

Development of Social-Emotional Competence in Boys of Color: A Cross-Sectional Cohort Analysis from Pre-K to Second Grade

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This article explores the development of psychosocial competence in boys of color (BOC; 226 African Americans and 109 Latinos). Changes in competence were assessed over 2 years in cohorts of low-income BOC beginning in pre-K, kindergarten, or first grade. Psycho-social competence was assessed in terms of self-regulation, interpersonal skills, and positive relationships with peers and teachers. Psycho-social and academic competence in literacy and math were assessed in prekindergarten through second grade using teacher reports, child reports, and normed measures. One-year follow-up data were available on measures of psycho-social competence. BOC evidenced high levels of psycho-social competence, especially on self-regulation, which was related to both math and reading achievement. Teachers and children held similarly favorable views of their relationships, but teacher ratings of peer relationships of BOC were less positive. Although emotional self-regulation was stable, declines were observed in self-regulation of attention, quality of peer relationships, teacher-rated closeness, and satisfaction with life at school, especially over the transition from pre-K to primary school.

The successes and competence of boys of color (BOC) are not often noted in educational research. Many are identified as gifted and talented and complete bachelor's and advanced degrees (Aud, Fox, & KewalRamani, 2010). Almost 45% of African American (AA) males reported having at least some form of college education (U.S. Census Bureau, 2011) and in 2010, more than 116,000 Latino (LA) males had earned a bachelor's degree (National Center for Education Statistics [NCES], 2011). Many face the obstacles in their way with a resilience, resourcefulness, and social competence characterized by facile use of language, subtlety of communication, and a positive self-appraisal (Noguera, 2003; Winn et al., 2012).

Still, a large number of BOC struggle academically, the reasons for which have not been widely recognized or addressed. These include persistent social inequality, low expectations of performance, biased instruments and practices, and school policies and practices (Harradine, Coleman, & Winn, 2012). Because BOC can do well under less than optimal circumstances, it would be helpful to understand more about the how competence develops in low-income BOC. For example, it would be helpful to know what level of social competencies BOC evidence at the start of school and whether it increases continuously over time. Development of psycho-social competencies is important, because these competencies are integral to

academic achievement and adjustment at school of BOC (see, e.g., Matthews, Kizzie, Rowley, & Cortina, 2010). The aim of this article is to present data on status and developmental trajectories of psycho-social competencies in low-income AA and LA boys from pre-K to second grade. This article also replicates earlier findings of a relationship between psycho-social competence and academic achievement.

Conceptual Framework

Poverty and socioeconomic disadvantage have well-documented associations with impaired socioemotional functioning and cognitive development (Aber, Morris, & Raver, 2012; McLoyd, 1998). Given the weight of this evidence, it may seem more parsimonious to attribute problems of school adjustment and academic achievement to poverty alone and call it a day. However, such a reductionist formulation of the problem would be incomplete because it ignores the contributions of ethnicity, language, culture, and gender (Coleman, Winn, & Harradine, 2012). The Phenomenological Variant of Ecological Systems Theory (P-VEST) framework (Spencer, Dupree, & Hartmann, 1997) and the Protection-Affection-Correction-Connection (PACC) framework (Winn et al., 2011) provide a more comprehensive and integrated approach to understanding BOC. P-VEST underscores the influences of social environments on development. Occupying a central position in this framework are the multiple vulnerabilities and threats to development emanating not only from poverty but also from gender and

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membership in an ethnic minority group. Numerous studies highlight male gender as a risk factor for suboptimal adjustment at school. For example, Campbell and Eaton (1999) and Ruble, Martin, and Berenbaum (2006) found that many boys typically arrive at school with fewer of the readiness skills associated with early school success than girls. Additional research has indicated that boys tend to have less well-developed language and fine motors skills (Sartorio, Lafrontuna, Polgliaghi, & Tecate, 2002). By themselves, these qualities bode poorly for school adjustment.

Ethnicity also poses risks for optimal development, because membership in a stigmatized ethnic group exposes children to negative stereotypes and prejudices, which result in stress that can adversely affect psychological functioning and performance (Clark, Anderson, Clark, & Williams, 1999). In addition to the negative appraisals of their competence and negative attributions regarding their intentions and behaviors inherent in racial prejudice, children in racial or ethnic minority groups may also be subjected to more punitive, harsh, and coercive reactions from adults (Barbarin & Crawford, 2006).

The PACC framework posits that there exists a set of pernicious and persistent obstacles met by BOC as a function of their social environments. These obstacles can be grouped into four categories: substandard physical and emotional protection, inadequate nurturance and affection, disproportionately harsh correction, and repeated broken connections. Many BOC have too few times when then can feel safe (protection), nurtured and valued (affection), fairly disciplined (correction), and consistently linked to meaningful, influential networks of people (connection). The protection, affection, and correction framework (PAC) for parenting was first developed by Stevenson, Davis, and Abdul-Kabir (2001), then expanded to include a fourth dimension, connection (C), and utilized with schools, communities, and families (Winn et al., 2011). The PACC framework is predicated on the fact that the toxic contexts experienced by many young AA males necessitate explicit and intentional practices and policies to counter their negative impact. Deliberate acts of protection, affection, connection, and correction (PACC) by adults and systems are necessary precursors for substantial increases in the rate of boys' ability to provide PACC for themselves and, eventually, for their families and communities. Schools are powerful players in the lives of children, and they can and do help to meet children's needs, sometimes even without realizing that they are doing so. School programs, policies, and strategies can work together to provide positive influences on the negative impact of many contextual variables. Schools have myriad ways to address barriers—some of which are totally under schools' immediate purview, while others require collaboration with external partners.

