings should have logical appeal for school administrators, as well as for teachers and counselors who work directly with students. Researchers have shown that with student mentoring, individualized instruction, interdisciplinary planning, and team teaching, students who are at risk for dropout might find that they greatly benefit from these solutions (Zvoch, 2006). Future researchers might explore variables that moderate or mediate the relationship between ninth-grade retention and on-time graduation. In reviewing the findings of this study as well as similar studies conducted in the area of retention and high school graduation, it is evident that school administration and classroom teachers need the assistance of applied research to identify the most effective strategies for addressing the disturbing trend of high school dropout.

References

- Alliance for Excellent Education. (2009). *The high cost of high school dropouts: What the nation pays for inadequate high schools*. Retrieved from <http://www.all4ed.org/files/archive/publications/HighCost.pdf>

- Ascher, C. (1987). The ninth grade: A precarious time for the potential dropout. *ERIC Digest*, 34, 1-5.
- Bowers, A. (2010). Grades and graduation: A longitudinal risk perspective to identify student dropouts. *The Journal of Educational Research*, 103, 191-207. doi:10.1080/00220670903382970
- Bowman, L. J. (2005). Grade retention: Is it a help or hindrance to student academic success? *Preventing School Failure*, 49, 42-46. doi:10.3200/PSFL.49.3.42-46
- Butler, S. K. (2003). Helping urban African American high school students to excel academically: The role of school counselors. *High School Journal*, 87, 51-57. doi:10.1353/hsj.2003.0012
- Cassel, R. (2003). A high school drop-out prevention program for the at-risk sophomore student. *Education*, 123, 649-658.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Deily, J. L. (2011). *Using goal setting to increase academic self-efficacy in at-risk ninth grade students*. Retrieved from <http://home.moravian.edu/public/educ/eddept/mEd/2011/Thesis/Deily.pdf>
- District Administration. (2005). *Retention or promotion: Wrong question*. Retrieved from <http://www.districtadministration.com>
- Eckenrode, J. (1984). Impact of chronic and acute stressors on daily reports of mood. *Journal of Personality and Social Psychology*, 46, 907-918. doi:10.1037/0022-3514.46.4.907
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13, 1-22.
- Fashola, O. S., & Slavin, R. E. (1998). Effective dropout prevention and college attendance programs for students placed at risk. *Journal of Education for Students Placed at Risk*, 3, 159-183. doi:10.1207/s15327671espr0302_5
- Flaxman, E., & Inger, M. (1992). Parents and schooling in the 1990s. *Educational Digest*, 57, 3-5.
- Gehring, J. (2004). To stem dropouts, urban districts switch strategies. *Education Week*, 23, 1-4.
- Gewertz, C. (2007). Building a nation of ninth-graders. *Education Week*, 27, 45-48.
- Grossnickle, D. R. (1986). *High school dropouts: Causes, consequences, and cure*. Bloomington, IN: Phi Delta Kappa International Inc.
- Jimerson, S. R. (2001). Meta-analysis of grade retention research: Implications for practice in the 21st century. *School Psychology Review*, 30, 420-438.
- Jimerson, S. R., Anderson, G. E., & Whipple, A. E. (2002). Winning the battle and losing the war: Examining the relation between grade retention and dropping out of high school. *Psychology in Schools*, 39, 441-457. doi:10.1002/pits.10046
- Jordan, W. J. (2001). *At-risk students during the first year of high school: Navigating treacherous waters*. Retrieved from <http://eric.ed.gov/PDFS/ED452314.pdf>
- Leckrone, M. J., & Griffith, B. G. (2006). Retention realities and educational standards. *Children and Schools*, 28, 53-58.
- Lee, T., Cornell, D., Gregory, A., & Fan, X. (2011). High suspension schools and dropout rates for Black and White students. *Education and Treatment of Children*, 34, 167-192.
- Light, H., & Morrison, P. (1990). *Beyond retention: A survival guide for regular classroom teachers*. Novato, CA: Academic Therapy.
- Marotta, S. A., & Garcia, J. G. (2003). Latinos in the United States in 2000. *Hispanic Journal of Behavioral Sciences*, 25, 13-34. doi:10.1177/0739986303251693
- Natale, J. (1991). Rethinking grade retention. *The Education Digest*, 56, 30-33.
- Neild, R. C. (2009). Falling off track during the transition to high school: What we know and what can be done. *Future of Children*, 19, 53-76.
- Onwuegbuzie, A. J. (2003). Expanding the framework of internal and external validity in quantitative research. *Research in the Schools*, 10(1), 71-89.
- Ouellette, P. M., & Wilkerson, D. (2008). "They Won't Come": Increasing parent involvement in parent management training programs for at-risk youths in schools. *School Social Work Journal*, 32, 39-53.
- Owings, W. A., & Magliaro, S. (1998). Grade retention: A history of failure. *Educational Leadership*, 56(1), 86-88.
- Robles-Piña, R. A. (2011). Depression and self-concept: Personality traits or coping styles in reaction to school retention. *Depression Research and Treatment*, Article ID 151469. Retrieved from <http://www.hindawi.com/journals/drt/2011/151469>
- Roderick, M. (1993). *The path to dropping out: Evidence for intervention*. Westport, CT: Greenwood.
- Silbergitt, B., Jimerson, S. R., Burns, M. K., & Appleton, J. J. (2006). Does the timing of grade retention make a difference? Examining the effects of early versus later retention. *School Psychology Review*, 35, 134-141.
- Somers, C. L., & Piliawsky, M. (2004). Drop-out prevention among urban, African American adolescents: Program evaluation and practical implications. *Preventing School Failure*, 48, 17-22.
- Sparks, E., Johnson, J., & Akos, P. (2010). Dropouts: Finding the needles in the haystack. *Educational Leadership*, 67, 46-49
- SPSS, Inc. (2009). PASW 18.0 for Windows. [Computer Software]. Chicago, IL: Author.
- Stanley, K. R., & Plucker, J. A. (2008). Improving high school graduation rates. *Center for Evaluation and Education Policy*, 6, 1-12.
- Strom, R. E., & Boster, F. J. (2007). Dropping out of high school: A meta-analysis assessing the effect of messages in the home and in school. *Communication Education*, 56, 433-452. doi:10.1080/03634520701413804
- Suh, S., & Suh, J. (2007). Risk factors and levels of risk for high school dropouts. *Professional School Counseling*, 10, 297-306.
- Texas Education Agency. (1996). *Comprehensive biennial report on Texas public schools: A report to the 75th Texas legislature*. Austin, TX: Texas Education Agency.
- U.S. Department of Education. (2009). *Dropout rates in the United States: Grade retention*. Retrieved from <http://www.nces.ed.gov/pubs/dp95/97473-5.asp>
- Weiss, C. (2001). Difficult starts: Turbulence in the school year and its impact on urban students' achievement. *American Journal of Education*, 109, 196-227.
- Zvoch, K. (2006). Freshmen year dropouts: Interactions between student and school characteristics and student dropout status. *Journal of Education for Students Placed At Risk*, 11, 97-117. doi:10.1207/s15327671espr1101_6

Authors

Jennifer N. Bornsheuer, MS, LPC, NCC, is currently a doctoral candidate in the Department of Educational Leadership and Counseling at Sam Houston State University in Huntsville, Texas. She is a Licensed Professional Counselor in Texas and a Nationally Certified Counselor.

Monica A. Polonyi is a doctoral candidate in the Department of Educational Leadership and Counseling at Sam Houston State University in Huntsville, Texas. She is a licensed professional counselor supervisor and a certified school counselor.

Malitta Andrews is a doctoral candidate in the Department of Educational Leadership and Counseling at Sam Houston State University in Huntsville, Texas.

Brenda Fore is a doctoral candidate in the Department of Educational Leadership and Counseling at Sam Houston State University in Huntsville, Texas.

Anthony J. Onwuegbuzie, Ph.D., is professor in the Department of Educational Leadership and Counseling at Sam Houston State University, where he teaches doctoral-level courses in qualitative research, quantitative research, and mixed research. His research areas include disadvantaged and underserved populations such as minorities, juvenile delinquents, and children living in war zones. Additionally, he writes extensively on qualitative, quantitative, and mixed methodological topics.

Early Identification of Potential High School Dropouts: An Investigation of the Relationship Among At-Risk Status, Wellness, Perceived Stress, and Mattering

Jan C. Lemon and Joshua C. Watson

Abstract: *In this study, the researchers concentrate on the gap in the educational and counseling literature documenting the extent to which certain psychosocial variables may contribute to the prediction of students who are at risk of dropping out of high school. Specifically, wellness, perceived stress, mattering, and at-risk status for dropping out of high school were assessed across 175 students attending a medium-sized high school located in the southeastern part of the United States. Participants completed a demographic questionnaire, the Five Factor Wellness Inventory-Teenage Version, the Student At-Risk Identification Scale-Student Questionnaire, the General Mattering Scale, and the Perceived Stress Scale. Using a regression analysis, the researchers found that the complete model, including all seven predictor variables, significantly predicted at-risk status for dropping out of high school, $F(7, 167) = 12.89, p < .05$. This model accounted for 35.1% of the variance in at-risk status for dropping out of high school. Based on these findings, counselors should utilize skills and interventions that help students stay intellectually, spiritually, and emotionally engaged in the learning process.*

Introduction

The repercussions of dropping out of high school can be long term and create emotional pain and financial suffering for the student, the student's family, and the community. The Alliance for Excellent Education (2007) reported that families headed by a high school graduate accumulate 10 times more wealth than families headed by a high school dropout. Also, the researchers stated that an additional \$74 billion dollars of wealth would be accumulated in the United States if heads of households had at least a high school diploma. Amos (2008) stated that currently fewer than three in four students finish high school in four years or less and that male students; students from low-income families; minority students; and students with language, learning, and psychological disabilities have higher dropout rates.

