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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 Review articles provide qualitative and/or quantitative syntheses of published and unpublished research and other information

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Perceptions of Social Support in Urban At-Risk Boys and Girls

Laurie A. Chapin and Raymond K. Yang

Abstract: This study explored at-risk boys' and girls' self-perceived social support. Participants were 141 female and 310 male, 8- to 12-year-olds from low-income neighborhoods; 54% of the sample is Latino. Using items from the four subscales of Harter's (1985) Social Support Scale for Children, factor analysis was used to explore differences in the underlying structure of social support. Analyses were performed separately for boys and girls. Analyses for girls' social support clearly reflected the four support types: close friend, family, classmate, and teacher. Boys did not reflect distinct types of support, indicating more similarity in their perceived social support from different people.

Introduction

There is a growing awareness that the development of positive outcomes varies due to context of development, culture, and gender (Ungar et al., 2007). Social support is an essential component of healthy development and must be understood in the contexts young people experience it (Coatsworth et al., 2000). This study will explore the meanings of social support for boys and girls from an urban community, contributing to the understanding of gender and social support in the development of resilience.

Resilience Theoretical Approach

Research related to the development of minority and children at risk for poor outcomes due to low socioeconomic status has typically focused on deficits; however, an approach that examines the resilience process and positive development is favored (Meece & Kurtz-Costes, 2001). Researchers typically define resilience as a process that results in positive outcomes or adaptation for children or adolescents who have experienced adversity (Luthar, Cicchetti, & Becker, 2000). For populations with many risk factors associated with poor development, Masten (2001) explains that the processes that are related to *positive* outcomes are not extraordinary.

Resilience appears to be a common phenomenon that results in most cases from the operation of basic human adaptational systems. If those systems are protected and in good working order, development is robust even in the face of severe adversity; if these systems are impaired, antecedent or consequent to adversity, then the risk for developmental problems is much greater, particularly if the environmental hazards are prolonged. (p. 227)

Masten (2001) and many other researchers support a conceptualization of resilience as a *process*, not a state of being or personality trait. Therefore, resilience research should focus on understanding the processes that enable children with many risk factors to achieve specific positive outcomes.

Social support is one of the crucial components of the resilience process and various scales maintain this. Positive relationships with peers and other people in the community and effective parenting are integral to human adaptational systems that contribute to resilience in children who experience adversity during development (Masten, 2001). Therefore, it is not surprising that children with many risk factors who have positive development often have certain family characteristics: close relationships with parent, authoritative parenting style, and relationships with extended family (Prevatt, 2003). Social support from teachers can have a positive impact on at-risk children. Nettles, Mucherah, and Jones (2000) found that elementary students from a high-risk, violent neighborhood who feel support from their teacher had higher math achievement and experience fewer effects from stressful life events. Peers are also an important resource for children and adolescents with many risk factors in reducing externalizing behaviors, and promoting higher achievement and other positive outcomes (Luthar, 2006).

Social support promotes the development of confidence in abilities and strengthens the skills that contribute to competence in their environment. Children who have greater emotional and instrumental support develop greater competence as adolescents (Wills, Blechman, & McNamara, 1996). The initial and most proximal source of social support is family. Parents are naturally in a position to support their children and nurture their development (Coatsworth et al., 2000). The role of peers increases throughout childhood and into adolescence (Blyth & Trager, 1988; Furman,

1989). Many positive effects are linked to relationships with peers. For example, children with positive, prosocial friendships tend to have higher achievement, IQ, self-worth, and mental health (Masten & Coatsworth 1995; 1998). Teacher support also is an important factor for positive development. In one study, students who reported higher teacher support (had teachers who were role models, helped with schoolwork and problems, and who cared) were less likely to use drugs, have friends who used drugs, and had fewer depressive symptoms (LaRusso, Romer, & Selman, 2008).

The assessment of perceived social support has important differences depending on contexts, including cultural and developmental (Procidano & Smith, 1997). Young people from poor neighborhoods encounter different developmental contexts from their middle-class peers, therefore the definition of competence or adjustment is different (Masten & Coatsworth, 1998). As Felner (2005) summarized: "For students in poverty, the skills and interaction styles required to be adaptive in an inner-city environment where safety may be an issue, when applied to a school setting, can be maladaptive or irrelevant" (p. 141).

Gender and Social Support

Because of the importance of understanding social support in resilience, it is essential to consider gender differences and similarities. Boys' and girls' different patterns of relationships with friends, family, and teachers must be considered when attempting to understand the role of social support in adjustment. Several studies have found gender differences in social support from friends (Furman & Buhrmester, 1985; Kupersmidt, Coie, & Dodge, 1990; Masten & Coatsworth, 1995; Way & Pahl, 2001); teachers (Reimer, 2002); and parents (Liu, 2008). However, much understanding of gender differences compares mean differences in measures (i.e., girls report significantly more parent support). Hussong (2000) found structural differences in intimacy and peer control for boys and girls, indicating that a more complete understanding of gender and social support should also take this approach.

A number of research studies using both quantitative and qualitative methods have highlighted numerous differences in the relationships of adolescent boys and girls, and a majority of this research is from middle-class samples, generally non-minorities (Way, 2004; Way, Cowal, Gingold, Pahl, & Bissessar, 2001). There is a need for understanding differences and similarities of low-income and minority young people. Many studies of protective factors, including social support, have not looked specifically at differences and similarities in girls' and boys' experiences (Wyman, 2003).

The Current Study

The literature demonstrates some important gender differences in levels of some types of social support and the relationship with positive outcomes. However, we know little about how at-risk young people think about social support and whether current models of social support—created with middle-class samples—are representative of low-SES and ethnically diverse populations. As an important aspect of the resilience process, understanding differences in how boys and girls perceive social support is important. This study will focus on two research questions:

1. Are there differences in the structure of perceived social support from different people for boys and girls from poor, urban neighborhoods?
2. How does this compare to the structure of perceived social support from the populations used to create the scale?

We hypothesize that there will be gender differences in the structure of friend and classmate support and similarities in parent support.

Method Sample

Participants were recruited from five Boys and Girls Clubs in the Denver metropolitan area using a non-probability sampling method. Boys and Girls Clubs serve children from low-income families with the goal of improving developmental outcomes. Four of the five clubs are located in neighborhoods with a variety of problems: high crime rates, poverty, unemployment, and school dropouts (Piton Foundation, September 1993).

Participation in the study was voluntary. Children took home consent forms (written in both English and Spanish) to be signed by a parent or guardian. Those who returned the consent forms and were present on the day of the survey administration were included in the study. All of the students provided verbal and written assent. Participants were given the option of taking the survey in Spanish, but none did. Participants were given a soda after they finished completing the questions.

The final number of participants included 141 females and 310 males (14 were excluded due to missing data). The inordinate number of boys was a result of the club only recently accepting girls into the program. Age ranged from 8- to 12-years-old and the mean age of participants was 10.93 years ($SD = 2.23$). The average age of girls was 11.2 ($SD = 1.92$) and the average age for boys was 10.8 ($SD = 1.77$). The average grade in school was 5.43 ($SD = 1.85$), and was 5.3 for boys and 5.7 for girls. The participants were 54.2% Latino, 18.5% White, 9.6% African American, 5.8% American Indian, and 5.6% of mixed ethnicity.

Measures

Demographics. The demographic questionnaire asked participants to report age, gender, grade in school, family structure, neighborhood, self-reported grades, ethnicity, and involvement in youth organizations.

Social Support. Participants completed Harter's (1985) Social Support Scale for Children (SSSC). This questionnaire measures the support and positive regard children feel they receive from the people in their lives. The items determine the degree the children feel others treat them like people, care about them, are liked, understand them, and help with problems. The measure has 24 questions and four subscales, each focused on different categories of people: (a) parents, (b) teachers, (c) classmates, and (d) close friends. According to Harter (1985), validity was established by correlations between each subscale and a measure of global self-worth ($r = .28$ to $r = .46$). Strong internal reliability was also found for each subscale ($\alpha = .77$ to $\alpha = .88$). Several samples, from grades 3 through 8, were used to test this measure. All

were from middle-class neighborhoods in Colorado and 90% were European American.

The question format first asks the child to choose between descriptions of two kinds of kids. For example, "Some kids have parents who treat their child like a person who really matters BUT other kids have parents who *don't* usually treat their child like a person who really matters." Once they have chosen which description is like them, they are instructed to check one of two boxes: *really true for me* or *sort of true for me*.

Results Analyses

Boys' and girls' data were examined separately in this study. To explore gender differences in perceptions of social support, separate principal axis factor analysis with varimax rotation calculations were performed to look at the underlying structure. Orthogonal rotation maximizes the differences and is likely to result in simple structure 85% of the time, and the factors are not correlated (Thompson, 2004). When Harter (1985) used factor analysis to develop the SSSC, she used oblique rotation, to allow factors to intercorrelate. Oblique is often used when orthogonal rotation does not achieve simple structure (Thompson, 2004). This study hoped to find distinct factors and simple structure for each gender, so orthogonal rotation was appropriate.

Boys' Social Support

The factor analysis for boys' social support did not conform to Harter's (1985) four-factor model. Six factors were identified with eigenvalues over 1. Factor five only consisted of two items and Factor six only included items that loaded higher on other factors, so four of the six factors were interpretable. Table 1 lists the items and factor scores.

Girls' Social Support

Factor analysis for girls' social support closely reflected Harter's factor model with four types of social support. Factor one only had Friend items, Factor two Teacher, Factor three Parent, and Factor four Classmate. Factor five consisted of the only three items that did not load as expected, one of which had a nearly equal cross-loading putting the item with the other Teacher support items. Table 2 outlines these analyses. The differences between the factor analysis for girls' social support and Harter's model were not large. Table 3 summarizes the factors for both boys and girls.

Discussion

Factor analysis of the boys' social support items revealed the scales were not consistent with Harter's model. The first factor consists of items from all of the different social support scales, indicating boys' social support has a general quality. This means that a boy might feel support in general (or lack of support) but does not always distinguish between different people in his life. Boys in this sample might also view their social support differently from the samples the original scales were based on. Way and Chen (2000) found working-class, minority boys who had supportive friendships were more likely to

have supportive families as well, a link which was not true for girls. This could mean that boys in this sample who had supportive families were likely to also have supportive friends and school ties, and similarly boys who are lacking supportive families also lack other supportive relationships. This is important because there is a hope that supportive friendships and relationships with other adults can make up for unsupportive families (Smokowski, Reynolds, & Bezruczko, 1999); the results of this study indicate this may not be true for boys.

The second factor shows boys clearly see friends and classmates as providing the same kind of support. Harter (1985) found a similar pattern of combined classmate and friend support with elementary age children; however, she did not explore gender differences. Possibly when boys answer the questions about classmates, they limit their thinking to their friends in the class. But boys also are more likely to associate with large groups of other boys, rather than having a smaller group of close friends, as is common among girls (Brooks-Gunn & Reiter, 1990). As suggested by other researchers (Hill & Lynch, 1983), perhaps boys' friendships are more similar to the friendships of girls who are younger, in that they are less intimate. Another explanation is that boys who have supportive close friends may also have supportive classmates, which would cause those items to factor similarly.

The girls' factor analysis of social support nearly matches the original model. Consistent with Harter's model, this suggests that girls see their social support as being differentiated. This means girls can have a supportive family while other relationships are not supportive. Girls may also find it easier than boys to make up for an unsupportive family with supportive friendships. Girls very clearly distinguished friends from classmates, a distinction boys did not make. Girls might be more likely to look outside their classroom to make friends. The girls in this sample show fewer differences than the boys compared to middle-class samples used to create the measure. Similar distinctions between different types of social support were found in Dutch adolescents by Helsen, Vollebergh, and Meeus (2000) who determined parent and friend support were related but independent systems.

More boys than girls participated in this study, and this could indicate differences in the population that are reflected in the results. As voluntary members of Boys and Girls Clubs, there could be reasons for the greater involvement of boys. The differences in numbers of boys and girls also make direct statistical comparisons difficult, necessitating the separate analyses done here. The results of this study are not necessarily generalizable to populations of different ages, from different kinds of neighborhoods, or from rural areas.

