The Journal
OF AT-RISK ISSUES

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The Journal of At-Risk Issues

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Focus:

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

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 Review articles provide qualitative and/or quantitative syntheses of published and unpublished research and other information that yields important perspectives about at-risk populations.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

Format:

Manuscripts should follow the guidelines of the *Publication Manual of the American Psychological Association* (5th 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.

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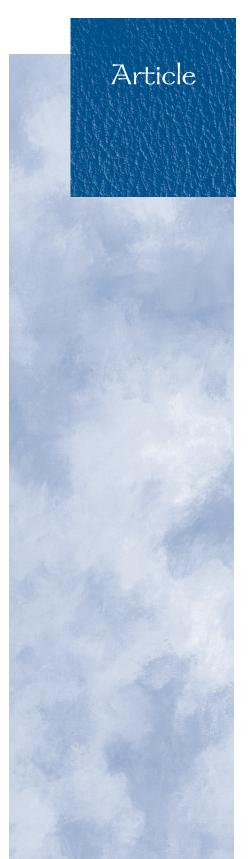
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Articles

A School District Comparison of Reading Achievement Based on Three Reading Programs

Sharon McCollum, Mary Nell McNeese, Ronald Styron, and David E. Lee

Abstract: *This study compared the reading achievement levels of 323 third grade students from a Caribbean school district receiving instruction from three different programs. Students were identified as at risk with a 95% minority enrollment, 100% free lunch and transportation, and the lowest NAEP test scores in the nation. Total standardized test scores from the Wide Range Achievement Test (WRAT)-Expanded Edition were compared according to instructional methods. The results of an ANOVA showed significant differences. Statistically, the Success for All Group achieved the highest mean score, while there were no significant differences in the mean scores between the Direct Instruction Group and the Basal Reader Group. The importance of this study lies in its effort to analyze available data on three modes of reading instruction. The school district should select one reading program and institute it districtwide after longitudinal quantitative and qualitative data are collected. This study is only the first step in that direction.*

The many factors that place young children at risk educationally include poverty, language barriers, learning disabilities, minority ethnic group membership, or a combination of such factors (Baas, 1991). As a result, "the challenge for educational researchers and practitioners is to identify practical and effective means of reducing such students' chances of academic failure, grade retention, and dropping out of school at an early age" (Ross, Smith, Slavin, & Madden, 1997, p. 171). As Englemann (1999) reported, school failure for at-risk students results largely from the fact that all children are expected to learn a specified battery of skills in a specified number of years. This comparison may be unfair for at-risk children because they may take longer to master those skills. They enter first grade substantially behind in reading, language, and number skills (p. 77).

Failure to develop reading skills during the primary school years intensifies as the student progresses through the grades. Juel (1988) reported that approximately 88% of first-grade students whose performance scores were in the lowest quartile in reading comprehension remained at performance levels below the 50th percentile through the fourth grade. Similar findings reported by others indicate that "students who have been poor readers in the early elementary years remain poor readers throughout school" (Carlson & Francis, 2002, p. 142).

The Comprehensive School Reform Movement (CSRM) promotes the idea that student achievement occurs most frequently when there is an intensive effort to make positive, academically-focused, schoolwide changes. Those "students in schools working with whole-school reform tended to achieve greater gains than students in schools attempting various pull-out programs" (Wested,

2003, p. 5). However, in spite of the promise shown by these programs, educators continue to be puzzled by the large number of children with severe problems in reading.

The purpose of the study reported here was to compare the reading standardized achievement test scores of third-grade students who received reading instruction using three different programs: *Success for All (SFA), Direct Instruction (DI),* and *Basal Reader (BR).* The backgrounds, advantages, and criticisms of each reading program were also considered.

Success for All

SFA, a school restructuring program developed by Robert Slavin and Nancy Madden (2000) of Johns Hopkins University, was designed to address the needs of at-risk students in high poverty schools. Key features of the program are

(a) a research-based instructional component focused on the development of literacy and oral language skills, (b) cooperative learning, (c) assessment of educational progress every eight weeks, (d) homogeneous ability grouping for reading instruction, (e) one-on-one tutoring, (f) a family support team, and (g) a full-time program facilitator to administer the program. (Urdegar, 2000, p. 1)

In contrast to traditional strategies, which often emphasized pulling disadvantaged students out of regular classes to receive limited tutoring, *SFA* was designed as a comprehensive program grounded on two essential principles: prevention and immediate, intensive intervention (Slavin et al., 1996; Slavin, Madden, Karweit, Dolan, & Wasik, 1992). *SFA* proposes that at-risk students are more successful when their academic deficiencies are addressed

early. A reform model, it is highly specified and comprehensive with respect to implementation guidelines and material for students and teachers. Almost all materials for students are provided, and teachers are expected to follow *SFA* lesson plans closely (Madden, Livingston, & Cummings, 1998).

The claims about the effectiveness of *SFA* went unchallenged until Walberg and Greenberg (1999) argued that independent evaluations by Venezky (1997) and Jones, Gottfredson, and Gottfredson (1997) showed that *SFA* produced gains only in kindergarten and first grade. These researchers concluded that at these early grade levels, it is easy to produce gains using a wide variety of much cheaper, simpler methods.

Direct Instruction

According to the American Federation of Teachers (2003), the oldest version of *Direct Instruction*, DISTAR, was developed in the 1960s as part of Project Follow Through, a component of President Johnson's War on Poverty. DISTAR achieved some level of success; however, it was heavily criticized for being too rigid, for concentrating too heavily on the basics, and for poor implementation practices (Adams & Englemann, 1996). The original DISTAR program, which has been expanded and enriched, is what is now termed *DI*.

This model "is a comprehensive system of instruction that integrates effective teaching practices with sophisticated curriculum design, classroom organization and management, and careful monitoring of student progress, as well as extensive staff development" (Stein, Carnine, & Dixon, 1998, p. 227). According to the American Federation of Teachers (2003), it "is a highly structured instructional approach, designed to accelerate the learning of at-risk students. Curriculum materials and instructional sequences attempt to move students to mastery at the fastest possible pace" (p. 1). Specifically, this approach

> integrates effective teaching practice such as monitoring student performance, providing corrective feedback, increasing academic engaged time through the use of small group instruction, and unison responding. The effective teaching techniques must be tied to well-designed, generalizable instructional strategies in order for students to succeed academically. (Stein et al., 1998, p. 228)

Adams and Englemann (1996) have identified 34 well-designed studies that compared *DI* models to other instructional approaches. Results showed that 87% of the post-treatment means favored the *DI* model, compared to only 12% favoring non-*DI* approaches. Sixty-four percent of the statistically significant outcomes favored the *DI* model, compared to only 1% of the outcomes favoring nondirect approaches, and 35% showed no difference among the approaches.

Basal Reader

Adopted *BR* series have been used as one component of elementary school language arts curriculums in the United States for decades. *BR*s popularized the "look-say" method of reading instruction in the 1950s. The most popular of the early *BR*s utilizing this method was Scott Foresman's "Sally, Dick and Jane." The focus of *BR*s was repeated practice with the same small set of vocabulary.

Criticism of *BR* programs focused on the lack of attention to systematic phonics instruction (Hoffman, Sailors, & Patterson, 2004), a problem addressed in the 1970s and 1980s; however, critics then contended that teachers became overly reliant upon skill-oriented workbooks and manuals and that their students still performed lower on national reading achievement assessments. Other criticism included that *BR*s failed to provide purposeful reading and underrepresented minorities and existing racial conflict in the stories (Pirofski, 2003).

Despite problems associated with basal reading programs, *BR*s have been shown to be helpful in developing reading proficiency in most children. Current *BR* programs consist of a full complement of materials, including comprehensive teacher guides; practice workbooks; testing materials; and instructional aids such as charts, word cards, "Big Books," game boxes, supplementary paperback library books, dictionaries, and reproducible masters for classroom handouts. Dechant (1991) reported that 95% or more of elementary school teachers use a *BR* approach, even though that percentage is declining.

Method
Participants

The study of these three methods reported here was conducted in a public school district in one of the U.S. Territories in the Caribbean Sea, which includes three islands and numerous keys. The district had an enrollment of 18,700 students, with an annual per-pupil expenditure of $6,478. All of its schools were classified as Title I schools, with their students receiving both free lunch and transportation. The school district was characterized by low-achieving students: In 1992 the average National Assessment of Educational Progress (NAEP) reading score for the district was 171 compared to a national average score of 215, and in 2002 the average NAEP reading score was 179 compared to a national average of 217. The schools serviced children, many of whom came from single parent households, non-English speaking households, households speaking an indigenous dialect, and households where the students were the first in their families to attend an American school. The ethnic background of the students was Afro-Caribbean.

Although there were 12 elementary schools in this district, this study was delimited to seven based on their choice of the three reading programs under investigation. Four hundred Wide Range Achievement Test (WRAT)-Expanded 2003-04 reading standardized test results were obtained from the participating schools in accordance with the district's policy and procedures. A total of 323 test results were useable, 77 being discarded because a different level of the WRAT-Expanded Group Assessment had been administered to those students.

Materials

The WRAT-Expanded Assessment, chosen because it is the only standardized instrument that had been administered to the public school children in the district in the last 5 years,

> measures those reading abilities important for understanding printed material beginning with reading words and sentences,

then continuing with the comprehension of various types of reading passages of ever-increasing complexity appropriate for proficient readers at the elementary and secondary levels. (Robertson, 2001, p. 5)

Test items assess three aspects of comprehension: Literal, Inferential, and Word Meaning in Context.

The test's psychometric properties of reliability, error, and validity have been assessed. Robertson (2001) reported that the test-retest reliability of WRAT-Expanded, as measured by the Kuder-Richardson Formula 20 (KR-20), was .89, which is acceptably reliable. As he explains, "All tests contain error to some degree. The Standard Error of Measurement (SEM) for the WRAT-Expanded tests is 5.1" (Robertson, 2001, p. 31). To gain construct and content validity, the tests were research literature-based, and test experts made suggestions for revisions, which were subsequently incorporated into them. Robertson concluded that the WRAT-Expanded norms were generally consistent with those of other tests normed at different times on different samples of individuals, saying that "these findings suggest that WRAT-Expanded users can have confidence that the norms represent a sample of examinees generally similar to the norming samples of other widely used achievement and cognitive measures" (Robertson, 2001, p. 52).

Procedures

All students received instruction in one of the three respective programs for 4 years spanning grades K-3. Eighty-seven, or 26.9%, of the students received instruction via *SFA;* 126, or 39%, received instruction via *DI;* and 110, or 34.1%, received instruction via *BR*.

The *Reading Roots and Wings* program was used for *SFA* instruction. Students were assessed and regrouped according to their reading level each school quarter when their teachers, administrators, and *SFA* coaches met to review their progress. Interventions were implemented as needed. Ongoing coaching and support were available to the schools through telephone meetings and site visits. The *SFA* program offered instruction on listening comprehension, teamwork (*Treasure Hunts*), writing (*Adventures in Writing*), editing (*Two-Minute Edit*), and a book club.

The *SRA/McGraw-Hill* program was used for *DI* instruction. The implementation of *DI* entailed language instruction using the *Language for Learning* program, reading instruction using the *Reading Mastery* and/or *Corrective Reading* programs, spelling instruction using the *Spelling Mastery* program, and writing instruction using the *Reasoning and Writing* program. No coaching or instructional supports were provided to schools that implemented this program of instruction.

The district used *Literature Works: An Integrated Approach to Reading and Language Arts* for *BR* instruction. *Literature Works* for grades K-6 was designed to motivate students through a wide range of reading materials. The anthologies in *Literature Works,* entitled *Collections,* centered on themes directed towards student interests. These themes were presented in both fiction and nonfiction works. A Theme Launch was provided for all grade levels, providing opportunities for students to preview the theme, develop a common language, build background, and set learning goals. No coaching or instructional supports were provided to schools that implemented this program of instruction.

The WRAT-Expanded Reading Assessment was administered to the third-grade students in March 2003 by the classroom teachers under the supervision of the school counselor, school administrators, and central office personnel. After securing district approval, the school counselors reported the total reading test standardized scores to the researchers. The data were entered in the Statistical Program for the Social Sciences (SPSS), version 11.

Results

The WRAT-Expanded Reading Achievement test mean for the entire sample was 92.2. The mean for the *SFA* students was 94.8, the highest of the three reading programs, while *DI* students had a mean of 90.2, the lowest of the programs compared, and *BR* students had a mean of 92.3. Both *SFA* and the *BR* had means above the sample. The sample standard deviation was 11.99. Figure 1 below compares the WRAT-Expanding standardized reading achievement score means for the three groups of third grade students:

Figure 1. WRAT-Expanded reading test mean scores by appropriate reading program.

Table 1 presents the descriptive statistics for the standardized reading achievement scores among the three groups in the study:

A one-way analysis of variance (ANOVA) was conducted to evaluate the differences among students from the three reading programs on the total WRAT-Expanded reading test standardized scores. The independent variable, the reading program factor, included the three programs, the *SFA*, the *DI*, and the *BR*. The dependent variable was the total WRAT-Expanded reading test standardized achievement scores. The ANOVA was significant, $F(2, 320) = 3.85$, $p = .02$. The strength of the relationship between the reading program factor and the total WRAT-Expanded reading test standardized scores as assessed by η^2 was small, with the reading factor accounting for 2% of the variance of the dependent variable. Even though this effect was small, it did show practical significance based on Cohen's rule of thumb (Kirk, 1995) and was either higher or comparable to the studies of the three programs individually.