It is likely that the effects of poverty, ethnicity, and gender are additive, leaving BOC vulnerable to more stressors and conveying correspondingly fewer resources with which to manage those stressors (Winn et al., 2012). P-VEST allows for wide individual differences and acknowledges that variations, including high levels of academic achievement and psycho-social competence, are extant among BOC who are poor and who are members of an ethnic minority group. However, the combined effects of poverty, male gender, and membership in a stigmatized ethnic group obstruct typical development and can lead to

disproportionately high numbers of BOC performing suboptimally (Patterson, Kupersmidt, & Vaden, 1990).

Psycho-social Competence

Psycho-social competence is defined here as a combination of self-regulation, interpersonal skills, and social relationships. The emergence of psycho-social competence in children is not only an indicator that children have appropriately mastered important developmental tasks of childhood related to self-regulation but also reveals the social resources (such as relationships with peers and adults) that children can access to manage arousal, adversity, and stress in their lives (Kraag, Zeezers, Kok, Hosman, & Abu-Saad, 2006). Interpersonal conceptions of psycho-social competence draw on the nature and processes involved in developing peer relationships and maintaining friendships (Rubin, Bukowski, & Parker, 2006). Mendez, McDermott, and Fantuzzo (2002) and Thompson (2006) have proposed a formulation of psycho-social competence that includes self-regulation of attention, behavior and emotions, and language skills.

In the academic arena, the National Education Goals Panel (1997) identified socioemotional competence among the skills that are important for successful functioning in school. Social competence was found to be especially important when children entered school (Brendgen, Vitaro, Bukowski, & Doyle, 2001). Although some studies suggest that psycho-social competence is important not just for emotional health but also for academic achievement itself, additional data are needed to make a more compelling case (Goodfellow & Nowicki, 2009; Merrell, 1991; Wentzel, 1991). Additional evidence points to a relationship between early positive social-emotional skills and later academic achievement (see Raver & Knitzer, 2002, for a review; Shields et al., 2001; Trentacosta & Izard, 2007).

Although most BOC develop the psycho-social and academic competence to successfully matriculate through K-12 education and beyond, those who seem not to be adjusting to the demands of school are the subject of special interest (e.g., Kohler & Lazarin, 2007; Tsoi-A-Fatt, 2010). BOC occupy a particularly demanding social niche in American society that is filled with challenges and pitfalls, including their access to quality preschool and school settings; teacher attitudes, beliefs, expectations, and behavior; curriculum quality and relevance; and school readiness skills (Early et al., 2010; Rashid, 2009). The assessment of BOC psycho-social competence included in this article uses indicators of self-regulation (of attention and emotions) and social functioning (i.e., social competence, peer relationships, and teacher-child relationships). The population studied consisted primarily of BOC growing up in low socioeconomic status (SES) families.

Self-Regulation

Self-regulation refers to a related set of attentional, emotional, and behavioral processes. Self-regulation is evidenced by the ability to marshal intellectual resources to focus on a task and avoid distractions. It also represents the ability to express emotions, particularly negative emotions such as anger, disgust, and ennui; to be civil and accommodating; and to bounce back

from disappointment or to maintain performance in the wake of some personal loss or other source of distress. Behaviorally, these processes include resisting impulses, delaying gratification, and engaging in behaviors that may not be intrinsically or immediately rewarding (Kopp, 2002; Kuczynski & Kochanska, 1995). Within the context of the classroom, we would expect that children with a high capacity for self-regulation are able to inhibit prepotent behavior to conform to requests of teachers and demands of the assigned task. For example, highly self-regulated children would be able to take turns, wait until the teacher is free to respond to them, restrain from blurting out answers or running down the hall, and maintain on-task behavior within the classroom. Rothbart, Sheese, and Posner (2007) identified psycho-social competencies critical to children's readiness for school and argued that a central purpose of preschool education ought to be the development and enhancement of self-regulation (attention) and promoting prosocial behavior. It is not surprising that children with high levels of self-regulation received higher ratings of school readiness in reading and math skills and in the quality of their social relationships at school (Miller, Gouley, Seifer, Dickstein, & Shields, 2004).

Interpersonal Skills and Social Functioning

Supportive, low-conflict relationships with adults facilitate children's interpersonal skills (Pianta, Nimetz, & Bennett, 1997). These relationships can be an important resource as the child encounters stressful situations and must learn to temper arousal and organize responses to stress. Researchers have repeatedly found that the emotional quality of a child's relationship with a preschool teacher is related to positive social adjustment and academic achievement in later grades (Hamre & Pianta, 2001; La Paro & Pianta, 2000; Pianta & Stuhlman, 2004a, 2004b). For example, children who had positive emotional relationships with teachers in early childhood classrooms evidenced higher levels of learning and showed greater gains on later measures of literacy and math (Mashburn et al., 2008).

Satisfaction with life at school provides still another indicator of the child's psycho-social status. The quality of relationships with peers and teachers is likely to affect a child's satisfaction with life at school. Valeski and Stipek (2001) have argued that children have a basic need to feel competent, valued, and socially connected. Children tend to report liking school when these needs are satisfied. In turn, when children are satisfied with school, they tend to be more engaged in learning. In light of the high rates of expulsions, suspensions, and dropout for AA boys (Aud et al., 2010), BOCs may lack a connection with school and staff and engagement with the curriculum and lessons.