The results of this study have important implications for future resilience research and interventions with youth from poor neighborhoods with many risk factors associated with poor outcomes. Girls might make up for unsupportive relationships with other relationships, while boys may not. Social support is an important aspect of the resilience process leading to positive outcomes and it might be more difficult for boys to establish support. As Masten (2001) phrased it, social support is a basic system of adaptation and

Efforts to promote competence and resilience in children at risk should focus on strategies that protect or restore the efficacy of these basic systems. Resilience models and findings also suggest that programs will be most effective when they tap these basic but powerful systems. (p. 235)

Table 1

Social Support: Boys' Factor Loadings and Rotated Factors

Item	Factor Loading					
	1	2	3	4	5	6
Spend recess with their classmates (C)	.620					
Have parents who do listen to their children's problems (P)	.617					
Don't have classmates who make fun of them (C)	.528					
Have parents who really do understand them (P)	.527					
Often get asked to play in games by their classmates (C)	.518				.346	
Have a teacher who cares if they feel bad (T)	.455		.434			.385
Have parents who do act like what their children do is important (P)	.409					
Have a close friend who cares about their feelings (F)	.393				.391	.378
Have a teacher who is fair to them (T)	.365		.332			.315
Have classmates they can become friends with (C)		.590				
Have classmates who pay attention to what they say (C)		.581				
Have a close friend they can talk to about things that bother them (F)		.565			.480	
Have classmates who like them the way they are (C)		.545				
Have a close friend who really understands them (F)		.507				
Have a close friend who they can tell their problems to (F)		.407			.330	
Have a teacher who helps them if upset and have a problem (T)			.762			
Have a teacher who cares about them (T)			.679			
Have a teacher who treats them like a person (T)			.517	.310		
Have a teacher who helps them do their best (T)			.409		.424	.329
Have parents who like them the way they are (P)				.702		
Have parents who treat their children like a person who really matters (P)				.643		
Have parents who care about their feelings (P)				.479		
Have a close friend who they like to spend time with (F)					.599	
Have a close friend who really listens to what they say (F)					.481	
Percent of variance explained	11.5 %	9.0 %	8.8 %	6.9 %	6.6 %	

Factor loadings < .3 are left blank. C = Classmate; P = Parent; F = Friend; T = Teacher

Table 2

Social Support Girls' Factor Loadings and Rotated Factors

Item	Factor Loading					
	1	2	3	4	5	6
Have a close friend who really listens to what they say (F)	.718					
Have a close friend who they like to spend time with (F)	.714		.311	.354		
Have a close friend they can talk to about things that bother them (F)	.679					
Have a close friend who they can tell their problems to (F)	.658					
Have a close friend who really understands them (F)	.616				.304	
Have a close friend who cares about their feelings (F)	.601					
Have a teacher who cares if they feel bad (T)		.747				
Have a teacher who is fair to them (T)		.747				
Have a teacher who cares about them (T)		.604			.336	
Have a teacher who helps them if they are upset and have a problem (T)		.601				
Have a teacher who helps them do their best (T)		.577				
Have parents who do listen to their children's problems (P)			.657			
Have parents who like them the way they are (P)			.656			
Have parents who treat their children like a person who really matters (P)			.630			
Have parents who care about their feelings (P)			.613			.516
Have parents who really do understand them (P)			.596			
Have parents who do act like what their children do is important (P)			.593			
Often get asked to play in games by their classmates (C)				.646		
Don't have classmates who make fun of them (C)				.568	.311	
Spend recess with their classmates (C)	.321			.504		
Have classmates who pay attention to what they say (C)				.466		
Have classmates who like them the way they are (C)					.734	
Have classmates they can become friends with (C)	.371				.477	
Have a teacher who treats them like a person (T)		.394		.367	.404	
Percent of variance explained	13.9 %	11.6 %	11.3 %	8.4 %	6.3 %	3 %

Factor loadings < .3 are left blank. C = Classmate; P = Parent; F = Friend; T = Teacher

Table 3

Social Support Factors

Boys	
Factor 1	General Social Support (3 Classmate items, 3 Parent, 2 Teacher, 1 Friend)
Factor 2	Friend/Classmate Support (3 Classmate items, 3 Friend)
Factor 3	Teacher Support (4 Teacher items)
Factor 4	Parent Support (3 Parent items)
Girls	
Factor 1	Close Friend Support (6 Friend items)
Factor 2	Teacher Support (5 Teacher items)
Factor 3	Parent Support (6 Parent items)
Factor 4	Classmate Support (4 Classmate items)

Note. Only the first 4 factors are included.

Luthar (2006) describes many programs aimed at improving parenting, friendships, and relationships with teachers to promote resilience and positive outcomes. However, these programs need to consider the differences between boys’ and girls’ experiences of social support.

Future Directions

Further research should investigate why boys show less differentiation between different types of social support. Family has a strong influence on other forms of support, so understanding how this works for boys and girls might be a direction to explore. It is possible that there is a bidirectional effect in social support—that boys and girls might solicit (or do not) support differently. The boys and girls in this study were from poor urban neighborhoods and it would be useful to investigate if boys and girls from other developmental contexts show similar structure in social support.

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An Extension Convergent Validity Study of the Systematic Screening for Behavior Disorders and the Achenbach Teacher's Report Form With Middle and High School Students With Emotional Disturbances

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Abstract: We sought to extend instrument validation research for the Systematic Screening for Behavior Disorders (SSBD) (Walker & Severson, 1990) using convergent validation techniques. Associations between Critical Events, Adaptive Behavior, and Maladaptive Behavior indices of the SSBD were examined in relation to syndrome, broadband, and total scores of the Achenbach Child Behavior Checklist-Teacher's Report Form (TRF) (Achenbach, 2001). Both measures were conducted with 65 students with emotional disturbance in grades 6 through 12. Overall convergent validity of the SSBD and TRF was strong, particularly for TRF externalizing problems and associated syndromes. Results provide further support for use of the SSBD in the assessment of behavioral functioning of students with emotional disturbance and extend validation for use of this instrument with secondary students.

Introduction

During the past 10 years, there has been a 20% increase in the number of children identified with emotional disturbance (ED) under the Individuals with Disabilities Education Act (IDEA) (U.S. Department of Education, 2002). U.S. public schools provide special education and related services to nearly 500,000 students labeled with emotional disturbance (U.S. Department of Education, 2002). Although 52% of students with disabilities graduated with a regular high school diploma in 2003, only 35% of students with ED did so. Furthermore, 56% of students with ED dropped out of school in 2003, substantiating the claim that students with ED consistently have the lowest graduation rates and highest dropout rates of students in the public school system (U.S. Department of Education, 2005). Consequently, students with ED continue to face problems throughout their teenage and adult years, including enhanced risk for arrest and substance abuse, job instability, higher usage of welfare and mental health services, and limited income earnings (Mayer, Lochman, & Van Acker, 2005; Rock, Fessler, & Church, 1997).

Because of their low rates of success in public schools and bleak long-term outcomes, it is apparent that students with ED present a variety of complex and challenging behaviors (Cullinan, 2007). For example, the current definition of ED in IDEA interprets the term emotional disturbance to mean one or more of a series of five "characteristics" that

are present "over a long period of time and to a marked degree" and "adversely affect a student's educational performance" (U.S. Department of Education, 2002). These characteristics include the following: an inability to learn that cannot be explained by intellectual, sensory, or health factors; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of depression; and a tendency to develop physical symptoms or fears associated with personal or school problems. School multidisciplinary teams are faced with the challenge of designing treatment programs that meet the behavioral and academic needs of students with ED. As a result, it is critical that decisions made on behalf of students with ED are based on accurate assessment data.

It can be challenging to determine whether a student fits the IDEA definition of ED (Cullinan, Osborne, & Epstein, 2004). Thus, it is important that steps be taken to validate formal instruments used in the assessment of ED. Instruments used in the assessment of ED should be highly reliable and valid so that useful data are gathered for decision-making purposes. For example, assessment instruments should be able to provide a holistic view of student's social-emotional functioning for planning and implementing effective treatment interventions.

In school-based assessment, behavior rating scales are one of the primary methods used to

identify students with ED (Mattison, 2001). Behavior rating scales have become extremely popular because of their ease of administration, time, and cost efficiency, and ability to monitor the current status and functioning of students with ED as well as to monitor their outcomes over time. Additionally, the use of rating scales in assessment allows for multiple informants (i.e., parents, teachers, students) to assess the functioning of students, which typically provides a broader range of perspectives on that student's behavior (Achenbach & McConaughy, 1996; Mash & Wolfe, 1999).

One of the most widely used rating scales for assessing social-emotional functioning is the *Child Behavior Checklist-Teacher's Report Form* (TRF) (Achenbach, 2001). The TRF is a standardized, norm-referenced behavior rating scale for teachers which assesses the social adjustment of students. The TRF is primarily a problem checklist consisting of 113 items. Teachers are asked to rate students on a variety of behaviors, and the instrument provides two broadband scores, "internalizing" and "externalizing," plus a "total scale" score for each participant. The TRF also provides score profiles on eight syndromes: Aggressive Behavior, Anxious/Depressed Behavior, Attention Problems, Delinquent Behavior, Social Problems, Somatic Complaints, Thought Problems, and Withdrawn Behavior. Students who score in the borderline clinical range or higher on one or more of the syndromes or on the overall index are considered at risk for behavioral difficulties.

Validity refers to a test's ability to measure what it purports to measure (Salvia & Ysseldyke, 2004). Valid instruments are critical in assessing students for ED and, if used appropriately for their intended purposes, assist practitioners in gathering data that allows for confidence in the decision-making process (Sattler, 2001). A number of different methods of examining the validity of an instrument are appropriate. One of the methods of examining validity is called convergent validity. Convergent validity examines the relationship between assessment instruments that measure the same constructs (Salvia & Ysseldyke, 2004). Demonstrating the convergent validity of an assessment instrument can increase the confidence that results obtained from that instrument reflect the constructs intended to be measured by that instrument. Thus, the higher the relationship between the two instruments, the stronger the convergent validity (Epstein, Nordness, Nelson, & Hertzog, 2002).

Existing convergent validity data provide support for the use of the TRF in assessing students' social-emotional functioning. Harniss and colleagues (Harniss, Epstein, Ryser, & Pearson, 1999) examined the convergent validity of the TRF and the *Behavioral and Emotional Rating Scale* (BERS) (Epstein & Sharma, 1998) in adolescents with ED. Specifically, the five positively based subscales and overall strength index of the BERS were correlated to the competence scales, internalizing and externalizing broadband dimensions, and total problem score of the TRF. Correlations ranged from moderately (.39) to highly (.72) positive for the competence scales. Correlations were moderately to highly negative with the externalizing broadband dimension and generally low for the internalizing broadband dimension. Meanwhile, Trout, Ryan, La Vigne, & Epstein (2003) sought to replicate the Harniss et al. (1999) study on an early childhood sample of students. Again, correlations were moderately to highly positive across the BERS and TRF subscales, ranging from .29 to .73. Additionally, the BERS evidenced moderately to highly negative correlations when compared to the

TRF internalizing and externalizing broadband dimensions, ranging from -.23 to -.62. In a third study (Emerson, Crowley, & Merrell, 1994), the convergent validity of the TRF and *School Social Behavior Scales* (SSBS) (Merrell, 1993) was examined on fourth- and fifth-grade public school students who were primarily Caucasian (95%). Specifically, the adaptive functioning subscale and the internalizing and externalizing broadband dimensions of the TRF were correlated with the social competence (Scale A) and Antisocial Behavior (Scale B) scales of the SSBS. As expected, correlations were moderate to high and in the expected directions when comparing the SSBS social competence subscales with the TRF adaptive functioning subscale (.65 to .73), internalizing broadband dimension (-.57 to -.62), and externalizing broadband dimension (-.55 to -.75). Additionally, correlations were also moderate to high and in the expected directions when comparing the SSBS antisocial behavior subscales with the TRF adaptive functioning scale (-.45 to -.62), internalizing broadband dimension (.34 to .52), and externalizing broadband dimension (.76 to .84).