In evaluating much of the existing body of literature regarding dropout prevention, many factors have been offered to help explain why students decide to drop out of school. Within the counseling and educational literature, the research variables that have shown the strongest likelihood for offering such an explanation are the constructs of socioeconomic status, academic performance, and family characteristics. These variables have been examined separately and together in numerous research studies (c.f., Bailey & Stegeline, 2003; Hickman & Garvey, 2006; Smink & Schargel, 2004). In addition, other studies have responded to this problem by assessing categories of these at-risk fac-

tors that are designed to prevent academic failure and improve other school outcome problems such as absenteeism, deviant behavior, and social anxiety (Hickman, Bartholomew, Mathwig, & Heinrick, 2008; Suh, Suh, & Houston, 2007). These factors have been shown to be statistically significant in predicting school dropout behavior; however, addressing these factors has not led to lower dropout rates. Even though these studies have successfully established at-risk factors, high school dropout continues to be an issue of national concern (America's Promise Alliance, 2009). In order to develop more accurate theoretical models concerning the high school dropout problem, additional factors should be included.

Review of Related Literature

Janosz, Blanc, Boulerice, and Tremblay (2000) have defined at-risk students as those who exhibit academic, behavioral, or attitudinal problems that lead to school dropout. In addition, Suh, Suh, and Houston (2007) referred to the term at risk as "aspects of a student's background and environment that may lead to a higher risk of her or his educational failure" (p. 196) and also stated, "For educators and counselors concerned with the well-being of society, school, and family, and, particularly, the individual student, identifying the predictors of high school failure is a critical task" (p. 196). As such, researchers have attempted to identify these predictive factors that contribute to a student's decision to drop out of school early.

These factors have focused on father's education, mother's education, mother's work status, and school suspensions (Boon & Cook, 2008); English Language Learners and free and reduced lunch (Zvoch, 2006); suspensions, truancy, and extracurricular activity participation (Randolph, Fraser, & Orthner, 2006).

Rowley, Roesch, Bradford, and Vaughn (2005) stated that adolescence is a difficult time marked by many psychological, behavioral, emotional, and cognitive changes. To understand how changes in these areas affect the student's at-risk status, the issue of high school dropout may be viewed from a holistic wellness approach. This approach is based on the unity of the person and the importance of including aspects that affect the whole individual. Holistic wellness is best understood as a multidimensional method in which mind, body, and spirit are integrated in a purposeful manner with a goal of living life more fully (Myers, Sweeney, & Witmer, 2000). In reviewing the research literature, a limited number of studies incorporating adolescent wellness as a study variable were found. These studies included topics such as help-seeking adolescents and wellness levels (Watson & Lemon, 2011); ethnic identity, acculturation, and mattering on wellness (Rayle & Myers, 2004); and nontraditional predictors of dropout such as physical, social, and emotional health (Miller, Gilman, & Martens, 2008; Weatherbee, 2006).

Gall (2008) indicated that social, economic, and academic pressures upon adolescents are creating a climate of fear, anxiety, and depression. She stated, "Many stressed-out adolescents don't understand the purpose of the race they're running or the value of the finish line that they are working so hard to reach" (p. 55). Students perceive their lives to be stressful and are lacking fewer coping skills than prior generations. Gall further stated, "American teenagers will tell you that they are on a first-name basis with stress, and scientific studies bear this out" (p. 25). She further added that students drop out of school because of a lack of motivation, inadequate personal coping skills, and lack of aspiration. Perceived stress has been described as the association between the person and the environment that is judged by the person as taxing or exceeding his or her resources and causing danger to his or her well-being (Folkman & Lazarus, 1985). No research studies to date have associated perceived stress with high school dropout; however, a few authors have included this topic in research with an adolescent population. Wadsworth et al. (2008) studied poverty-related stress on adolescent functioning and found that immediate stressful life events and perceived stress by children of poverty-related issues are damaging to the physical and psychological well-being of adolescents and may contribute to school dropout. In addition, Magaya, Asner-Self, and Schreiber (2005) studied stress and coping, and the authors concluded that adolescents are under considerable stress related to school success, finances, interpersonal relationships, and issues of adolescent development.

Elliott, Kao, and Grant (2004) noted that mattering is important for developing self-identity, self-concept, sense of belonging, and understanding one's purpose in life. In studying the aspect of mattering in adolescents, few studies have been conducted using a mattering variable with an adolescent population; however, limited research has recognized that mattering to others is particularly important during this developmental time (Dixon Rayle & Myers, 2004; Marshall, 2001; Rosenberg & McCullough, 1981). In addition, the research indicates that if adolescents perceive that they are important and matter to

others, they may report lower anxiety and depression levels (Dixon, Scheidegger, McWhirter, 2009), greater wellness (Dixon Rayle, 2005), increased academic motivation (Dixon & Tucker, 2008), healthier ethnic identities (Rayle & Myers, 2004), and a greater sense of engagement in the school environment (Dixon & Tucker, 2008). In addition, Dixon and Tucker (2008) added, "Mattering is a foundational relationship concept that can bring individuals within a school together and can be integrated into a school counseling program's philosophy and mission" (p. 124).

No published research to date has attempted to determine the explanatory and predictive importance of wellness, mattering, and perceived stress in an attempt to produce a profile of at-risk status. Specific research including these variables may increase educators' understanding of the characteristics most important in determining dropout decisions. This addition to the existing literature could aid in forming a foundation for future school and mental health counseling efforts when encouraging adolescents to successfully graduate from high school and to achieve a greater state of well-being and self-actualization. The aim of this study was to determine whether students who may be at risk for dropout can be predicted by observing measures of wellness, perceived stress, and mattering.

In order to more accurately explain and predict at-risk status of dropping out of high school, the following research questions were examined:

1. What are the levels of the five second-order factors of wellness, perceived stress, mattering, and at-risk status for dropping out of high school?
2. What is the relationship among the five second-order factors of wellness, perceived stress, mattering, and at-risk status for dropping out of high school?
3. To what extent can the variance in at-risk status for dropping out of high school be accounted for by the five second-order factors of wellness, perceived stress, and mattering?

Method

This study analyzed the variables of the five second-order factors of wellness (creative self, coping self, social self, essential self, and physical self); perceived stress; and mattering as they relate to the at-risk status of students for dropping out of high school. Therefore, the goal of this research is to empirically explain the predictive value of each of these constructs for determining high school dropout at-risk status.

Participants

Participants consisted of high school students attending a mid-sized high school in the southeastern part of the United States in a community of approximately 6,000. The total enrollment of the school was 640 students with 52 % males and 48 % females. The racial distribution consisted of 18 % African-American, 2 % Hispanic, 1 % Asian-American, and 79 % White students. A total of 207 students returned consent forms with 177 voluntarily choosing to participate. Of the 177 comprising the final sample, 77 were males (43.5 %) and 100 were females (56.5 %). The participants' ages ranged from 14 to 18 with a mean of 16.21 (SD = 1.36). Freshmen made up the

largest number of participants with 66 (37.3%). In addition, there were 17 sophomores (9.6%), 44 juniors (24.9%), and 50 seniors (28.2%). Racial distribution mirrored that of the student body as a whole. There were 141 (79.7%) White participants, 33 (18.6%) African-American participants, 1 (.6%) Hispanic participant, and 2 (1.1%) Native American participants.

Instrumentation

This study used multiple assessment instruments and a demographic questionnaire. These instruments included the Five Factor Wellness Inventory–Teenage Version (5F-Wel-T; Myers & Sweeney, 2005), the Student At-Risk Identification Scale–Student Questionnaire (SARIS-SQ; McKee, Melvin, Ditoro, & McKee, 1998), the General Mattering Scale (GMS; Marcus, 1991), the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983), and a demographic questionnaire specifically developed for this study. All instruments are self-report survey questionnaires appropriate for the population in question.

Five Factor Wellness Inventory–Teenage Version. This instrument assesses a student's current state of wellness. It was developed through structural equation modeling and designed to assess the factors comprising the evidenced-based Indivisible Self Model of Wellness. These factors include a single higher-order factor (Total Wellness); five second-order factors (creative self, coping self, social self, essential self, and physical self); and 17 third-order factors. The teenage version of the 5F-Wel consists of two demographic items and 97 items rated on a four-point Likert-type scale ranging from 1 (strongly disagree) to 4 (strongly agree). The raw scale scores are converted to a common metric using a linear transformation process. These transformed scales range between 25 and 100, with higher scores indicating higher levels of wellness. While the teenage version of the 5F-Wel is based on the original adult version and produces the same scale scores, its underlying factor structure has not been empirically tested. However, previous studies utilizing the teen version support the validity and reliability of the instrument for use with an adolescent population (Watson & Lemon, 2011; Dixon Rayle & Myers, 2004). In the 5F-Wel test manual, Myers and Sweeney (2005) report an alpha coefficient of .91 for the single higher-order factor of Total Wellness and alpha coefficients ranging from .60 to .82 for the five second-order factors using the teen version. In this study, the five second-order factors were used as predictor variables, and the full study alpha coefficients for these variables ranged from .74 to .89.

Student At-Risk Identification Scale–Student Questionnaire. The SARIS-SQ is a 16-item scale designed to identify the student who is at risk of dropping out of high school. This scale lists behaviors and conditions that are commonly associated with the potential dropout. The items included on the instrument were selected based on published research on variables associated with dropping out of school. The scale includes both attitude and intention items, and these items were weighted based on a pilot study with 423 ninth- through eleventh-grade students at a predominantly middle-class suburban high school in a southeastern state. Scores on each item were correlated with the total SQ score. The normative sample of 423 was used to calculate a Cronbach's alpha of .70. A subsample of this group ($N = 34$ ninth graders) was retested after 3 to 4 weeks. Test-retest reliability was

higher, with $r = .86$. Although the Cronbach's alpha coefficient was modest, McKee et al. (1998) note that a heterogeneous scale of this type tends to underestimate the reliability of this type of measure. The Cronbach's alpha coefficient calculated for this study was .75.