Descriptive Data for Standardized Reading Achievement Scores Among *SFA, BR,* and *DI*

Reading Program	n	Mean	Standard Deviation	Minimum	Maximum
SFA	87	94.8	12.99	59	129
BR	110	92.3	10.81	67	129
DI	126	90.2	11.97	59	119

Tukey post-hoc comparisons were conducted to evaluate pairwise differences among the means since the Levene's test for equality showed that equal variances could be assumed. There were significant differences between the *SFA* group and both the *DI* and the *BR* groups, with the *SFA* group showing the highest mean scores. There were no significant differences, however, between the *DI* and *BR* groups, suggesting that the *DI* and the *BR* groups were statistically equal. The results of the data analysis showed that students in the *SFA* reading program scored significantly higher than students in the *DI* or *BR* reading programs, although students in the latter two programs did not score significantly different from each other.

Discussion

The data indicated that there was a statistically significant difference in standardized reading achievement scores among the *SFA*, the DI, and the *BR* groups. The *SFA* group had the highest standard reading achievement score. Students who received 4 years of instruction in the *SFA* reading program attained significantly higher standard mean scores than students who received reading instruction for a similar period of time with *DI* or *BR*. The reading programs will be discussed individually.

Success for All

SFA was designed as a comprehensive program grounded on two essential principles: prevention and immediate, intensive intervention. In *SFA*, attention is focused on providing every student the support needed to be a successful reader by the end of the third grade. The program recognizes the different ways and rates that students learn to read. Therefore, it offers a variety of support systems (Slavin et al., 1992).

The creators of the *SFA* program indicated that the program's success was dependent upon those who implemented it (Hill, 1998). Decidedly, the schools contributed to the positive or negative impact of all of the reading programs cited in this study, with teacher acceptance, teacher morale, teacher and staff training, and administrative support being but a few of the variables that contributed to the level of accomplishment in each. In addition, the teachers were provided added supports to help with the successful implementation of all three programs. The teachers in this school district appeared to support and be committed to the implementation of these programs, including *SFA*.

Direct Instruction

Proponents of the *DI* model contend that it is "a comprehensive system of instruction that integrates effective teaching practices with sophisticated curriculum design, classroom organization and management, and careful monitoring of student progress, as well as extensive staff development" (Stein et al., 1998, p. 227). The American Federation of Teachers (2003) evaluated *DI* as "a highly structured instructional approach, designed to accelerate the learning of at-risk students. Curriculum materials and instructional sequences attempted to move students to mastery at the fastest possible pace" (p.1). Adams and Engelmann's (1996) metanalysis of 34 studies found *DI* to be the most effective instructional reading program.

Contrary to these research literature findings, the study reported here found students who received *DI* reading instruction to be on par with their *BR* cohorts, while performing significantly behind their *SFA* counterparts. *DI* was designed for substantially the same target population of challenged readers as those for whom *SFA* was created. Becker (2001) and Engleman (1999) contended that *DI* is a valuable intervention when teaching reading to disadvantaged students. Under circumstances different from those in this study, the *DI* intervention may have produced positive reading gains similar to the *SFA* intervention.

Basal Reader

The *BR* was designed to increase reading ability and facilitate language arts skills in young readers by introducing children to selected series readings which gradually become more difficult. Traditionally, *BR* reading instruction has been the predominant method of reading instruction. However, Hoffman, Sailors, and Patterson (2004) found that *BRs* were not the most effective with minority students, such as the target population for this study. This study did not contradict those findings.

Delimitations and Limitations of the Study

The study was subject to the following delimitations:

1. The study was delimited to one of the U.S. Territories in the Caribbean Sea. This location was selected as an excellent example of a low-performing minority school district.
2. Additionally, the study was delimited to third grade students who received instruction through the *SFA, DI,* or *BR* reading programs for 4 years. This length of instruction was chosen based on the uniform assessment of reading achievement levels by the standardized WRAT-Expanded Test at the end of that period.

The following limitations restrict this study:

1. The data were collected by the school district, and, therefore, the researchers were limited to the data made available through the Superintendent's Office. The researchers did not directly participate in the data collection.
2. Since the WRAT-Expanded Test was administered to students at each individual school site, the researchers were limited by the testing conditions selected by each school.
3. The students were selected based on their 4-year participation in the reading program at one of the seven schools in the sample.

Neither the students nor the schools in the study were randomly assigned to treatment groups. The absence of random selection reduces the meaning and the generalizability of this study; however, it was not feasible to randomly assign these students or schools to specific reading program treatment groups.

4. The study did not measure actual gains in reading ability from pretest to posttest. Since the students were not tested prior to the reading program, there may have been preexisting differences among students and/or schools that unfairly biased the WRAT-Expanded Test results in favor of the *SFA* reading program over the *DI* and the *BR* programs.

5. The implementation of the three reading programs was not standardized, and the teaching interventions were not assessed for validity or reliability. It is possible that the *SFA* schools had more gifted teachers and/or administrators than their cohorts. No measures were conducted to ensure that the instruction for any of the three interventions was actually implemented as designed.

6. The schools implementing the *SFA* intervention were provided program coaches to assist in the successful implementations of that program. These schools might have received additional training not afforded to those schools implementing the alternative reading interventions.

Implications for Educational Leaders

According to Ediger (2002),

the first R (reading, writing, and arithmetic) is vital for pupils to develop knowledge and skill since reading cuts across the curriculum and is highly important in society. Thus, reading is used in each and every academic area of the school curriculum. Teachers need to excel in reading instruction. (p. 1)

To aid in determining the best type of instruction, Guthrie, Schafer, Von Secker, and Alban (2004) advocated the need for studies on characteristics of school reading programs producing reliable increases in student achievement. At the same time, however, they acknowledged the challenges of "detecting effects on achievement of reading programs when the school is the unit of analysis" (p. 2).

School reading programs are increasingly under scrutiny by school-based administrators, central office personnel, and policymakers. In the 1990s, voters expressed their dissatisfaction with low student test scores and the persistent achievement gap between Caucasians and most minority students. As a result, the No Child Left Behind Act of 2001 (NCLB) was passed. This legislation requires states to develop annual assessments aligned to state standards and to use achievement on these assessments as the primary measure of district and school accountability. NCLB is intended to ensure that all schools make adequate yearly progress (AYP) toward having all students proficient in reading and mathematics by 2014. The law also requires states to have in place a statewide accountability system that applies to all public schools, including charter schools (Learning First Alliance, 2004).

Schools are required to demonstrate that students are making adequate yearly progress, and failure to show AYP has dire consequences, including releasing that failure to the public, giving families the option of transferring their children to other schools, losing federal funding, instituting new curricula, replacing district personnel, appointing a trustee to run the district, and/or district restructuring.

As a result of NCLB, today, more than ever, it is essential that teachers, administrators, and district policymakers understand the characteristics of an effective schoolwide reading program. It has been the intent of this research to provide data to those teachers, administrators, and policymakers on three different reading programs in a low-performing minority school district.

Suggested Future Research

It is recommended that in the future, this research should be replicated over a longer period of time (such as 5 years) to evaluate the reading programs longitudinally. The authors of this work also recommend additional large-scale controlled studies to measure the efficacy of these programs. These studies should examine the effects of the limitations and delimitations on the measurement of the reading gains associated with each program, including the validity/reliability of those interventions and their standard implementation. Finally, there is a need for a pre-post comparison of all three reading programs.

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Reducing Seclusion Timeout and Restraint Procedures With At-Risk Youth

Joseph B. Ryan, Reece Peterson, George Tetreault, and Emily Vander Hagen

Abstract: *The purpose of this pilot study was to review the effects of professional staff training in crisis management and de-escalation techniques on the use of seclusion timeout and restraint procedures with at-risk students in a K-12 special day school. An exploratory pre-post study was conducted over a two-year period, comparing the use of these behavior management interventions when all staff members were provided crisis intervention training. In addition, a brief survey was administered to all staff members concerning their training in and use of behavioral interventions. Results indicated professional staff training was effective in reducing (a) seclusion timeout procedures by more than one-third (39.4%) and (b) physical restraints (17.6%). This study also found staff members were not initiating seclusion timeout procedures primarily for the reasons they were trained (e.g., physical aggression) but rather for nonviolent behaviors such as leaving an assigned area and disrupting the classroom environment.*

Seclusion timeouts and physical restraint are two of the most restrictive behavioral interventions schools rely on to manage the inappropriate and aggressive behavior frequently displayed by at-risk youth. Recently, however, public awareness has been raised regarding the inherent dangers associated with the use of these aversive procedures. An investigative series in the *Hartford Courant*, a Connecticut newspaper, reported there were 142 restraint-related deaths across the United States over a 10-year period (Weiss, 1998). Similar findings regarding the hazards of restraint and seclusion have been issued by the Government Accounting Office (USGAO, 1999) and the Child Welfare League of America (CWLA, 2002).

Timeout Procedures Used in Schools

Timeout is a behavior management procedure that has long been used in the field of education to address a broad range of maladaptive behaviors across educational placement settings (Costenbader & Reading-Brown, 1995). It is actually a form of punishment implemented to reduce inappropriate behaviors by denying a student access to any type of reinforcement (Alberto & Troutman, 1999; Ryan, Sanders, Katsiyannis & Yell, In Press). There are three variants of this procedure, differing in respect to the degree they separate students from their peers and academic instruction. Timeout procedures ranging from the least to most restrictive interventions include (a) inclusion, (b) exclusion, and (c) seclusion. Inclusion (e.g., contingent observation, timeout ribbon), the least aversive of the three procedures, entails placing the student in a classroom area in which the student can observe the class but denies the him/her the opportunity to participate in activities and receive reinforcement

for a given period of time (Yell, 1990). Exclusion (e.g., think time), the second and most frequently used timeout procedure (Costenbader & Reading-Brown, 1995; Gast & Nelson, 1977), denies the student the opportunity to either observe or participate in any classroom activities. The third and most restrictive form of timeout, seclusion (e.g., isolation room, cool down room), removes students from the classroom environment, placing them in an involuntary confinement in a room or area where they are physically prevented from leaving (Busch & Shore, 2000).

Restraint Procedures Used in Schools

There are two common forms of restraints used in schools today: (a) mechanical, and (b) ambulatory. Mechanical restraint entails the use of any device or object (e.g., tape, tie downs, calming blanket, body carrier) to limit an individual's body movement to prevent or manage out-of-control behavior. The second and more common form of physical restraint is often referred to as ambulatory restraint, manual restraint, or "therapeutic holding" (American Academy of Pediatrics Committee on Pediatric Emergency Medicine, 1997). This type of restraint involves one or more people using their bodies to restrict another's body movement as a means of reconstituting behavioral control, and establishing and maintaining safety for the out-of-control student, other students, and staff (American Academy of Child and Adolescent Psychiatry, 2000).

The use of physical restraint in schools, discussed since the 1950s, was included in a list of "techniques for the antiseptic manipulation of surface behavior" by Redl and Wineman (1952)

for the use of controlling students displaying aggressive behavior. To date, however, research investigating the use of restraint in our nation's schools has been limited. Recent literature reviews failed to identify how widespread the use of restraint in schools has become (Persi & Pasquali, 1999; Ryan & Peterson, 2004). However, anecdotal information based on court cases and legislation indicates their use has become common among students with special needs, at least for larger school systems (Ryan & Peterson, 2004).

One of the criticisms schools have received regarding the use of restraint and seclusion procedures has been the lack of any established accreditation requirement or governing body to establish policy and monitor their use. Other professional fields, such as the medical, psychiatric, and law enforcement domains, have all established strict guidelines to govern the use of restraint procedures. Often these standards include accreditation requirements from governing bodies such as the Joint Commission on Accreditation of Healthcare Organizations or other agencies such as the National Association of Psychiatric Treatment Centers for Children (Cribari, 1996) and the American Academy of Pediatrics (American Academy of Pediatrics, 1997). These requirements have resulted in widespread training and certification for staff in these programs. The lack of these commonly accepted guidelines or accreditation standards in schools makes those who use physical restraint more susceptible to misunderstanding and abuse, in addition to leading to improper implementation. To make matters worse, school staff may lack training regarding the effective behavioral interventions necessary for the prevention of the emotional outbursts typically associated with children with severe behavioral problems (Moses, 2000). Such interventions are critical in preventing student behavior from escalating to potentially dangerous levels where restraint may be needed.

Given the inherent safety risks associated with the use of seclusion timeouts and restraint procedures, it is incumbent upon schools to ensure the use of these behavioral interventions is minimized. One means of ensuring these procedures are used only when necessary is by providing crisis intervention training to the staff members working with students who display aggressive behaviors (Jones & Timbers, 2003). The purpose of this pilot study was to determine if such a schoolwide staff training program emphasizing behavior management and de-escalation strategies would effectively reduce the number of seclusionary timeouts and physical restraints performed on at-risk students placed in a special day school.

Methods
Subjects

This pilot study was conducted in a Minnesota public special day school serving students from grades K through 12. Students were placed in the school from the surrounding public school districts and a local residential facility on both a short- and long-term basis due to inappropriate behaviors. The school had an average daily enrollment of 90 students during the course of the study but provided educational services for a total of 316 students throughout the school's 171 day academic calendar year. Participants for this study were 42 students who attended at least 75 school days during both the 2002/03 (Year 1) and 2003/04 (Year 2) academic school years. They included 40

males and 2 females, comprised of 37 Caucasian, 3 American Indian and 2 African American students.

Staff Training

All staff members underwent extensive training, spending one hour twice each month throughout the academic school year in de-escalation training. Staff members all initially underwent Crisis Prevention Institute's (CPI) Nonviolent Crisis Intervention Training. The focus of this training program is to teach staff members how to handle crisis and stressful situations successfully, with low anxiety and high security for all individuals involved (Crisis Prevention Institute, 2002). The largest portion of the program focuses on training on such preventative techniques as (a) identifying maladaptive behaviors, (b) choosing appropriate interventions, (c) using nonverbal techniques for de-escalating behaviors, and (d) the ideology of personal well being. Another unit of the program focuses on nonviolent physical crisis intervention and team interventions, for example, such techniques that may be used in a situation where student behavior has escalated despite preventive techniques and safety becomes an issue. All staff members practiced and rehearsed the procedures in the training sessions. The program concluded with the staff members applying the material learned in situational role plays and discussing post intervention techniques. In addition, staff received additional training during bimonthly staff meetings on alternative strategies to de-escalate aggressive students using Therapeutic Intervention, a curriculum developed by the Minnesota Department of Human Services.