The *Systematic Screening for Behavior Disorders* (SSBD) (Walker & Severson, 1990) is a three-stage screening process that was originally designed for the screening of social and emotional behavioral problems of elementary school students. Stage I includes teacher nominations and rank-ordering of pupils meeting specific definitions of behavior difficulties; Stage II includes teacher completion of the Adaptive and Maladaptive Behavior rating scales; and Stage III includes observation of the student in various settings. The SSBD has demonstrated mixed results with respect to the technical adequacy of the instrument. Zlompke and Spies (1998) reviewed the SSBD and found several studies presented in the manual that support the development and validation of the SSBD, although a few correlations were less than desirable. Stage I test-retest rank order correlations (one-month retest) averaged .76 for externalizers and .74 for internalizers, respectively. However, of the top three students listed for externalizing and internalizing behaviors, only 69% were listed among the top three students a month later. During Stage II trial testing, test-retest reliabilities were much higher and improved to .88 for adaptive and .83 for maladaptive behaviors (Zlompke & Spies, 1998). Similar results were found within measures of internal consistency for Stage II, with coefficient alphas averaging .86 on the adaptive and .84 maladaptive scales, respectively. Analyses were not conducted on the Stage III due to low frequencies of positively checked items (Zlompke & Spies, 1998). However, the researchers reported that interrater agreement ratios for Stage III were consistently within the .80 to .90 range (using 10-second interval recording).

Discriminant validity studies of the SSBD support the use of the instrument in areas such as classifying group membership (e.g., ED versus non-ED populations) and discriminating between students' externalizing and internalizing behaviors (Zlompke & Spies, 1998). However, predictive and concurrent validity studies suggest the instrument has low to moderate correlations in Stage I, II, and III measures. For instance, predictive validity data indicated that on Stage I measures, only 52% of internalizers and 69% of externalizers from the previous year were listed among the top three ranked students in the following year (Zlompke & Spies, 1998). Stage II correlations ranged from .32 (Critical Events Index) to .70 (Maladaptive Rating Scale), respectively, and when shared with the Stage III measure, indicated classification efficiencies in the low to moderate range (Zlompke & Spies, 1998).

Concurrent validity data was addressed in the manual by correlating the total score on the Stage II ratings with other measures designed by the first author (Walker-McConnell Scale of Social Competence and School Adjustment). While these data suggest there is some support for the Stage II measures of the SSBD, most scores were also in the low to moderate range (Zlompke & Spies, 1998).

Recently, researchers have extended the use of the SSBD to middle and junior high school students with positive results (Caldarella, Young, Richardson, Young, & Young, 2008; H. M. Walker, personal communication, June 21, 2007). For example, Caldarella, Young, Richardson, Young, and Young (2006, 2008) asked teachers of students in grades six through nine to identify students at risk for emotional and behavioral difficulties (SSBD Stage 1). Teachers completed SSBD Stage 2 scales (Critical Events Index, Maladaptive Behavior, and Adaptive Behavior) as well as the TRF and the Social Skills Rating Scale (Gresham & Elliot, 1990) on 123 students meeting teacher nomination criteria at SSBD Stage 1. Caldarella and colleagues (2008) found small to moderate correlations between TRF Externalizing and Internalizing and SSBD scales. Correlations between SSBD Adaptive Behavior and TRF Externalizing and Internalizing Scales were small in magnitude ($-.33$ and $.17$, respectively); whereas those between SSBD Maladaptive Behavior and TRF Externalizing and Internalizing Scales were moderate and small in magnitude ($.67$ and $-.23$, respectively). Using t-test comparisons of each item between students nominated as internalizing or externalizing on SSBD Stage 1, Caldarella and colleagues (2008) divided items on the Critical Events Index (CEI) into either internalizing or externalizing categories. Correlations between SSBD CEI Externalizing and TRF Externalizing and Internalizing Scales were moderate in magnitude ($.51$ and $-.30$, respectively). Similarly, moderate correlations between SSBD CEI Internalizing and TRF Externalizing and Internalizing Scale were found ($-.37$ and $.53$, respectively). Findings indicated that the SSBD shows promise as a valid and reliable screening measure for at-risk secondary students (Caldarella et al., 2006, 2008).

Current studies suggest that the TRF compares favorably with other measures, including the BERS and SSBS. However, previous studies have compared the TRF to other measures using limited populations, most notably, adolescent students, early childhood students, and non-disabled fourth- and fifth-grade Caucasian students. To date, researchers have not examined the convergent validity of the widely used behavioral screening measure *Systematic Screening for Behavior Disorders* (Walker & Severson, 1990) with other standardized measures of behavioral functioning on secondary populations with ED. The primary purpose of this study was to examine the convergent validity of the SSBD with the TRF on a sample of sixth through twelfth-grade public school students receiving special education services for ED served in self-contained settings.

Method

Participants

Sixty-five public school students (51 males and 14 females) receiving special education services for ED in an urban, northwestern city participated in this study. The participants were served across nine different settings: one middle school ($n = 8$), three high schools ($n = 46$), one psychiatric residential treatment facility ($n = 5$), and one

interim alternative educational setting ($n = 6$). Ethnic breakdowns were 43% Caucasian ($n = 28$), 25% African-American ($n = 16$), 9% Hispanic ($n = 6$), 5% Native-American ($n = 3$), 1% Asian ($n = 1$), and 17% mixed ethnicity ($n = 11$). The specific number and approximate percentage of the 65 participants at each grade level follows: sixth grade, $n = 3$ (5%); seventh grade, $n = 6$ (9%); eighth grade, $n = 3$ (5%); ninth grade, $n = 21$ (32%); tenth grade, $n = 19$ (29%); eleventh grade, $n = 10$ (15%); and twelfth grade, $n = 3$ (5%). Ages of students ranged from 12 to 20 years, with a mean of 16.0 ($SD = 1.8$).

Thirteen teachers of participating students completed ratings of students' social and emotional strengths and problem behaviors. The number of teachers employed at the middle and high school grade levels were two (22%) and seven (78%), respectively. Six teachers were female (67%) and three were male (33%). The number of years teaching students with ED ranged from 2 to 28, with an average of 10.5 years ($SD = 10.2$). All participating teachers held special education teaching endorsements. Teacher caseloads ranged from 8 to 21 students, with a mean of 11.9 ($SD = 5.1$).

Measures

The *Systematic Screening for Behavior Disorders* (SSBD) (Walker & Severson, 1990; 1992) is a three-stage screening process that begins with teacher nominations and rank-ordering of pupils meeting specific definitions of behavior difficulties. The second stage consists of a 33-item Critical Events Index (CEI) checklist and a 23-item Combined Frequency Index (CFI) checklist. The CEI contains 33 items measuring low-frequency, high-intensity behavior problems (e.g., sets fires, steals). The respondent indicates whether the critical event has or has not occurred within the past six months. The CFI consists of two behavior-rating scales: Adaptive Behavior (12 items) and Maladaptive Behavior (11 items). The Adaptive Behavior scale includes 12 items that assess classroom and peer adaptive adjustment (e.g., is considerate of the feelings of others). The Maladaptive Behavior scale has 11 items that focus on school-related behavior problems (e.g., refuses to participate in games and activities with other children at recess). Both the Adaptive and Maladaptive scales measure the frequency of the student's behavior within the past month.

The *Child Behavior Checklist-Teacher's Report Form* (Achenbach, 2001) is used to measure the social adjustment of participants. The TRF consists of 113 problem items, such as difficulty following directions, disturbs other pupils, and disrupts class discipline. The teacher rates the child on each item and indicates the severity of the problem on a three-point Likert-type scale ranging from 0 (Not True) to 2 (Very True or Often True). The TRF scoring profile provides a total scale score (Total Problems), two broadband scale scores (Internalizing and Externalizing), and eight syndrome subscale scores (Withdrawn Behavior, Somatic Complaints, Anxious/Depressed Behavior, Social Problems, Thought Problems, Attention Problems, Rule-Breaking Behavior, and Aggressive Behavior). The broadband Internalizing scale score is based on the sum of the Withdrawn Behavior, Somatic Complaints, and Anxious/Depressed Behavior scale scores. The broadband Externalizing scale score is based on the Rule-Breaking Behavior and Aggressive Behavior scale scores. The Social Problems, Thought Problems, and Attention Problems syndrome subscale scores are

not included on either the broadband Internalizing or Externalizing scale scores. The TRF test-retest and internal consistency values for the broad and syndrome scales are reported in the test manual as ranging from .62 to .96 and .72 to .95, respectively (Achenbach, 1991). The syndrome and broadband scale scores of participants in the present study indicated very strong internal consistency with a Cronbach's Alpha of .95.

Procedures

Thirteen special education teachers serving students with ED in self-contained classrooms completed the SSBD and TRF for each participating student in May of 2005. Teachers did not complete SSBD or TRF protocols for students whom they had known for less than two months. A two-hour training session familiarized teachers with the structure (i.e., item formats) and specific instructions for completing these measures. Teachers were given two weeks to complete the two scales. Each student was rated independently by teachers. Research assistants were trained to score and enter the data derived from SSBD and TRF protocols. The training and scoring reliability procedures used with research assistants follow.

Training. Two research assistants completed the scoring of SSBD and TRF protocols. The research assistants reached 100% fidelity in scoring each measure on three consecutive trials. Scoring fidelity was determined by comparing the research assistants' scoring of a practice protocol with one scored accurately. When the research assistants reached the fidelity criterion they began scoring the SSBD and TRF protocols of participating students.

Scoring reliability. Scoring reliability checks on all SSBD and TRF protocols were conducted at two phases of data collection. First, each protocol was checked for scoring accuracy by two of the authors after initial scoring by research assistants. More specifically, each protocol was checked to determine that items were completed, raw scores were computed accurately for each subtest, and standard scores were derived accurately. Agreement was calculated by dividing the number of agreements by agreements plus disagreements and multiplying by 100. An agreement was recorded when the agreement check calculations aligned with calculations made after initial scoring. Agreement in scoring SSBD and TRF protocols was 98% (range = 96% to 100%), and 99% (range = 98% to 100%), respectively. Second, all scores were checked for accuracy by researchers following initial data entry. Agreement in entering SSBD and TRF data was 99%. Initial errors made in scoring or data entry were corrected.

Results

This study utilized Pearson's Product-Moment correlation coefficients to analyze the relationship between the SSBD scale and the TRF syndrome, broadband, and total scores of the 65 participating youth (see Table 1). The 11 correlations between the SSBD Adaptive Behavior scale and TRF syndrome, broadband, and total scores were negative, whereas all of the remaining 22 correlations were positive and in the expected direction. The strength of the correlations varied from .29 to .89. The strength, or magnitude, of correlations was assessed using the scale developed by Hopkins (2002). Correlations of .1 to .29, .3 to .49, .5 to .69, .70 to .89, and .90 or more were considered small, moderate, large, very large, and nearly perfect,

Table 1

Correlations Between SSBD Scales and TRF Syndrome and Composite Scores

	SSBD Scale		
	Critical Events	Adaptive Behavior	Maladaptive Behavior
TRF Syndrome Scores			
Anxious/Depressed	.63**	-.35**	.35**
Withdrawn	.61**	-.44**	.29*
Somatic Complaints	.76**	-.58**	.52**
Social Problems	.69**	-.54**	.61**
Thought Problems	.80**	-.62**	.50**
Attention Problems	.79**	-.81**	.76**
Rule-Breaking Behavior	.53**	-.78**	.73**
Aggressive Behavior	.75**	-.78**	.89**
TRF Broadband Scores			
Internalizing	.75**	-.53**	.48**
Externalizing	.72**	-.84**	.89**
TRF Total Score			
Total Problems	.82**	-.83**	.79**

Note. * $p < .05$ and ** $p < .01$.

respectively. Using these criteria, 17 correlations (52%) were very large, 11 (33%) were large, 4 (12%) moderate, and 1 (3%) small in magnitude. Thus, with one exception, correlations were moderate to very large in magnitude.

Several correlations warrant highlighting. Very large (i.e., .70 to .89) correlations were found between the TRF Total Problems and the SSBD Critical Events Index ($r = .82, p < .01$), Adaptive Behavior scale ($r = -.83, p < .01$), and Maladaptive Behavior scale ($r = .79, p < .01$). Very large correlations were also found between the TRF Externalizing Problems and the SSBD Critical Events Index ($r = .72, p < .01$), Adaptive Behavior Scale ($r = -.84, p < .01$), and Maladaptive Behavior Scale ($r = .89, p < .01$). The correlation between the TRF Internalizing Problems and SSBD Critical Events Index was also very large ($r = .75, p < .01$). The magnitude of the correlations between the TRF Internalizing Problems and the SSBD Adaptive Behavior ($r = -.53, p < .01$), and Maladaptive Behavior scales ($r = .51, p < .01$) were large and moderate, respectively. This indicates that the overall convergent validity of the SSBD and the TRF was very strong, par-

ticularly for TRF Externalizing Problems and associated syndromes. For example, very large correlations were found between the TRF Aggressive Behavior externalizing syndrome and the SSBD Critical Events Index ($r = .75, p < .01$), Adaptive Behavior Scale ($r = -.78, p < .01$), and Maladaptive Behavior Scale ($r = .89, p < .01$).