General Mattering Scale. This instrument was used to measure adolescents' feelings about how much they matter to other people and about the degree to which they perceive themselves to be important to others. This scale is based on Rosenberg and McCullough's (1981) model of five components of mattering: (a) attention, (b) importance, (c) ego extension, (d) dependence, and (e) appreciation. The GMS consists of five items and asks participants to respond to each using a four-point Likert-type scale with values ranging from 1 (not at all) to 4 (very much). Scores on the GMS can range between 5 and 20, with higher scores indicating a greater sense of mattering. In a previous study involving a sample of 462 adolescents, Rayle and Myers (2004) reported a Cronbach's alpha coefficient of .74 for the GMS. For this study, a Cronbach's alpha coefficient of .86 was calculated for the GMS.

Perceived Stress Scale. This instrument was used to measure adolescents' perceptions of the degree to which situations in their life are appraised as stressful. The 10-item measure was designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives (Cohen, Kamarck, & Mermelstein, 1983). The PSS consists of 10 items and asks participants to answer by using a five-point Likert scale, which ranges as follows: 0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often, 4 = very often. PSS scores are obtained by reversing the scores on the four positive items (e.g., 0 = 4, 1 = 3, 2 = 2, etc.) and then summing across all 10 items. Items 4, 5, 7, and 8 are the positively stated items (e.g., "In the last month, how often have you been able to control irritations in your life?"). The scaled scores range from 0 to 40. Three samples were used for original validation measures of the scale. Two of the samples consisted of college students, and one sample consisted of a heterogeneous group enrolled in a smoking-cessation program. The coefficient alpha reliability for the PSS was .84, .85, and .86 in each of the three samples. For this study sample, the alpha coefficient was .87.

Procedure

Upon receiving IRB approval, the opportunity to participate in this study was presented to the students and informed consent agreements were distributed to the research participants' parents or legal guardians. For those students who already were 18 years of age, they were directly given the adult student informed consent document. Once parental or student consent was obtained, the researcher compiled a list of participation-eligible students. Only the students on the list were allowed to participate in the data gathering process.

To gather data, the students were pulled from their advisor groups during regular school time. The researcher called for the eligible students by grade level to the school cafeteria. Prior to the distribution of any instrument packets, a disclosure statement contained in a Minor Assent Form was read to all potential participants informing them of what would be expected of them in this study; their rights as participants; and how data would be collected, analyzed, and stored. Those students who chose to continue with the process were given a packet while those that made the decision to withdraw from the study were given the option of either remaining quietly at their seat

or returning to their advisor group at school.

Data Analysis

Several preliminary analyses were conducted using version 15.0 of the Statistical Package for the Social Sciences (SPSS, 2006) on the data set prior to initiating a multiple regression analysis. First, demographic information was analyzed in order to describe the participants and the overall sample. The statistics reported included frequencies, means, and standard deviations on all demographic data. Second, Cronbach alpha reliability coefficients were calculated for all study variables included in this sample. Finally, Pearson Product-Moment correlations between overall scores on the four primary instruments and subscales were computed for all participants.

Results

Prior to data analysis, missing data were assessed for each entry on all study instruments before creating variables. Two values were missing on the wellness instrument and were replaced using the mean substitution method for all valid responses for those particular questions. Assumptions were tested by examining normal probability plots of residuals, scatter diagrams of residual versus predicted residuals, and the Shapiro–Wilk’s statistical test for normality. The plots, diagrams, and test indicate some nonnormal distributions; however, the distributions were not extreme, and the W significance values were all greater than .05 (Leech, Barrett, & Morgan, 2005). Thus, assumptions concerning multivariate normality, linearity, and homoscedasticity were assumed. Tolerance statistics and the variance inflation factor for each predictor were examined for multicollinearity. In this study, there were no tolerance values below 0.1 and no VIF values above 10; therefore, this assumption was not violated. Outliers were identified by calculating the Mahalanobis distance in a preliminary regression procedure. Two cases exceeded the chi-square value, $\chi^2(7, n = 177) = 24.32, p = .001$. These two cases were deleted from further analyses. Once preliminary analyses were completed, each research question was statistically analyzed. To evaluate the first research question (What are the levels of wellness, perceived stress, mattering, and at-risk status for dropping out of high school?), descriptive statistics were computed including means and standard deviation for all scales. Table 1 reports the mean (*M*), standard deviation (*SD*), minimum range, and the maximum range for each of the predictor and dependent variables. The scaled scores for the variable *perceived stress* had a possibility of ranging from 0 to 40 with scores in this study ranging from 2 to 36. Higher scores on this instrument indicated a greater perception of stress and inability to cope. The mean for this study was 19.14 (*SD* = 7.519). The scores for the variable *mattering* have a possibility of ranging from 5 to 20, and scores in this study were in that same possibility range. However, with this scale, higher numbers indicate a greater sense of mattering. The mean is 16.04 (*SD* = 3.06). The other independent variables are the second-order factors of the Indivisible Self Model of Wellness (coping self, creative self, physical self, essential self, and social self; Sweeney & Myers, 2009). These indices of Wellness were measured across the five domains, with higher scores indicating a greater level of wellness. Scores on the wellness variables may range from 25 to

100, and minimum and maximum ranges for this study are indicated in Table 1. The variable *coping self* (*M* = 72.70, *SD* = 7.58) is composed of elements of realistic beliefs, stress management, and self-worth. *Creative self* (*M* = 78.47, *SD* 10.07) is composed of thinking, emotions, control, positive humor, and work. Exercise and nutrition compile the variable of *physical self* (*M* = 77.76, *SD* = 14.63); and *essential self* (*M* = 81.74, *SD* = 10.29) includes spirituality, self-care, gender identity, and cultural identity. Finally, *social self* (*M* = 80.86, *SD* = 9.21) comprises friendship and love.

The dependent variable *SARIS-SQ* is an indication of a participant’s

Table 1

Descriptive Statistics for Independent and Predictor Variables

Independent Variable	Range Minimum	Range Maximum	<i>M</i>	<i>SD</i>
Perceived Stress	2	36	19.14	7.51
Mattering	5	20	16.04	3.05
Coping Self	43.42	89.47	72.70	7.58
Creative Self	47.73	100.00	78.47	10.06
Physical Self	30.56	100.00	77.76	14.63
Essential Self	40.28	100.00	81.74	10.29
Social Self	45.45	93.18	80.86	9.21
SARIS-SQ	0	18	5.15	3.83

Note. *N* = 177, *M* = mean, and *SD* = standard deviation.

score for being at risk for dropping out of high school, and scores may range from 0 to 27. The mean for this variable is 5.15 (*SD* = 3.837), and the scores ranged from 0 to 18 with 133 (75%) participants scoring between 0 and 6, the range indicative of students who pose no risk for dropout. Thirty-seven participants (21%) scored in the risk range of 7 to 12, and 7 (4%) scored in the 13 to 18 high-risk range.

To evaluate the second research question (What is the relationship among wellness, perceived stress, mattering, and at-risk status for dropping out of high school?), Pearson product-moment correlations were calculated and a correlation matrix constructed to determine the relationship among the variables of wellness, perceived, stress, mattering, and at-risk status for dropping out of high school. As indicated by Table 2, all factors were significantly correlated with the second-order wellness factors being the most highly correlated (coping self and creative self, $r = .758, p < .01$; social self and creative self, $r = .687, p < .01$; social self and coping self, $r = .697, p < .01$; essential self and creative self, $r = .709, p < .01$; essential self and coping self, $r = .651, p < .01$; and physical self and coping self, $r = .612, p < .01$). These relationships would be expected because all are aspects of wellness. However, redundancy would not be a problem unless the *r* values exceeded .80 (Mertler & Vannatta, 2005).

To evaluate the third research question (To what extent can the

Table 2

Correlations Among Predictor and Dependent Variables

Variable	S-SQ	Mattering	PStress	CrSelf	CpSelf	SSelf	ESelf	PSelf
S-SQ	1.00							
Mattering	-.23*	1.00						
PStress	.25*	-.28*	1.00					
CrSelf	.54*	-.49*	.38*	1.00				
CpSelf	.42*	-.55*	.34*	.76*	1.00			
SSelf	.41*	-.54*	.24*	.69*	.70*	1.00		
ESelf	.51*	-.43*	.21*	.71*	.65*	.54*	1.00	
PSelf	.32*	-.34*	.39*	.55*	.61*	.45*	.47*	1.00

Note. S-SQ = Student At-Risk Identification Scale - Student Questionnaire, PStress = Perceived Stress, CrSelf = Creative Self, CpSelf = Coping Self, SSelf = Social Self, ESelf = Essential Self, and PSelf = Physical Self.

* $p < .05$

variance in at-risk status for dropping out of high school be accounted for by wellness, perceived stress, and mattering?), a standard multiple regression analysis was conducted to examine the influence of several PVs on the DV of at-risk status. The standard method was used because the study is exploratory, and there is no substantive knowledge as to which variable may be more influential. All predictor variables were entered into the analysis simultaneously. The predictor variables included the following: (a) five second-order wellness factors (creative, self, coping self, social self, essential self, and physical self); (b) perceived stress; and (c) mattering. The effect of each of the predictor variables on the at-risk status for dropping out of high school score was assessed as if it had been entered into the equation after all other predictor variables had been entered (Mertler & Vannatta, 2005). The results revealed that the complete model including all seven predictor variables significantly predicted at-risk status for dropping out of high school, $F(7, 167) = 12.89, p < .05$. R^2 for the model was .35, and adjusted R^2 was .32. This model accounts for 35.1 % of the variance in at-risk status for dropout. Table 3 displays the unstandardized regression coefficients (β), intercept, and standardized regression coefficients (β) for each variable. In terms of individual relationships between the independent variables and at risk for dropout status, *creative self* ($t = 2.74, p < .05$) and *essential self* ($t = 3.53, p < .05$) each significantly predicted at-risk status for high school dropout. In addition, the analysis indicated that the variables of *mattering*, *perceived stress*, *coping self*, *social self*, and *physical self* did not predict a significant portion of the variance in at-risk status for high school dropout.