Schoolwide Behavior Intervention Plan

All staff members were expected to follow a "gated" schoolwide behavior intervention plan when dealing with aggressive behavior. This gated procedure mandates that staff members attempt a less restrictive form of intervention (e.g., inclusion timeout) prior to using more restrictive procedures (e.g., seclusion timeout). When staff members first observe maladaptive behavior, they initiate simple intervention techniques such as discussing the problem privately with the student or suggesting another activity. If simple techniques fail, the next step in behavior intervention is problem solving. In this technique, the staff member(s) and student calmly discuss the inappropriate behavior and consequences, evaluate the situation, develop a plan, commit to it, and design a follow-up plan. Staff members use this opportunity to teach proper coping skills and to develop plans for future behavior. An inclusion timeout is the next step if the student refuses to participate in the problem-solving step. At this point, the student is removed from the activity and required to stay quiet for three minutes before reengaging the problem-solving sequence. If the student continues the inappropriate behavior, the student is placed in an exclusion timeout in a chair outside the classroom. The student is instructed to sit quietly for 5 minutes before reattempting to reengage the problem-solving step. If the student is unable to sit quietly for 5 consecutive minutes within a maximum duration of 15 minutes, the student is moved to a seclusion timeout.

During this step, the door to the seclusion room is left ajar, and a staff member monitors the student through the open doorway. The student may then begin the problem-solving step and rejoin the class after 5 minutes of quiet. To prevent the excessive use of seclusion

timeout, the student should be asked to rejoin his or her classroom after a period of 60 minutes. This opportunity should be afforded to every student regardless if the student has processed successfully with a staff member. For safety reasons, students are required to remove shoes, belt, jewelry, pocket contents, and other materials prior to entering the timeout room.

If a student attempts to leave the unlocked timeout room, refuses to hand over objects that can be used to deface property or inflict injury, refuses to walk and must be physically escorted/restrained on the way to the timeout room, or is physically aggressive, the door to the timeout room is locked (with an electromagnetic lock). After the student is able to remain calm and quiet for 5 minutes, a staff member will enter and try reengaging the problem-solving step. If the student refuses to leave the area, the door is relocked, and the process begins again. Staff members monitor the student through a window positioned next to the door. If an hour passes without the student successfully completing the problem-solving step, the student should be asked to rejoin the class. Each use of seclusion timeout is documented by the involved staff member(s), reviewed by the director, and filed in the student's folder.

Procedure

All data for the study reported here were collected from incident reports written during two consecutive academic school years for pre- and post-data collection analysis. School policy mandated that following the use of either a seclusion timeout or physical restraint, one of the participating staff members was required to complete an incident report detailing the event and all staff members involved. Variables coded by the school and verified by the first author included (a) age, (b) gender, (c) grade level, (d) date and time, (e) procedure used (seclusionary timeout or restraint), (f) duration of incident, (g) staff involved, and (h) behavior necessitating intervention. Behavior resulting in intervention included (a) rule violation, (b) property misuse/destruction, (c) physical aggression, (d) leaving the area, (e) disrespect, (f) threatening, (g) spitting, (h) noncompliance, (i) interfering with another student's education, (j) harassment, (k) violating another's personal space/privacy, (l) disruption, and (m) contraband.

Teacher Survey

A teacher self-questionnaire was administered using a convenience sample of 32 staff members (i.e., teachers, educational assistants, administrators) assigned to the participating school. Teacher questionnaires were implemented using a five-step process to ensure a high response rate (Dillman, 2007). These elements included (1) a respondent-friendly questionnaire, (2) multiple contacts, (3) the inclusion of stamped return envelopes, (4) personalized correspondence, and (5) a token financial incentive ($2 bill) included with the request. The 44-item questionnaire, administered following all data collection, attempted to determine (a) current school policies regarding restraint and timeout procedures, (b) frequency with which these procedures are currently used, (c) level of training staff received regarding de-escalation strategies and restraint procedures, and (d) level of agreement between administrative policy and actual implementation of restraint and timeout procedures with students.

Results

Frequency of Timeout and Restraint Procedures

During Year 1, prior to staff receiving intensive de-escalation training, 25 students were placed in seclusion timeout a total of 439 times. The number of timeouts per individual ranged from a single event to a maximum of 43. In comparison, during Year 2, seclusion timeouts were administered to only 21 students for a total of 266 times, a 39.4% reduction. The number of timeouts experienced by each student ranged from once to a maximum of 66 during the school year. During Year 1, there were 15 students sent to seclusion timeout more than ten times. The following year, the number of these so-called frequent flyers was effectively reduced to four.

During Year 1, school staff performed 68 physical restraints on nine different students. Only one mechanical restraint was used on a student requiring this type of intervention based on his physical disability and behavioral intervention plan (BIP). The academic year following training, ambulatory restraints were implemented only 56 times with five different students, a reduction of 17.6%. The use of mechanical restraint remained the same, only once during the academic year.

Duration of Seclusion

During Year 1, the duration of seclusion timeout procedures ranged from 2 through 60 minutes, with an average length of 13. Following staff training, the duration of timeouts remained consistent, ranging from 3 to 60 minutes, with an average duration of 15 minutes.

Gender and Ethnicity

In respect to gender, seclusion timeout procedures were used with only one female student during the initial academic school year. No female students were placed in seclusion during the second academic school year. Comparing the use of aversive procedures across ethnic groups, Caucasian students accounted for the majority (93.2%) of all timeouts during Year 1, while Native Americans accounted for the remaining (6.8%) procedures. During Year 2 African American students accounted for 12.4% of all timeouts, while the percentage of Caucasian students isolated decreased (84.2%) as did the Native American percentages (3.4%).

Restraint procedures were performed only on male students during the two-year period. In addition, all students restrained were Caucasian with the exception of one African American student who was restrained during the initial school year.

Age and Grade Level

Students placed in timeout during Year 1 ranged from 7 to 15 years old, with an average age of 12. The following year, the age of the students isolated was similar, ranging from 8 through 16, with an average age of 13. The majority placed in seclusion during both school years were elementary (K-5) and middle school (6-8) students. During both school years the percentage of students placed in seclusion showed minimal variation. Elementary students (grades 1 - 5) represented approximately one third (30.5% and 27.4%) of the students placed in timeouts, while middle school (grades 6 - 8) students represented approximately two thirds of students in seclusion (58.8%, 60.2%) and high school students were rarely placed in timeout during either school year (10.7%, 12.4%).

Restraints were also performed far more frequently among younger students during both years. In Year 1, most of the restraints (80.9%) were performed among elementary students. Students in middle school were much less likely to be restrained (14.7%), while high school students rarely (4.4%) experienced this procedure. During the second year, the elementary grades still represented the majority (67.9%) of all restraints performed, while middle school students accounted for the remaining (32.1%) restraints. No restraints were performed on high school students.

Time and Day of Occurrence

There appeared to be two peak time periods when the majority of interventions took place. During Year 1, there was a morning peak from 10:00 a.m. to 11:00 a.m., while a second more pronounced spike occurred approximately midday, from 11:30 a.m. to 2:30 p.m. Year 2 showed a similar pattern, with a morning peak from 9:00 a.m. to 10:15 a.m., and a second peak occurring between the hours of 11:30 a.m. and 2:30 p.m.

The actual weekdays that timeouts occurred most frequently appeared to be consistent throughout both years. While the daily range varied within several percentage points of each other, both Wednesday (25.7%) during Year 1 and Tuesday (27.2%) during Year 2 experienced the highest occurrence of incidents.

Escalation of Behaviors

When comparing the use of restraint procedures with students, the number of physical restraints was effectively reduced from 68 to 39 from the first to second academic school year. While the actual number of restraints decreased, the percentage of timeout incidents necessitating the use of restraint procedures increased from 15.5% to 25.8%.

Behavior Requiring Intervention

After reviewing the incident reports, the reasons cited by staff members for implementing seclusion timeouts with students remained relatively consistent throughout the two-year time frame. The most common reasons staff members cited for placing a student in seclusion were "leaving an assigned area" (32.6%), and "noncompliance" (31.9%). Less common behaviors that resulted in seclusion included "disrupting the class" (11.2%), "property misuse/destruction" (10.1%), "disrespect" (4.5%), "physical aggression" (2.8%), "harassment" (2.4%) and "making threats" (2.0%).

When analyzing the use of restraint procedures with children, staff reported that "noncompliance" (48.4%) and "leaving the assigned area" (19.4%) were the leading precipitators. Other reasons mentioned by staff members on the incident reports included "property misuse/destruction" (7.3%), "disrespect" (7.3%), "disrupting the class" (6.5%), "threatening" (3.2%), "physical aggression" (3.2%), "horseplay" (3.2%), and "harassment" (0.8%).

Staff Survey

The staff survey was completed by 93.75% (n = 30) of all staff members. Findings are reported concerning (a) prevalence of seclusion and restraint procedures, (b) application of procedures, and (c) professional training.

Use of Timeout and Restraint Procedures. The majority of all staff members (90%) reported using inclusion timeout procedures with students, with three quarters (73.3%) of those surveyed claiming they used it on at least a weekly basis. All staff members reported using exclusion timeout, with the majority (90%) using it on at least a weekly basis. Seclusion, which is the most restrictive form of timeout, was used by almost all staff members surveyed (96.7%), with nearly two thirds using it on at least a weekly basis. Approximately three quarters of the staff surveyed (73.3%) reporting using restraint procedures, with a quarter (26.7%) reporting using them on a weekly basis. Staff who administered restraint procedures incorporated all of the following types of restraints: physical escorts, basket holds, prone restraints, and wall restraints. Only one staff member reported using a mechanical restraint specifically listed on the student's BIP.

Application of Procedures. The most common reasons staff provided for implementing restraint procedures in the order of prevalence included physical aggression towards staff (90%), physical aggression towards peers (86.7%), property destruction (63.3%), leaving assigned area (26.7%), physical threats (23.3%), and refusal to follow staff directions (13.3%). Restraint procedures were never used for refusing to perform an academic task.

Staff members reported various responses regarding when they terminated a restraint procedure. The most common reason cited was when the student was placed in seclusion (93.3%). Staff provided other reasons for ceasing restraint procedures such as a student's verbal willingness to cooperate (30%), specific time elapses (20%), and a student ceasing to struggle (13.3%).

Professional Training. All staff members reported receiving training in de-escalation techniques during the past year, with nearly two thirds (63.3%) receiving between 5 to 12 hours. This extensive training resulted in nearly all staff members (90%) reporting being satisfied with the level of training they had received. Staff reported learning de-escalation strategies from a variety of sources including staff development (100%), professional seminars (100%), teacher training in college (71.4%), and professional journals (50%).

Discussion
Frequency of Timeout and Restraint Procedures

The professional staff training conducted at this special day school appears to have resulted in a large reduction in the use of seclusion timeout procedures for its at-risk students. Overall, there were 288 fewer timeout procedures performed during the academic school year following staff training. This reduction is an impressive two thirds (65.6%) decrease in the use of seclusion timeout procedures performed by staff members. As a result, the school performed an average 1.68 fewer timeouts per day. Considering that the average duration of a timeout was 17 minutes and involved three staff members, the school saved 245 school hours that could be more effectively directed towards educating and/or counseling these students. This reduction also translates into more educational opportunities for the entire student body since students are not being removed from the educational environment, an intervention which frequently disrupts ongoing classroom instruction.

A specific area of concern was the excessive use of seclusion timeout procedures with specific students. The school continued to

use seclusion, the most aversive and highly restrictive timeout procedure, excessively (e.g., 66 times) with some students, despite all clear evidence the procedure was ineffective in reducing their maladaptive behavior. This situation is not uncommon due to the subtle reinforcing qualities timeout procedure can provide to both the student and teacher. A teacher can be unknowingly negatively reinforced when using an ineffective timeout procedure because it is still effective in removing the aversive event (e.g., student maladaptive behavior) from the classroom. Likewise, students are also inadvertently being reinforced and continue to display maladaptive behaviors because the resulting timeout successfully removes them from an environment/task (e.g., math assignment) they are attempting to escape/avoid. This inadvertent reinforcement necessitates that any excessive use of these procedures be analyzed thoroughly to determine the underlying purposes timeout may be serving. Schools need to conduct a functional behavioral assessment when their behavioral interventions are not being successful.

A second area of concern is that all staff members were not complying with the directed schoolwide behavioral intervention in place concerning the use of timeout procedures. This intervention plan, designed as a gated procedure, moves students from one level of timeout (e.g., inclusion) to the next (e.g., exclusion) when the less restrictive timeout proves to be unsuccessful, the only exception being when the use of a restraint procedure is required. In this event, students are placed in seclusion once it is safe to transport them. However, results from the staff survey showed that only 90 % of school personnel reported using the least restrictive form of inclusion timeout, while 96.7 % had used seclusion. These answers suggest that some staff members skipped the less restrictive forms of timeout. The first author personally witnessed staff skipping the use of exclusion timeout with one student. When asked about the protocol, the staff member stated she knew the student and believed that an exclusion timeout would be ineffective. This inconsistency in administering disciplinary procedures within a school is a serious concern and highlights the importance of administrators monitoring the use of aversive procedures closely. If staff members determine that modifications to standardized procedures are required, they should be specified within the student's individualized behavioral intervention plan.

