

# Perceived Social Support and Self-Esteem in Adolescents with Learning Disabilities at a Private School

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*This study evaluated perceived social support and self-esteem in 66 students who attended a private school for students with learning disabilities. Results from a hierarchical regression analysis indicated that support from parents predicted 35% of the variance in global self-worth. Support from classmates, close friends, and teachers did not make significantly unique contributions to self-worth above and beyond support from parents. Further, results of t-tests indicated that students reported significantly higher scores on several domains of self-esteem, including general intellectual competence and global self-worth, compared to their peers with learning disabilities in a public school. Implications of the results are discussed.*

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**Key Words: Learning Disabilities, Social Support, Self-Esteem, Self-Worth, Adolescents, Private School**

Research within the field of self-esteem has convincingly demonstrated that individuals with learning disabilities (LD) are more likely to develop negative self-perceptions than their peers without learning disabilities (Bear, Minke, & Manning, 2002; Chapman, 1988; Elbaum & Vaughn, 2003; Tabassam & Grainger, 2002). Of primary importance in this regard is the literature linking negative self-perceptions, or low self-esteem, to depressive tendencies (Harter, 1999; Quatman & Watson, 2001) and behavioral or emotional disorders, such as delinquency, conduct disorders, eating disorders, anxiety, and suicidal behavior (Coopersmith, 1967; Harter, 1999). Conversely, a favorable attitude toward oneself is related to positive psychological adjustment (Schweitzer, Seth-Smith, & Callan, 1992). High self-esteem, then, can be considered an important component of overall happiness and life satisfaction.

Given the extensive findings relating learning disabilities to the detrimental effects of low self-esteem (Bakker & Bosman, 2003; Butler & Marinov-Glassman, 1994; Chapman, 1988; Forman, 1988; Gans, Kenny, & Ghany, 2003; Elbaum & Vaughn, 2003), it is essential that these topics be further explored and approaches to enhancing self-esteem for students with LD be identified.

## ***Relationship Between Social Support and Self-Esteem***

The role of perceived social support in the development of adolescent self-esteem has become an increasingly important line of research. Researchers believe

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that social support, or the behaviors and general support from others, can act as an enhancement to self-esteem (Cosden & McNamara, 1997; DuBois et al., 2002) and is a critical source of self-worth for developing adolescents (Harter, 1999). Social support has also been shown to positively affect the adaptations of adolescents at risk of school failure (Richman, Rosenfeld, & Bowen, 1998). Research has confirmed the positive relationship between support from friends and family and self-esteem (Hagborg, 2003; Helsen, Vollebergh, & Meeus, 2000; Richman et al., 1998; Rothman & Cosden, 1995; Williams & Galliher, 2006).

Conversely, there is strong evidence that a lack of adequate social support has detrimental effects on self-esteem (DuBois et al., 2002; Garnefski & Diekstra, 1996; Harter, 1999; Helsen et al., 2000). Perceptions of familial support may in fact be the single most powerful predictor of adolescent self-esteem (Helsen et al., 2000; Quatman & Watson, 2001) and remain "the best indicator of emotional problems during adolescence" (Helsen et al., 2000, p. 319). According to Forman (1988), "The child who ... experiences a lack of social support from significant others is likely to demonstrate a considerable degree of emotional distress" (p. 115).

Although the relationship between self-esteem and social support has been validated in numerous investigations involving students with and without LD, most of the literature concerning these variables has focused solely on adolescents in public schools. The lack of empirical investigations on adolescent self-esteem and perceived social support among individuals with LD who attend private schools is unfortunate (DuBois et al., 2002; Garnefski & Diekstra, 1996; Harter, 1999; Helsen et al., 2000), considering the potential benefits to self-esteem of settings where individualized instruction and positive feedback are present (Bear & Minke, 1996).

### ***Learning Disabilities and Self-Esteem***

While there is wide documentation that, compared to their non-LD peers, students with LD report a lower self-concept and self-efficacy, especially in the intellectual/academic domain (Bear et al., 2002; Chapman, 1988; Elbaum & Vaughn, 2003; Gans et al., 2003; Lackaye, Margalit, Ziv, & Ziman, 2006; Tabassam & Grainger, 2002) and often report lower self-concepts in the social domain (Elbaum & Vaughn, 2003), an interesting theme has emerged from the literature. Although students with LD report a lower self-concept in the academic domain, they are often able to maintain a global self-perception relatively equivalent to that of their non-LD peers (Bear & Minke, 1996; Chapman, 1988; Forman, 1988; Gans et al., 2003). One might also expect that for an individual with a learning disability who holds a negative self-concept related to school achievement, a lower general self-perception would be generalized. However, the literature clearly establishes that individuals with LD are able to maintain a positive sense of global self-worth despite lower perceptions in the academic domain (Bear et al., 2002; Gans et al., 2003).