Table 3

Summary of Regression Analysis Variables

Variable	β	SE β	β	t
Mattering	.125	.099	.099	1.26
Perceived Stress	.049	.036	.096	1.37
Creative Stress	.122	.044	.314	2.74*
Coping Stress	-.035	.055	-.072	-.63
Social Self	.038	.036	.100	1.05
Essential Self	.126	.036	.326	3.53*
Physical Self	-.003	.022	-.012	-.15

Note. $N = 175$.

* $p < .05$.

Conclusions and Implications for Counselors and Educators

This study implies important implications for school counselors and educators. As evidenced by the significance of two wellness factors (creative self and essential self), the student that is at risk for high school dropout has a need to incorporate high school completion into his or her personal value system and to bridge individual meaning-making processes in relation to life, goals, self, and others with high school graduation. School counselors should include interventions that promote skills, which develop purpose in life, compassion for others, moral values, and a sense of oneness with the universe. This would include individual and group counseling with an emphasis on

freeing students with “should” and “oughts” in their belief systems and creating plans with new outlooks on how to make the most of the student’s academic attributes, personal beliefs, and individual strengths. Sweeney (2009) stated that there is a close association between wellness and Adlerian concepts. Therefore, Individual Psychology would be an excellent theory to employ with adolescent clients. Also, it is interesting to note that the significance of these components of wellness indicates that counselors and educators cannot make others do anything that they do not consider personally useful. Thus, the attributes that protect students from making poor academic decisions can only be understood from the aspect of the student’s private logic (Sweeney, 2009).

In addition, this study indicates that it is time to restore soulful learning to education that engages the student in all realms. A mechanistic focus of instruction does not promote creativity nor does it promote an enduring love of the learning process. Miller (1996) stated, “Restoring the soul to education is not a new vision. It is a vision articulated by the Greeks and various indigenous people for centuries and is found in Taoism and in the teachings of Christ and the Buddha” (p. 15). Sax and Newton (1997) stated that educational objectives may be cognitive, affective, or psychomotor. The significance of this model points to the fact that affective objectives, which encompass feelings, emotions, and values, should be included in the curriculum. According to Krathwohl, Bloom, and Masia (1964), the highest level of the affective domain is concerned with character and a philosophy of life. High school dropout has long been considered a problem of student dysfunction and should now be approached from a perspective that addresses life and academic behaviors affecting the student intellectually, spiritually, and emotionally.

Limitations in the study exist that relate to sampling and instrumentation and are addressed in order to promote a better analysis of future studies in this area of research. The use of a convenience sample may possibly limit the generalizability of the results as participants were recruited from a single high school in a southern rural setting, and student demographics may change from school to school even in the same school district. Furthermore, adolescents from other venues (private schools and inner-city schools) could present with different profiles. Also, the simple process of gathering consent forms in this study may have limited the sample to a more “well” group of participants. Future researchers would benefit from using a combined sample from various schools with a greater emphasis on parental consent with the less involved students. In addition, the instruments used in this study were all self-report measures that depended on accurate information from an adolescent population. There is a tendency for participants, especially adolescents, to self-report socially desirable answers. However, the researchers were very careful to emphasize to the participants that there were no right or wrong answers and every reasonable measure was taken to protect the confidentiality of all study participants, thereby empowering the participants to be truthful.

Additional research is needed to substantiate and broaden the current findings relative to the relationship among wellness, mattering, perceived stress, and at-risk status for dropping out of high school. For example, exploring further issues of mattering, wellness, and social media may provide new insights into the current worldview of adolescents. Technology has muddled the waters of social psychology

and created a vast chasm in understanding the all-important social element in the lifestyle of high school students. Likewise, further research concerning perceived stress among high school students may provide a better understanding of the lack of coping skills evidenced in this population. More importantly, this study indicated that components of wellness are critical considerations in the high school dropout issue, and these findings provide a foundation for future studies. Continued examination of the third-order factors underlying the variables of wellness used in this study would build upon this foundation and would prove useful in determining which of these underlying factors are most influential in predicting the potential for high school dropout. In addition, further studies addressing wellness in relationship to high school dropout by grade level, gender, birth order, and ethnicity would be beneficial to this area of research.

References

- America’s Promise Alliance. (2009). *Cities in crisis: Closing the graduation gap*. Retrieved from <http://www.americapromise.org>
- Alliance for Excellent Education. (2007). *Hidden benefits: The impact of high school graduation on household wealth*. Retrieved from <http://www.all4ed.org/files/archive/publications/hiddenbenefits/pdf>
- Amos, J. (2008). *Dropouts, diplomas, and dollars: U. S. high schools and the nation’s economy*. Washington, DC: Alliance for Excellent Education.
- Bailey, B., & Stegelin, D. A. (2003). Creating a sense of place: Anchoring at-risk students within K–12 classrooms. *Journal of At-Risk Issues*, 9(2), 17–26.
- Boon, J. J., & Cook, J. (2008). Risk or resilience? What makes a difference? *The Australian Educational Researcher*, 35(1), 81–102.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385–396. doi:10.2307/2136404
- Dixon Rayle, A. (2005). Adolescent gender differences in mattering and wellness. *Journal of Adolescence*, 28, 753–763.
- Dixon Rayle, A., & Myers, J. E. (2004). Counseling adolescents toward wellness: The roles of ethnic identity, acculturation, and mattering. *Professional School Counseling*, 8, 81–90.
- Dixon, A. L., Scheidegger, C., & McWhirter, J. J. (2009). The adolescent mattering experience: Gender variations in perceived mattering, anxiety, and depression. *Journal of Counseling & Development*, 87, 302–318.
- Dixon, A. L., & Tucker, C. (2008). Every student matters: Enhancing strengths-based school counseling through the application of mattering. *Professional School Counseling*, 12(2), 123–126.
- Elliot, G. C., Kao, S., & Grant, A. (2004). Mattering empirical validation of a social-psychological concept. *Self and Identity*, 3, 339–354. doi:10.1080/1357650044000119
- Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of college examination. *Journal of Personality and Social Psychology*, 48, 150–170. doi:10.1037/0022-3514.48.1.150
- Gall, M. (2008). The 4S’s of adolescent success. *Independent School*, 67(4), 54–65.

- Hickman, G. P., & Garvey, I. (2006). Analyses of academic achievement and school behavior problems as indices of program effectiveness among at-risk adolescents enrolled in a youth-based mentoring program. *Journal of At-Risk Issues*, 12(1), 1–15.
- Hickman, G. P., Bartholomew, M., Mathwig, J., & Heinrick, R. S. (2008). Differential developmental pathways of high school dropouts and graduates. *Journal of Educational Research*, 102(1), 3–14. doi:10.3200/JOER.102.1.3-14
- Janosz, M., Blanc, M. L., Boulerice, B., & Tremblay, R. E. (2000). Predicting different types of school dropouts: A typological approach with two longitudinal samples. *Journal of Educational Psychology*, 92, 171–190. doi:10.1016/005-7967(94)90160-0
- Krathwohl, D. R., Bloom, B. S., & Masia, B. B. (1964). *Taxonomy of educational objectives: The classification of educational goals: Handbook II: Affective domain*. New York: McKay. SEE REF PG 15
- Leech, N. L., Barrett, K. L., & Morgan, G. A. (2005). *SPSS for intermediate statistics*. New Jersey: Lawrence Erlbaum Associates, Publishers.
- Magaya, L., Asner-Self, K. K., & Schreiber, J. B. (2005). Stress and coping strategies among Zimbabwean adolescents. *British Journal of Educational Psychology*, 75, 661–671. doi:10.1348/000709905X25508
- Marcus, F. M. (1991). *Mattering: Its measurement and theoretical significance*. Unpublished manuscript.
- Marshall, S. K. (2001). Do I matter? Construct validation of adolescents' perceived mattering to parents and friends. *Journal of Adolescence*, 24, 473–490. doi:10.1006/jado.2001.0384
- McKee, J., Melvin, K. B., Ditoro, V., & McKee, S. P. (1998). SARIS: Student at-risk identification scale. *The Journal of At-Risk Issues*, 4(2), 24–32.
- Mertler, C. A., & Vannatta, R. A. (2005). *Advanced and multivariate statistical methods*. Glendale, CA: Pyrczak Publishing.
- Miller, D. N., Gilman, R., & Martens, M. P. (2008). Wellness promotion in the schools: Enhancing students' mental and physical health. *Psychology in the Schools*, 45(1). doi:10.1002/pits.20274
- Miller, J. P. (1996). *Education and the soul*. Paper presented at American Manufacturing Excellence, Toronto, Canada, November 1996.
- Myers, J. E., & Sweeney, T. J. (2005). *5F-Wel manual*. Greensboro, NC: Mind Garden, Inc.
- Myers, J. E., Sweeney, T. J., & Witmer, J. M. (2000). The wheel of wellness, counseling for wellness: A holistic approach to treatment planning. *Journal of Counseling and Development*, 78, 251–266.
- Rayle, A. D., & Myers, J. E. (2004). Counseling adolescents toward wellness: The roles of ethnic identity, acculturating, and mattering. *Professional School Counseling*, 8, 81–90.
- Randolph, K. A., Fraser, M. W., & Orthner, D. K. (2006). A strategy for assessing the impact of time-varying family risk factors on high school dropout. *Journal of Family Issues*, 27(7), 933–950. doi:10.1177/0192513X06287168
- Rosenberg, M., & McCullough, B. C. (1981). Mattering: Inferred significance and mental health. *Research in Community and Mental Health*, 2, 163–182.
- Rowley, A. A., Roesch, S. C., Bradford, J. J., & Vaughn, A. A. (2005). Developing and validating a stress appraisal measure of minority adolescents. *Journal of Adolescence*, 28, 547–557. doi:10.1016/j.adolescence.2004.10.010
- Sax, G., & Newton, J. W. (1997). *Principles of educational and psychological measurement and evaluation*. Belmont, CA: Cengage Learning.
- Smink, J., & Schargel, F. P. (2004). *Helping students graduate: A strategic approach to dropout prevention*. Larchmont, NY: Eye on Education.
- SPSS Inc. (2006). Statistical Package for the Social Sciences (Version 15.0) [software]. SPSS Inc., Chicago, IL.
- Suh, S., Suh, J., & Houston, I. (2007). Predictors of categorical at-risk high school dropouts. *Journal of Counseling and Development*, 85, 196–203.
- Sweeney, T. J. (2009). *Adlerian counseling and psychotherapy: A practitioner's approach* (5th ed.). New York: Routledge.
- Wadsworth, M. E., Raviv, T., Reinhard, C., Wolff, B., Santiago, C. E., & Einhorn, L. (2008). An indirect effects model of the association between poverty and child functioning: The role of children's poverty-related stress. *Journal of Loss and Trauma*, 13, 156–185.
- Watson, J. C., & Lemon, J. C. (2011). A profile of adolescent wellness: Implications for working with a help-seeking population. *Journal of Humanistic Counseling, Education, and Development*, 50(1), 70–83.
- Weatherbee, S. (2006). *Preventing high school dropout: Implications of a screening inventory for school reform policy and practice* (Unpublished doctoral dissertation). York University, Toronto.
- Zvoch, K. (2006). Freshman year dropouts: Interactions between student and school characteristics and student dropout status. *Journal of Education for Students Placed at Risk*, 11(1), 97–11.