The school experienced a similarly impressive reduction in the use of restraint procedures with its student body. Findings showed a 16.7 % reduction in use of physical restraint following staff training. Given the potential health risks associated for staff and student alike, the school may have, in effect, significantly reduced its risk of both injury and liability.

Duration

The professional staff training on de-escalation did not have an impact on the overall duration of seclusionary timeouts. The average timeout over the two academic school years ranged from 17 to 18 minutes in duration. However, the training provided to the staff focused on de-escalating students during the early phases of agitation, not on calming a student once the student was placed in seclusion timeout. While there were fewer timeouts performed that lasted less than 5 minutes, the overall percentage remained consistent (10 %).

Future studies may wish to investigate effective methods of reducing the student's cycle of aggression.

Gender and Ethnicity

There were not a sufficient number of female students ($n = 2$) to perform a valid comparison of gender timeout use across academic school years. When comparing timeout use among ethnicities, there appeared to be a large increase (21.9 %) in the use of timeout procedures with African American students following staff training. Caution should be used, however, when making generalizations since the analysis was based on small and unequal sample populations.

Age and Grade Level

Analysis found seclusion timeouts were more commonly used among students in middle school during the 2-year period (89 % and 56 %), while the use of restraint was predominantly performed on younger elementary students (68.7 % and 87.2 %). The average age of students placed in timeout was 12 years of age. These findings are consistent with earlier research that found a moderately significant relationship between age and the escalation of student behavior, with the most notable increase in inappropriate behavior reported with the onset of adolescence (Persi & Pasquali, 1999). It is posited that the use of restraints and timeouts is more common among younger children, potentially due to (a) their possessing fewer mechanisms for coping with frustration, (b) staff perhaps believing intrusive procedures may be more developmentally appropriate for younger children, and (c) staff perhaps being apprehensive to perform these procedures on larger and stronger individuals (Miller, Walker, & Friedman, 1989; Persi & Pasquali, 1999).

Time and Day of Occurrence

The authors did not have sufficient information to determine if particular academic courses were more likely to precipitate behaviors that necessitated the use of seclusion timeouts or physical restraints. Future studies might investigate the correlation of behavior associated with specific academic instruction throughout the day.

Escalation of Behaviors

The drastic reduction in seclusion timeouts, coupled with a higher percentage of timeouts that escalated to restraint procedures, may signify timeout procedures are being used more judiciously. Since a quarter of all seclusion timeouts currently require restraints, it is likely these procedures are being used only with students who are highly agitated and experiencing tremendous difficulty maintaining self-control. During the first year, there were a substantially larger number of seclusion timeouts performed when a less restrictive timeout procedure (i.e., inclusion, exclusion) may have been better suited for the situation.

Conclusion

While advocacy groups would applaud findings that neither seclusion timeouts nor restraint procedures were used in response to the destruction of physical property, there is concern since both of these procedures were administered even though staff members claimed physical aggression was not being displayed by the students. This is

important since physical aggression is one of the few behaviors that both professional organizations and advocacy groups agree requires the use of these aversive procedures. It is possible that staff members implemented these procedures with the belief that the student was both capable and likely to display physical aggression; therefore, they intervened prior to the actual display of this behavior. To address this issue more accurately, it is recommended that an additional category be added to the school's incident report concerning the posturing of physical aggression.

Limitations

There were several limitations to this study in regard to its sample population. A primary limitation of this study dealt with the use of a convenience sample, making its findings difficult to generalize to the broader population of at-risk students. This study was conducted in one medium-sized Minnesota city and, as such, does not provide adequate representation of students placed in special day schools nationwide. In addition, the sample contained relatively few minority students.

Implications

While advocacy and professional groups frequently disagree concerning the need for seclusionary timeouts and physical restraints, they both acknowledge the potential threat these coercive procedures pose to the safety of both student and staff alike. Hence, providing a skill-based treatment program that can effectively reduce the use of these aversive interventions will help reduce the likelihood of injuries and death. Given the findings of this study, it is imperative that additional research be conducted on a larger scale nationally and across educational placement settings. Doing so will help determine if staff training in de-escalation techniques can minimize the use of aversive behavior management techniques, as well as the injuries and fatalities associated with their use.

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An Investigation of the Relationship Between Receptive Language and Social Adjustment in a General Sample of Elementary School Children

Gregory J. Benner, Diana Rogers-Adkinson, Paul Mooney, and Douglas A. Abbott

Abstract: *A growing body of research suggests that children with language disorders are at risk for social adjustment problems and school failure. This paper provides further evidence regarding this situation, assessing the strength of the relationship between receptive language and social adjustment in a sample of the general population of public school children grades K-2. In addition, variables that predict the social adjustment of elementary-aged public school children are investigated. The results of this study indicated that small to moderate correlations between measures of receptive language and social adjustment were significant. Moreover, receptive language scores, particularly receptive vocabulary, predicted the social skills and academic competence of children. The findings, limitations, and future research needs are discussed.*

Successful language acquisition is critical for achieving academic competence and positive social adjustment. Children with language deficits are 10 times more likely to have social adjustment problems than those in the general population (Tomblin, Zhang, Buckwalter, & Catts, 2000; Warr-Leeper, Wright, & Mack, 1994). Furthermore, this relationship becomes increasingly problematic given that the psychopathological problems of children with language deficits also tend to increase over time (Hooper, Roberts, Zeisel, & Poe, 2003; Nelson, Benner, & Rogers-Adkinson, 2003).

This paper begins by briefly defining commonly used language concepts. Communication refers to both speech and language. Speech is a verbal means of communicating or conveying meaning, whereas language (i.e., receptive, expressive, and pragmatic) is a socially shared code to communicate meaning (Owens, 2001). Language disorders are of two primary types, receptive and expressive. Receptive (e.g., listening) language disorders include problems understanding language. Expressive (e.g., speaking) language disorders are problems using language (Owens, 1996). Pragmatic deficits refer to difficulties with the rules related to language use in a social setting (e.g., speaker-listener relationship, turn-taking, eye contact). These language skill deficits are not considered a type of language disorder, but rather a component of language.

A recent review of the literature on the language skills of children with social adjustment problems (Benner, Nelson, & Epstein, 2002) indicated four principal findings regarding this relationship. First, researchers have examined the co-occurrence of social adjustment problems and language deficits using a relatively restrictive sample of participants. The majority of participants were children served in clinical settings (i.e., primarily speech language clinics or psychiatric settings). Limited investigations have explored the language skills of children with social adjustment problems in public school settings (Camarata, Hughes, & Ruhl, 1988; McDonough, 1989; Miniutti, 1991; Nelson et al., 2003).

Second, there appears to be little or no information on the strength of the relationship between social adjustment and receptive language. Researchers have used only causal-comparative or epidemiological research designs to examine the co-occurrence of language and social adjustment problems (Benner et al., 2002). Although such designs provide evidence regarding the co-occurrence of social adjustment problems and language deficits, little information is provided regarding its strength or nature. Moreover, few researchers have examined the language-related and demographic variables (e.g., language, gender, age, race) that predict the social adjustment of public school children (Rogers-Adkinson, 2003).

Third, language deficits have been found to have a devastating effect on peer relationships (Benner et al., 2002). Aggressive children, for example, use less verbal communication and more physical action to solve interpersonal problems with their peers, possibly due to their language deficits (Gallagher, 1999; Zabel & Nigro, 2001). Children with receptive language deficits that limit their ability to comprehend and comply with repeated warnings or verbal cues may be prone to noncompliance (Fujiki, Brinton, Morgan, & Hart, 1999). Such children become frustrated, and, consequently, develop ongoing miscommunication patterns and antisocial behavior (Ruhl, Hughes, & Camarata, 1992).

Finally, the likelihood of children exhibiting antisocial behaviors tends to be higher for those with receptive language deficits (Baker & Cantwell, 1985;

Cohen, Davine, Horodezsky, Lipsett, & Isaacson, 1993). Researchers have found that children with receptive language deficits are at substantially higher risk for antisocial behavior than those with speech (i.e., articulation) or speech and language disorders. For example, Cohen et al. (1993) found that children with undetected receptive language deficits were rated as the most delinquent and depressed by parents and most aggressive by teachers and demonstrated more severe challenging behavior, while children with expressive deficits were rated as more socially withdrawn and anxious (Cohen, 1996). Not only do receptive language deficits frequently go undetected, but children with receptive language deficits also have higher rates of behavior problems than do children with specific expressive language deficits (Cantwell & Baker, 1991; Cohen, 1996; Silva, Williams, & McGee, 1987). Most pointed is the work of Warr-Leeper, Wright, & Mack (1994) in which weaknesses in receptive language were apparent for all (N = 20) subjects with severe social adjustment problems (p < .001), while deficiencies in expressive language were also evident, but less pronounced. As these studies suggest, in general researchers have found that language skill deficits place children at risk of increased levels of antisocial behavior and school failure.

More recently, neurological development has been explored related to this issue. The work of Hooper et al. (2003) indicated that core language functions were predictive of behavior problems in a typically developing kindergarten group. In addition, in a preliminary study by Rogers-Adkinson (2003), language processing as measured by the Test of Language Processing-R (Richard & Hanner, 1995), suggested advanced processing skills were limited in a population of males verified with emotional disturbance in segregated programming.

Although there is substantial evidence that social adjustment and language deficits co-occur (Baker & Cantwell, 1985; Benner et al., 2002; Rutter & Mawhood, 1991), researchers have failed to investigate the receptive language skills of children placed in public school settings using correlational research designs. To address this issue, the purpose of this study was twofold: the first was to assess the strength of the relationship between the social adjustment and receptive language skills of elementary-aged public school children, while the second purpose was to assess the variables that predict the social adjustment of elementary-aged public school children.

Method
Participants

One hundred and fifty children (81 boys and 69 girls) enrolled in two elementary schools in the Midwest participated in this study. Participants ranged in age from 4 to 8, with a mean of 6.53 (SD = .96). The percentages of kindergarten, first-grade, and second-grade children were 33%, 35%, and 32%, respectively. The ethnic background of the children was 77% Caucasian, 12% African American, 9% Hispanic, 1% Asian, and 1% Native American. Preliminary analyses were conducted to determine whether there were statistically significant differences in the mean standard scores of boys and girls. These analyses revealed that there were no statistically significant differences between these means for any of the dependent measures (e.g., Total TACL: $t(148) = -.850$, $p >$ .05).

Dependent Measures

Social adjustment. Social adjustment was measured using the Social Skills Rating System (SSRS) (Elliott & Gresham, 1990). Teachers rated student behaviors on a 3-point, Likert-type scale in two areas: the frequency the behaviors occurred and the importance of each to the respondent. The SSRS is composed of three domains (i.e., Social Skills, Problem Behaviors, and Academic Competence) and eight subtests (i.e., Cooperation, Assertiveness, Self-Control, Externalizing Problems, Internalizing Problems, and Hyperactivity). The social skills domain comprises and measures the Cooperation, Assertiveness, and Self-Control subscales. The Problem Behaviors domain includes and measures the Externalizing Problems (e.g., arguing, aggression, and rule-breaking behavior); Internalizing Problems (e.g., depression, anxiety, and recurrent complaints of bodily pains or illness); and Hyperactivity subscales. The Academic Competence domain measures reading and mathematics performance, motivation, parental support, and general cognitive functioning. The SSRS, which has demonstrated content, construct, concurrent and factor analysis validity as well as technically adequate properties, is a widely used measure of social adjustment (Conoley & Impara, 1995).

Receptive language. Receptive language was measured using the Test of Auditory Comprehension of Language-3 (TACL-3) (Carrow-Woolfolk, 1999). The TACL-3, an individually administered test of receptive language, consists of 139 items grouped into three language domains of 45 to 48 items. Each item is composed of a word, phrase, or sentence and a corresponding plate of three colored drawings. For the study reported here, the examiner read the stimulus aloud, and the child was directed to point to the picture that he or she believed best represented the meaning of the word, phrase, or sentence. The TACL-3 is a technically adequate and widely used measure of the receptive language skills of children ages 3 to 9 (Conoley & Impara, 1995), providing a total score and scores across three domains. The three domains of receptive language measured include (a) Vocabulary, (b) Grammatical Morphemes, and (c) Elaborated Phrases and Sentences. Vocabulary measures the auditory comprehension of the most literal and common meanings of word classes such as nouns, verbs, adjectives, and adverbs. The Grammatical Morphemes domain measures the auditory comprehension of the meaning of prepositions, noun number and case, verb number and tense, noun-verb agreement, and derivational suffixes, tested within the context of a simple sentence. The Elaborated Phrases and Sentences domain measures the auditory comprehension of syntactically-based word relations and sentence constructions.

Internal Consistency of Dependent Measures

Cronbach's Alpha was used to measure the internal consistency between Total TACL-3 score and SSRS Social Skills, Problem Behaviors, and Academic Competence domains. This analysis was conducted to determine the extent to which item responses on the TACL-3 and SSRS domains obtained at the same time correlate with one another. Cronbach's Alpha coefficients were .512, -.395, and .680 between Total TACL-3 and SSRS Social Skills, Problem Behaviors, and Academic Competence domains.

Agreement

Agreement checks were conducted at two phases of the data collection. At both phases, agreement was calculated by dividing the number of agreements by agreements plus disagreements and multiplying by 100. First, all SSRS and TACL-3 protocols were checked for scoring accuracy by researchers after initial scoring by school psychologists. An agreement was recorded when the agreement check calculations aligned with calculations made at initial scoring. Agreement in scoring SSRS and TACL-3 protocols was 97% and 98%, respectively. Second, all of the scores were checked for accuracy by the researchers following initial data entry. Agreement in entering SSRS and TACL-3 data was 99%. Initial errors made in scoring or data entry were corrected.