Another framework for determining validity is provided by Anastasi and Urbina (1996). These researchers report that in order for a correlation coefficient to be cited as evidence of validity, it should demonstrate statistical significance. As indicated in Table 1, all of the 33 correlations meet this criterion (i.e., $p < .05$).

Discussion

Continuing to research the validity of behavior rating scales such as the SSBD serves a function in the field of assessment of behaviors. Schools are conscious of the difficulty in accurately identifying the presence of behavior disorders in students (Cullinan, et al., 2004; Uhing, Mooney, & Ryser, 2005) and rely heavily upon behavior rating scales to identify students who would benefit from behavioral supports to improve school performance (Mattison, 2001). The purpose of this study was to extend the validation evidence for the SSBD by examining the convergent validity of the SSBD and the TRF with students in 6th through 12th grade with ED.

Previous convergent validity studies conducted between the TRF and other behavior rating scales resulted in largely moderate to high correlations (Harniss et al., 1999; Trout et al., 2003). Results of the present study reaffirmed those previous studies, demonstrating a range of correlations from small ($r = .29$) to very large ($r = .89$) in magnitude. In Harniss et al. (1999) and Trout et al. (2003), the patterns indicated that stronger correlations were generally reported for TRF externalizing versus internalizing domains. Results also extended evidence of validity for the use of the TRF with the full range of school-age students. Whereas previous convergent validity studies demonstrated evidence for specific, limited age groups of students, none of whom were labeled as having an IDEA disability, the current evidence was gained using a population of students that ranged from sixth to twelfth grade and included students identified with an IDEA disability. Demonstrating moderate to high correlations is an important component in determining the validity of an instrument in a convergent validity study. It is also critical to document the statistical significance of those correlations. The results showed that 100% ($N = 33$) of the correlations were significant at the $p < .01$ level.

Our findings extend the validation of the SSBD to middle and high school students with ED. In their sample of 123 middle and junior high school students, Caldarella and colleagues (2008) found small to moderate correlations between TRF Externalizing and Internalizing and SSBD Critical Events, Maladaptive, and Adaptive scales. We extend the work of Caldarella and colleagues (2008) by sampling from middle and high school students receiving services for ED, placed in self-contained settings. We found that, with one exception, the 33 correlations between the TRF and SSBD scales were moderate to very large in magnitude. Caldarella and colleagues (2008) found that correlations between SSBD Adaptive Behavior and TRF Externalizing and Internalizing Scales were small in magnitude ($-.33$ and $.17$, respectively); whereas we found very large ($-.84$) and large ($.53$) correlations, respectively. In addition, Caldarella and colleagues (2008)

found moderate and small correlations between SSBD Maladaptive Behavior and TRF Externalizing and Internalizing Scales ($.67$ and $-.23$, respectively); whereas we found very large ($.89$) and moderate correlations ($.48$), respectively. It remains unclear what variables might explain the more robust correlations between the SSBD and TRF found in the present study. One explanation may be the nature of participants in each study. Students in the present investigation met inclusion criteria by being formally identified with emotional disturbance and in being served in a self-contained placement whereas those participating in Caldarella et al. (2008) met SSBD criteria for risk of behavioral disorder.

Four primary limitations within this study should be acknowledged. First, the nine public schools in which all of the participants were enrolled were located within the same northwestern city in the United States. It is recognized that had the study included a more diverse population of schools from across the U.S., the results of this study may have been different. Second, the largest percentage of participants included in this study was from the middle school grade level (i.e., grades 7, 8, and 9). It is plausible that the results may be different if the same study was repeated with a sample more evenly distributed across grade levels. Third, it is possible that these results may not generalize beyond students with ED, as all participants were identified as having an ED diagnosis. Finally, no observations were conducted and no permanent products were collected to assess validity in this study.

These limitations can be addressed in two ways. First, professionals interested in the continued effort to validate assessment instruments could collaborate in an effort to collect data from a more diverse population of students, including those from different geographic locations. Second, future convergent validity research in the area of behavior could include more direct measures of behavior.

There are two primary implications of the present study. First, the role of validating assessment instruments is shared by both researchers and practitioners (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999). The findings of the present study supporting the validity of the SSBD and the TRF not only add to the evidence base for these instruments but also support the notion that practitioners engaged in ongoing professional development and interventions can contribute to the literature in this area of study. It demonstrates that practitioners active in the field can and may become more engaged in the research process in an effort to continue to determine the soundness of the instruments they are using in the field. Second, although universal screening for basic reading, mathematics, and writing skills is relatively straightforward and efficient because there are well-established measures and benchmark standards for performance available to schools, this is not the case for social behavior. The SSBD is the only available universal screening instrument for social behavior. Our findings extend the extant validation literature of the SSBD with secondary students formally identified with ED. Our findings suggest the potential use of the SSBD as a valid measure of the behavioral functioning of students with emotional disturbance from primary through secondary grade levels. These data may inform the implementation of Response to Intervention (RtI) in the area of social behavior, particularly among students with the most challenging behaviors.

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High School Completion: A Comprehensive Review of Projects Directed Toward Keeping Students in School

Thelma M. Gunn, David W. Chorney, and John C. Poulsen

Abstract: *Since 1999, the Alberta Initiative for School Improvement (AISI) has provided funding to provincial school authorities for projects designed to improve student learning and performance. Conducted in three-year cycles, this unique approach has successfully helped to initiate approximately 1,600 grassroots projects led by school districts, teachers, parents, and students across the province. The following comprehensive review examines 18 selected projects selected by Alberta Education (Cycle 2, 2003-2006) as focusing upon high school completion. Based on the project report findings, a number of successful strategies and programs were implemented that targeted students at risk of non-completion. The following discussion will identify the major foci, themes, and strategies arising from those projects.*

Introduction

The 21st Century has ushered in a need for greater technological comprehension, occupational training, and intelligent consumption of global issues. Like most industrialized countries, Canada is a nation that acknowledges these changes and therefore places significant value on education and its means of training future professionals and citizens. The need for a highly-skilled workforce is mounting and shows no sign of decline (Alberta Commission on Learning, 2003; Government of Canada, 2009).

Given the staggering provincial statistics which indicate that approximately 25 % of students entering Grade 10 do not complete or graduate from high school with a diploma within five years, we know that the province of Alberta is falling below the national average, and may suffer serious economic, political, and social consequences as we forge further into the 21st Century. Therefore, it was the goal of the Alberta Commission on Learning (ACOL) to have 90 % of Alberta's youth complete high school within four years of starting Grade 10 (Alberta Learning, 2008). This sentiment has been reiterated and accepted in the Alberta Learning 2008-2011 Business Plan (Alberta Learning, 2008). The Alberta Commission on Learning (ACOL) has identified several strategies that may help accomplish this goal. Most notably, and pertinent to this discussion, is that there must be greater opportunity to pilot and evaluate new approaches through the Alberta Initiative for School Improvement (AISI). The ACOL recommended that innovative strategies to keep students in school should be considered a top priority for funding, and that all results should be shared for further growth and benefits. Prior

to reporting on the outcomes of Cycle 2 (2003-2006) AISI projects and their potential impact, it is important to examine the factors associated with non-completion.

High School Completion

High school completion is a topic of considerable interest in industrialized countries. The economic and sociocultural health of a nation is often inextricably linked to the importance of education. In a report released by the Centre for the Study of Living Standards (2007), there are significant correlations between educational attainment and labor market outcomes; the labor force participation rate; the employment rate; as well as poverty, crime, and health. Most notably, the negative impact on these linkages is most evident in the absence of high school completion. Typically, high school completion is reported quantitatively. In Alberta and other North American locations, completion status is based on those who complete or graduate from high school with a diploma within a prescribed number of years after entering (Alberta Learning, 2004; Satchwell, 2004). As suggested above, calculations in Alberta begin five years after entering Grade 10. Other methods of calculation in Canada and the United States include using Grade 12 enrollment statistics, bracketing age ranges of graduates, and including students who wrote General Educational Development (GED) exams (Bracey, 2009; Satchwell, 2004; Warren & Halpern-Manners, 2007). Taken together, it is clear that depending upon the method of calculation, it is difficult to ascertain a universally accepted definition of high school completion/graduation, and even more difficult to determine whether

it is increasing or decreasing locally, nationally, or internationally. Nevertheless, it is an urgent social problem in North America, and a genuine area of concern in Alberta.

Factors Associated With Non-Completion

To better understand the factors leading to non-completion, there are several specific factors that must be considered. The main factors identified for further exploration in Alberta include gender, First Nations/Metis/Inuit (FNMI), socioeconomic and regional considerations, as well as student- and school-related issues (Satchwell, 2004).

According to the literature, boys are at the greatest risk of leaving school early (Bushnik, Barr-Telford, & Bussiere, 2004; Satchwell, 2004). Male students are more susceptible to substance abuse, learning/reading disabilities, acting out in school, diagnoses of ADD and ADHD, delinquency, and the effects of poverty and physical abuse, to name a few (Centre for the Study of Living Standards, 2007; Satchwell, 2004). These, and other devastating consequences often cause male students to either fail or to be retained at grade level.

In Canada, First Nations/Metis/Inuit (FNMI) students are perhaps the highest risk population with respect to non-completion. Statistics indicate that only one in five Canadian Aboriginal students who enroll in Grade 8 will receive their high school diploma (Centre for the Study of Living Standards, 2007; Cowley & Easton, 2004; Satchwell, 2004; Statistics Canada, 2003). Given the difficulties in finding employment without a high school diploma, for either Aboriginal or non-Aboriginal peoples, the severity of the situation is exacerbated by secondary social problems such as poverty, substance abuse, rapid population increases, criminal involvement, and racism, to name a few (Centre for the Study of Living Standards, 2007; Satchwell, 2004).

Like many minority and indigenous populations throughout the world, Canadian Aboriginal students feel marginalized within the school setting (McPartland, 1994; Richardson & Blanchett-Cohen, 2000). They report poor relationships with teachers and fellow students, a lack of care and concern, and a perceived expectation of failure (Heffernan, Beaudin, Gunn, & Tailfeathers, 2004; Sinclair, Christenson, Lehr, & Anderson, 2003). These sentiments are coupled with the negative impact of former residential schools on Aboriginal culture and family structure (Neegan, 2005; Witt, 2005/2006).

Low socioeconomic status is strongly correlated to inner-city locations, where the greatest number of early school leavers reside (Centre for the Study of Living Standards, 2007; Schargel & Smink, 2001; Suh, Suh, & Houston, 2007). The location and condition of a student's life can impact the decision to remain in school (Blackmore, 2007). As indicated in the literature, students living in poverty are more likely to drop out (Bushnik et al., 2004; Satchwell, 2004) as are students living in low-income families (Satchwell, 2004; Schargel & Smink, 2001; Suh & Suh, 2007).

Finally, several student- and school-based issues are predictive of non-completion. Poor relationships with teachers, feelings of isolation, behavioral disorders, and achievement-related factors are strong contributors to early school leaving (Satchwell, 2004; Suh et al., 2007). Other factors include poor family structures and support, increased student mobility (South, Haynie, & Bose, 2005), and conduct disorders (Suh & Suh, 2007).

School Retention

Despite the salience of these dropout factors for Alberta students, there is sufficient literature to suggest that student retention can be positively impacted by a culture of community and care. In 2003, Lehr, Hansen, Sinclair, and Christenson reviewed 45 prevention and intervention studies (i.e., conducted between 1983 and 2000) that addressed dropout or school completion. Lehr et al. concluded that successful programs begin with a personal-affective focus (i.e., teaching interpersonal relations, providing individual counseling), with a later shift to an academic focus (i.e., tutoring, specialized courses).