Authors

Jan C. Lemon, Ph.D., is the senior counselor at Florence High School in Florence, MS, and the past president of Mississippi School Counselor's Association. Her research interests include adolescent wellness and spirituality.

Joshua C. Watson, Ph.D., is an associate professor of counseling and educational psychology at Mississippi State University. He is also interested in research concerning wellness issues, and he is the current president of the Association for Assessment in Counseling and Education.

An Evaluation of Past Special Education Programs and Services Provided to Incarcerated Young Offenders

Lawrence Ingalls, Helen Hammond, and Robert P. Trussell

Abstract: *This study investigated the past special education programs and services provided to children and youth who later became incarcerated. Participants in this study were inmates from a medium security state correctional facility in the southwest region of the United States. All inmates involved in this study were identified as having a disability and qualified for special education services. Their ages ranged from 18 to 24 years of age. Through file reviews and inmate interviews, data were collected to determine their background special education experiences. Results indicated that the level and intensity of special education services were clearly inadequate to meet the needs of these individuals during their years in public education. Recommendations regarding data results are provided.*

Introduction

Antisocial behavior in youth can be understood as persistent violations of socially normative behavior over time (Kazdin, 1987; Lane, 1999; Walker, Colvin, & Ramsey, 1995). These socially normative violations are usually behaviors that conflict with the general social expectations within a culture, such as acts of aggression, chronic rule infractions, regular defiance of authority, and vandalism (Simcha-Fagan, Gersten, & Langner, 1986). As these behaviors persist throughout childhood and early adolescence, they become progressively more stable and resistant to intervention (Kazdin, 1987; O'Shaughnessy, Lane, Gresham, & Beebe-Frankenberger, 2002). Potentially, these behaviors can eventually conflict with societal law.

Antisocial Behavior in Childhood and Youth

Antisocial behavior of childhood and youth follows two known paths of development starting in early childhood or emerging in early adolescence (Patterson, 1986; Patterson, Reid, & Dishion, 1992). Early starters are those children who show signs of antisocial behavior at an early age and have their first arrest before or at age 14. Research indicates that approximately 50 % of early starters will progress to be the most seriously antisocial adolescents (Hill, Lochman, Coie, Greenberg, & Conduct Problems Prevention Research Group [CPPRG], 2004; Loeber, Wung, & Keenan, 1993). Early starters are more likely to be life-course-persistent offenders (Moffitt, 1993). Late starters exhibit problem behaviors but do not tend to violate social norms to the degree that would warrant an arrest until after

the age of 14 (Eddy, Reid, & Curry, 2002; Patterson & Yoerger, 2002).

Walker et al. (1995) clearly emphasized the value of early detection of young children with antisocial behaviors. Their research concluded that if aggressive and antisocial behaviors are not changed by the end of third grade, this behavioral condition should be treated as a chronic condition similar to medical problems like diabetes. Walker and his colleagues surmised that the antisocial behaviors would be lifelong problems and would only be managed with appropriate interventions and support. Thus, it is critical for educators to take these early episodes of antisocial behavior seriously.

According to the U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS, 2007), violent crimes committed by juveniles between the ages of 12 and 18 years reached an all-time high in 1994. In a 1994 report, youths accounted for 15 % of all violent crimes and 17 % of all arrests (Snyder, 2003). Although the occurrence of juvenile violent crimes has gradually decreased over the past decade, rates continue to be alarmingly high. According to national statistics provided by the Centers for Disease Control and Prevention (CDC), youth violence is the second leading cause of death among youth and the major cause for nonfatal injuries for youth (CDC, 2009).

To further highlight the seriousness of this issue of young offenders, it is important to look at additional statistics of very young offenders who have not only displayed antisocial behaviors at a young age but have committed violent crimes. Loeber, Farrington, and Petechuk (2003) stated between 1988 and 1997 arrests of young children for violent

crimes had increased 45 %. According to these authors, juvenile courts in 1997 saw more than 180,000 young offenders. In 1999, there were more than 218,000 arrests of children younger than 13 years of age (McGarrell, 2001). According to a report by Puzzanchera et al. (2000), 16 % of all individuals seen by the juvenile courts are children under 13 years of age.

The Office of Juvenile Justice and Delinquency Prevention (OJJDP, 2003) formed a study group to increase their understanding of children who engaged in antisocial behaviors at a very early age (early starters). OJJDP found this group of offenders has increased 33 % since the 1990s (Snyder, 2001). Additional findings revealed these children are at a greater risk of becoming chronic, violent juvenile offenders than juvenile offenders whose delinquency began in adolescence years (OJJDP, 2003; McGarrell, 2001; Loeber et al., 2003; Snyder, Espiritu, Huizinga, Loeber, & Petechuk, 2003). The Children, Youth, and Family Consortium (2004) stated that young children with severe behavioral and/or emotional problems are 50 % more likely to continue to experience mental health problems into adolescence and adult years. Along with being at significant risk for becoming involved in criminal behaviors and their consequences, additional negative outcomes for children exhibiting antisocial behavior include the lack of development of skills necessary to obtain basic control of their social environment through the use of prosocial behaviors (Quinn, Mathur, & Rutherford, 1995).

The OJJDP study group (2003) found evidence in their research that some of the very young offenders had engaged in significant antisocial behaviors at an early age. They continued to remark that these behaviors should have been indicators of future problem behaviors. Snyder and Sickmund (1999) pointed out that these young children are typically overlooked at being serious risks due to their age and also due to the fact they do not have a long record of offences. Snyder et al. (2003) affirmed the urgent need to address child delinquency issues as young offenders consume an enormous amount of school resources, juvenile justice services, mental health programs, and child welfare departmental services.

School Failure

Antisocial children and youth, whether early or late starters, characteristically have difficulties in school, experience school failure, and have educational disabilities. These students exhibit lower rates of academic engaged time and subaverage achievement overall (Coie & Jacobs, 1993; Hinshaw, 1992). Wolfgang (2008) stated many deviant behaviors of school-age children are related to the lack of success the child experiences in school. He stated that some behavior problems may be the student's reaction to frustration regarding academic and social experiences. The frustration may become visible to others through aggressive acts. Some children outgrow these stages of misbehavior and for others the frustration intensifies to school and social failures. Academic achievement predictably co-occurs with student antisocial behavior (Hawkins, Farrington, & Catalano, 1998; Herrenkohl & Guerra, 1998; Maguin & Loeber, 1996). Specifically, academic achievement is related to the frequency, onset, persistence, and seriousness of antisocial behavior (Maguin & Loeber, 1996). The relationship between school performance and antisocial behavior appears to be inverse. Research has demonstrated that the likelihood of students exhibiting antisocial behaviors increases as school performance decreases (Brier,

1995; Farrington, 1996; Howell & Hawkins, 1998; Huizinga, Loeber, Thornberry, & Cothorn, 2000; Maguin & Loeber, 1996; McEvoy & Welker, 2000). These characteristics are stable over time. Overall, children with antisocial behaviors tend to exhibit poor interpersonal skills, limited social and academic problem-solving skills, and low rates of academic engagement (Coie & Jacobs, 1993; Hinshaw, 1992; Kolko, 1994; Walker et al., 1995).

Children and youth who engage in patterns of antisocial behaviors have an increased likelihood of being identified as a student with a special education disability. Between 30 % to 50 % of youth offenders have been identified with an educational disability. Of these, 40 % had a learning disability and 46 % had emotional/behavioral disorders (Frieden, 2003; Zabel & Nigro, 2001). Furthermore, children with emotional/behavioral disabilities (E/BD) experience greater academic problems as compared to same-age peers without disabilities (Epstein, Kinder, & Bursuck, 1989). Typically, children with E/BD perform one year below their peers in academic areas. The lower academic performance is a concern to educators as self-concept and self-esteem may decrease concurrently. Low academic achievement and poor social skills may play a major role of impacting one another. The lack of academic proficiency may cause students to display inappropriate behaviors and deviant social skills may negatively affect academic skills. Meese (1996) stated students who experience repeated trouble in these areas may begin to expect failure and discontinue their attempts for success.