Procedures

The TACL-3 was administered by four graduate students and two school psychologists. Administrators were trained to deliver the test in a consistent and accurate manner. Testing was conducted on three consecutive days in the fall of the school year in quiet areas of the schools (e.g., rooms in the library), taking approximately 20 minutes per child. The SSRS was completed by the eight classroom teachers of elementary school children. Each teacher received the same written and verbal instruction for accurately completing the SSRS. The teachers received no information about the purpose of the study. Teachers completed the SSRS for each child in the class shortly after the TACL-3 was administered. The SSRS protocols were completed and returned within two weeks of the administration of the TACL-3.

Results

The strength of the relationship between social adjustment and receptive language was addressed in three ways. First, preliminary descriptive analyses were conducted to compare the overall performance of the 150 elementary-aged children on the dependent measures used in this study (i.e., the TACL-3 and the SSRS) with age and grade level norms (see Table 1). As Table 1 illustrates, overall performance on the dependent measures of these children approximated standardized norms across grade levels.

Second, Pearson Product Moment correlations were conducted to examine the overall strength of the relationship between receptive language and social adjustment (see Table 2). This relationship was addressed using the TACL-3 total and domain scores (i.e., Vocabulary, Grammatical Morphemes, and Elaborated Sentences and Phrases) and the SSRS domain (i.e., Social Skills, Problem Behaviors, and Academic Competence) and subscale (i.e., Cooperation, Assertiveness, Self-Control, Externalizing, Internalizing, and Hyperactivity) scores. Table 2 indicates that the Total TACL-3 and Vocabulary domain scores were significantly correlated with the Social Skills ($p < .001$), Problem Behaviors ($p < .05$), and the Academic Competence domains ($p < .001$). The TACL-3 Grammatical Morphemes and Elaborated Sentences and Phrases domain scores were significantly correlated with the Social Skills ($p < .01$) and Academic Competence domains ($p < .001$). As indicated in this table, a large Pearson Product Moment correlation was found between Total TACL-3 and Academic Competence [r (142) = .52, p < .001]. The strength of the relationship between Total TACL-3 and Social Skills [r (142) = .35, p < .001] was moderate in magnitude, whereas that between Total TACL-3 and SSRS Problem Behaviors [r (142) = -.17, $p < .05$] was small. Thus, a moderate to strong positive relationship was found between receptive language and two key areas of social adjustment, social skills and academic competence. A small inverse correlation was found between receptive language skills and problem behaviors.

Third, multiple regression analyses were used to predict social adjustment (social skills, academic competence, and problem behaviors) based on the predictors of demographic variables (i.e., age and ethnicity) and receptive language skills (i.e., TACL-3 Vocabulary, Grammatical Morphemes, and Elaborated Sentences and Phrases). Regression diagnostics were conducted prior to conducting these analyses to screen data for deviant cases such as extreme outliers and/or those having undue influence on the results (Pedhazur, 1999). Influential cases have a significant effect on values of regression statistics either uniquely or in combination with other observations. To detect these influential cases, the following regression diagnostics were examined: (a) leverage (detects cases that affect the regression line), (b) Cook's D (detects cases that are influential due to their values on Y, X, or both), and (c) Standardized DFBETA (detects cases that affect the regression coefficient). The results of the regression diagnostics indicated that there were no deviant cases or outliers that would unduly influence the results of the regression analyses. Additionally, collinearity diagnostics indicated that the predictive variables were a linear combination of one another. The condition index obtained in all cases was < 10, with a condition index of 30 to 100 indicating moderate to strong collinearity (Fox, 1991).

The target variables for the regression analyses were the SSRS Social Skills, Academic Competence, and Problem Behavior scores. The same two constructs—demographic variables (i.e., age and ethnicity) and receptive language (TACL-3 Vocabulary, Grammatical Morphemes, and Elaborated Sentences and Phrases)—were entered into each of the regression analyses. Each of these constructs was entered in the first and last position to enable both the establishment of the initial contribution of the demographic variables and receptive language constructs when the other predictor was not present (i.e., first position) and the final contribution of each construct after the other was entered into the equation (i.e., final position). Entry in the final position allowed for the examination of the contribution of the demographic and receptive language constructs on the prediction of social skills, problem behaviors, and academic competence above and beyond the contribution of the other construct. These analyses also provided information on the combined contribution of the demographic variables and receptive language constructs on the prediction of social skills, academic competence, and problem behaviors.

In all cases, the probability of F to enter was < .05 and to remove > .10. A significant regression was found. When all variables were entered into the regression formula, 17%, 28%, and 7% of the variance in the social skills, academic competence, and problem behaviors of participants, respectively, were accounted for (see Table 3). The overall regression equation in the prediction of social skills ([F (5, 151) = 7.99, $p < .001$) and academic competence [F (5, 151) = 15.09, $p < .001$) was statistically significant. Only the receptive language construct contributed to the overall fit-of-the-model when entered in the first or the last position in the regression analyses for social skills and academic competence.

Table 1

Mean Standard Scores and Standard Deviations of Elementary-Aged Children on the SSRS and TACL-3 Measures

Area/Dependent Measure/Subtests	Mean	*SD*
Social Skills SSRS	101.53	15.64
Cooperation	14.6	4.9
Assertiveness	12.3	4.3
Self-Control	14.6	4.7
Problem Behaviors SSRS	100.33	15.07
Externalizing	3.4	3.4
Internalizing	2.7	2.6
Hyperactivity	4.2	3.8
Academic Competence SSRS	92.24	13.42
Total TACL-3	98.22	13.33
Vocabulary	9.61	2.52
Grammatical Morphemes	9.74	2.57
Elaborated Sentences and Phrases	9.81	2.58

Note. The Total Test of Auditory Comprehension of Language-3 and Social Skills Rating System domain (i.e., Social Skills, Problem Behaviors, and Academic Competence) are standard scores based upon mean of 100 and standard deviation of 15. The subtests of TACL-3 (i.e., Vocabulary, Grammatical Morphemes, and Elaborated Sentences and Phrases) are based upon a mean of 10 and standard deviation of 3. The subscales of the SSRS (i.e., Cooperation, Assertiveness, Self-Control, Externalizing, Internalizing, and Hyperactivity) are raw scores ranging from 0 to 20

Table 2

Correlations Between the SSRS and the TACL-3

| Domain | Social Skills | | | | Problem Behaviors | | | | Academic Competence |
	Overall	Cooperation	Assertive-ness	Self-Control	Overall	Externalizing	Internal-izing	Hyperactivity	Overall
Total TACL-3	.35***	.38***	.35***	.16	-.17*	-.08	-.14	-.18*	.52***
Vocabulary	.35***	.35***	.34***	.15	-.19*	-.06	-.22**	-.19*	45***
Grammatical	27**	.33**	.30**	.12	-.11	-.07	-.07	-.13	.43***
Morphemes									
Elaborated	.23**	.25**	.23**	.12	-.12	-.08	-.07	-.14	.39***
Sentences and Phrases									

*Note. * p < .05, ** p .01, and *** p < .001.*

Discussion

Several findings warrant discussion in light of this study's aim to assess the strength of the relationship between social adjustment and receptive language skills of elementary-aged public school children and to assess the variables that predict the social adjustment of elementary-aged public school children. First, small to moderate statistically significant correlations were found between receptive language and social adjustment in kindergarten through second-grade public school children. Second, the component of social adjustment most strongly correlated with receptive language was the teacher-perceived academic competence ($r = .52$) of children. This correlation approximates that reported between receptive language and academic achievement ($r = .56$) in a meta-analysis of 58 studies on the learning problems of kindergarten and first-grade children (Horn & Packard, 1985). Twenty-eight percent of the variance in the academic competence of participants was accounted for by receptive language skills. As indicated in Table 3, demographic variables contributed nothing above and beyond receptive language skills in accounting for the variance in academic competence. Third, small statistically significant correlations were found between receptive language and the social skills and problem behaviors components of social adjustment. Moreover, receptive language skills contributed to the overall fit-of-the-model when entered in the first or the last position in the regression analyses for social skills, accounting for 16% of the variance. This finding extends previous research suggesting that young children with low social skills were more likely to have deficient language skills (Kaiser, Hancock, Cai, Foster, & Hester, 2000).

Finally, the receptive language domain that best predicted the social skills and academic competences of children was vocabulary. The importance of vocabulary knowledge to school success and to social adjustment is widely documented (Anderson & Nagy, 1991; Becker, 1977). For example, Hart and Risley (1995) conducted a longitudinal study on the language skills of young children from 42 families, finding that children's vocabulary growth rate and vocabulary use were largely determined by the quality and quantity of social interactions with their parents over time. More similar to the current study, Linz, Hooper, Hynd, and Isaac (1990) found that receptive vocabulary performance was significantly worse for children with severe social adjustment problems than for the control children.

Limitations

This study was limited in several ways. First, though widely accepted and technically adequate instruments were used to measure the constructs of receptive language (i.e., the TACL-3) and social adjustment (i.e., the SSRS), different instruments or a combination of instruments may yield different results. Therefore, this study was limited by the dependent measures used. Second, the sample was not demographically representative of the general population of kindergarten to second-grade public school children. This sample was drawn from a primarily Caucasian, rural location in the Midwestern United States. Generalizability is, therefore, limited. Third, though performance on the SSRS Academic Competence domain was average, the mean sample score was approximately one half a standard deviation below standardized norms. Generalizing the significant

Table 3

Multiple Regression Analyses for Demographic Variables and Receptive Language

Construct	Initial Entry				Entry in Last Position	
	df	β	*F*	*p*	*F Change*	*p*
Social Skills						
Demographic	2	.10	.69	.504	1.93[a]	.150
Receptive Language	5	.38	7.13	.000	7.99[b]	.000
Academic Competence						
Demographic	2	.09	.49	.614	.16[c]	.852
Receptive Language	5	.52	15.63	.000	15.09[d]	.000
Problem Behaviors						
Demographic	2	.16	1.53	.220	1.82[e]	.162
Receptive Language	5	.20	1.74	.162	1.93[f]	.128

Note. [a] $\Delta R^2 = .03$, [b] $\Delta R^2 = .16$, [c] $\Delta R^2 = .00$, [d] $\Delta R^2 = .27$, [e] $\Delta R^2 = .03$, and [f] $\Delta R^2 = .04$.

correlation between academic competence and receptive language to the normal population of kindergarten through second-grade children could be problematic. Fourth, this is the only study to date that has examined the strength of the relationship between receptive language and social adjustment. Until replications of this study are conducted, the trustworthiness and usability of its findings should be interpreted cautiously. Finally, this study was limited by the correlational research design used. Future research should address the nature of the relationship between receptive language and social adjustment using experimental research designs. Such experimental studies could be designed to explore three possible relationships: (a) receptive language delay precedes social adjustment problems, (b) social adjustment problems precede receptive language delay, and (c) both receptive language delay and social adjustment problems are related through a common antecedent variable or set of variables.

Implications

There are several possible implications to address. First, most of the intricacies of what a child must learn about complex social behaviors and language, particularly in the area of vocabulary, are acquired through reciprocal interactions with their caregivers by age 5 (Nelson, 2000; Patterson, 1982). Receptive language delays and social adjustment problems may emerge from the same underlying etiological factor, such as unhealthy early caregiver-child interactions (Hart & Risley, 1995; Nelson, 2000). Receptive language deficits may result from and serve as catalysts for ongoing coercive interactions between caregiver or teacher and the individual child with social adjustment problems. These coercive interactions may actually reinforce and validate problem behaviors, resulting in an ongoing, persistent pattern of problem behavior and communication deficits (Nelson, 2000; Walker, Ramsey, & Colvin, 1995).

Second, children with social adjustment problems should be screened for receptive language delays (American Institutes for Research, 2002; Walker, Schwarz, Nippold, Irvin, & Noell, 1994). Recognition of language deficits in children with social adjustment problems in school is often eclipsed by the challenge of managing these students in the classroom (Hooper et al., 2003; Warr-Leeper et al., 1994). Benner (2005) found that approximately 86 % of a sample (*N* = 56) of K - fifth-grade children with serious behavioral disorders who met clinical criteria for language disorders were not receiving formal language services. Cohen and colleagues (1998) found that 40 % of children with social adjustment problems have unsuspected receptive language deficits that go undiagnosed and untreated (Cohen, Barwick, Horodezky, Vallance, & Im, 1998). Untreated delays in receptive language are problematic given that children are expected to learn through listening at least 60 % of the time during the elementary school years (Dunkin & Biddle, 1974) and 90 % of the time during the secondary school years (Richards, 1978; Warr-Leeper et al., 1994).

Based on the findings of the current study, it makes sense to engage in proactive screening and identification of receptive language deficits. Identifying reliable and valid screening and assessment processes will require the involvement of speech-language pathologists. Involving speech-language pathologists in these activities may require new and innovative screening and assessment processes to identify young children at risk of both emotional disturbance (ED) and language problems given the case loads of these professionals.

For example, a language screening process might be incorporated into the second stage of the *Systematic Screening for Behavior Disorders* (SSBD: Walker & Severson, 1990) to identify children at risk of ED and language deficits. The SSBD is a three-stage process that begins with teacher nominations and rank ordering of pupils meeting specific definitions of behavior difficulties. The second stage consists of teacher ratings of adaptive and maladaptive behavior patterns. Direct observations of classroom and playground behavior are conducted in the final stage.

A large beta coefficient was found for the receptive language construct when entered in the first position in the regression analysis for academic competence (β = .52). A moderate beta coefficient was found for the receptive language construct when entered in the first position in the regression analysis for social skills (β = .38). Small beta coefficients were found for the receptive language (β = .16) and demographic constructs (β = .20) when entered in the first position in the regression analysis for problem behaviors. A small beta coefficient was found for the demographic construct (β = .10) in the regression analysis for social skills. The TACL-3 Vocabulary score contributed to the prediction of social skills and academic competence. The *t*-test for the Beta weight for this measure was statistically significant (*p* < .001) when the receptive language construct was in either the initial or final position. Thus, receptive language skills (vocabulary, grammatical morphemes, elaborated sentences and phrases) were a better predictor of the social skills and academic competence of elementary-aged children than demographic variables (i.e., age and ethnicity).