A variety of explanations have been offered for the tendency of adolescents with LD to report a low self-concept in the academic domain, yet maintain a global self-concept relatively equal to that of non-LD students. Some researchers have attributed a positive global self-concept in students with LD to perceived personal competence in other domains (Harter, 1999), while others believe that the favorable learning environment created by encouraging feedback from and interaction with teachers or other supporters helps to maintain self-esteem (Bear & Minke, 1996;

Jordan & Stanovich, 2001). Finally, a small number of investigations have associated attendance at specialized schools for learning disabilities with variances in self-esteem (Bakker & Bosman, 2003; Butler & Marinov-Glassman, 1994; Forman, 1988; Kelly & Norwich, 2004).

### ***The Value of Special Schools for Students with LD***

Three particularly relevant inquiries about the self-esteem of children with LD assert that there are positive benefits to self-esteem for students who attend private schools for learning disabilities (Bakker & Bosman, 2003; Butler & Marinov-Glassman, 1994; Kelly & Norwich, 2004). Specifically, Butler and Marinov-Glassman (1994) conducted research with students who attended a special school where all students shared an LD diagnosis to discover whether isolation from nondisabled peers ultimately undermines or enhances their self-esteem. These researchers found support for their belief that students who are placed in self-contained classrooms, “where their salient reference group consists of other students with disabilities ... feel more positively about themselves than students who attend regular classes” (Butler & Marinov-Glassman, 1994, p. 325). The authors concluded that children with LD in special schools in Israel perceived themselves more favorably than students who attended classes in public schools.

Bakker and Bosman (2003) explored the well-being of children who attended schools for special education in the Netherlands, arguing against the potentially negative consequences of inclusive education in public schools. Finding that “the self-esteem of children with learning disabilities does not benefit from regular education attendance” (Bakker & Bosman, 2003, p. 6), the authors firmly concluded that the higher self-image of students in the special education schools “warrants heightened attention” (p. 6).

Finally, Kelly and Norwich (2004) also found, through qualitative research, that children with moderate LD in special schools reported more positive self-perceptions of their educational abilities. Overall, these three distinctive investigations are in agreement and lend additional support to the notion that students with LD in special schools exhibit positive outcomes with regard to self-concept.

One theory about why students in an isolated setting or in a private school might exhibit high self-esteem is related to the potential support offered by teachers. That is, in classrooms specifically structured to meet the needs of students in small settings, positive support and feedback may foster positive self-perceptions (Bear & Minke, 1996; Jordan & Stanovich, 2001). Given that children’s self-perceptions are often affected by their academic achievement (Forman, 1988), it may be important to consider that in classrooms taught by teachers who are trained to address the unique academic and social needs of students with LD, and where students of similar abilities attend (Butler & Marinov-Glassman, 1994), self-esteem would be enhanced. “Students may fare better in some classrooms than in others, in part as a result of different patterns of instructional interactions, and of teacher beliefs and attitudes toward students with learning difficulties” (Jordan & Stanovich, 2001, p. 47). Jordan and Stanovich (2001) found that students who had teachers who saw themselves as responsible for their students’ achievement reported significantly higher self-esteem scores than did students of teachers who do not maintain such a

philosophy. The classroom environment, therefore, is particularly important for students with LD.

Another relevant investigation explored the importance of social support for self-concept in a private school (Forman, 1988). This study sought to determine whether supportive teachers exerted more influence on scholastic self-concept than did classmates or friends, or whether peers played an important role in determining non-academic self-concepts. Students who attended a private school for LD in this study reported levels of general self-esteem no different from students who attended a university clinic. It is worthwhile to acknowledge that Forman used a very small sample of students in the private school, causing the researcher to express the possibility that “the small number of subjects in both resource and regular classroom placements made it difficult to achieve statistically significant differences” (1988, p. 121). In the same research, Forman also compared students in a private school to students diagnosed in a university clinic and attending various placements. The findings that “school placement did not seem to affect self-concept in this sample of subjects” (Forman, 1988, p. 121) seems unclear, given there was no comparison between private and public per se. The limitations noted in Forman’s investigation related to small sample size and differing definitions of school placement warrant consideration when interpreting those findings and applying them to the current study.