There are few published studies that report data for young BOC on the dimensions of psycho-social competence at the center of this study: self-regulation, interpersonal skills, and social relationships. Some studies have found that teachers often rate AA children (especially boys) as having more externalizing problem behaviors and as less self-regulated (e.g., Skiba, Michael, Nardo, & Peterson, 2002). Currently, we have very limited knowledge about the social skills and relationships of BOC, how they develop over time, and their significance for success at school for BOC. Given the growing evidence of a relationship between psycho-social competence and academic

achievement (see Raver & Knitzer, 2002, for a review; Shields et al., 2001; Trentacosta & Izard, 2007), understanding the status and development of social competencies of BOC is important. This is particularly true for the subset of BOC whose academic and psychological well-being may be challenged by the triple vulnerabilities of gender, ethnicity, and poverty (Thomas & Stevenson, 2009).

Research Questions and Expected Findings

To address these issues, this study first describes the level of psycho-social competence observed in a sample of young BOC growing up in low-income households. Data from the study will be used to answer the following questions: (a) How do BOC score across the multiple domains of psycho-social competence? (b) Do psycho-social competencies increase with time in school from pre-K to second grade? (c) Are psycho-social competencies related positively to academic achievement in math and literacy? It is expected that BOC will show improvements in self-regulation and social functioning between prekindergarten and second grade as a consequence of maturation and adaptation to the school setting. It is expected that relationships with teachers and peers will be consistently positive over time. It is expected that aspects of psycho-social competence, particularly self-regulation of attention and emotion, will be related to academic skills and satisfaction with life at school.

Method

Participants

The report utilizes a cross-sectional sequential design (Baltes, Cornelius, & Nesselrode, 1979) in which three grade cohorts of AA and LA boys in pre-K, kindergarten, and first grade were assessed at the end of two academic years. Specifically, the pre-K cohort consisting of 63 AA and 30 LA boys was assessed at the end of pre-K and kindergarten, the kindergarten cohort consisting of 86 AA and 37 LA boys was assessed at the end of kindergarten and first grade, and the first-grade cohort consisting of 77 AA and 42 LA boys was assessed at the end of first and second grade. The boys in the sample were students from three public school districts. The school districts included a medium-sized manufacturing city in the Midwest; a small Midwestern state capital; and a geographically and demographically diverse county in a Southern state with rural, urban, and suburban schools. Almost all of the boys in this study (85%) met the eligibility criteria for free or reduced-price lunch. They attended public schools located in and serving predominately low-income neighborhoods. The ages of boys at the time of testing ranged from 4 to 8 1/2 years old. Despite the fact that many boys in our sample came from low-income homes, the boys in this study are heterogeneous with respect to reading and math achievement, and many showed promise of academic excellence. For math, the mean standard score on the Test of Early Mathematics Ability-3rd edition (TEMA-3; Ginsburg & Baroody, 2003) was 93.0 ($SD = 12.9$) and for the Letter-Word recognition subtest of the Woodcock-Johnson-III (Woodcock, McGrew, & Mather, 2001), the mean was 100.6 ($SD = 14.1$).

Procedures

Assessment data were gathered as part of Promoting Academic Success (PAS) for BOC, an initiative funded by the W. K. Kellogg Foundation to support school districts in improving the academic and social-emotional outcomes of BOC. During the initial 2 years, PAS gathered annual baseline data on the psycho-social status and academic functioning of the boys in the study. With the assent of parents, LA and AA boys in prekindergarten to second grade were assessed using direct child assessments and reports of teachers, parents, and the boys themselves. School districts followed their local procedures to secure parental permission for student participation, and each procedure was approved by the University Institutional Review Board.

Measures

Attention scale. This scale (DuPaul et al., 1997) is a measure of the difficulty children have in regulating attention. This teacher-reported scale consists of nine items covering indicators of low attention regulation included in *DSM-V* diagnosis of ADHD such as being distractible, forgetful, disorganized, inattentive, not listening, losing things, and failing to follow instructions. Each item assesses the frequency of a specific symptom exhibited over the past 6 months or since the beginning of the school year. Teachers rate the frequency on a 4-point Likert scale, 0 (*never or rarely*), 1 (*sometimes*), 2 (*often*), and 3 (*very often*). The measure has been used in several studies of young children and has substantial evidence supporting its validity (DuPaul et al., 1997). Estimates of stability, internal consistency, and construct validity of the ARS4 are strong, and the scale is correlated with direct observations of classroom behavior (see DuPaul, Power, McGoey, Ikeda, & Anastopoulos, 1998). In this report, assessments are scored so that high scores are indicative of high regulation of attention. The internal consistency for this sample is high ($\alpha = .96$).

Emotion regulation. This measure consists of five teacher-rated items adapted from the Student-Teacher Rating Scale (STRS; Pianta, 2001). Items assess the stability and evenness of feelings the child expresses toward the teacher, the child's effectiveness in regulating anger, and bouncing back from bad moods at school. Items are rated on a 5-point scale, indicating the extent to which the statement is typical of the child. High scores indicate high levels of self-regulation of emotions. The internal consistency of the scale for this sample is high ($\alpha = .90$).

Social competence. The Social Competence Scale (SCS; Barbarin, 2007) is a 12-item measure on which a teacher rates qualities and dispositions of the child that tend to foster positive relationships with others, such as affability and prosocial behavior. The items include facilitative social styles, such as a sense of humor, flexibility, and an easygoing manner; prosocial behaviors such as friendliness, conflict resolution, and sensitivity to and acceptance of others; and positive response from peers as reflected in the child's popularity and ability to lead others. The

5-point rating scale employed for this measure is 1 (*Not at All*), 2 (*A Little*), 3 (*Moderately Well*), 4 (*Well*), and 5 (*Very Well*). Two 6-item subscale scores emerge in a factor analysis—Social Skills and Peer Relationships. The Social Skills subscale is a rating of the behaviors that facilitate social interactions. High ratings suggest that the child is viewed as easygoing, pleasant, and affable in relationships with adults and peers. The estimate of internal consistency for this scale is high (Cronbach's $\alpha = .90$). The Peer Relationships subscale specifically assesses the quality of relationships with peers. High scores indicate that the teachers view the child as accepted by and getting along well with peers. The estimate of internal consistency for this scale is in the highly acceptable range (Cronbach's $\alpha = .85$).