Finally, early intervention and support programs for social adjustment problems, among other variables, should address receptive language deficits (Rogers-Adkinson & Griffith, 1995). A narrow window of opportunity exists where there is still a chance to alter the course from chronic behavioral and language disorders to behavioral and language competence. One of the most compelling and well-established findings is the importance of early intervention providing intensive instruction in key language and literacy skills such as phonemic awareness and alphabetic understanding for young children at risk for reading disabilities (National Research Council, 1998). Language development programs that can be delivered by teachers are available. For example, *Language for Learning* (Englemann & Osborn, 1999) is an empirically validated language development program that can be delivered by both general and special education teachers. This direct instruction program teaches syntactic, semantic, and pragmatic skills believed to be necessary for success in school. The results of two recent quasi-experimental investigations of the *Language for Learning* program demonstrated that the program produced positive effects on the receptive language skills and social adjustment of young children (Benner et al., 2002; Waldron-Soler et al., 2002). The use of empirically validated interventions such as *Language for Learning* is important given that the critical period for optimal growth in receptive language skills and social adjustment of children is prior to the third grade (Snow, 1987; Walker et al., 1995). However, given the lack of research in this area, more study research is warranted.

Summary

In summary, there is a gap in the literature on the strength of the relationship between social adjustment and receptive language. Researchers have used only causal-comparative or epidemiological

research designs to examine the co-occurrence of language and social adjustment problems (Benner et al., 2002). The results of this study indicate that the magnitude of the relationship between the receptive language skills and social adjustment of elementary-aged children ranges from small (i.e., problem behaviors) to large (i.e., academic competence). Moreover, receptive language scores, particularly receptive vocabulary, predicted the social skills and academic competence of kindergarten through second-grade children. Given that language skill deficits place children at risk of increased levels of antisocial behavior and school failure, building these skills through early identification and intervention becomes paramount.

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The "Adolescentizing" of the GED: Youth Perspectives

Carolyn Hughes, Latanya Riley, Gaylan Brown, Sarah Moore, Jennifer Sarrett, and Barbara Washington

Abstract: *Increasing numbers of adolescents are dropping out of high school and enrolling in General Educational Development (GED) programs. However, rarely have researchers asked these students their reasons for leaving school prior to graduation or their goals for obtaining a GED. To address these issues, we interviewed 20 youths enrolled in GED programs who had dropped out of high-poverty, low-performing high schools. These students were from low-income backgrounds, and most were African American males. One group of students was being served in a state custody residential program and the other was noncustodial. Findings indicated similarities and differences across groups as well as the need to modify school environments and address goal setting to increase student engagement in school to prevent high school dropout.*

High school dropout is rapidly becoming an issue of major national concern as evidenced by current legislation (e.g., No Child Left Behind Act of 2002), burgeoning educational reports (Bridgeland, DiIulio, & Morison, 2006), and recent mainstream media coverage (Landsberg, 2006 in the *Los Angeles Times*). For example, a recent *Time* magazine cover story "Dropout Nation" (Thornburgh, 2006) was published simultaneously in conjunction with a 2-day television special "American Schools in Crisis" on the Oprah Winfrey Show (April 11 & 12, 2006). Indeed, only 68 % of high school students nationally are expected to graduate on time (Greene & Winters, 2006; Swanson, 2004). Furthermore, dropout rates differ considerably across racial groups: Only 50 % of African American, 51 % of Native American, and 53 % of Hispanic students are expected to graduate versus 75 % of White and 77 % of Asian students (Swanson, 2004). Graduation rates are even lower for some male subgroups: Orfield, Losen, Wald, and Swanson (2004) reported graduation rates of 43 % for African American, 47 % for Native American, and 48 % for Hispanic males. Poverty is also a factor associated with high dropout rates: Almost 59 % of African American and 40 % of Hispanic (vs. 11 % of White) students attend high-poverty high schools with dropout rates of 50 % or more (Balfanz & Legters, 2004).

These graduation rates are strikingly low, particularly considering that high school dropouts are twice as likely to be unemployed than are high school graduates and their yearly earnings average more than $7,000 less than those of high school graduates and more than $24,000 less than those of college graduates (U.S. Census Bureau, 2006). They are also much more likely to be living in poverty, on public assistance, incarcerated, and in poor health

(Bridgeland et al., 2006). The unemployment rate is over 10 % for high school dropouts; however, this rate is higher for those who are male, have a minority status, or are living in poverty (U.S. Census Bureau, 2006). For example, almost one half of African American male dropouts living in central cities are unemployed (Sum, Khatiwada, Ampaw, & Tobar, 2004).

The multiple factors identified as accounting for the persistently high dropout rates are often categorized as "push-out" and "pull-out" factors (Scanlon & Mellard, 2002). Push-out factors typically relate to school practices such as grade retention policies, curriculum and instruction, and class size (Penna & Tallerico, 2005). Zero tolerance disciplinary policies, adopted by school districts in the early 1990s, have resulted in increased arrests, expulsions, suspensions, and the eventual dropping out of students for sometimes seemingly minor infractions (Miller, Ross, & Sturgis, 2005). No Child Left Behind (NCLB) and other accountability initiatives and attempts to raise standards may have the unintended consequence of pushing out of school those students who are struggling academically and who are less likely to pass a state's high-stakes exams, possibly placing a school on a "needs improvement" status (Landsberg, 2006; Lewin & Medina, 2003; Rachal & Bingham, 2004).

Some of these students may be "pushed" by school personnel into adult education General Educational Development (GED) classes as an alternative to the traditional school environment (Scanlon & Mellard, 2002). In fact, although GED instruction originally was designed for World War II veterans as an alternate form of completing a high school education, trends indicate increasing numbers of 16- and 17-year-olds enrolling in these programs. That 41 % of GED recipients in 2001 were 19 years

or younger represents a phenomenon increasingly referred to as the "adolescentizing" of the GED (Rachal & Bingham, 2004). Growing evidence indicates that many of these students have been asked to leave their high schools because of academic or disciplinary problems (Lewin & Medina, 2003; Rachal & Bingham, 2004). However, these students may not be aware that many of them will not pass the GED exam and that this diploma has less value in the job market or as a step to college (Scanlon & Mellard, 2002; Lewin & Medina, 2003). In general, fewer than 2% of dropouts receive a GED diploma (Scanlon & Mellard, 2002).

Pull-out factors, conceptualized as centered outside school, include personal (e.g., a student's motivation or self-esteem) and family characteristics (e.g., socioeconomic status or single-parent family); conflicting student responsibilities (e.g., employment or parenting status); and demographic, peer, and neighborhood characteristics (e.g., minority status, having friends who have dropped out, or being from a low-income neighborhood) (Gleason & Dynarski, 2002; Penna & Tallerico, 2005). Other researchers have identified lack of social bonding or no sense of identity with school with a gradual disengagement process, eventually resulting in students leaving school (Lehr, Hansen, Sinclair, & Christenson, 2003). In addition, a student's school history (e.g., poor school performance, attendance, or grades) influences the dropout process (Rumberger, 2004).

Identifying factors relating to early exit from high school and subsequent enrollment in a GED program may inform efforts to keep students in school and increase high school graduation rates. However, Gleason and Dynarski (2002) argued that although many factors have been associated with dropping out, reliable predictive variables have not been identified. Further, researchers have observed that dropouts are not a homogeneous group; rather, they leave school for a variety of reasons (Aloise-Young & Chavez, 2002).

One way to learn more about what causes students to leave school early may simply be to ask them. However, despite the increasing enrollments of adolescents in GED programs, few of these youths have been asked about their reasons for prematurely leaving high school (Brouilette, 1999). The few studies that did query GED students typically included either (a) forced-choice questionnaires that restricted the range of responses (Vann, 1995), (b) anecdotal versus systematic reporting of student responses (Brouilette, 1999), or (c) older versus younger participants. For example, Moeller, Day, and Rivera's (2004) and Mageehon's (2003) participants were older adults enrolled in correctional facility GED programs. In addition, Moeller et al. (2004) primarily questioned participants with respect to their current GED educational experiences in the correctional facility versus their high school experiences, while Mageehon (2003) provided only anecdotal reports of the responses of the five participants in her study.

The purpose of the study reported here was to address limitations in previous investigations of GED populations. First, our participants were young adults, primarily African American males from high-poverty backgrounds. Second, we employed open-ended interview questions versus rating scales or forced-choice responses to allow us to obtain the youths' multiple, complex reasons for dropping out. Third, we systematically analyzed themes in students responses rather than simply providing anecdotal reports. Fourth, we asked participants their reasons for getting an education and a GED in relation to their future goals.

Method
Setting

Participants were enrolled in a GED program funded by the state's Department of Labor and Workforce Development in collaboration with a local career advancement center designed to help low-income, at-risk youths who had dropped out of public school by providing GED instruction, job training, and other life-skills instruction. It was located in a community center in a central city neighborhood in a metropolitan area in Southeastern United States in which 80% of residents were African American, 40% were unemployed, and 44% of families lived below the poverty level, typically in a household headed by a single female who was receiving or previously had received public assistance (U.S. Census Bureau, 2006). Before dropping out of school, participants had attended high-poverty, low-performing area high schools identified as "needing improvement" based on NCLB dictates in response to low test scores and graduation rates.

GED Program

Six 3-hour GED classes were offered weekly at the community center, with participating students scheduled to attend two sessions per week on alternate days. On average, 8 to 10 students were present per class with one full-time teacher employed by the funding agency and one to two part-time volunteer teaching assistants. One room with several large classroom tables was dedicated to group GED instruction; an adjacent room used for 1:1 instruction was shared with a second teacher providing job training to GED students on a part-time basis. The teacher and assistants provided instruction using a published GED exam preparation curriculum, and students were provided with curriculum materials to use during class. One break, halfway through each 3-hour session, allowed students to go to a nearby convenience store and purchase snacks if they chose and had the money to do so.

Participants

A total of 20 students enrolled in the GED program participated in this study. These students represented two different groups of students who attended GED classes on alternate days: those who were in state custody ($n = 8$) and those who were not ($n = 12$). All students in the two groups enrolled at the time of the study were asked to participate. Only one student refused to give consent to do so.

Custodial participants. Six males (African American = 4, White = 2) and 2 African American females with an average age of 18 were in this group. These participants lived in a residential state custody program in the metropolitan area. The program was contracted by the state Department of Children's Services to serve youth 14 years or older who (a) were adjudicated due to criminal violations, such as burglary; (b) had been removed from their homes because of abuse or neglect; (c) had been referred from other state-funded youth development centers that they previously had attended; or (d) were homeless. The average length of stay in the residential facility was 5 months, although youths without a stable home environment to return to were eligible to remain longer. All without a high school diploma were required to attend a local public high school (if entitlement had not been removed) or a GED program. The program's primary goal was to help youths maximize the skills needed to be independent and productive members of their community.

Noncustodial participants. Eight noncustodial participants were male (African American = 7, White = 1) and four were female (African American = 3, White = 1). These participants, who lived in the neighborhood surrounding the community center, were enrolled in a program funded by a local Young Women's Christian Association (YWCA) called Youth at Work. This program served low-income youths living with a family member or on their own who (a) were at risk of dropping out or had dropped out of high school, (b) were in need of basic skills, (c) were pregnant, or (d) had been adjudicated or had prior criminal records. These youths were referred to the program by group home staff, the Juvenile Justice Center, the Department of Children Services, parole officers, community agencies, or school personnel. Youth at Work provided these students with books, tuition to attend the GED program or other postsecondary or vocational programs, bus passes to travel to the program and job sites, and test fees for the GED. On average, students remained in the program for approximately 15 months. The primary purpose of this program was to provide students with the educational and job assistance that would prepare them to be independent, productive citizens in their communities.

Measures

Records analysis. Participants' written records in the GED program were examined to obtain demographic information, including employment history, number of children, special education services received, age and grade at time of leaving school, and number of schools attended. Attendance records in the GED program were examined for the two consecutive months prior to conducting interviews for all participants in the study. The total number of hours attending across the 2-month span was collected for each participant, then divided by the total possible number of hours of attendance and multiplied by 100 to obtain the percent of attendance. Academic records were examined to determine daily classroom performance.

Participant interviews. Open-ended interviews were employed to obtain information from the 20 participants about their perspectives on their high school dropout experiences and their goals in the GED program. The interview protocol consisted of 13 open-ended questions focusing on four topic areas: (a) student preferences concerning previous schools attended (e.g., "What did you like most about the last school you attended?"); (b) student preferences concerning past teachers (e.g., "What didn't you like about your least favorite teacher? Why?"); (c) factors perceived by students related to dropping out of or staying in school (e. g., "What could you have done differently to keep you in school?"), and (d) the students' perceived value of education and the GED in relation to their future goals (e.g., "How important is getting an education to you? Why?"). These questions were derived from a review of the high school dropout prevention literature (Brouilette, 1999; Gleason & Dynarksi, 2002; Kortering & Braziel, 1999; Scanlon & Mellard, 2002). The five authors reviewed the initial protocol of questions, improving the wording and comprehension level. Based on feedback, a final interview form was developed.

Observations. Three volunteer teaching assistants were present in the GED classroom on a rotational basis allowing one to two assistants to be present. These assistants, who were students at a local university and served as three authors of this study, were trained to collect the extensive field notes and reflections on student performance and activities during each class session.