In 2007, the LD Resources website listed over 260 independent kindergarten through grade 12 schools with LD support programs in the United States, not including learning centers, reading clinics, or tutors. However, to date a limited number of investigators have chosen to focus on this population. The current investigation was an attempt to extend the findings of prior research with adolescents who attend private schools for students with LD outside of the United States (Bakker & Bosman, 2003; Butler & Marinov-Glassman, 1994; Forman, 1988; Kelly & Norwich, 2004) by investigating a sample of students in the United States. If students with LD at a private school display greater levels of self-esteem than their peers with or without LD in public school, efforts should be undertaken to identify the students who would most benefit from a private setting.

The results of the current investigation have a potential impact on the decision-making process for parents, practitioners, administrators, and researchers. Understanding that social support and school placement can influence self-esteem can help parents and practitioners provide the most supportive environment for their children at home and at school, as well as enable them to choose the most appropriate school environment for their children with LD. Further, given the potentially damaging effects of low self-esteem (Coopersmith, 1967; Harter, 1999; Quatman & Watson, 2001), determining the most beneficial school environment offers a promising model for administrators who seek to foster favorable self-esteem in their students.

### ***Purpose of the Study***

The primary aim of the present study was to (a) examine adolescents’ perceived social support from parents, teachers, classmates, and close friends and global self-worth as well as nine domains of self-esteem outlined by Renick and Harter (1988) (general intellectual ability; reading, writing, spelling and math competence;

social competence; athletic competence; behavioral conduct; physical appearance) and (b) determine which source of social support appeared to exert the strongest influence on global self-worth. A second goal was to determine whether students in the sample experienced higher levels of self-esteem than their peers with LD in public schools. To accomplish this goal, mean data from each self-esteem scale were compared to the means in Renick and Harter's (1988) standardization sample of 90 students with LD in grades 4 through 8 who attended public school resource rooms on a part-time basis.

## METHOD

### *Participants*

Participants were 66 children (40 boys and 26 girls) with LD who were enrolled in grades 4 through 8 in a private school exclusively for children with learning disabilities. Participants were randomly drawn from a population of 176 fourth-through eighth-grade students. In addition to receiving an independent formal LD diagnosis, students received screening prior to gaining acceptance into the school, which serves children in first through eighth grade in a Southern California city.

Students were enrolled in classrooms taught by fully credentialed teachers who had received extensive training in multisensory instruction designed to meet the educational needs of students with LD. Also on staff was a clinical social worker who worked alongside teachers to build students' socialization skills and self-esteem. According to school policy, information about scholastic achievement was not made available to the researcher.

### *Procedure*

Participants were recruited through letters of introduction and consent forms mailed to the home of every student in grades 4 through 8 by the school's administrative offices. Parents or guardians were informed of the nature of the study and their right to decline permission for any reason without question. Signed parental consent forms were then collected, and students were asked to grant their signed assent. Participants were also informed of their freedom to decline participation or to cease completion of the survey at any time without penalty.

### *Measures*

***Self-esteem.*** Self-esteem was assessed using Renick and Harter's *Self-Perception Profile for Learning Disabled Students* (Renick & Harter, 1988), which was designed specifically for use with both nondisabled and children with LD. The test measures global self-worth and nine additional domains of self-esteem, including general intellectual ability, reading competence, spelling competence, writing competence, math competence, social acceptance, athletic competence, behavioral conduct, and physical appearance (Renick & Harter, 1988).

Similar to researchers Graziano and Ward (1992), a modified version of Renick and Harter's scale was used in the current study. Instead of the two-step approach, where students are asked to choose the statement most like them, a Likert-type scale was created. For each of the 46 items, children were given one statement and asked to respond on a scale ranging from 1 (very false for me) to 4 (very true for me). On this instrument, a score of 4 represents the highest level of competence in

a domain of self-esteem. The reliability coefficient for the current sample in each subcategory of the self-esteem scale was as follows: general intellectual ability, .87; reading competence, .88; writing competence, .82; spelling competence, .90; math competence, .92; social acceptance, .83; athletic competence, .89; behavioral conduct, .80; physical appearance, .84; and global self-worth, .82.