The literature also suggests that dropout rates are diminished where there is a strong school-based commitment to address specific student needs categorized under the headings of home, community, peers, and school (Christenson, Sinclair, Lehr, & Godber, 2001). With respect to home or family life, parents who provide greater academic support, supervision, and educational expectations (Comer, Haynes, Joyner, & Ben-Avie, 1996), positively increase academic engagement. Community involvement and activities also cultivate a greater sense of belonging, accountability, and commitment to the school environment. This is especially important in schools that have a significant number of poor and minority students (McPartland, 1994). Peer influences must also be integrated into a high school completion program as peer pressure and social networks can positively or negatively affect school experiences and expectations to graduate (Sinclair et al., 2003). And finally, the school itself must find ways to enhance students' interest and enthusiasm for school, motivation to learn, and sense of belonging (Christenson & Thurlow, 2004). The student must understand that there is,

Someone who is not going to give up on them or allow them to be distracted from school; that there is someone who knows them and is available to them throughout the school year, the summer, and into the next school year; and that caring adults want them to learn, do the work, attend class regularly, be on time, express frustration constructively, stay in school, and succeed. (p. 38)

Alberta Initiative for School Improvement (AISI)

AISI has provided funding to provincial school authorities for projects designed to improve student learning and performance (<http://education.alberta.ca/aisi>). Conducted in three-year cycles, this unique approach has successfully helped to initiate approximately 1,600 innovative and creative grassroots projects led by school districts, teachers, parents, and students across the province. Each project is tailored to the local needs and circumstances of the school, school district, and community over a three-year period. Moreover, it is based on the principles of flexibility, collaboration, inquiry, reflection, and sustainability. Projects are funded by Alberta Education and are monitored from the Student Improvement Branch (SIB). In order to qualify, detailed project proposals are to be submitted and approved. Project proposals must include such information as a description of the educational issue requiring funding, a plan of proposed project activities, a detailed three-year budget, a list of measures that will assist in data collection, planned methods of data analysis, staffing

considerations, student demographics, and the proposed professional development activities. Reports are to be submitted each year of implementation. Upon completion, those projects with medium to high effect sizes on the required measures are selected, thematically categorized, and forwarded to university reviewers. According to SIB, all data on student learning, both baseline and outcomes, were converted to a common scale (e.g., standard score) that permitted comparison of improvement, regardless of the type of measure the school authorities used. As it is commonly known, an effect size expresses the increase or decrease in standard deviation units. For each measure, the baseline and annual result were converted to standardized (z) scores with a mean of zero and a standard deviation of one. The effect size for each measure was determined by the difference between the z scores for the baseline and the actual annual results and then averaged over the measures for each project and weighted by the number of students involved in each measure. These average effect sizes were grouped into five categories: no effect (less than zero or not significant), minimal (.01 to less than 0.2), small (0.2 to 0.3), medium (0.4 to 0.7), and large (0.8 or higher). The following is a comprehensive review of the 18 selected high school completion projects with medium to large effect sizes completed in Cycle 2 (2003-2006).

Method

Upon receipt of the 18 selected projects from Alberta Education’s Student Improvement Branch (SIB), all identifying information was removed. The project reports were then distributed to researchers for a triple blind review. As previously indicated, the projects were initiated and completed during the period identified as Cycle 2 (2003-2006). As determined by SIB, the selected projects had significant effect sizes (i.e., .4 to .8 and higher) on those measures involving student learning (e.g., Provincial Achievement Tests, Diploma examinations, standardized measures, and locally developed measures); student behavior, attitude, and satisfaction; and parent satisfaction.

An exploratory approach was employed for categorical and thematic analysis. The researchers read each project report in search of constructs that represent the major and minor themes. These themes lead to hypotheses about causal linkages regarding project effectiveness. Consequently, reports were also read to determine effectiveness for student outcomes and impact on the school and community as well as project design. Descriptive statistics were also calculated to determine the percentage of projects that fell into each of the major themes.

It should be noted that each of the 18 selected AISI projects were designed using an action research approach. That is, in keeping with the intention of action research, the primary purpose of each project was to increase the education professionals’ practice (Gall, Gall, & Borg, 2007). Professional development, experiential knowledge, and the impact of published research and theories in authentic contexts were the primary foci. As such, over the course of three years each project typically adopted several strategies and approaches with the intention of improving completion rates. For instance, a single project may have included the improvement of attendance rates through incentive systems, as well as the implementation of a program designed

to improve standardized academic achievement scores. Therefore, the results herein are not intended for experimental replication. Rather, they are a review of successful themes and approaches for potentially similar high school completion projects.

Categorical Analysis

Each of the 18 selected high school completion projects can be grouped into one or more categories that best describe the reported purpose and focus/foci of each project (Table 1). Category titles are as follows: *instructional/academic support*, *school retention*, *school-based mentorship*, and *transition*.

Table 1

Categorical Frequencies and Percentages of AISI High School Completion Projects

	Frequency*	Percentage**
Instructional/Academic Support	12	67%
School Retention	7	39%
School-Based Mentorship	6	33%
Transition	3	17%

Note. Total number of projects = 18. Projects could fall into one or more categories.

*Frequency = The number of projects that were classified as falling within this category.

**Percentage = The percentage of projects that were classified as falling within this category.

The category of *instructional/academic support* included projects that reportedly provided specific academic assistance through special course offerings, differentiated instruction, and a desire to raise Provincial Achievement Test scores. Projects characterized as instructional/academic support were committed to providing students with the academic skills and training necessary for graduation.

School retention projects were primarily focused on providing additional assistance to ensure that students remain in school/coursework until graduation. There were several different reported approaches included in this classification, all making attempts to improve the school climate and provide alternative/flexible programming. In doing so, the project reports indicated that they were hopeful that students would experience a sense of belonging, commitment, support, and flexibility with respect to their academic well-being.

Many of the projects were categorized under *school-based mentorship*. By definition, effective mentorship programs clearly demonstrate that each student is provided with a caring environment comprised of mentors who provide emotional, psychological, and

academic support. These projects reported focusing upon the vital personal connection between a caring educator and the student.

Finally, several projects were designed to assist students in transitioning into postsecondary education and/or their career. The reported focus was upon meeting eligibility requirements, making suitable career choices, and finding pathway opportunities. This category was entitled *transition*.

Thematic Analysis

The five main themes derived from the project reports were instructional modifications/support, alternative programming, social/psychological support, professional development, and parental/home involvement (Table 2). Themes were ascertained on the basis of being influential foci (i.e., area(s) of success, influence, and primary importance), as reported in the project reports.

Table 2

Main Theme Frequencies and Percentages of AISI High School Completion Projects

	Frequency*	Percentage**
Instructional Modifications	12	67 %
Alternative Programming	10	56 %
Social/Psychological Support	10	56 %
Professional Development	7	39 %
Parental/Home Environment	6	33 %

Note. Total number of projects = 18. Projects could fall into one or more themes.

*Frequency = The number of projects that were classified as exhibiting this theme.

**Percentage = The percentage of projects that were classified as exhibiting this theme.

Instructional Modifications. The most predominant theme of the projects was instructional modifications. Differentiated learning, the adoption of more effective and diverse learning strategies, one-on-one/small group support, motivational strategies, and the targeting of subject specific needs were the most frequently identified modification methods. Their primary purpose was to supplement basic classroom instruction and provide specific methods of support for students at risk. Several projects employed differentiated learning in order to assist students approach the curriculum in personally meaningful ways. Assessment methods, learning materials, and classroom experiences were tailored to the needs of the students.

A number of projects adopted effective and diverse learning strategies such as brain-based learning strategies, accommodating

multiple intelligences, and using advanced technology in the classroom. According to the reports, both current and research-supported strategies were carefully selected, practiced, and deployed. It was frequently stated that traditional methods of instruction had failed to be successful with at-risk students. Therefore, alternative strategies were implemented.

Many project reports highlighted the benefits associated with one-on-one or small group instruction. Having peers and attentive adults work directly with students provided both academic and psychological support for those at risk. Additionally, attempts to target domain specific difficulties were frequently reported. Many students in jeopardy of leaving school early typically have historical difficulties with one or more academic subjects, most notably language and/or mathematics. Several projects made explicit attempts to identify and remedy such difficulties with additional programming, coaching/mentoring, and tutorials. Successes were reported in the following comments:

New and innovative ways to assess student writing were set up with the focus on the student becoming more aware of (his/her) errors and how to avoid them. Students reviewed returned assignments, checked teacher comments and correction symbols to determine the most frequent writing errors and wrote specific goals for improvement. Each student developed personal goals for improvement in consultation with the teacher.

Models for support (learning centers, homework hotel, classroom support, smaller class sizes, math clubs, homework lunch clubs, classroom workshops, classroom teacher professional development and support) helped mitigate the effects of learned helplessness in some students.

Alternative Programming. Over half of the projects reported the importance of providing *alternative programming* to ensure completion. Students who were identified as at risk, below average, or who had already dropped out were provided with alternative opportunities to complete the necessary course work for graduation. Typically, this involved student learning centres, online academic programs, or career incentive programs.

Student centres were created in several schools to provide additional instructional support, individualized academic assistance, a safe and caring environment in which to work, and a source for finding internal and external sources of mental and financial aid. According to those projects that utilized centres, students responded positively with such comments as: "The Student Centre is an influential part of our school. It has continued to provide help and assistance to me and my peers. It has helped me form superior study habits and organizational skills." Teachers and administration articulated similar sentiments as they noted the importance of centres within the school and community: "Most of my students are non-academics and many have special needs. The Student Centre has been the best support system I have had the opportunity to work with. It is an essential part of my courses."

Online programming and course completion offerings were also commonly implemented. In providing this source of alternative programming, students were able to complete graduation require-

ments with greater flexibility and creativity. Students could either take courses offered through their own school or school division, or enroll in externally based programs. This type of programming was most suitable for those students who found regular attendance challenging, were working full- or part-time, or who needed to pick up missed courses.

Career incentive programs were created to help students understand the opportunities available to them after graduation. Post-secondary requirements, career counseling, and career choices were highlighted by way of programs offered through the school or external bodies, or through supplementary information found in student centres. While many of the projects provided crucial information for transitioning into a post-graduation life, one project focused upon an alternative arts-based program connection with the community. In a most poignant comment they wrote: "Students that came and became involved in these projects would turn up for rehearsal on days when they did not know where they would stay that night. Performances and practice became more important than finding drugs or some of the necessities of life."

Social/Psychological Support. This was a prevalent theme in over half of the AISI high school completion reports. Many projects recognized the importance of a safe and caring environment when assisting students toward graduation. It was noted that the connection a student feels toward their academic community, teachers, and peers is critical when deciding whether to remain in school or to drop out. In response, counseling supports, cross-cultural awareness initiatives, and mentorship programs were frequently established.

Counseling supports ranged from the provision of links to the community for additional psychological assistance, to helping students identify and adopt adaptive emotional/psychological approaches. According to the project reports, such inclusions were well received and successful:

When students arrived, they took part in a sharing circle and developed an understanding of respect, consensus and cooperation in decision making through drama, games, and exercises. . . . The games in the circle of trust building worked really well. We were amazed that 70 people doing group building games together could do so well. Community was built in places that were extremely difficult before.

Several projects were strongly committed to enhancing cross-cultural awareness within their school(s) and community. For many minority populations, the feeling of isolation is a leading cause of early school leaving. By identifying the contributions and inherent strengths of each culture, at-risk students and their peers were able to create an inclusive academic environment:

Integration of Aboriginal perspective, content and resources into curriculum and instruction and the use of Elders, Aboriginal storytellers, role models, guest speakers. . . allowed students to see their culture reflected in the curriculum. This increased the pride in the Aboriginal population and understanding in the non-Aboriginal population.

Mentorship programs were often established with the intention of assisting at-risk students with academic and socio-emotional issues. Teachers modeled effective academic strategies and were available advocates and counselors. Comments included: "(They) boosted students' self-esteem by helping them become more independent and responsible for their own learning; students learned to self-advocate and became more self-aware, confident and responsible learners." And "It was pleasing to see the number of students actively participating in the Mentorship Program. Some real gains were made in getting students to complete course work and indeed in just staying connected to the school itself."

Professional Development. Another major theme emanating from the project reports concerned *professional development*. For many of the high school completion projects, the primary focus, and reported source(s) of success, was the professional development component. The training, workshops, and seminars that teachers and administrations received were critical for the establishment and maintenance of a three-year project, as well as for future sustainability. Professional development also aided in building collaboration and commitment amongst teachers and schools. The comments found within the reports attest to these sentiments: "Professional development gives educators a gift that cannot be taken away after the . . . AISI project no longer exists," and "The overall outcome of our focused and directed PD was that teachers had a larger repertoire of strategies to keep more 'at-risk' students at the school site which in turn contributed to more appropriate instruction and hence improved student learning and achievement."