Child-teacher relationship (teacher-rated). Teachers used the STRS (Pianta, 2001) to assess the closeness of the relationship with each student. Closeness is the mean of seven items such as "I share an affectionate, warm relationship with this child." Items are rated on a 5-point scale, indicating the extent to which the statement characterizes the relationship between the child and teacher with responses ranging from 1 (*Definitely does not apply*) to 5 (*Definitely applies*). Alpha coefficient for the Closeness scale in the current study is .86.

Feelings about school. Children's Feelings About School (FAS; Valeski & Stipek, 2001) is a 15-item scale with two factor analytically derived subscales. One subscale provides the child's perspective of the child-teacher relationship, in that it assesses the child's feelings toward the teacher (e.g., Do you like teacher? Does teacher care about you?). A second subscale assesses the child's satisfaction with life at school (e.g., Do you like school? How fun are things at school?). The measure was administered verbally to children on an individual basis. The response options were presented to children as a series of bars increasing in size that corresponded to each of the response options. The children were asked to point to their response. Internal consistency for the factors has also been established with analyses revealing α 's of .74 for child-teacher relationship and .52 for satisfaction. For this sample, the estimate of internal consistency is in the acceptable range at .60 for child rating of relationship with teacher and .68 for satisfaction with life at school.

Academic Rating Scale. The Academic Rating Scale (ARS; U.S. Department of Education, National Center for Education Statistics, 1999) consists of 5-point rating scales used to rate literacy and math ability. The ARS was initially developed for the ECLS-K study but has been used in other early childhood studies (e.g., National Center for Early Development and Learning study of public sponsored prekindergarten).

Literacy. The ratings are teacher appraisals of the child's level of skill development in literacy and math. The teacher rated the child's proficiency on nine early language and literacy skills using a 5-point scale, 1 (*Not Yet*), 2 (*Beginning*), 3 (*In Progress*), 4 (*Intermediate*), and 5 (*Proficient*). These ratings cover the following skill areas: letter naming, rhyming, conventions of print, independent reading, use of complex sentence structure, interpreting stories, narrative predictions, early writing, and use of computers. A total score is based on the mean rating across the nine items. This index score is significantly

correlated with letter naming, receptive language (i.e., the Peabody Picture Vocabulary Test), and the Woodcock–Johnson literacy scales. For this sample, teacher appraisal of literacy skills correlated .52 with W-J letter-word recognition subtest and .25 with the child’s self-appraisal. Reliability of this measure for the study was strong. Cronbach’s α ranged from .89 to .94. For the current sample, it is .82.

Mathematics. The teacher rated the child’s proficiency on seven early math skills with the same 5-point scale used for literacy. The ratings were meant to cover a broad range of skills that children in prekindergarten and early elementary school might show. Thus, some of the skills listed, such as adding two-digit numbers, may not be initially appropriate for very young children, but were included to assess how children’s skills change over time. A total score is based on the mean rating across the items. For this sample, teacher appraisal of literacy skills correlated .50 with the TEMA and .32 with the child’s self-appraisal. The estimate of internal consistency for this scale ranged from .94 to .95. For the current sample, it is .92. This total index score is correlated with the Woodcock–Johnson applied problems scale.

Mathematics achievement. The TEMA-3 (Ginsburg & Baroody, 2003) is an individually administered direct assessment measure developed for children ages 3–8 years, 11 months to evaluate strengths and weaknesses in both informal and formal mathematical conceptual understanding and skill acquisition. Informal tasks assessed by the TEMA-3 include numbering, number comparisons, calculation by enumeration, and understanding of concepts such as cardinality, part-whole relations, and equal partitioning. The formal skills assessed include numeral literacy, number facts, calculation by addition and subtraction, and concepts such as additive commutativity, grouping, and place value. The TEMA-3 is standardized on a normative sample of 1,228 children who are representative of the demographic variability of the U.S. population. The average reliability coefficient for Form A is .94, and the 2-week test–retest reliability coefficient is .93.

Literacy academic achievement. The Woodcock–Johnson Test of Achievement, 3rd edition (W-J III; Woodcock et al., 2001) is a norm-referenced comprehensive test of academic achievement using a nationally representative sample. Internal consistency for each of the subtests has been found to range from .76 to .94 (Woodcock et al., 2001). Several subtests

were administered in the spring of each year and in the fall of the year the children entered the program. The subtests used are as follows: letter-word identification to all students; passage comprehension, word attack, and reading fluency were administered to students in first and second grade.

These data were collected on all pre-K, kindergarten, and first-grade students in years 1 and 2 of the project (2007–2008 and 2008–2009). Teachers completed surveys on each PAS student in their class, and students were assessed individually outside of class by trained assessors.

Analytical Plan

First, we computed correlations among the indicators of psycho-social competence to assess the extent to which they tap into a common domain. Then, we presented mean competence scores to show relative standing of BOC in the competence domains. Next, we computed a repeated measures analysis of variance to assess the changes in competence over time. Finally, we computed a series of multiple linear regressions to assess the extent to which domains of social competence predicted academic outcomes.