**Social support.** Harter's *Social Support Scale for Children* (Harter, 1985) was used to assess perceived social support from significant others – parents, teachers, classmates, and close friends – through four subscales. As in the self-esteem measurement, for this sample a Likert-type scale was created, where students were asked to respond to a statement from a range of 1 (very false for me) to 4 (very true for me). The reliability coefficient for this sample for each subscale was as follows: support from parents, .86; support from teachers, .80; support from classmates, .75; and support from close friends, .88.

## RESULTS

According to Cohen (1988), an analysis using a desired  $r = .50$  to achieve at least a power of 90 requires a sample size of at least 60 at the  $p < .05$  level. In the current investigation, with an  $I = .50$  and a total sample size of 66, at the  $p < .05$  level, the resulting power was 0.99. In other words, a power of at least .80 is needed to detect a reasonable departure from the null (Cohen, 1988); power in the current study exceeded the minimum requirement.

Descriptive statistics were calculated for the sample, by gender, for the self-esteem and social support subscales (see Table 1). To determine differences between boys and girls on measures of social support and self-esteem,  $t$ -tests for independent groups were calculated. Overall, boys reported significantly higher perceptions of athletic competence than did girls ( $t = 2.16, p < .05$ ), and girls reported more significant perceptions of support from teachers ( $t = -2.86, p < .05$ ).

Table 1  
*Means and Standard Deviations for Self-Esteem and Social Support Variables*

Variable	Males N = 40		Females N = 26	
	M	SD	M	SD
<b>Self-Esteem</b>				
General Intellectual Ability	3.20	0.61	2.99	0.58
Reading Competence	2.88	0.66	2.73	0.83
Writing Competence	2.91	0.55	2.99	0.57
Spelling Competence	2.87	0.53	2.61	0.88
Math Competence	3.23	0.71	2.85	0.88
Social Competence	3.08	0.71	3.11	0.57
Athletic Competence	3.09	0.68	2.69	0.80
Behavioral Competence	2.97	0.47	2.94	0.70
Physical Appearance	3.21	0.44	3.27	0.63
Global Self-Worth	3.22	0.48	3.36	0.64
<b>Social Support</b>				
Support from Teachers	3.09	0.52	3.45	0.45
Support from Classmates	3.24	0.49	2.97	0.71
Support from Parents	3.55	0.38	3.35	0.69
Support from Close Friends	3.43	0.53	3.66	0.50

Pearson correlations were calculated to determine the relationships between the social support and self-esteem variables. Table 2 displays the results of that analysis. Several significant positive correlations emerged from the data. Specifically, participants who perceived higher support from parents were more likely to have higher perceptions of general intellectual ability ( $r = .31, p < .05$ ); math competence ( $r = .35, p < .01$ ); behavioral conduct ( $r = .33, p < .01$ ); physical appearance ( $r = .55, p < .01$ ); and global self-worth ( $r = .53, p < .01$ ). Further, higher support from classmates were associated with more favorable self-perceptions in intellectual ability ( $r = .25, p < .05$ ); math competence ( $r = .36, p < .01$ ); social acceptance ( $r = .51, p < .01$ ); athletic competence ( $r = .34, p < .01$ ); behavioral conduct ( $r = .33, p < .01$ ); physical appearance ( $r = .54, p < .01$ ); and global self-worth ( $r = .32, p < .01$ ).

Table 2

*Correlations Between Self-Esteem and Social Support Variables*

Self-Esteem Variables	Social Support Variables			
	Teachers	Classmates	Parents	Close Friends
General Intell.Ability	.170	.254*	.306*	.155
Reading Competence	.116	-.120	.174	-.068
Writing Competence	.132	.004	.059	-.024
Spelling Competence	-.163	.027	.033	-.055
Math Competence	.152	.355**	.347**	.274*
Social Competence	.004	.509**	.154	.222
Athletic Competence	-.017	.339**	.125	.003
Behavioral Conduct	.222	.326**	.332**	.191
Physical Appearance	.081	.535**	.554**	.203
Global Self-Worth	.171	.321**	.534**	.148

$N = 66$ .

\*  $p < .05$ . \*\*  $p < 0.01$ .

Thus, the data indicate that for the current sample, perceived support from classmates and parents had the closest relationship to self-worth compared to support from teachers or close friends. It is important to note from the table that overall, only 33% of all correlations were significant at the  $p < .05$  or  $p < .01$  levels. Nevertheless, some important correlations emerged that warrant further exploration.