Parental/Home Environment. The final major theme arising from the project reports concerned *parental/home environment*. Many of the high school completion projects made overt attempts to forge adaptive links to the home life of at-risk students, as well as incorporate the positive influences of parents and guardians. It was often stated, and always understood that in order for students to understand the importance of education, parents must be active participants, advocates, and mentors. To this end, communication strategies and partnerships were the most commonly reported methods of collaboration. They included Parent Advisory Councils, Web sites, newsletters, and "open door" policies, to name a few.

For those projects that successfully incorporated parental involvement, support was evident. For instance: "We received enormous positive feedback from parents as their children had never been recognized before for their academics, citizenship, or school involvement" and "Parental support remained a critical factor for the success of the Student Centre. Communication between parents and schools was imperative for a positive relationship to exist and for this program to flourish."

Tabulations Concerning Summary Outcomes

Based on the Summary section of the project reports, tabulations were calculated for the headings "What worked well" (see Table 3) and "What did not work well" (see Table 4). The most frequently occurring responses were categorized and tabulated.

Table 3

"What Worked Well" Frequencies and Percentages

	Frequency*	Percentage**
Staff were supportive/committed to the project	9	50 %
Students were given a second chance/good psychological support	7	39 %
The flexibility of the program/flexibility for instruction	6	33 %
The program was successful/implementation was successful	6	33 %
The success of the professional development activities/focus	5	28 %
Students were better able to transition into the next level of school/into a career	4	22 %
The project created hope for the future	4	22 %

Note: Total number of projects = 18; Projects could report one or more themes.

*Frequency = The number of projects that reported this theme.

**Percentage = The percentage of projects that reported this theme.

Table 4

"What Did Not Work Well" Frequencies and Percentages

	Frequency*	Percentage**
Parents were not involved enough/did not communicate enough	13	72 %
Staff/school commitment was not strong/too much staff turnaround	10	56 %
It was difficult keeping students in school/on track	8	44 %
The time commitment was too great/the time limits were too tight	7	39 %
Collecting data was difficult/not always appropriate to the project design	4	22 %

Note: Total number of projects = 18; Projects could report one or more themes.

*Frequency = The number of projects that reported this theme.

**Percentage = The percentage of projects that reported this theme.

The most commonly reported reason for a project's success concerned the level of commitment and support amongst the staff and administration. It was recognized that a project of such duration and magnitude could only be undertaken where there is school-based and districtwide backing. Also commonly reported was the recognition that project success was found within the students themselves. By being given appropriate psychological supports and opportunities for a second chance, student outcomes were positive. Other commonly reported reasons for project success involved the flexibility of the program structure as well as instructional approaches; the ease and success of project implementation; the gains experienced from professional development activities; the ease of transition for students going on to the next level of education or career; and the creation of an optimistic future for at-risk students.

With respect to the reported reasons concerning what did not work well, the most common response was that parents were neither as involved nor as communicative as hoped. Many projects made concerted efforts to involve parents. While some were successful in their attempts, many reported falling short of anticipated parental involvement. This same sentiment was echoed in the second highest reported reason. Although some projects stated that what worked best in their project was staff commitment, many reported that it was lacking. Specifically, it was often indicated that this was partially due to staff turnaround and attrition. Other commonly reported reasons for a project not working well included problems associated with keeping students in school and on track academically and psychologically; the time commitments associated with a large scale project as well as completion deadlines; and the difficulties associated with the selection of appropriate data instruments and the subsequent analyses of outcomes.

Conclusion

According to the literature, high school completion is impacted by several critical factors. Gender, First Nations/Metis/Inuit (FNMI) issues, socioeconomic and regional considerations, and student- and school-based issues both individually and collectively influence whether a student decides to leave school early, or to continue until meeting the requirements for graduation (Satchwell, 2004). While these factors are formidable, they can be mediated through careful prevention and intervention strategies. There is sufficient evidence in the literature to suggest that by attending to the social/psychological needs of each student (i.e., developing strong interpersonal connections between students, peers, teachers, and parents; providing counseling services; creating mentorship programs and alliances), and then shifting toward academic needs (i.e., tutoring services, flexible programming, differentiated instruction), early school leaving may be prevented (Christenson et al., 2001; Lehr et al, 2003).

Upon review of the 18 selected projects, many either attended to social/psychological issues prior to academic issues, or placed more emphasis on social/psychological issues as compared to academic issues. Of those that focused more heavily on academic issues, there was still considerable attention directed toward social/psychological issues. Therefore, it appears that all of the 18 projects from Cycle 2 were aligned with the literature regarding prevention and intervention. However, this was not the case with respect to several of the factors associated with early school leaving.

Although the literature states that male students tend to be at higher risk for early school leaving, no project tailored their program toward this at-risk population. Nor did any project focus upon female students. While such a focus may not have been warranted by any of the projects for Cycle 2, it may be a consideration for future projects.

Similarly, for First Nations, Metis, and Inuit (FNMI) students, there was only one selected project that focused exclusively on an Aboriginal population. A few studies made mention of Aboriginal issues and the importance of cultural awareness within the school, but it was not a primary focus. Given the statistics regarding non-completion by Aboriginal students, there is no question that more projects focusing upon Aboriginal student retention need to be created, supported, and deployed.

Finally, while there is evidence to suggest that it is never too late to address the risk factors associated with early leaving, there should be an even greater focus on elementary school students (Edmondson & White, 1998; Entwisle, 1990; Suh & Suh, 2007). Several of the projects cited population parameters beginning in kindergarten, but there was little data derived from, or reporting of, students younger than Grade 10.

Overall, the 18 selected Cycle 2 projects regarding high school completion were designed, deployed, and reported with the utmost integrity. The project reports clearly exhibited the dedication and commitment of teachers, staff, and administrators in Alberta schools. While the gains were not always as significant as the project coordinators had hoped, they were critical first steps toward future outcomes. The knowledge, skills, and strategies acquired through Cycle 2 will likely have an impact for many years. As the literature suggests, early school leaving is a process, not an event. The same can be said for reversing this formidable trend.

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Racial Identity Attitudes and Academic Achievement Among At-Risk Black Female Adolescents

Carolyn Hughes, Nicole N. Manns, and Donna Y. Ford

Abstract: *Racial identity attitudes, a construct proposed as a measure of the world view of Blacks (Cross & Vandiver, 2001), and academic performance of a group of Black females attending a high-poverty, failing high school with a 42% graduation rate were examined. These young women were either pregnant or parenting and attended a parenting support group at their school. Findings revealed that racial identity attitude scores generally were low for participants. In addition, two subscale scores were significantly related to school absence and academic performance. Significant relationships were also found among subscale scores. Findings are discussed in relation to future research and practice in the areas of racial identity attitudes and pregnancy prevention and parenting support programs for at-risk Black female youth.*

Introduction

For the first time since 1991, the teenage birthrate in the U.S. rose during 2006, with the largest rate increase (5%; 63.7 births per 1,000 population) for Black females ages 15 to 19 years (Hamilton, Martin, & Ventura, 2007). During the same time, the highest rate of low-weight births and infant deaths occurred among Black women (Annie E. Casey Foundation, 2008). Although Hispanic teens have a higher birthrate, Black teens have the highest pregnancy rate (134 per 1,000 population) (Hamilton et al., 2007). Black teens also are more likely to have engaged in sexual activity before age 13 and to be sexually active than are either White or Hispanic teens (Centers for Disease Control and Prevention, 2008). They also are estimated to have the highest rate of unintended births (80%) (Afable-Munsuz, Speizer, Magnus, & Kendall, 2006).

Early, high-risk sexual activity; teenage pregnancy; and teen parenting present considerable challenges to a young, single woman. Outcomes associated with these behaviors include poor academic performance, high school dropout, limited postsecondary education and career options, and diminished earnings (Baytop, 2006; Sealey-Ruiz, 2007). Children born to teen parents are more likely to experience birth complications and to be preterm and of low birthweight, placing them at risk for illness, death, and developmental delays (Thomas & Dimitrov, 2007). In addition, teen mothers are more likely to experience higher levels of stress, depression, feelings of failure and helplessness, and physical health complications than are older mothers (Meschke & Bartholomae, 1998).

Factors associated with teen pregnancy include socioeconomic status, parental level of education, neighborhood and school characteristics, academic

performance, substance use, peer pressure, social influences, race, ethnicity, and family composition and dynamics (Kalmuss, Davidson, Cohall, Laraque, & Cassell, 2003). Pregnancy prevention programs generally have focused on primary or secondary prevention, such as delaying sexual activity and increasing use of contraceptives among sexually active teens, although effects have been equivocal (Baytop, 2006). In addition, teens' attitudes have been examined as factors that contribute to or delay sexual activity and pregnancy (Meschke & Bartholomae, 1998; Thomas & Dimitrov, 2007). For example, Afable-Munsuz et al. (2006) suggested that having a Positive Orientation Toward Early Motherhood (POEM) by associating pregnancy with increased responsibility, intimacy, attention, and acceptance encourages unprotected sexual activity among young women. Researchers have recommended including values clarification, self-efficacy enhancement, goal setting, and decision making in pregnancy prevention curricula, although limited effectiveness data exist (Kalmuss et al., 2003; Thomas & Dimitrov, 2007). In addition, to address the poor academic performance typical of pregnant or parenting teens, academic support has been incorporated into teen parenting programs; however, program effects have been similarly minimal (Baytop, 2006).

The relation between Black racial identity attitudes and a range of educational, social, and psychological outcomes have been studied extensively (Awad, 2007; Davis, Aronson, & Salinas, 2006; Franklin-Jackson & Carter, 2007; Jones, Cross, & DeFour, 2007; Vandiver, Cross, Worrell, & Fhagen-Smith, 2002; Worrell, 2008). However, no researchers have studied specifically the interaction of the psychological outcome of Black racial identity and pregnancy in Black teens. Racial identity

attitudes is a construct proposed by Cross and Vandiver (2001) and colleagues to describe frameworks by which Blacks view the world. The concept of racial identity attitudes is derived from Cross and colleagues' expanded Nigrescence model of the psychology of Black identity, which consists of three multidimensional frames of reference by which the world is viewed (Cross & Vandiver, 2001). The first frame (Pre-Encounter) describes Blacks prior to encountering the effects of race and racism and comprises three different attitudes: assimilating White culture (Assimilation), adopting negative views of Blacks (Miseducation), and racial self-hatred (Self-Hatred). The next frame (Immersion-Emersion Anti-White) suggests a confrontation that propels the awareness that race and racism play a critical role in American society, prompting an anti-White attitude. The third frame (Internalization) is composed of two attitudes: Afrocentricity (immersion in Black culture) and Multiculturalist (connecting with multiple cultures and groups). The progression through the gamut of racial identity attitudes is viewed as individualistic rather than linear, recognizing that Blacks represent economic, social, and ethnic diversity (Jones et al., 2007).

Racial identity attitudes, particularly Internalization views, have been associated with positive outcomes for Blacks with respect to academic achievement, self-esteem, mental health, developing trust, and refraining from high-risk behaviors, although findings have been mixed (Awad, 2007; Jones et al., 2007; Lockett & Harrell, 2003; Smalls, White, Chavous, & Sellers, 2007). Internalization attitudes may also serve as a protective factor against racial discrimination and stereotype threat (Davis et al., 2006; Franklin-Jackson & Carter, 2007; Jones et al., 2007; Wakefield & Hudley, 2007). However, despite the potential of racial identity attitudes to influence outcomes positively among Blacks, few investigations of racial identity have been conducted in high schools, particularly in high-poverty, under-resourced high schools attended predominately by Blacks (Irving & Hudley, 2005; Smalls et al., 2007). In addition, no published study was found in which the relation of academic performance and racial identification was examined among Black adolescent females at risk for school failure due to pregnancy or parenting, poverty, attendance at a failing school, and low academic achievement. Finally, although racial identity attitudes have been associated with decreased engagement in high-risk behaviors, a focus on racial identity has not been incorporated into pregnancy prevention programs, despite the high incidence of sexual activity and unintended pregnancies reported among Black teens. However, it may be that changes in racial identity attitudes, such as more developed Internalization views, relate to delaying sexual activity and future pregnancies and improving academic performance among young Black women who are pregnant or parenting.