Results

Psycho-social Competence

Table 1 presents the correlations among the psycho-social competence measures at Time 1. The relatively high correlations among the items support the position that these measures are tapping a common domain we are calling psycho-social competence. The highest intercorrelations are of social skills with the other measures.

The descriptive data on the psycho-social competence scales made it possible to compare one domain with another and to draw inferences about relative strengths. The mean scores for the first-year psycho-social ratings are presented in Figure 1. The scores on the domains of competence trend toward the high end of the rating scale data and thus present a favorable view of the psycho-social status of boys as a group and across grade cohorts. These ratings reflect high competence in the self-regulation of attention and emotion as well as for the relationship between the child and the teacher. Mean ratings of the teacher–child relationship made by students are very close to those made by teachers.

Table 1. Correlations Among Indicators of Psycho-Social Competence

	Self-regulation: attention	Self-regulation: emotions	Relationships with peers	Social skills	Teacher–child relationship (T)	Teacher–child relationship (C)
Self-regulation: emotions	.38***					
Peer relationships	.55***	.47***				
Social skills	.65***	.63***	.84***			
Teacher–child relationship (T)	.30***	.25***	.62***	.53***		
Teacher–child relationship (C)	.07	–.01	.22***	.15**	.16**	
Satisfaction with school	.18**	.05	.19***	.16**	.14**	.36***

Note. Significant values are in bold type.

** $p \leq .01$. *** $p \leq .001$.

Development of Competence

A sequential cohort analysis of the psycho-social competence scales was made possible by comparing scores from grade cohorts whose assessments were repeated in two consecutive years. Figures 2–8 present graphs of these mean scores for the three cohorts over the 2-year time spans. One-factor analyses of variance (ANOVAs) were computed to test the significance of differences between cohorts for their scores within the same grade. The cohorts did not differ on competence ratings within any of the grade levels.

For each of the six indicators of psycho-social competence and for the child’s rating of satisfaction with life at school, a repeated measures ANOVA was computed using Time 1 and Time 2 assessments as the repeated measure and Cohort as a between-subject factor. None of the Cohort × Time interactions was significant. There is a significant downward (i.e., less positive) trajectory from Time 1 to Time 2 for self-regulation of attention, $F(1, 337) = 16.1, p < .001, \eta^2 = .05$ (see Figure 2). The temporal trend for self-regulation of emotion was not significant (see Figure 3). BOC ratings on social skills declined significantly over time, $F(1, 337) = 4.98, p = .026, \eta^2 = .02$. A similar pattern of decline was observed for ratings of the quality of peer relationships, $F(1, 337) = 4.29, p = .039, \eta^2 = .01$ (see Figure 5).

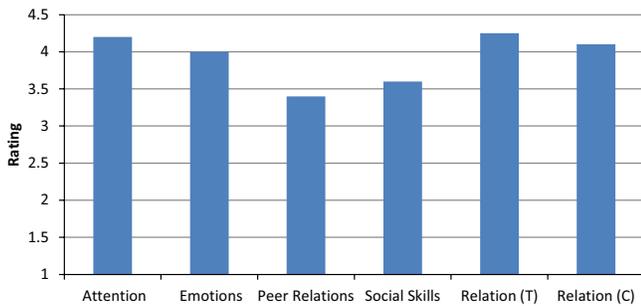


Figure 1. Profile of psycho-social competencies in boys of color.

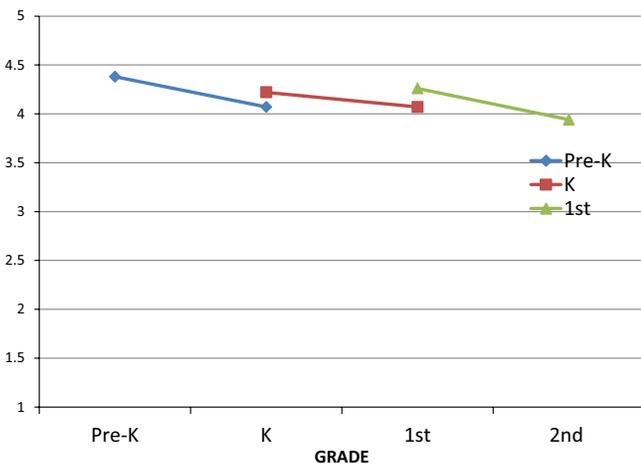


Figure 2. Mean rating of self-regulation of attention for pre-K, kindergarten, and grade 1 cohorts.

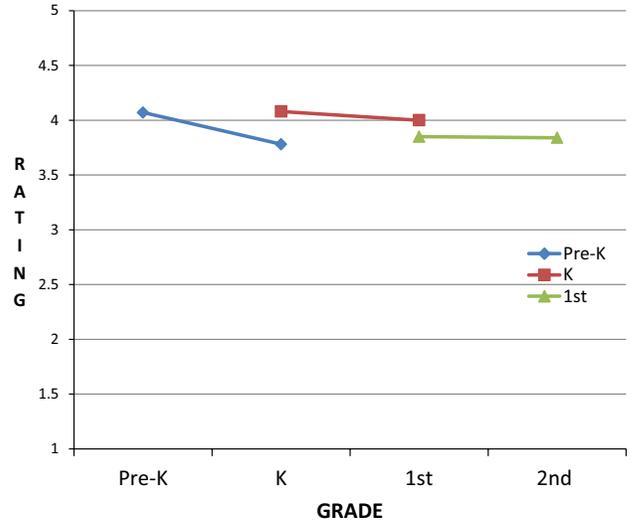


Figure 3. Mean rating of self-regulation of emotions for pre-K, kindergarten, and grade 1 cohorts.