An additional concern for students with E/BD lies in the attitudes of their teachers. Teachers tend to focus more negatively on those behaviors exhibited by students whom are identified as E/BD than they do with similar behaviors exhibited by typical students (Nelson & Roberts, 2000; Montague & Rinaldi, 2001). Additionally, students with E/BD tend to absorb the teacher's attitudes and take note that the teachers are treating them differently than typical students. Eventually they begin to develop a negative attitude about themselves as a result of this type of teacher behavior (Montague & Rinaldi, 2001). Therefore, the student's behaviors tend to get worse as a result of their own self-concept that has been shaped by teacher behaviors.

Previous research has found behavioral problems as a major reason why students with disabilities are expelled or removed from schools (Wagner, Neuman, Cameto, Levine, & Marder, 2003). According to Kauffman (2005), students with E/BD are less likely to graduate from high school and to attend postsecondary institutions as compared to other students with mild disabilities. Walker et al. (1995) found that 20 % of delinquents have been arrested after three years from leaving school. More alarming, data from the U.S. Department of Health and Human Services (1999) reported even larger statistics. This report stated approximately 70 % of E/BD students would be arrested within three years of quitting school. Cullinan (2002) found that after three years of departing from school, a majority of students with E/BD were unemployed, had been arrested, and were not living independently.

Research has consistently demonstrated that the vast majority of incarcerated adults with a history of antisocial behaviors also had a history of poor school performance and a high dropout rate (Henggeler, Melton, & Smith, 1992; Hodgkinson, 1991). Although the rate of youth offenders with disabilities is disproportionately high, there continues to be weaknesses in the amount of research which

explores the relationships between youth offenders and education disabilities (Alltucker, Bullis, Close, & Yovanoff, 2006; Archwamety & Katsiyannis, 2000).

Early Intervention for Students With Antisocial Behavior

The Individuals with Disability Education Act (IDEA) states early intervention services are to be provided to infants and toddlers, birth through two years, and their families. The term "early intervention services" also refers to the services provided to children at an early age prior to starting school (Bauer & Shea, 1999) and continues on through eight years of age. The intent of these services is to enhance a child's development and/or serve as a preventative measure to overcome an existing condition or disability (Gonzalez-Mena, 2006; Guralnick, 1997; Heward, 2006; Kaiser & Rasminsky, 2003; Lerner, Lowenthal, & Egan, 2003; Raver, 2009; Wolery & Bailey, 2002; Zirpoli, 1995). Early intervention services may also help to reduce the need for special education services for the child at a later date. Early interventions for children with antisocial behavior are intended to reduce the tendency for these children to become young offenders.

Loeber and Farrington (1998) noted a variety of risk factors for child delinquency. Some entailed aggression, lack of empathy, and sensation seeking (child factors); poor parental practices (family factors); poor academic achievement and attitudes (school factors); and peer rejection or association (peer factors). All four of these factors would be observable in young children from birth through eight years of age (the early intervention years) and should be noted by early interventionists in the field.

Loeber et al. (2003) noted most behavioral interventions they reviewed focused on adolescent offenders rather than child delinquents. Programs for the adolescent group are more likely to be reactive to individuals' violent behaviors rather than being proactive and preventative to children in their early years. These authors commented that the early intervention approach is a key to decreasing child, adolescent, and adult criminal offenses.

The Children, Youth, and Family Consortium (2004) discussed the urgent need to address the behavioral problems of young children at an early age. They stated some children may need to have a pharmacological treatment in order to respond to the behavioral intervention program. They also emphasized the importance of the family's involvement in working with the early intervention professionals. This partnership with families would help to eliminate the family factors that Loeber and Farrington noted in their research.

Fox, Dunlap, Hemmeter, Joseph, and Strain (2003) provided an early intervention model for young children with antisocial behaviors. The model emphasized a three-tiered intervention approach utilizing positive behavioral supports. The authors found this model to be particularly effective for teaching social skills and in preventing the occurrence of serious challenging behaviors in the children's later years. Thus, some programs are being utilized for these children; however, not at a rate that is effectively solving the criminal rate of young offenders.

In summary, the literature suggests that children with antisocial behaviors are increasingly becoming more involved in the penal system and are involved in serious crimes at an earlier age. Addition-

ally, children who engage in antisocial behaviors at a very early age (early starters) are more likely to continue these antisocial behaviors into adulthood. If these behaviors are not eliminated by eight or nine years of age, the behaviors should be viewed as a chronic condition. Therefore, early interventionists and teachers must acknowledge the urgency of early behavior programs for young children who are engaging in antisocial behaviors.

The Purpose of the Study

The purpose of this study was to investigate the prior educational backgrounds and experiences of young adult inmates with educational disabilities. Specifically, this study examined their student characteristics, placement histories, and interventions and services provided within or by the public school system. Additionally, inmate's perceptions of their educational experiences were explored.

Method

Participants and Setting

Participants involved in this study were inmates in a medium security state correctional facility in the southwest region of the United States. Participants were male and ranged from 18 through 24 years of age. The mean age of the inmates was 20.8 years. All of the participants were identified as having an educational disability under IDEA and therefore qualified for educational services under federal law. A total of 30 inmates participated in the study. Participation included giving permission for a thorough file review of all available educational records followed by in-depth interviews with researchers. According to the file reviews, the ethnicity of the inmates included 57 % Hispanic, 10 % White, 3 % African American, 3 % American Indian, 6 % White and Hispanic, and 20 % unknown. Of these inmates, 37 % had a learning disability, 4 % emotional/behavioral disorders, 7 % had mental retardation, 27 % had learning disabilities and emotional/behavioral disorders, and 26 % had no clear diagnosis in their IEP or educational records.

Instruments

Two instruments were developed specifically for this study to address the research questions. The first instrument was a checklist used to review educational files. Information on the checklist included demographics, educational history, graduation/dropout information, academic achievement, behavior problems, and medical history. The instrument was developed by the researchers involved in the study in an effort to identify school-based practices and services provided to these inmates during their school years. Further, this instrument attempted to identify risk factors that may have contributed to or protective factors that could have prevented their social failures in their communities.

In order to verify the information contained in the education file, a second instrument was utilized. This second instrument was an interview designed to verify information contained in the files. Questions in the interview matched the checklist contents used to review the educational files. For example, during the file review, information regarding the number of years the inmate was previously receiving special education services in the public school system was obtained. During the interviews with the inmates, this type of information was

verified. These interviews were conducted in the pods, personnel offices, and educational classrooms within the correctional facility. The location of the interviews was determined based on individual inmate security status. Each inmate was individually interviewed by the three researchers during each interview session. Interviews generally lasted 45 minutes to an hour. Further, no correctional officers or personnel were present during the interview; however, for security purposes they were within visual proximity. All of the interviews occurred with only the researchers and inmates in the same room. Only data consistently reported between the checklist and the interview were reported in this study.

Procedures

The purpose of this study was to explore the educational background and experiences of incarcerated adults with an educational disability. This type of context specific inquiry is appropriately addressed through qualitative methodology. This study occurred over a period of five years by the same data collectors. The duration of this study was influenced by the accessibility to inmates primarily due to changes in security status across the correctional facility during various times of the study. For example, the correctional facility was in complete lockdown for one year during the course of the study. A total of 13 visits encompassing 80 hours were made by researchers in order to conduct file reviews and inmate interviews. Researcher bias was reduced by having each file reviewed by one researcher and then the information was verified by another. Each participating inmate's educational file was reviewed in order to code personal and educational experiences. The files were reviewed to identify specific characteristics, including age, ethnicity, primary language use, qualification for special education, attendance in alternative school, history of behavior problems, etc. Analysis of file reviews was conducted through summarizing information and completing frequency counts. Since files were from numerous school districts across the country, the information contained in these files varied greatly. In some cases the files were relatively complete; in others, essential information was omitted illustrating the inconsistencies of special education records.

In order to enhance and triangulate information gathered from the file reviews, interviews were conducted with inmates. These interviews were administered by three researchers who transcribed responses independently in order to assure inter-rater reliability and reduce researcher bias. Once transcribed, analysis occurred amongst the researchers by collectively reviewing each transcription and then identifying emerging themes and commonalities. Some of the themes were identified based on the questions in the interview protocol. Other themes emerged as the result of inmate responses, perceptions, and experiences. Participant responses were analyzed to further enhance emerging themes or were unique enough to create additional themes. In order to establish inter-rater reliability in this process, researchers analyzed and categorized themes independently, then met to identify common patterns and discuss areas of differences. Triangulation of data was achieved through substantiating information identified in the file reviews through individual interviews. Further, triangulation was established through finding common themes and patterns across individual inmate responses.

Results

The results of the file reviews and verification interviews were separated into categories focusing on history of problem behaviors, academic difficulties, special education support, grade completion and alternative school placement, and health and mental health. Results of the history of problem behaviors showed that 76.67 % (23) of inmates exhibited problem behaviors prior to the 4th grade while 13.33 % (4) began to exhibit problem behaviors during or after 4th grade. Of those inmates who exhibited problem behaviors prior to 4th grade, 66.67 % (20) began to show these behaviors before or during 1st and 2nd grade and 10 % (3) exhibited problem behaviors during 3rd grade (see Table 1).

