Article

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

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

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

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

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

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

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

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

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

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

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

Method

Participants

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

Dependent Measures

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

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

Internal Consistency of Dependent Measures

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

Agreement

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

Procedures

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

Results

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

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

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

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

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

Table 1

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

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

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

Table 2

Correlations Between the SSRS and the TACL-3

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

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

Discussion

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

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

Limitations

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

Table 3

Multiple Regression Analyses for Demographic Variables and Receptive Language

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

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

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

Implications

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

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

Based on the findings of the current study, it makes sense to engage in proactive screening and identification of receptive language deficits. Identifying reliable and valid screening and assessment processes will require the involvement of speech-language pathologists. Involving speech-language pathologists in these activities may require new and innovative screening and assessment processes to identify young children at risk of both emotional disturbance (ED) and language problems given the case loads of these professionals. For example, a language screening process might be incorporated into the second stage of the *Systematic Screening for Behavior Disorders* (SSBD: Walker & Severson, 1990) to identify children at risk of ED and language deficits. The SSBD is a three-stage process that begins with teacher nominations and rank ordering of pupils meeting specific definitions of behavior difficulties. The second stage consists of teacher ratings of adaptive and maladaptive behavior patterns. Direct observations of classroom and playground behavior are conducted in the final stage.

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

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

Summary

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

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

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