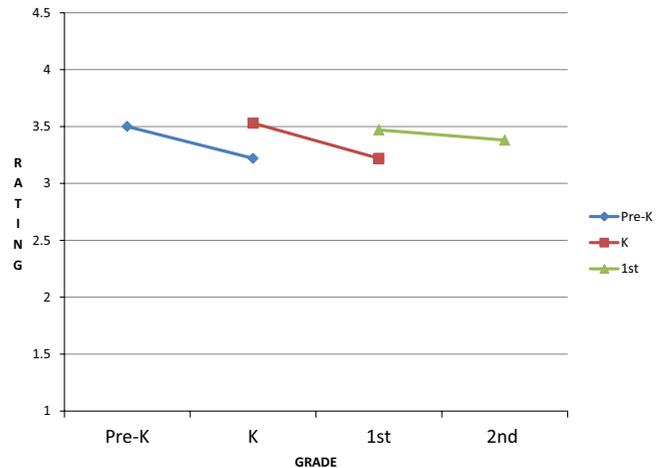


Figure 4. Mean rating of social skills by cohort.

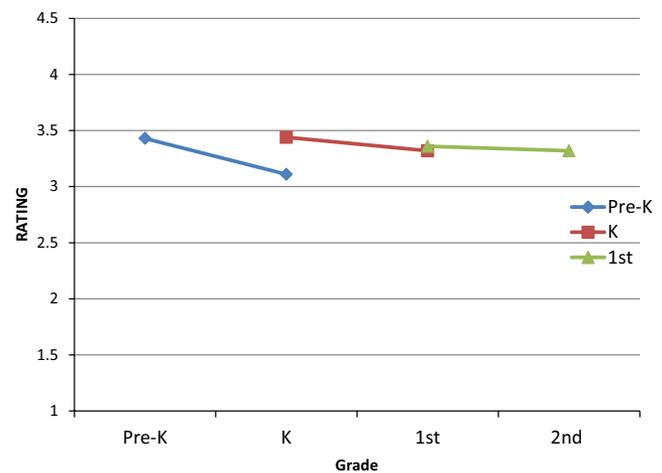


Figure 5. Mean rating of peer relationships by cohort.

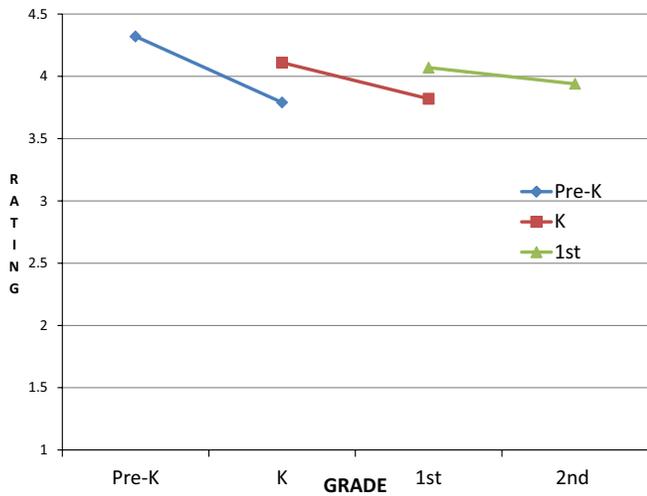


Figure 6. Teacher-child relationships (teacher-rated) by cohort.

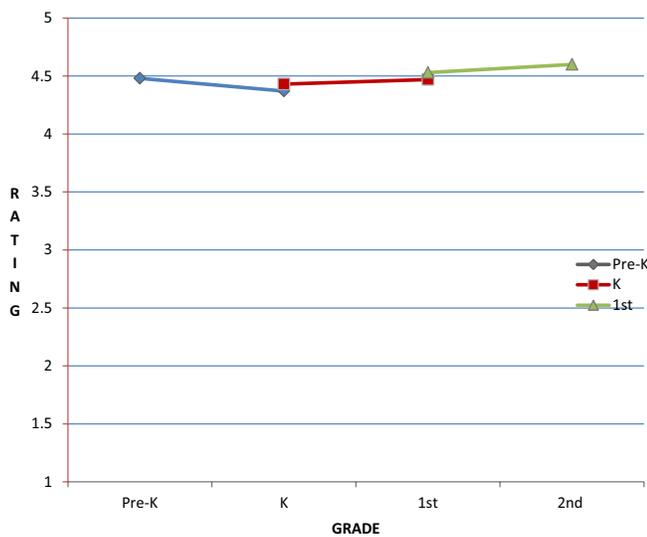


Figure 7. Teacher-child relationships (child-rated) by cohort.

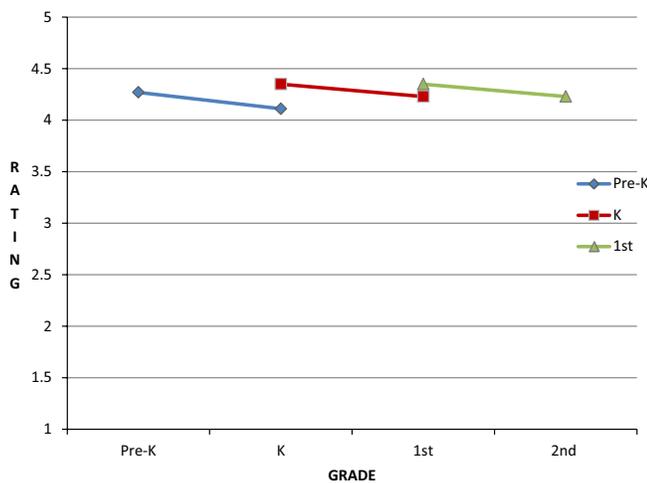


Figure 8. Child satisfaction with life at school by cohort.