Therefore, the purpose of this study was to extend the literature by examining the relation between racial identity attitudes, academic performance, and school attendance among a group of at-risk Black adolescent females. These students attended a high-poverty, predominately Black high school identified as failing by federal and state standards. In addition, these young women were either pregnant or parenting and attended a teen parent support group at their school. The goal was to identify factors that may have accounted for differential academic outcomes among these students and the role played by racial identity attitudes in influencing these outcomes.

Method Setting

Participants attended a comprehensive high school offering a range of academic and career preparation courses that was located in a large metropolitan school district in the southeastern U.S. The school enrolled 1,270 students, of which 78% were Black, 19% White, and 3% other ethnicities (e.g., Hispanic, Asian, Native American). On-time graduation rate was 42%, and 95% of students received free or reduced lunches. The school was identified as "needing improvement" based on No Child Left Behind (NCLB) standards with respect to graduation rates and test scores. Eighty percent of residents in the students' neighborhood were Black, 40% of adults 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).

Parenting Support Program

The school provided a parenting support program targeting retention of female students who were pregnant or parenting. This program was funded and staffed through a neighborhood health agency and was designed to provide low-income, academically at-risk youth with educational and health assistance to decrease their likelihood of future pregnancies and of exiting school early. Services were provided through an in-school health clinic and crisis intervention center. One-hour classes were offered twice weekly to program participants by a staff social worker using a curriculum composed of lessons clustered into three broad units: (a) exploring self-concept and perceiving oneself as a unique individual; (b) addressing peer pressure, sexual health, and healthy relationships; and (c) developing skills in assertiveness, interpersonal communication, and money management. Although 42 students were listed on the class roster, typically only 25 to 30 students were present for class meetings. Participants who missed more than three meetings per month were evaluated based on teacher input and grades to determine retention in the program. This attendance policy did not apply during a student's final trimester of pregnancy during which school policy allowed students to have homebound instruction. Students were referred to the program by a teacher, health clinic staff, parent, or self-referral. A graduate student in special education from a local university served as a teaching assistant during one class period per week.

Participants

Of the 42 females enrolled in the program, 27 participated in the study. Because the goal was to measure Black racial identity attitudes, only Black students were selected to participate. Fifteen students on the program's roster were excluded because they either (a) were not Black, or (b) never attended class during the length of the study. Written consent was obtained from all participating students and a parent or guardian (minor students). Participants' mean age was 17.5 years (range = 15 to 19) and almost half were in the ninth grade. Only two students reported being employed. Over half ($n = 15$) were parents; of these, five were also pregnant. Twelve students were not yet parents but were pregnant. Seven students were on homebound instruction (in their third trimester); five of these students were already parents. All but six students lived with a single mother or grandparent as family head of household. Family income of over two-thirds of students

was less than \$20,000 annually and over one-half of families received state-funded health care and/or aid to children. Additional participant information is shown in Table 1.

Table 1

Participant Information

Characteristic	Frequency	Percent
Age		
15	3	11
16	7	26
17	6	22
18	10	37
19	1	4
Grade		
9	11	40
10	5	19
11	5	19
12	6	22
Current Employment Status		
Employed	2	7
Not Employed	25	93
Parenting Status		
Participants With Children (Pregnant)	5	19
Participants With Children (Not Pregnant)	10	37
Participants Without Children (Pregnant)	12	44
Homebound Participants ^a	7	16
Family Head of Household		
Mother Only	14	51
Grandparent	7	26
Two Parents	5	19
Father of Participant's Child	1	4
Yearly Household Income		
< \$10,000	9	33
\$10,000 - \$20,000	10	37
> \$20,000 - \$30,000	5	19
> \$30,000	1	4
Not Reported	2	7
Government Assistance Received by Family ^b		
State Medicare	14	51
Women, Infants, and Children (WIC)	14	51
Food Stamps	11	41
Public Assistance	8	30

^aHomebound participants were in their third trimester of pregnancy.

^bMore than one response was possible.

Measures

Cross Racial Identity Scale (CRIS). The CRIS (Vandiver et al., 2002) was used to measure participants' racial identity stages based on Cross and Vandiver's (2001) Nigrescence model. The 40-item questionnaire comprises six subscales using a 7-point Likert-type scale where 1 = Strongly disagree, 4 = Neither agree nor disagree, and 7 = Strongly agree. The Pre-Encounter Assimilation subscale measures pro-American, assimilationist attitudes (e.g., "I think of myself primarily as an American, and seldom as a member of a racial group"). The Pre-Encounter Miseducation subscale assesses acceptance of negative stereotypes about Blacks (e.g., "Many African Americans are too lazy to see opportunities that are right in front of them"). The Pre-Encounter Self-Hatred subscale measures racial self-hatred (e.g., "Privately, I sometimes have negative feelings about being Black"). The Immersion-Emersion Anti-White subscale measures hatred toward Whites and White society (e.g., "I hate the White community and all that it represents"). The Internalization Afrocentricity subscale measures awareness of Black culture and Black empowerment (e.g., "Black people will never be free until we embrace an Afrocentric perspective"). The Internalization Multiculturalist subscale assesses acceptance of and connection with diverse cultures (e.g., "I believe it is important to have both a Black identity and a multicultural perspective, because this connects me to other groups [Hispanics, Asian-Americans, Whites, Jews, gays & lesbians, etc.]"). The CRIS demonstrated adequate reliability with alpha values of .76 to .89 (Vandiver et al., 2002). Convergent validity was demonstrated with significant correlations with the Multidimensional Inventory of Black Identity (Jones et al., 2007). Internal consistency of the CRIS with the current sample was established as .68 overall. *Record reviews.* Students' school records were examined to identify course enrollment, grade point averages (GPAs), and school attendance for the first four six-week grading periods of the academic year in which the study occurred (N = 116 days). Family demographic information (e.g., household income, government assistance received, head of household) was obtained from intake information of the participating health agency.

Data Collection Procedures

The teaching assistant (a Black female) established rapport with participants throughout one semester in which she helped facilitate the parenting support program curriculum. After obtaining written consent for participation (students could opt out, although none did), the teaching assistant then distributed the CRIS to students at the beginning of one class period. First, the assistant read aloud from a written script the purpose of the survey, procedures for answering questions, and methods for ensuring confidentiality. Students were informed that there were no right or wrong answers and that their responses would not affect their treatment or evaluation in class. Students were asked to sit apart and raise their hands if clarification was needed on a question. Next, the assistant verbally read each question on the survey form, waited for students to respond in writing, and provided clarification when asked.

Data Analysis

Descriptive statistics were used to summarize participants' demographic information. Means, standard deviations, and ranges were found for students' GPAs, school absences, and subscale scores on the CRIS. Summary data were analyzed to identify trends in relation to parenting and homebound status of students. In addition, independent sample t-tests were conducted to identify significant differences in CRIS scores due to parenting status. Finally, Pearson correlation coefficients were computed to investigate the relation among study variables.

Results

Descriptive Analysis

Table 2 presents the means, standard deviations, and ranges of students' GPAs, absences, and CRIS subscale scores. The mean GPA for participants was low (1.95, range = 0 to 3.80), where 0 = F, 2 = C, and 4 = A. Nine students had less than a C average; of these, six were on homebound status or had a child, and three did not. Ten students had averages in the C range of whom six had a child or were homebound, and four were not. Eight students had a B or better average; five of these had a child or were homebound, and three were not. Although GPA's generally were low, being a parent or being homebound did not appear to relate to poor grades.

Table 2

Descriptive Analysis of Student Variables

Variable	Mean	SD	Range
GPA	1.95	1.21	0-3.80
Absence	22.30	21.31	1-66
CRIS Subscale			
Pre-Encounter Assimilation	3.91	1.41	2.20-6.40
Pre-Encounter Miseducation	3.84	1.23	2.00-6.20
Pre-Encounter Self-Hatred	2.94	1.67	1.00-6.00
Immersion-Emersion Anti-White	2.81	1.64	1.00-6.60
Internalization Afrocentricity	3.53	1.18	1.00-5.80
Internalization Multiculturalist	3.97	1.21	1.00-.700

Note. Grade point average (GPA) was measured on a scale ranging from 0 to 4.0. Absences were calculated based on a total of 116 possible days. CRIS subscale scores were measured on a scale where 1 = *strongly disagree*, 2 = *disagree*, 3 = *somewhat disagree*, 4 = *neither agree nor disagree*, 5 = *somewhat agree*, 6 = *agree*, and 7 = *strongly agree*.

Average school absence was high ($M = 22$ days absent of 116 possible days present, range = 1 to 66). Absences across students tended to be bimodal: 14 students were absent 10% or less of possible days present ($n \leq 12$ days); 10 students were absent 25% or more of possible days ($n \geq 30$ days). Of the 14 students with comparatively fewer absences, 7 were on homebound status or had a child, whereas 7 did not. (Homebound students who completed assignments and reported daily to their teachers were counted as present.) Of the 10 with greater absences, 8 were either homebound or had a child and only 2 did not. In addition, nine participants were a year overage for their grade and seven were two or more years overage. Of the seven, five either had a child or were homebound. Therefore, high absences did not appear to be associated with parenting or homebound status while being overage and under-credited did.

Mean CRIS subscale scores were fairly low (range = 2.81 to 3.97 on a scale of 1 to 7), generally indicating disagreement or neutrality toward statements. Although students used the entire scale in responding, scores generally clustered around subscale means, as indicated by modest standard deviations. The Internalization Multiculturalist subscale had the highest mean (3.97), although 22 responses fell between "disagreeing" or "neither agreeing or disagreeing" with statements like "I believe it is important to have both a Black identity and a multicultural perspective, because this connects me to other groups (Hispanics, Asian-Americans, Whites, Jews, gays & lesbians, etc.)." Only five students had mean subscale scores indicating "agreeing" or "strongly agreeing" with such statements. The Pre-encounter Assimilation subscale ranked closely behind ($M = 3.91$), indicating general disagreement or neutral feelings with statements like "If I had to put a label on my identity, it would be 'American,' and not African American." Mean scores of only 3 students indicated "agreeing" or "strongly agreeing" with similar statements; 10 students' mean scores fell in the range of "strongly disagreeing" or "disagreeing." The mean score (3.84) for the Pre-Encounter Miseducation subscale ranked next. Nine students' mean scores showed "strong disagreement" or "disagreement" with statements like "Blacks place more emphasis on having a good time than on hard work." Eleven students' scores showed "some disagreement" or neutral feelings. Only seven students' mean scores showed any level of agreement with similar statements. These findings indicate that although students did not hold strong multicultural views, they also did not strongly subscribe to negative stereotypes about Blacks.

Ranking next was the Internalization Afrocentricity subscale ($M = 3.53$). Only two students' mean scores showed "somewhat agreeing" with statements like "I believe that only those Black people who accept an Afrocentric perspective can truly solve the race problem in America." Mean scores of 16 students fell in the range of "somewhat disagreeing" or feeling neutral, while the 9 remaining students' scores indicated "strongly disagreeing" or "disagreeing." Similarly, the next ranking mean (2.94) showed general disagreement with Pre-Encounter Self-Hatred subscale statements. Mean scores of 17 students indicated "strong disagreement" or "disagreement" with statements like "When I look in the mirror at my Black image, sometimes I do not feel good about what I see" and only 5 students' mean scores showed any level of agreement. The lowest mean score was for the Immersion-Emersion Anti-White subscale (2.81), suggesting that students generally did not hold a strong dislike of Whites or

White culture. Specifically, 16 of 27 students' mean scores for this subscale fell in the range of "strongly disagreeing" or "disagreeing" with statements like "I have a strong feeling of hatred and disdain for all White people" as compared to only five students' mean scores indicating any level of agreement. Findings show that students generally disagreed with negative views toward Whites or themselves as Black and that they did not hold strong Afrocentric views. Finally, a series of independent samples t-tests indicated no significant differences in CRIS subscale mean scores related to students either being a parent or on homebound status.

Correlational Analysis

Table 3 shows results for the Pearson correlation analysis for the variables GPA, absence, and CRIS subscale scores.