Interview Procedures

All interviews were conducted individually in a quiet corner of the room adjacent to the GED classroom. The volunteer teaching assistants were trained through role play to conduct these interviews. After obtaining verbal consent to participate, an interviewer asked a student to move to a quiet area in the adjacent classroom away from other class members for the interview. First, the interviewer read aloud from a written script the procedures for answering questions and the methods for ensuring the confidentiality of the responses. Next, the interviewer verbally asked each question on the interview form, providing clarification or follow-up questions as needed. As the interviews were conducted, interviewers recorded responses to the questions asked on the interview protocol. These sessions took between 20 to 25 minutes per participant.

Data Analysis

Descriptive statistics were used to summarize participant information from the record reviews. Participant interviews were transcribed verbatim by one author and checked for accuracy by having two additional authors read the transcribed responses to each question for each participant. Content analysis procedures (Lincoln & Guba, 1985) then were used to identify the categories and subcategories emerging from the custodial and noncustodial group responses. First, two authors independently classified the responses to each question into provisional categories based on similarity of meaning. Responses could be subdivided into more than one category. Second, classifications were compared and revised, and based on consensus among raters, definitions of the categories and rules for inclusion were developed. Then, raters independently reassigned responses to the revised categories, and these findings were compared. Fourth, to assess the agreement of the assignment to the categories, a third author independently classified responses based on the revised categories. Agreement was calculated for the responses to each question by dividing the total number of agreements per response per question by the number of disagreements plus agreements. The mean agreement of the assignment to the categories was 95 % (range = 70 % to 98 %) per question for the custodial participants and 94 % (range = 81 % to 98 %) per question for the noncustodial participants. Finally, field notes were summarized to include the most important observations and reflections of the teaching assistants.

Results

Record analysis findings (e.g., gender, race, last school attended) were compared for the custodial and noncustodial participants. Next, we summarized and compared interview responses by topic area and question for the two groups of students. Finally, we summarized the observations of student performance in the GED program.

Record Analysis

Table 1 summarizes the findings from the record analysis. The two groups of students (custodial and noncustodial) were similar in demographic characteristics. Across both groups of participants (N = 20), students were primarily male (n = 14) and African American (n = 16), with a mean age of 18. Few had children (n = 3), and few were employed (n = 4). Mean age when dropping out of school, last

grade attended, and number of schools attended were slightly lower for the custodial versus noncustodial participants (i.e., 16 vs. 17 years, 9th vs. 10th grade, 8 vs. 9 schools). Number of years since dropping out of school was similar across the groups ($M = 2$).

Differences found across groups included the fact that 5 of 8 custodial students reported having received special education services in school whereas none of the noncustodial students did. In addition, attendance in the GED program, although low, was almost twice as high for custodial as noncustodial students (i.e., 41 % vs. 22 % of total possible hours). Finally, student performance on GED practice tests in class was generally poor across groups.

Interviews

Categories of responses to the questions asked in the interviews displayed by topic area (i.e., student preferences concerning previous school attended, student preferences concerning past teachers, factors perceived by students as related to dropping out of or staying in school, students' perceived value of education and future goals) are shown in Table 2 for the custodial and noncustodial groups. The total number of responses obtained per question per group is listed after each question. In addition, the number of responses per category per question (and the percentage of total responses per question) is provided for each group. Because a response could be subdivided and

assigned to more than one category per question, more responses than the total number of students interviewed were possible per question. For example, 20 responses were assigned across five categories in response to Question 2 (i.e., "What did you like least about the last school you attended?") for the custodial group and 25 for the noncustodial group. Responses to questions are discussed by topic area below, including representative examples of actual student comments. (Complete listing of student responses arranged by category and sub-category are available upon request.)

Student preferences concerning previous school attended. Questions 1, 2, and 3 addressed student preferences concerning the last school they attended before dropping out and what they would like to change about these schools. When students were asked what they liked most about their schools (Question 1), positive interactions with peers (custodial students = 9 comments) or with teachers or principals (noncustodial students = 9 comments) were cited most often. For example, remarks from custodial students included "Some cool people were there," "I got to see people—had friends and relationships and stuff," and "I got in FFA because I had friends there." Noncustodial student remarks included having teachers who cared and "treated us like family and really tried to help us" and "teachers who made a difference and who paid attention to me." Students in both groups mentioned particular classes (e.g., math, cosmetology, auto mechan-

Table 1

Record Analysis Summary

Characteristic	Custodial ($n = 8$)	Noncustodial ($n = 12$)
Gender and race	6 males, 2 females; 6 African American (4 males, 2 females); 2 White (2 males)	8 males, 4 females; 10 African American (7 males, 3 females); 2 White (1 male, 1 female)
Reported being employed	1	3
Reported having children	1	2
Reported having received special education services	5	0
Age in years at time of study	$M = 18$ (range = 17 - 21)	$M = 18$ (range = 17 - 21)
Age in years when dropped out	$M = 16$ (range = 15 - 17)	$M = 17$ (range = 16 - 19)
Number of schools attended	$M = 8$ (range = 6 - 11)	$M = 9$ (range = 4 - 25)
Last grade attended	$M = 9$th (range = 6 - 11)	$M = 10$th (range = 8 - 11)
Number of years since dropping out	$M = 2$ (range = 1 - 4)	$M = 2$ (range = < 1 - 4)
Attendance in GED Program*	$M = 41$ % (range = 16 - 58 %)	$M = 22$ % (range = 5 - 37 %)

*Attendance was taken for a 2-month span and calculated by dividing the number of hours attended by each participant by the total number of hours of possible attendance and multiplied by 100.

ics) or extracurricular or social activities (e.g, sports, P.E., lunch) as their favorite aspects of the schools they attended.

When asked what they liked least about their last school attended (Question 2), the greatest number of comments when combined across both groups (*n* = 16) related to poor or uninteresting classes or instruction. Comments included "Class wasn't fun—the atmosphere was dull. I didn't like school because it was boring" and "There were no real classes; I just slept. We were just supposed to go through and do worksheets" (custodial) and "I used to love school—don't know what happened. After freshman year it got boring" and "They teach you the same stuff over and over again. Class was boring" (noncustodial). Negative interactions with others accounted for the second largest group of comments (*n* = 15) combined across groups. Although custodial students primarily cited negative interactions with peers (e.g., "Some people were snobby toward me because I wasn't cool or rich—the school had cliques"), noncustodial students primarily cited their negative interactions with principals (e.g., the principal was too harsh or unfair or "put a student out for nothing"). Thirteen comments combined across groups related to school policies, rules, or schedules. Custodial student comments primarily related to attendance and rules (e.g., "I didn't like the dress code—no sagging and you had to tuck your shirt in"), while noncustodial student remarks primarily focused on school discipline (e.g., "Certain students got special treatment" and "I didn't like the school's discipline policy—too strict and racist"). Only one comment (custodial) addressed school violence (i. e., "Kids were always fighting—in the hood and in school").

Question 3 asked students what they would have changed about their previous schools. Most of the comments across both groups (*n* = 15) related to improving classes and instruction, including "making it more fun and exploring for students," having enough books that weren't outdated (custodial), and having "teachers who were passionate and worked with all the students" (noncustodial). Additional comments related to changing class (*n* = 4) or school (*n* = 8) structure or policies. For example, custodial students mentioned having smaller classes, time to work alone, and more 1:1 learning experiences. Noncustodial students suggested reducing overcrowding at school "to alleviate the turmoil between rival neighborhoods attending the same schools" and having the same discipline treatment for all students. Students in both groups wanted shorter classes or school days. Only custodial students (*n* = 3 comments) mentioned wanting better interactions with peers, teachers, or principals.

Student preferences concerning past teachers. Questions 4 and 5 asked students about their past teachers. When asked what they liked about their favorite teachers (Question 4), students in both groups mentioned positive attitudes and interaction styles most often (*n* = 20 comments). For example, custodial student comments included "Mr. G—he was cool," "My English teacher was understanding—I could talk to her about anything," and "My cosmetology teacher—she was easygoing and friendly." Noncustodial student comments were similar: "The art teacher was cool" and "Ms. C. was there for us—she wasn't in it for the money." Responses (*n* = 23) in both groups indicated that students' favorite teachers were (a) nonjudgmental and respectful (e.g., "She never judged people"); (b) good instructors (e.g., "The teacher took time to explain things" and "He was very creative and made learning fun"); and (c) interactive with students outside of class (e.g., "She helped me after school and would take me out

to eat"). Two comments in each group indicated that the favorite teachers taught subjects the student preferred (e.g., math, culinary arts, or auto mechanics).

Comments from both groups (n = 24) overwhelmingly cited negative attitudes and interaction styles when students were asked what they did not like about their least favorite teachers (Question 5). Custodial student comments included "Mr. N. didn't know how to communicate effectively—he would yell instead of talking," "The teacher was cool sometimes and other times he had bad days," and "Ms. L. had no sense of humor." Noncustodial student remarks included "The math teacher was sarcastic and disrespectful," "Mr. L. treated Black people different," and "Ms. C. talked too loud." Students in both groups (*n* = 6 comments) also mentioned that their teachers' discipline and rules were too strict (e.g., "Would write people up for anything" and "Wouldn't let me make up my work when I was pregnant"). Custodial students also mentioned that these teachers treated students unfairly (e.g., "The teacher didn't treat all students the same"), while noncustodial students cited teacher poor instruction (e.g., "Ms. V. wasn't a good teacher because she joked too much").

Factors perceived by students as related to dropping out of or staying in school. Questions 9, 10, 11, 12, and 8 dealt with student perceptions regarding factors relating to their dropping out of or staying in school. Question 9 asked why students left school. Students in both groups (*n* = 20 comments) overwhelmingly cited school action or policies (primarily being suspended or expelled) as the reason for leaving school. Custodial student remarks included "I got withdrawn from school because I scored high on the GED practice test and was pulled out without knowing about it" and "I got suspended for the entire year—too many fights and too much stress and migraines, doing drugs and selling. I quit going—didn't go for many days and got caught with pills and sent to an alternative school." Noncustodial student responses were similar: "I was about to be kicked out so I just stopped going" and "An incident happened where a teacher accused me of swinging at her. The principal didn't believe me so I got suspended for two days, so I quit." Unlike noncustodial students, custodial students mentioned using or selling drugs (e.g., "Went ripped one day and saw all the kids and decided with friends not to ever go back"), peer or family influences (e.g., "All my family quit school—all my cousins dropped out"), and being put in jail (e.g., "I quit when I got locked up for robbery and possession of a handgun") as reasons for dropping out. Noncustodial students mentioned their own behavior or attitude (five comments) as a reason for dropping out (e.g., "I was frustrated with my own success—I got D's whether I worked or not").

When asked what could have prevented them from leaving school (Question 10), custodial students primarily mentioned changing their own behavior (four comments) (e.g., "Stop hanging around negative peers"), followed by changes in school (e.g., "Shorter periods, less students") and action by the juvenile justice system (e.g., "If I had been put on probation I would have stayed because if I didn't go to school I would have been picked up"). The majority of noncustodial student comments (*n* = 12) focused on changes in school (e.g., "Put me in my actual grade" and "Extra help from my teachers"), followed by changes in the student's attitude or behavior (e.g., "I wouldn't change schools—I would change myself and my attitude") or academic performance ("Making better grades"). Similarly, when

Categories of Participant Responses to Interview Questions by Topic Area

Response	Custodial f (%)	Non-custodial f (%)	Total
Student preferences concerning previous school attended			
1. What did you like most about the last school you attended?			(C = 22; NC = 22)
Positive interactions with peers	9 (40)	2 (9)	
Positive interactions with teachers or principals	3 (14)	9 (40)	
Interesting class content or relaxed classroom atmosphere	5 (23)	6 (28)	
Participation in extracurricular activities or social events	5 (23)	2 (9)	
School atmosphere and schedule	0 (0)	3 (14)	
2. What did you like least about the last school you attended?			(C = 20; NC = 25)
Poor or uninteresting classes or instruction	9 (45)	7 (28)	
School policies, rules, or schedules	5 (25)	8 (32)	
Negative interactions with principals	0 (0)	7 (28)	
Negative interactions with peers or teachers	5 (25)	3 (12)	
School violence	1 (5)	0 (0)	
3. If you could change anything about your previous schools, what would you change and why?			(C = 16, NC = 14)
Improve classes and instruction	5 (31)	10 (71)	
Change class structure, size, or placement	4 (25)	0 (0)	
Change school size, schedule, policies, or atmosphere	4 (25)	4 (29)	
Improve interactions with peers, teachers, and principals	3 (19)	0 (0)	
Student preferences concerning past teachers			
4. What did you like about your favorite teacher? Why?			(C = 24; NC = 23)
Positive attitude and interaction style	11 (45)	9 (39)	
Good instructor	4 (17)	7 (30)	
Nonjudgmental, respectful, and tolerant	4 (17)	3 (13)	
Interacted with students outside class	3 (13)	2 (9)	
Liked subject taught by teacher	2 (8)	2 (9)	
5. What didn't you like about your least favorite teacher? Why?			(C = 19; NC = 17)
Negative attitude and interaction style	12 (63)	12 (71)	
Discipline and rules too strict	4 (21)	2 (11)	
Treated students unfairly	3 (16)	0 (0)	
Poor instructor	0 (0)	3 (18)	
Factors perceived by students as related to dropping out of or staying in school			
9. Why did you leave school?			(C = 15; NC = 19)
School action or policies	6 (40)	14 (74)	
Personal behavior or attitude	0 (0)	5 (26)	
Using and/or selling drugs	4 (27)	0 (0)	
Peer or family influence	3 (20)	0 (0)	
Put in jail	2 (13)	0 (0)	