This pattern is repeated for teacher-rated closeness in their relationship with BOC, $F(1, 338) = 19.36, p = .001, \eta^2 = .05$ (see Figure 6). However, there was a significant Cohort \times Time interaction, suggesting that BOC in the pre-K cohort experienced a steeper decline in relationship ratings than the other two cohorts, $F(2, 338) = 5.11, p = .007, \eta^2 = .03$. In contrast to the deteriorating ratings by teachers, their own ratings of BOC of their relationships with teachers were stable over time (see Figure 7). Ratings of satisfaction of BOC with their lives at school declined significantly over time, $F(1, 238) = 9.25, p = .002, \eta^2 = .01$ (see Figure 8).

Relationship of Psycho-Social Competence with Academic Skills

To test the possible contribution of psycho-social competence to academic functioning, a series of multiple linear regressions was computed. Specifically, we examined the extent to which measures of psychosocial competence at Time 1 predicted achievement indicators at Time 2. The independent variables consisted of the six psycho-social competence measures. These analyses controlled for race or ethnicity, poverty, and age. The four measures of academic performance used as the dependent measures included a direct assessment of literacy (Word Attack) and math (TEMA) and teachers' ratings of literacy and math skills (ARS) of BOC. In addition, we used regression to test the relationship of psycho-social competence with satisfaction with school of BOC (which includes items in which children rate how good they are in math and literacy).

Table 2 presents the results of the regression analyses, the standardized b , η_s , r^2 s, F -values, and significance level for each predictor for each of the four academic measures and school satisfaction. Overall, the regressions show a consistent relationship between psycho-social competence and academic achievement. The psycho-social competence measures were significant predictors of reading and math scores. Teacher-rated language and literacy skills of BOC were significantly predicted by self-regulation of attention and emotion. Word Attack standard scores were significantly predicted by self-regulation of attention and emotion, quality of peer relationships, and age. Teacher-rated math skills were significantly predicted by self-regulation of attention and emotion, quality of peer relationships, social competence, poverty status, and age. TEMA math standardized scores were predicted by self-regulation of emotion, social competence, and teacher-rated relationships with the child. Satisfaction with school was related to ethnicity, with LA boys reporting higher school life satisfaction than AA boys and to the assessment of BOC of their relationship with the teacher.

Discussion

This research was designed to fill gaps in our knowledge about the extent and development of psycho-social competencies of BOC, many of whom face inadequate protection, affection, connection, and correction as well as the triple vulnerability of gender, race or ethnicity, and poverty in regard to development of psycho-social competence during the early childhood years from pre-K to second grade. The results provide a window into the strengths of and the challenges faced by

Table 2. Regression Analyses with Achievement and School Satisfaction as Dependent Variables and Time 1 Psycho-Social Competence and Demographics as Independent Variables

	Academic rating scale (ARS)-language	W-J -Word attack	ARS math	Test of early mathematics ability (TEMA) math	School satisfaction
	β				
Attention	.25***	.20*	.17*	.08	.12
Emotion	.25***	.21*	.26***	.30***	.04
Peers	.19	-.27*	.18*	.12	.05
Social skills	.16	.26	.20**	.30*	-.03
Relation(T)	-.01	.06	-.01	-.16*	.03
Relation(C)	.05	.05	.050	.04	.37***
Ethnicity	-.07	.12	-.02	-.08	.12*
Poverty	-.05	-.09	.10*	-.06	-.06
Age	.52	-.34***	.48***	.08	.00
R ²	.50	.19	.45	.13	.27
F-Value	32.68***	5.4***	25.95***	3.79***	8.03***
df	9, 289	9, 199	9, 290	9, 290	9, 290

Note. Significant values are in bold type.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

many BOC, who often underperform academically as compared with their other-race peers. This study pays particular attention to the relational aspect of social competence, drawing on the dual perspectives of child and teacher. It offers a glimpse of how social competence changes and evolves over the critical years of prekindergarten to second grade. In general, we found that teachers viewed these BOC as having strengths with respect to self-regulation and relationships with teachers but were less positive about their peer relationships. According to teachers, the strengths they saw in the boys in self-regulation of attention and social relations began to decline modestly over time. The boys themselves reported less satisfaction with life at school, especially over the transition from pre-K to primary school. Finally, we found that psycho-social competence is linked to math-and literacy-based academic functioning.

The quality of relationships between teachers and BOC is viewed in very favorable terms by both teachers and students. In relationships with adults, the mean ratings by teachers suggest that young BOC were seen by teachers as friendly, easygoing, affable, or sensitive to the feelings of others, and evidencing a sense of humor only to a modest degree. It is possible that the high ratings made by teachers of boys' competence represent a ceiling effect that conceals real variations in student-teacher relationships.

It is difficult to discern whether or not the decline in ratings of psycho-social competence is meaningful. The effect sizes were small, but the trend was the same for all cohorts. The declines from pre-K to kindergarten deserve special attention. The move into primary school has been noted as a particularly challenging one for all students given the change in philosophy and pedagogy. The transition to kindergarten often is more structured with an emphasis on planned curricula, group instruction, and specific learning objectives (Barbarin & Miller, 2009; Rimm-Kaufman, Pianta, & Cox, 2000). The transition to a more teacher-directed and intentional approach to instruction places greater demand on boys for self-regulation of attention and conformity to class rules, demands that some boys may

not be well prepared to meet. The difficulty of this transition could be the result of moving to elementary school classrooms, which have more performance demands and which may be less accommodating to the developmental vulnerabilities of boys (Barbarin, 2002). Preschools typically adopt a child-focused orientation, which gives more freedom of movement and choice in the selection of learning centers that are of interest to the boys. For these reasons, boys' vulnerability may be most evident then and this points out the need for vigilance and appropriate intervention at the first signs of difficulty.