Table 1

History of Problem Behaviors

History of Problem Behaviors	Percent/Frequency Based on a Population of 30
Problem behaviors evident in student records prior to 4th grade	76.67 (23)
Problem behaviors evident in student records beginning before or during 1st or 2nd grade	66.67 (20)
Problem behaviors evident in student records beginning during 3rd grade	10.00 (3)
Problem behaviors evident in student records beginning during the 4th, 5th, or 6th grade	13.33 (4)
No record of specific grade of emergence of problem behaviors	10.00 (3)

Results of the history of academic difficulties showed that 73.33 % (22) of inmates had academic difficulties prior to the 4th grade while 17.67 % (5) of inmates began to have academic difficulties during or after 5th grade. Records indicated that 60 % (18) had difficulties with reading, 10 % (3) had difficulties with writing, and 60 % (18) had difficulties with mathematics. Ten inmates (33.33 %) had records indicating at least one occurrence of grade retention (see Table 2).

As shown in Table 3, results of special education support explored the extent to which behavioral intervention programs or plans were found in student records and which types of behavioral services were provided. According to the results, 83.33 % (25) of inmate records showed no evidence of behavior intervention programs or plans. Of the 16.67 % (25) of inmate records that had evidence of behavior intervention programs and plans, 10.33 % (3) included a behavior chart, 3.33 % (1) included a plan for incorporating punishments, and 3.33 % (1) had a tutor assigned. The specific goals of inmate IEPs were 16.67 % (5) social and behavioral goals, 76.67 % (23) academic goals alone, and 6.67 % (2) unknown.

Table 2

History of Academic Difficulties

History of Academic Difficulties	Percent/Frequency Based on a Population of 30
Academic difficulties evident in student records prior to 4th grade	73.33 (22)
Academic difficulties evident in student records beginning in 5th grade or above	17.67 (5)
No record of specific grade of emergence of academic difficulties	10.00 (3)
Academic difficulties in reading	60.00 (18)
Academic difficulties in writing	10.00 (3)
Academic difficulties in mathematics	60.00 (18)
History of school retention	33.33 (10)

Table 3

History of Special Education Support

Behavioral Intervention Programs/ Plans and IEP	Percent/Frequency Based on a Population of 30
Behavior program/plan not evident in student records	83.33 (25)
Behavior program/plan evident in student records	16.67 (5)
Types of behavior programs/plans documented:	
Behavior chart	10.33 (3)
Punishment plan	3.33 (1)
Tutor	3.33 (1)
Focus of IEP goals:	
Social/behavioral	16.67 (5)
Academic	76.67 (23)
Unknown	6.67 (2)

The results indicated that the vast majority of inmates dropped out of school: 16.67 % (5) of inmates exited school at the 7th grade, 16.67 % (5) at the 8th grade, 33.33 % (10) at the 9th grade, 10 % (3) at the 10th grade, 6.67 % (2) at the 11th grade, 3.33 % (1) made it through 12th grade, and 13.33 % (4) was unknown (see Table 4). Results also indicated that 90 % (27) were placed in some type of alternative school during their education.

Table 4

Grade Completion and Alternative School

History of Grade Completion and Alternative School Placement	Percent/Frequency Based on a Population of 30
Grade exited school	
7th grade	16.67 (5)
8th grade	16.67 (5)
9th grade	33.33 (10)
10th grade	10.00 (3)
11th grade	6.67 (2)
12th grade	3.33 (1)
Unknown	13.33 (4)
Alternative school placement evident in the student record	90.00 (27)

Information was collected on the types of physical and mental health issues these inmates experienced during their school years. The records indicated that 53.33 % (16) of the records showed a history of attention deficit hyperactivity disorders; 90 % (27) alcohol and drug abuse; 10 % (3) auditory deficits; 30 % (9) a major mental illness (including bipolar disorder and depression); 20 % (6) chronic health problems (asthma, seizures, ear infections); and 60 % (18) traumatic brain injury (see Table 5).

Table 5

Health and Mental Health

History of Health and Mental Health	Percent/Frequency Based on a Population of 30
Attention deficit hyperactivity disorders	53.33 (16)
Alcohol and drug abuse	90.00 (27)
Auditory deficits	10.00 (3)
Chronic health problems (asthma, seizures, ear infections)	30.00 (9)
Major mental illness (bipolar, depression)	20.00 (6)
Traumatic brain injury	60.00 (18)

Discussion

The results of this study revealed that the inmates had a history of behavioral problems and a majority of them exhibited problem behaviors at an early onset. The results also revealed that the IEP interventions for these past inmates largely focused on academic interventions and not behavioral interventions. These findings are concerning as they suggest that the special education system may have inadvertently neglected to prepare inmates for an adult life by failing to provide comprehensive social and behavioral interventions.

Failure to focus on the student's problem behavior at an early age is a noted problem in schools today (Snyder et al., 2003; Snyder & Sickmund, 1999). Educator's failure to focus on problem behaviors is reflected in this study as little was done to aid the inmates with their problem behaviors when they were in school. This is reflective in the identification rates as only 4% of the inmates were identified as students with E/BD. However, suggested by the nature of the fact that they were now young men in an incarcerated setting, problem behaviors tended to dominate their life. The hesitancy to identify students as E/BD and then develop goals and interventions specific to their problem behaviors may have contributed to their later anti-social behavior.

It is unclear why the education system did not view behavior interventions as the primary need of the inmates involved in this study. An interpretation of the results suggests that as students, these inmates lacked the ability to self-monitor and self-regulate their own behaviors. The results of this study also suggested that if there was any attempt to address the problematic behaviors, it was largely addressed as planned punishment and adult external control of student behavior. Little, if any, emphasis was placed on teaching the students skills at managing their own behavior.

The literature suggested that poor academic performance results in poor social skill performance (Brier, 1995; Farrington, 1996; Howell & Hawkins 1998; Huizinga et al., 2000; Maguin & Loeber, 1996; McEvoy & Welker, 2000). It is possible that the heavy focus on academics may have been perceived to be an indirect method to improve social behaviors. That is, if the student improved in academics, their self-esteem would improve and eventually their social behaviors would begin to improve. If this was the reason for the heavy focus on academic improvement, although well intended, it did not work for the inmates involved in this study. It would seem that the inmates needed direct instruction on developing positive social and self-regulatory behaviors, evidence of which was plainly lacking in the data collected.

The inmates interviewed in this study recognized that they had difficulty with their behaviors as students in the school system. They also recognized that they were treated differently by their teachers when compared to their class peers. The awareness of behavior problems and differential treatment by their teachers is also reflected in the literature (Montague & Rinaldi, 2001; Nelson & Roberts, 2000). The differential treatment of the inmates may have resulted in the high dropout rate noted in this study. The inmates who perceived themselves as undesirable to their teachers indicated during the interviews that they wanted to escape from these negative attitudes.

The data collected from this study suggested that many of the inmates had physical and mental issues, such as traumatic brain

injury, attention deficit disorder, and in some cases mental illness. However, the file review did not reveal if there was an intervention plan in place to assist the inmate, as a student, with these issues. Since these physical and mental conditions may have influenced the social behavior of the inmate while in school, it is logical that there should have been an intervention to assist the student with the effects of these conditions.

Overall, the data revealed the ineffective education these inmates encountered while in the public education system. The overemphasis on academic instruction and the underemphasis on social skill development may have been a contributing factor to the inmates' current incarceration. If not a contributing factor, the data collected suggested that the education system did not identify the necessary educational curriculum to prevent these inmates from becoming life-course-persistent offenders.

References

- Alltucker, K. W., Bullis, M., Close, D., & Yovanoff, P. (2006). Different pathways to juvenile delinquency: Characteristics of early and late starters in a sample of previously incarcerated youth. *Journal of Child and Family Studies*, 15(4), 479-492.
- Archwamety, T., & Katsiyannis, A. (2000). Academic remediation, parole violations, and recidivism rates among delinquent youths. *Remedial and Special Education*, 21, 161-170.
- Bauer, A. M., & Shea, T. M. (1999). *Learners with emotional and behavioral disorders: An introduction*. Upper Saddle River, NJ: Merrill.
- Brier, N. (1995). Predicting anti-social behavior in youngsters displaying poor academic achievement: A review of risk factors. *Developmental and Behavioral Pediatrics*, 16, 271-276.
- Centers for Disease Control and Prevention (CDC). (2009). *Youth violence national and state statistics at a glance*. Retrieved from http://www.cdc.gov/violenceprevention/youthviolence/stats_at_a_glance
- Children, Youth, & Family Consortium. (2004). *Behavioral disorders in early childhood*. The Division of Early Childhood (DEC): Bright Tots. University of Minnesota.
- Coie, J., & Jacobs, M. (1993). The role of social context in the prevention of conduct disorder. *Development and Psychopathology*, 5, 263-275.
- Cullinan, D. (2002). *Students with emotional and behavioral disorders: An introduction for teachers and other helping professionals*. Upper Saddle River, NJ: Merrill.
- Eddy, J. M., Reid, J. B., & Curry, V. (2002). The etiology of youth antisocial behavior, delinquency, and violence and a public health approach to prevention. In M. R. Shinn, H. Walker, & G. Stoner (Eds.), *Interventions for academic and behavior problems II: Preventive and remedial approaches* (pp.27-51). Bethesda, MD: National Association of School Psychologists.
- Epstein, M. H., Kinder, D., & Bursuck, B. (1989). The academic status of adolescents with behavioral disorders. *Behavioral Disorders*, 14, 157-165.
- Farrington, D. P. (1996). The explanation and prevention of youthful offending. In J.D. Hawkins (Ed.), *Delinquency and crime: Current theories* (pp. 68-148). New York: Cambridge University Press.