Response	*Custodial* f (%)	*Non-custodial* f (%)	Total
10. What could have prevented you from leaving school?			(C = 8; NC = 20)
Changes in school schedule, policies, or instruction	3 (37)	12 (60)	
Changes in my own attitude or behavior	4 (50)	6 (30)	
Improvement in my academic performance	0 (0)	2 (10)	
Action by juvenile justice system	1 (13)	0 (0)	
11. What could you have done differently to keep you in school?		15 (68)	(C = 16; NC = 22)
Improve attitude and behavior	8 (50)	7 (32)	
Improve school performance	8 (50)		
12. What kept you in school for as long as you stayed?			(C = 10; NC = 12)
Peers or family	3 (30)	5 (42)	
Teachers or classes	0 (0)	4 (33)	
To avoid getting in trouble/to have something to do	4 (40)	0 (0)	
Personal goal	3 (30)	3 (25)	
8. Given the chance, would you return to public school? Why or why not?			(C = 10; NC = 19)
No, because of not liking to go to high school	2 (20)	6 (32)	
No, because of social reasons	5 (50)	4 (21)	
Yes, because of benefits of going to high school	2 (20)	5 (26)	
Yes, if certain changes are made	1 (10)	4 (21	
Student perceived value of education and future goals			
6. How important is getting an education to you? Why?			(C = 14; NC = 18)
Important to experience success and new opportunities	0 (0)	8 (45)	
Important in order to achieve personal goals	7 (50)	6 (33)	
Important in order to go to college or trade school	4 (28)	0 (0)	
Important for a good job	3 (22)	4 (22)	
7. How important is it to get your GED? Why?			(C = 16; NC = 14)
Important in order to achieve personal goals	8 (50)	6 (42)	
Important for a good job	4 (25)	2 (14)	
Important because going back to school is not an option	3 (19)	3 (22)	
Important in order to go to college	1 (6)	3 (22)	
13. What are your future goals?			(C = 21; NC = 25)
To get a job or career	5 (24)	11 (44)	
To achieve personal goals	7 (33)	3 (12)	
To go to college or trade school	7 (33)	6 (24)	
To get GED	2 (10)	5 (20)	

Note: C = Custodial, NC = Non-custodial.

asked what students could have done differently to stay in school (Question 11), all student comments across groups related to either changing their attitudes and behavior ($n = 23$) or improving their school performance ($n = 15$). For example, custodial students responded, "Staying to myself and changing life sooner," "Waiting until later to have kids," and "Studying more and using free time wisely." Noncustodial students stated, "Staying out of trouble," "Applying myself to the work ethic," and "Staying focused."

Question 12 asked students to identify what kept them in school for as long as they stayed. A variety of peer and family influences ($n = 8$) was mentioned by both groups. For example, custodial students mentioned having friends in school or a parent who served as an inspiration. Noncustodial student comments included "My mother told me to go to school or get out of the house," "My granny—she didn't want to lose her check for disability," and "My mother—she always encouraged me to do better and have things in life." Both groups also mentioned personal goals (six comments), such as "Did not want to get a GED—wanted to get my high school diploma. My sister and brother were already in state custody" (custodial) and "I knew I wanted to be educated. I knew I was pregnant but I knew I wanted to go to college" (noncustodial). Only custodial students mentioned staying in school to avoid trouble or to have something to do (four comments) (e.g., "I just stayed to get away from the house because if I stayed there, there would be more trouble—my grandparents were saying I was doing stuff I wasn't"). Noncustodial students were the only ones to cite their teachers or classes as a reason to stay in school (four comments) (e.g., "I had teachers who had great relationships with me").

Despite the factors identified by the students for remaining in school, few comments from either the custodial (3 of 10) or noncustodial (9 of 19) group indicated that students would return to school if given the chance (Question 8). Both groups cited social reasons ($n = 9$) for not returning, such as "I don't like being around other people" and "I'm too old and would feel out of place" (custodial) and "People made fun of me and it caused me grief" (noncustodial). Both groups also indicated not liking to go to school (eight comments) as a reason for not returning, including "The special education classes I was in since 3rd grade were too small" (custodial) and "I really don't like school" and "there isn't anything the school can teach me that I don't know or can't learn on my own" (noncustodial). The few comments that advocated returning to school focused on benefits ($n = 7$), such as "I want to graduate" and "I missed out on a lot of learning" (custodial) and "I feel like I could do better at school" and "Everyone needs a high school diploma" (noncustodial). Finally, some students held that they would return to school if certain changes were made (five comments): "If they put me in the right grade after I was transferred" (custodial) and "Only if the teachers gave me a chance to make it" and "The classes need to be smaller to make learning more effective" (noncustodial).

Students' perceived value of education and future goals. Questions 6, 7, and 13 related to these students' perceived value of education and the GED in relation to their goals for the future. When asked how important it was to get an education (Question 6), students in both groups ($n = 13$ comments) indicated it was important for achieving personal goals. For example, custodial student comments included "Very important, because it's self-motivation and something that

can't be taken away" and "Very important, because I don't want my kids or sister to get their diploma first." Noncustodial student remarks included "Very important, because I want to be remembered for doing something exceptional, not a police standoff" and "Very important, because no one wants to be dumb, not cool—it's cool to know some stuff." Students in both groups (seven comments) also indicated that an education was important for getting a good job (e.g., pharmacy, construction, army), and custodial students cited the need for an education for college or trade school. Noncustodial students also cited the importance of education in experiencing success (e.g., "Because where I'm from women ain't worth nothing, but education will take me out of that and I will be a successful female from the hood" and "This will start my life"). In response to Question 7 (i.e., "How important is it to get your GED?"), three of four categories of student comments across both groups were similar to those found in response to Question 6 (i.e., important in order to achieve personal goals, important for a good job, important in order to go to college). In addition, some student comments across both groups ($n = 6$) indicated that a GED was important because going back to school was not an option (e.g., "Going back to school is not an option because I'm too far behind," "This is my last opportunity to get a diploma," and "I can't get back in public schools").

Finally, when asked about their future goals (Question 13), four categories of responses emerged across both groups of students (i.e, getting a job or career, going to college, achieving personal goals, getting a GED). Job and career goals ($n = 16$) included "trying to rap or do art," "work and support family," and "maybe join military" (custodial) and "open up a car detail shop," playing football, and acting or modeling (noncustodial). Postsecondary goals across groups included degrees or licenses in cosmetology, business management, and health care; personal goals focused on being independent and successful, serving as a role model, and supporting own children.

Observations

In addition to the low attendance of all students, observations indicated that students generally did not appear motivated to work on assigned activities, such as GED practice tests, unless working 1:1 with an assistant or in a group competition directed by an assistant. Students appeared to respond well to the friendly, "laid-back" style of the teacher and assistants; however, considerable prompting and encouragement were required to engage them in academic activities. Furthermore, students were allowed to leave the building for a break to visit the local convenience store, a popular site for drug dealing. Field notes reflected assistant concern that classroom expectations were too low and rules were not uniformly enforced.

Discussion

The nation's high school dropout rates are increasing at alarming rates, and many at-risk students are being shunted into out-of-school GED programs. Although GED programs originally were designed for adults, increasing numbers of adolescents are enrolling in these classes. Therefore, it is critical to know more about why these youth are dropping out of high school. Our study, however, is one of only a handful investigating the perceptions of youth in GED programs.

Similar to findings from previous studies (Penna & Tallerico, 2005), students cited school policies (e.g., suspension or expulsion)

as a primary reason for leaving school, as well as their own attitudes (e.g., frustration) and behavior (e.g., selling drugs or failing to attend class). Poor or uninteresting classes or instruction; the teachers' communication styles (e.g., sarcastic or judgmental); unfair or strict discipline policies; and negative interactions with peers, teachers, and principals were also reasons given for not liking school. At the same time, students cited favorable aspects of previous schools, including positive interactions with others and favorite classes and teachers, in addition to their own personal goals, for keeping them in school for as long as they stayed, a finding corroborated by Kortering and Konold (2005). Participant recommendations for school change included improved instruction, more relevant coursework, smaller classes, and increased classroom resources. Similar to respondents interviewed by Bridgeland et al. (2006), students indicated that they highly valued getting an education and believed it was critical to achieving their future goals (e.g., attending college or trade school). Furthermore, like Bridgeland et al.'s (2006) students, our participants accepted some personal responsibility for having left school.

Our findings extend the research on high school dropout in several ways. We targeted a voice rarely found in the dropout literature: that of low-income youths, primarily African American males, attending a GED program who previously had attended high-poverty, low-performing schools. In addition, a subgroup of these students was enrolled in a residential state custody facility. Although some findings were similar across groups, differences were also apparent. For example, interactions with peers in school emerged as a major factor for either staying in (positive interactions) or leaving (negative interactions) school for students in state custody. Further, and not surprisingly, these students cited illegal incidents (e.g., selling drugs or possessing a handgun) as related to their leaving school more often than did their noncustodial counterparts. In addition, unlike students in previous studies (e.g., Kortering & Braziel, 1999), few of our participants indicated that they would ever return to high school.

In part, our findings may relate to the fact that all participants had attended high-poverty high schools on the "needs improvement" list as dictated by NCLB legislation because of their low test scores and graduation rates. Similar to many schools having a majority of African American or Hispanic students (Balfanz & Legters, 2004), these schools were characterized as having limited resources, high teacher absences, and an uneven quality of instruction. Student critiques that "We were just supposed to go through and do worksheets"; that "Teachers were disorganized and classrooms were junky"; or that there were not enough materials, heat, books, or resources may be totally justified. Previous studies (Gleason & Dynarksi, 2002) have tended to focus on student characteristics or performance as causal factors related to dropping out. Although these factors are important, overemphasizing them without considering school qualities may result in "blaming the victim" and viewing the student as the sole source of the dropout problem. Since the majority of African American and Hispanic students attend schools with dropout rates of 50 % or higher, it is imperative that we learn what these students are experiencing in school that may lead them to drop out. If, as indicated by this study, students collectively are identifying poor instruction, lack of resources, overcrowding, and limited choice of classes as problems in the high-poverty schools they attend, these problems must be addressed.

At the same time, when asked what could have prevented them

from leaving school (Question 10), 43 % of the responses were related to participants' changing their own behavior, performance, or attitudes (e.g., attending class, doing homework, being focused, or taking school seriously). In other words, students professed their own lack of motivation to attend school as related to their dropping out. This lack of motivation can be viewed two ways, one of which sees the problem as residing within the student. It may be that the participants lacked goals related to completing school. Although students overwhelmingly said that they valued an education and getting a high school diploma, it may be that these goals were too long-term to motivate their actions on a daily basis in order to come to class or complete homework assignments. Or these students may have had conflicting goals, such as earning money or engaging in a romantic or sexual relationship, which prevented them from attending school on a regular basis (Carroll, Durkin, Hattie, & Houghton, 1997). The notion of conflicting goals seems plausible considering the students' poor attendance (i.e., 41 % custodial, 22 % noncustodial) and academic performance in their GED program, despite their claims of wishing to obtain their GED. Our participants may have been similar to those interviewed by Bridgeland et al. (2006) who indicated that having "too much freedom" led to their dropping out. If the students' most salient goals relate to earning money, hanging out with peers, or engaging in other activities outside of school, their motivation to attend classes will be problematic. Consequently, curricula have been proposed for at-risk youths to teach goal-setting and decision-making skills to increase their academic motivation (O'Hearn & Gatz, 2002).

While goal-setting curricula and related programs emphasize the need for the student to change, lack of student motivation also can be viewed as a problem residing within the school. How can a school change to become an environment that motivates students? Zhang and Law (2005) suggested allowing students to become more active participants in their educational process to promote their academic motivation. By increasing the students' opportunities to set goals and make decisions and by providing the support needed to learn these skills, school may become a more motivating environment. In addition, schools can become more accommodating of individual student behaviors and needs. For example, participants in our study indicated that they were behind in their assignments, slept in class, missed classes, and needed more help to understand class work. They also felt that schools lacked flexibility in transferring credits, applying discipline policies, and scheduling classes. Supports and accommodations in school could be provided to address these problems early to improve student likelihood of success, thereby increasing their motivation to attend school.

Finally, positive aspects about previous schools cited by students included relationships with peers and teachers, while negative interactions with peers, teachers, and principals were reasons given for leaving school. In addition, students suggested that class sizes should be smaller, with several respondents citing the warmth and friendliness of their small GED classes as preferable to the larger, less personal classes they experienced in public school. Recently, considerable attention in the research and practice literature has focused on developing small learning communities or communities of caring within a school to combat dropping out among at-risk students (Kerr & Legters, 2004). For many low-income students, there is a lack of caring adults in their lives. A sense of community and the presence of

caring, compassionate adults and mentors can provide students with the motivation to succeed in school (Penna & Tallerico, 2005). Increasing positive interactions and building a sense of community within the classroom and school could provide the goals and motivation to keep students coming to school rather than looking outside to find support and companionship. In fact, a caring community has even been suggested as a means to counter violence at school (Osterman, 2003). Rather than push out students failing to comply with school discipline policies, schools may be able to accommodate them by providing support to change behavior and offering membership in an accepting community (Hughes & Carter, 2006).

While this study offers insight into the increasing number of high school dropouts in GED programs, its generalizability is limited by the small number of participants, the lack of extensive background or family information about the participating students, and the self-report of their experiences in high school. Because events reported had occurred in the past, direct observation could not be conducted to corroborate these student perceptions. Future research should expand the number of participants and, if possible, corroborate findings with input from teachers, parents, and others.

However, there is value in recommendations provided by study participants. These should be introduced and their effects evaluated in high-poverty high schools typical of those the participants attended. In fact, many of their recommendations such as experiential learning activities, direct instructional methods, and actively engaging students are proven practices that all schools can and should implement. Although many dropout programs have focused on changing the student rather than the school environment (Lehr et al., 2003; Rumberger, 2004), implementing such recommendations gives schools the opportunity to address change on both levels. By listening to youth attending GED programs, we can (a) avoid the pitfalls that they encountered and (b) build school environments that address these students' needs, both of which are important in light of the growing dropout crisis in American schools and the recent "adolescentizing" of the GED.

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