As we relied primarily on teacher ratings, significant caution must be observed in interpreting these data. Teacher ratings may be inflated by social desirability. It is possible that teachers believed that as professionals, they should not admit to having different and negative relationships with some students, particularly because the teachers knew they were part of a project focused on BOC. The argument for a social desirability effect may be mitigated by the finding that students report liking their teachers as well. Teachers' ratings of psycho-social competence may be influenced by selection factors. For example, teachers only rated the boys for whom consent forms were returned by parents. Nevertheless, the credibility of these positive ratings given by teachers is strengthened by evidence of a countervailing tendency of teachers to make more negative ratings of BOC, particularly AA boys (Zimmerman, Khoury, Vega, Gil, & Warheit, 1995).

In addition to possible social desirability, teachers may have been hindered in their perceptions and evaluations of their students by their own biases (both acknowledged and unidentified) as well as their experiences and cultural fluency. The ability of teachers to articulate barriers that exist for the recognition of their students' possible strengths may be the key to overcoming them, for it is hard to change behavior that one cannot acknowledge. Results from work by Harradine et al. (2012) suggest that, over time, teachers were able to learn how to recognize more strengths in children of color by utilizing an observational tool (Teachers Perception of Potential in Students, or the TOPS) and engaging in self-reflection. It is therefore possi-

ble to change the lens through which teachers view their students, although this change does take time, concerted effort, and willingness. Although the present data do not suggest widespread, teacher-perceived deficits in social competence for the boys in PAS, there is a chance that ratings might have been influenced by teachers' own undetermined mindsets.

Relationship of Psycho-Social Competence with Academic Functioning

In light of the considerable time and attention given by school staff to learning, testing, and achievement, it is not difficult to make the case that development of social and emotional skills suffer benign neglect. Moreover, in spite of prodigious effort to demonstrate the importance of social competence to academic achievement and the ready availability of evidence-based socioemotional curricula, there has not been a groundswell of support for the inclusion of social competence training in classrooms. To alter this situation, mental health advocates have attempted to marshal arguments about the significance and accessibility of socioemotional training programs such as Second Step (Committee for Children, 2010) and Promoting Alternative Thinking Strategies—PATHS (Greenberg, Kusche, Cook, & Quamma, 1995). These programs typically focus on issues such as emotional understanding, impulse control, self-regulation, and conflict management that reduce problems of classroom management and promote prosocial behavior.

The results of the study suggest that overall, the BOC in our sample possess high levels of psycho-social competence as measured by teachers' ratings. This is particularly true with respect to self-regulation of attention and emotions. Contrasted with the high ratings of self-regulation are the somewhat lower ratings of relationships with peers and of social skills. This suggests that teachers perceive boys as having relatively more difficulty in getting along with peers. Many early intervention social skill programs, such as PATHS and Second Step, include modules on emotional awareness and regulation in addition to social skills. The relatively high ratings for self-regulation and relatively low ratings of peer relationships suggest that the early years in school may be a critical time to provide boys assistance in developing social skills that emphasize peer conflict resolution and friendship development.

Although the role of social competence and mental health in social functioning is well recognized, its relationship with academic achievement has not received much attention. We found that psycho-social competence is related both to direct assessments and teachers' ratings of children's math competence. Our data do not permit claims about the direction of causality, but a case can be made for bidirectional influence. Our results provide some preliminary evidence that psycho-social competence allows children to marshal and press into service other cognitive and motivational resources that are needed for learning. Conversely, acquiring early math skill involves mastery of abstract concepts and acquisition of a vocabulary to represent these concepts. These skills lay a foundation for higher order thinking skills and abstract reasoning skills that potentially enhance children's ability to resolve interpersonal conflict and manage social relationships more effectively. For example, children who are able to classify objects, consider spatial relations

from different vantage points, and rotate objects in their heads may be able to switch perspectives on social situations in ways that lead to improved conflict resolution.

Additional Limitations

Additional research is needed to explore more fully the relationship between these skills and processes that contribute to academic achievement. Although we were able to collect 2 years of data for some of the boys in our study, there is a need for longitudinal data over a longer period to validate the trajectories observed in this study and test the factors that may impact these trajectories. Further exploration of the validity of measures used in the PAS study should also be conducted. For example, the low internal consistency found for one FAS subscale, relationship with teacher, may reflect the difficulty of assessing this construct with children of younger ages. Finally, we were unable to capture parent ratings of children's social competence and were therefore unable to triangulate the teachers' perceptions of the boys.

Conclusion

While we acknowledge the limitations of this study, the evidence it presents is suggestive of a high level of psycho-social competence among BOC overall and, at the same time, points to the importance of psycho-social competence for their academic achievement. The ability of BOC to regulate attention and develop close relationships with teachers and peers proved to be especially important. In light of the contextual barriers (inadequate PACC) and triple vulnerability that many low-income BOC are likely to experience, additional longitudinal studies are needed to clarify how psycho-social competence develops across the elementary school years and to highlight the ways in which many BOC become competent and achieve success in school despite the barriers and risks. A shift from deficit- to strengths-based research is needed to develop better interventions and supports that are suited to needs of BOC, especially as they make the transition from early childhood programs to elementary schools.

Keywords: boys of color; African American boys; Latino boys; social inequality; poverty; psycho-social competence; ethnicity; self-regulation; peer relationships; pre-K; kindergarten; teacher-student relationship

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