- Fox, L., Dunlap, G., Hemmeter, M. L., Joseph, G. E., & Strain, P. S. (2003). The teaching pyramid: A model for supporting social competence and preventing challenging behavior in young children. *Young Children*, 58(4), 48-52.
- Frieden, L. (2003). *Addressing the needs of youth with disabilities in the juvenile justice system: The current status of evidence-based research*. Washington, DC: National Council on Disability.
- Gonzalez-Mena, J. (2006). *The young child in the family and the community* (4th ed.). Upper Saddle River, NJ: Merrill.
- Guralnick, M. (1997). *The effectiveness of early intervention*. Baltimore: Brookes.
- Hawkins, J. D., Farrington, D. P., & Catalano, R. F. (1998). Reducing violence through the schools. In D. S. Elliott, B. A. Hamburg, & K. R. Williams (Eds.), *Violence in American schools* (pp. 188-216). New York: Cambridge University Press.
- Henggeler, S. W., Melton, G. B., & Smith, L. A. (1992). Family preservation using multisystemic therapy: An effective alternative to incarcerating serious juvenile offenders. *Journal of Consulting and Clinical Psychology*, 60, 953-961.
- Herrenkohl, L. R., & Guerra, M. R. (1998). Participant structures, scientific discourse, and student engagement in fourth grade. *Cognition and Instruction*, 16(4), 431-73.
- Heward, W. (2006). *Exceptional children: An introduction to special education*. Upper Saddle River, NJ: Merrill.
- Hill, L. G., Lochman, J. E., Coie, J. D., Greenberg, M. T., & Conduct Problems Prevention Research Group. (2004). Effectiveness of early screening for externalizing problems; Issues of screening accuracy and utility. *Journal of Consulting and Clinical Psychology*, 72(5), 809-820.
- Hinshaw, S. P. (1992). Academic underachievement, attention deficits, and aggression: Comorbidity and implications for intervention. *Journal of Consulting and Clinical Psychology*, 60, 893-903.
- Hodgkinson, H. (1991). Reform versus reality. *Phi Delta Kappan*, 73, 8-16.
- Howell, J. C., & Hawkins, J. D. (1998). Prevention of youth violence. In M. Tonry & M.H. Moore (Eds.), *Crime and Justice: A Review of Research*, (Vol. 24, pp. 263-315). Chicago: University of Chicago Press.
- Huizinga, D., Loeber, R., Thornberry, T. P., & Cothorn, L. (2000, November). *Co-occurrence of delinquency and other problem behaviors*. Juvenile Justice Bulletin, 1-8. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention. Retrieved from http://www.ncjrs.gov/html/ojjdp/jjbul2000_11_3/contents.html
- Individuals with Disabilities Education Act (IDEA) of 2004, Pub. L. No. 108-446, § Sec. 1400 (c).
- Kaiser, B., & Rasminsky, J. S. (2003). *Challenging behavior in young children: Understanding, preventing, and responding effectively*. Boston: Pearson.
- Kauffman, J. M. (2005). *Characteristics of emotional and behavioral disorders of children and youth* (8th ed.). Upper Saddle River, NJ: Merrill.
- Kazdin, A. (1987). Treatment of antisocial behavior in children: Current status and future directions. *Psychological Bulletin*, 102, 187-203.
- Kolko, D. J. (1994). Conduct disorder. In M. Hersen, R. T. Ammerman, & L. A. Sisson (Eds.), *Handbook of aggressive and destructive behavior in psychiatric patients* (pp. 363-394). New York: Plenum Press.
- Lane, K. L. (1999). Young students at risk for antisocial behavior: The utility of academic and social skills interventions. *Journal of Emotional and Behavioral Disorders*, 7(4), 211-223.
- Lerner, J. W., Lowenthal, B., & Egan, R. W. (2003). *Preschool children with special needs: Children at risk, children with disabilities* (2nd ed.). Boston: Allyn and Bacon.
- Loeber, R., & Farrington, D. P. (1998). Never too early, never too late: Risk factors and successful interventions for serious and violent juvenile offenders. *Studies on Crime and Crime Prevention*, 7(1), 7-30.
- Loeber, R., Farrington, D. P., & Petechuk, D. (2003). *Child delinquency: Early intervention and prevention*. Child Delinquency Bulletin Series. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Loeber, R., Wung, P., & Keenan, K. (1993). Developmental pathways in disruptive child behavior. *Development and Psychopathology*, 5, 103-133.
- Maguin, E., & Loeber, R. (1996). Academic performance and delinquency. *Crime and Justice: Review of Research*, 20, 145-264.
- McEvoy, A., & Welker, R. (2000). Antisocial behavior, academic failure, and school climate: A critical review. *Journal of Emotional & Behavioral Disorders*, 8(3), 130-141.
- McGarrell, E. F. (2001). *Restorative justice conferences as an early response to young offenders*. Juvenile Justice Bulletin. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Meese, R. L. (1996). *Strategies for teaching students with emotional and behavioral disorders*. Pacific Grove, CA: Brooks/Cole.
- Moffitt, T. E. (1993). Life-course persistent and adolescence-limited antisocial behavior: A developmental taxonomy. *Psychological Review*, 100, 674-701.
- Montague, M., & Rinaldi, C. (2001). Classroom dynamics and children at risk: A follow-up. *Learning Disability Quarterly*, 4(2), 75-83.
- Nelson, J. R., & Roberts, M. L. (2000) Ongoing reciprocal: Teacher-student interactions involving disruptive behaviors in general education classrooms. *Journal of Emotional and Behavioral Disorders*, 8, 27-37.
- Office of Juvenile Justice and Delinquency Prevention (OJJDP) Study Group. (2003). *Child Delinquency Series*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- O'Shaughnessy, T., Lane, K. L., Gresham, F. M., & Beebe-Frankenberg, M. (2002). Students with or at-risk for learning and emotional-behavioral difficulties: An integrated system of prevention and intervention. In K. L. Lane, F. M. Gresham, & T. E. O'Shaughnessy (Eds.), *Interventions for children with or at risk for emotional and behavioral disorders* (pp. 3-17). Needham, MA: Allyn & Bacon.
- Patterson, G. R. (1986). Performance models for antisocial boys. *American Psychologist*, 41, 432-444.
- Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *Antisocial boys*. Eugene, OR: Castalia.

- Patterson, G. R., & Yoerger, K. (2002). A developmental model for early- and late-onset delinquency. In J. B. Reid, G. R. Patterson, & J. Snyder (Eds.), *Antisocial behavior in children and adolescents: A developmental analysis and model for intervention*. Washington, DC: American Psychological Association.
- Puzzanchera, C., Stahl, A. L., Finnegan, T. A., Snyder, H. N., Poole, R. S., & Tierney, N. (2000). *Juvenile Court Statistics 1997*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice.
- Quinn, M. M., Mathur, S. R., & Rutherford, R. B. (1995). Early identification of antisocial boys: A multi-method approach. *Education and Treatment of Children*, 18(3), 272-281.
- Raver, S. A. (2009). *Early childhood special education – 0 to 8 years: Strategies for positive outcomes*. Upper Saddle River, NJ: Pearson.
- Simcha-Fagan, O., Gersten, J. C., & Langner, T. S. (1986). Early precursors and concurrent correlates of patterns of illicit drug use in adolescence. *Journal of Drug Issues*, 16(1), 7-28.
- Snyder, H. N. (2001). Epidemiology of official offending. In R. Loeber & D. P. Farrington (Eds.), *Child delinquents: Development, intervention, and service needs* (pp. 25-46). Thousand Oaks, CA: Sage.
- Snyder, H. N. (2003). *Juvenile arrests 2001*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Snyder, H. N., Espiritu, R. C., Huizinga, D., Loeber, R., & Petechuk, D. (2003). *Prevalence and development of child delinquency*. Child Delinquency Bulletin Series. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- Snyder, H. N., & Sickmund, M. (1999) *Juvenile offenders and victims: 1999 national report*. Washington, DC: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.
- U. S. Department of Health and Human Services. (1999). *Report of the Surgeon General's conference on Children's Mental Health: A national action agenda*. Washington, DC: Author.
- U.S. Department of Justice, Bureau of Justice Statistics, *National Crime Victimization Survey (NCVS)*. (2007). Retrieved from <http://bjs.ojp.usdoj.gov/index.cfm?ty=pbdetail&iid=1762>
- Wagner, M., Neuman, L., Cameto, R., Levine, P., & Marder, C. (2003). *Going to school: Instructional contexts, programs, and participation of secondary school students with disabilities*. Menlo Park, CA: SRI International.
- Walker, H. M., Colvin, G., & Ramsey, E. (1995). *Antisocial behavior in school: Strategies and best practices*. Pacific Grove: Brooks/Cole.
- Wolery, M., & Bailey, D. (2002). Early childhood special education research. *Journal of Early Intervention*, 25(2), 88-99.
- Wolfgang, C. H. (2008). *Solve discipline problems* (7th ed.). Boston: Allyn and Bacon.
- Zabel, R. H., & Nigro, F. A. (2001). The influence of special education experience and gender of juvenile offenders on academic achievement scores in reading, language, and mathematics. *Behavioral Disorders*, 26, 164-172.
- Zirpoli, T. J. (1995). *Understanding and affecting the behavior of young children*. Englewood Cliffs: Merrill.

Authors

Lawrence Ingalls, Ph.D., is an Associate Professor at the University of Texas at El Paso in the Department of Educational Psychology and Special Services. He has many years of teaching experience working with children with mild to severe disabilities including children with emotional and behavioral disabilities. Dr. Ingalls has devoted years of research addressing educational issues with young offenders placed in an incarcerated setting.

Helen Hammond, Ph.D., is an Associate Professor at the University of Texas at El Paso in the Department of Educational Psychology and Special Services. Her professional experiences have been affiliated with early intervention programs and working with children who have severe disabilities. Dr. Hammond has been actively involved for several years dealing with early intervention needs that should have been in place for the incarcerated special education population.

Robert P. Trussell, Ph.D., is an Assistant Professor at the University of Texas at El Paso in the Department of Educational Psychology and Special Services. He has worked in a variety of settings that serve students with disabilities. Dr. Trussell's primary interest is developing behavioral programs for students with emotional and behavioral problems and in particular those students who are at risk of becoming young offenders.

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

www.dropoutprevention.org