GPA and absence. A Pearson correlation coefficient of $-.73$ ($p < .01$) was found between students' GPAs and absences, indicating that students with higher GPAs had fewer absences. For example, 9 students had a GPA of D or F (< 2.0); their mean absence rate was 41 (of 116 days). Eight students had a GPA of B (3.0 or better); these students had a mean absence rate of only eight days. Not surprisingly, having higher grades related to attending school more frequently. CRIS subscales and GPA. A moderate but significant negative relationship ($r = -.50$, $p < .01$) was found between the Pre-Encounter Miseducation subscale score and GPA. The greater the degree to which students agreed with negative stereotypes of Blacks, such as laziness or affiliation with crime, the lower their GPAs tended to be. For example, 7 students had a mean Miseducation subscale score of 5 or greater

indicating "somewhat" to "strong" agreement with negative Black stereotypes. These students had a mean GPA of 1.00. Nine students had mean scores of 3 or less indicating that they "somewhat" to "strongly disagreed" with such stereotypes. Their mean GPAs fell in the C range (2.33), which was above the mean of 1.95 for all participants.

The Immersion-Emersion Anti-White subscale score also was moderately but significantly negatively correlated with GPA ($r = -.43$, $p < .05$). The more students endorsed anti-White attitudes, such as hating Whites and White society, the lower their GPAs tended to be. The five students with mean scores of 5 or greater, indicating agreement with anti-White statements, had a mean GPA of 1.26 (D). Seventeen students had mean scores of 3 or less indicating disagreement; their mean GPA was in the C range (2.38). Therefore, holding negative views toward both Blacks and Whites related to lowered academic performance for students for students who were pregnant or parenting.

CRIS subscales and absence. The same two CRIS subscales, Pre-Encounter Miseducation ($r = .68$, $p < .01$) and Immersion-Emersion Anti-White ($r = .42$, $p < .05$), had a significant relationship to absence, however, in a positive direction. Higher absences were positively related to higher scores on these subscales. To illustrate, the 7 students with Miseducation scores of 5 or greater (i.e., agreeing with negative stereotypes of Blacks) had a mean absence rate of 44 (of 116) days. The 9 students with scores of 3 or less had a mean absence rate of 11 days. Similarly, the 5 students with mean scores of 5 or greater on the Anti-White subscale had a mean of absence rate of 38 days; the 17 students with mean scores of 3 or less had a

Table 3

Correlation Coefficients for GPA, Absence, and Racial Identity Subscales

Measure	1	2	3	4	5	6	7	8
1. GPA	--							
2. Absence	$-.73^{**}$	--						
3. Pre-Encounter Assimilation	.25	$-.22$	--					
4. Pre-Encounter Miseducation	$-.50^{**}$	$.68^{**}$	$-.32$	--				
5. Pre-Encounter Self-Hatred	$-.36$	.27	$-.23$	.04	--			
6. Immersion-Emersion Anti-White	$-.43^{*}$	$.42^{*}$	$-.14$	.15	$.63^{**}$	--		
7. Internalization Afrocentricity	.14	$-.02$	.05	$-.32$	.20	.20	--	
8. Internalization Multiculturalist	.37	$-.18$	.34	$-.07$	$-.34$	$-.40^{*}$	$-.12$	--

Note. * $p < .05$. ** $p < .01$.

mean absence rate of 18 days. Therefore, for Black teens who were pregnant or parenting, subscribing to negative stereotypes of Blacks and Whites correlated with missing school more frequently.

CRIS subscale intercorrelations. Two significant correlational relationships were found among mean CRIS subscale scores. Pre-Encounter Self-Hatred (e.g., "I go through periods when I am down on myself because I am Black") was positively related to Immersion-Emersion Anti-White attitudes ($r = .63, p < .01$). In addition, holding Anti-White attitudes was negatively related to endorsing Internalization Multiculturalist attitudes, such as feeling connected to individuals from different cultural backgrounds or sexual orientations ($r = -.40, p < .05$). Findings show that if students tended to feel self-hatred because of being Black, they were more likely to hold negative views toward Whites. Feeling connected to different cultures and groups, however, related to students having more positive attitudes toward Whites.

Discussion

The racial identity attitudes of a group of Black females attending a high-poverty, failing high school with a 42 % graduation rate were examined. These young women were either pregnant, parenting, or both; attended a parenting support group at their school; and all but six lived with a single parent or grandparent. As a group, their academic performance was lower than the school average where 65 % of grades were a C or better. Average GPA for participants was below a C; however, individual student records suggested that having a child or being homebound (third trimester of pregnancy) did not relate to lower GPAs except for students at the bottom of the grade scale. Participant absences generally were high but only related to parenting or being homebound for those with the most excessive absences, as did being overage for grade. Not surprisingly, absences and GPA were found to be negatively correlated for these students; racial identity attitudes also related to school performance. Based on our findings, implications for Black adolescent development, racial identity attitudes, and pregnancy prevention programs will be discussed.

Participants in our study represent a unique population among investigations of racial identity attitudes. Rarely have high school students been included in these studies, particularly students attending impoverished, failing, segregated schools (Irving & Hudley, 2005; Smalls et al., 2007). Because Blacks are overrepresented in separate and under-resourced schools in the U.S. (Orfield, Losen, Wald, & Swanson, 2004), it is critical to examine the outlook and beliefs of youth attending these schools, including their racial identity attitudes (Irving & Hudley, 2005). This study investigated the racial identity attitudes of pregnant or parenting females with generally low academic performance who attended a marginalized, racially segregated school. No published study has been found addressing racial identity with this population. These students exemplify an extremely vulnerable population faced with the challenges of young, single motherhood compounded with poverty, segregation, and limited educational experiences and resources. In addition, these young women were confronted with the stigma typically associated with teen pregnancy and parenting, as well as the prevailing racist attitudes and practices that exist nationally and, in particular, in southeastern U.S. (Holthouse,

2009). Because racial identity attitudes can affect student outcomes such as academic performance, it is important to examine their effects among previously unexamined populations, as in our investigation.

Findings revealed that CRIS subscale scores, used to measure racial identity attitudes, generally were low for our participants, with all means below 4 on a scale of 1 to 7. As a group, participants overwhelmingly rejected anti-White or Black self-hatred views and disagreed with or were ambivalent toward an Afrocentric perspective as well as stereotyped negative attitudes toward Blacks. In addition, they were not inclined to give up their Black identity in favor of an assimilatory American identity or a more multicultural perspective. Two subscale scores (Pre-Encounter Miseducation and Immersion-Emersion Anti-White) were significantly related to absence and GPA. Specifically, students who subscribed to negative stereotypes of Blacks and anti-White views tended to have extremely low GPAs and excessive absences. Conversely, holding more positive views toward both Blacks and Whites was associated with higher grades and fewer absences. In addition, several subscale scores were significantly related. Black self-hatred attitudes were positively related to anti-White views, whereas anti-White views were negatively correlated with feelings of multicultural connectedness.

Although findings have been mixed, previous researchers reported that higher anti-White scores on the CRIS racial identity assessment related to lower academic performance, whereas multicultural views were positively related to academic performance and acted as a buffer against racism (Awad, 2007; Jones et al., 2007; Worrell, 2008). In general, these studies reported subscale scores that differed substantially from our findings. For example, mean CRIS Multiculturalist subscale scores reported by Awad, Jones, Worrell, and colleagues were between 4.72 and 5.64 as compared to our mean of 3.97. Mean Anti-White subscale scores were lower in these studies (1.68 to 2.78) than in ours (2.81). However, participants in these studies were either college students or adolescents from middle class backgrounds attending integrated, high performing public schools. In contrast, participants in our study attended a school that was overwhelmingly Black, low-income, and failing. Their neighborhood was similarly segregated, lacking in resources, and plagued by unemployment. In addition, participants were further marginalized by their pregnant or parenting status.

Our participants' racial identity attitudes may have been influenced by their cloistered, racially segregated, and under-resourced school and neighborhood environments. Lack of exposure to racial, ethnic, cultural, and economic diversity could have prevented students in our study from developing more multicultural views. Multicultural racial identity attitudes have been associated with (a) helping Blacks feel connected to and accepting of people of other races, religions, ethnicities, or sexual orientations; (b) increasing Blacks' self-esteem; (c) providing protection from the effects of racial incidents or practices; and (d) decreasing involvement in high-risk behaviors (Franklin-Jackson & Carter, 2007; Jones et al., 2007; Smalls et al., 2007; Wakefield & Hudley, 2007). Not only were our participants likely hampered by school and neighborhood shortcomings, but, in addition, their segregated environments may have influenced some students to hold anti-White, culturally narrow views that hindered their academic performance and social and personal adjustment. Further,

their segregated, impoverished environments may have prevented some participants from questioning negative stereotypes of Blacks (e.g., lazy, unemployed, criminally involved)—a view found in this study to relate to poor academic performance and excessive absence.

Research has demonstrated empirically the benefits of attending racially-balanced schools, especially for Blacks (Booker, 2007; Lee, 2007; Williams & Land, 2006). For example, Lee's data corroborate findings of previous studies on the effects of school racial composition indicating that Blacks do better academically at schools with a larger proportion of Whites. It may be that racial segregation in itself presents a disabling condition by limiting the development of a broader, more multicultural attitude associated with higher academic performance and protection from discrimination, racism, and racial stereotypes (Wakefield & Hudley, 2007; Williams & Land, 2006). In addition, Blacks attending impoverished, segregated schools who are receiving an inferior education may not connect academic success with future career success because of limited exemplars (Irving & Hudley, 2005; Somers, Owens, & Piliawsky, 2008). Further, participants in our study experienced the double jeopardy of attending such a school and facing the challenges of pregnancy and parenting while generally being near the bottom of the school ladder academically. Participants may have been affected by the stigma of teen pregnancy, as viewed by the dominant White culture of the U.S., and, therefore, felt even more socially isolated within their largely segregated school and neighborhood setting, in addition to the isolation experienced by any young mother with limited resources and supports.

Future Research and Practice

Findings suggest ideas for future research and practice. Teens in this study attended a parenting support program designed to prevent future pregnancies and keep students in school. Attitude has been suggested as a factor in decreasing early sexual activity and unintended pregnancies among teens and improving academic performance (Afable-Munsuz et al., 2006; Thomas & Dimitrov, 2007). Although self-identity and self-esteem were addressed as a component of the program attended by participants, racial identity attitudes were not. However, racial identity attitudes, particularly multiculturalist views, have been reported to increase Blacks' self-esteem, confidence, coping skills, and academic performance while decreasing high-risk behaviors (Irving & Hudley, 2005; Wakefield & Hudley, 2007). A more developed multicultural racial identity attitude may have helped participants acquire the skills to refrain from unsafe or unwanted sex and prevent future pregnancies by raising their self-confidence, sense of self-efficacy, and social awareness. Similarly, their academic performance may have improved. To date, pregnancy prevention programs have had limited effect on teens' sexual or academic behavior (Baytop, 2006; Franklin, Grant, Corcoran, Miller, & Bultman, 1997). Future pregnancy prevention and teen parenting programs should evaluate the effect of racial identity development as a treatment component.

Although mean academic performance was low among participants, individual differences in performance were found that related to racial identity attitudes, such as participants' views toward Blacks and Whites. However, it is not known if other factors may have accounted for differences in students' attitudes and performance. For example, family support, personal characteristics, family economic

status, or teacher support may have influenced participants' school performance and attendance. Future researchers should include multiple contextual factors in their investigations of racial identity attitudes among similar populations and settings.

Limitations

Several limitations to the study warrant further attention. First, our participant sample was small ($N = 27$) and represented only one high school in one metropolitan area in the Southeast. The study should be replicated with a larger, national sample. Second, the voice of participants was not included. Future studies should corroborate quantitative data with participants' own views on racial identity, pregnancy, and parenting as gathered through open-ended interviews. Third, a comparison group was not included. It may have been revealing to compare findings for teens in this study to those of young women in the same school who were not pregnant or parenting.

Conclusion

Black teenage females who are pregnant or parenting and attending high-poverty, segregated, failing high schools have many challenges to face in maintaining favorable academic performance and school attendance. To stay enrolled in school while fulfilling their responsibilities as young mothers, these students require considerable support, including affordable daycare, flexible class schedules, and acceptance by and assistance from family and friends. Although many factors are associated with successful outcomes for these young women, racial identity attitudes were shown in this study to relate to higher grades and lower rates of school absence. Promoting students' racial awareness within a multicultural worldview as a component of teen parenting programs has potential to increase these students' likelihood of successful, postsecondary, adult outcomes.

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