*Effects of Social Support on Self-Esteem*

A one-way between-groups analysis of variance (ANOVA) was conducted to explore the impact of support on levels of self-esteem. Participants were divided into three groups according to level of social support. A statistically significant difference at the  $p < .05$  level was found in global self-worth scores for the three levels of support groups,  $F(2, 61) = 5.9$ . Students in the low-support group were significantly lower in global self-worth than students in the high-support group. The effect size, calculated using Eta squared, was .16, a rather large effect size (Cohen, 1988). Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ( $M = 1.21, SD = .41$ ) was significantly different from Group 2 ( $M = 1.63, SD = .49$ ) and Group 3 ( $M = 1.62, SD = .49$ ). Group 2 did not differ significantly from Group 3.



Given the literature supporting the assumption that perceptions of self are more closely tied to support from parents or significant adults and from classmates or peers (DuBois et al., 2002; Hagborg, 2003; Helsen et al., 2000; Quatman & Watson, 2001; Richman et al., 1998; Rothman & Cosden, 1995; Williams & Galliher, 2006), a hierarchical regression analysis was conducted with support from parents entered first, after controlling for age and gender.

Table 3 presents a summary of the hierarchical regression results. As illustrated, the results support the model for the interaction of social support and global self-worth. Age and gender, entered into the model first, were not significant predictors of global self-worth, explaining only 2% of the variance in the dependent variable ( $\Delta R^2 = .02$ ,  $F(2, 63) = .735$ ,  $p > .05$ ). Support from parents, the second factor added to the model, was significant, contributing 32% of the variance in global self-worth ( $\Delta R^2 = .32$ ), a large multivariate effect size (Cohen, 1988), above and beyond that explained by the demographic variables,  $F(3, 62) = 10.87$ ,  $p < .001$ . Support from classmates contributed less than 1% of the variance ( $\Delta R^2 < .01$ ), a rather small effect size, above and beyond support from parents,  $F(4, 61) = 8.09$ ,  $p < .05$ . Support from close friends uniquely contributed less than 1% of the variance ( $\Delta R^2 < .01$ ), a small effect size (Cohen, 1988),  $F(5, 60) = 6.42$ ,  $p < .05$ . Finally, support from teachers contributed less than 1% of the variance in global self-worth ( $\Delta R^2 < .01$ ), a small effect size, beyond that of the previous support variables,  $F(6, 59) = 5.4$ ,  $p < .05$ .

**Table 3**  
*Summary of Hierarchical Regression Analysis for Social Support Variables Predicting Global Self-Worth (N = 66)*

Variable	B	SE B	$\beta$	$R^2$	Adj. $R^2$	$R^2$ Change
Step 1				.02	-.01	.02
Age	-2.62	.05	-.08			
Gender	0.13	.14	.12			
Step 2				.35	.31	.32*
Support from Parents	0.56	.13	.55			
Step 3				.35	.3	< .01
Support from Classmates	5.04	.19	.05			
Step 4				.35	.3	< .01
Support from Close Friends	-8.80	.12	-.08			
Step 5				.35	.3	< .01
Support from Teachers	3.25	.13	.03			

\* $p < .05$ .

In summary, a collection of two demographic variables (age and gender) and four support variables (support from parents, classmates, close friends, and teachers) explained 35% of the variance in global self-worth of students with LD at a private school. This represents a large multivariate effect size (Cohen, 1988).

***Effects of School Placement***

To gain a clearer picture of the impact of school placement on self-esteem, mean data for each self-esteem subscale were obtained and compared to Renick and



Harter's (1988) mean data. The current sample reported significantly higher means in general intellectual competence ( $t = 7.03$ ,  $df = 65$ ,  $p < .05$ ); writing competence ( $t = 1.95$ ,  $df = 65$ ,  $p < .05$ ); spelling competence ( $t = 2.97$ ,  $df = 65$ ,  $p < .05$ ); math competence ( $t = 2.30$ ,  $df = 65$ ,  $p < .05$ ); social competence ( $t = 4.65$ ,  $df = 65$ ,  $p < .05$ ); physical appearance ( $t = 5.53$ ,  $df = 65$ ;  $p < .05$ ); and global self-worth ( $t = 2.27$ ,  $df = 65$ ,  $p < .05$ ).

## DISCUSSION

Prior to conducting this research, investigations examining social support and self-esteem variables in samples of students in private schools for students with LD had not been conducted in the United States for almost two decades. Although the Butler and Marinov-Glassman (1994) study demonstrated support for the hypothesis that students with LD who attend special schools report higher self-esteem than those with LD in mainstream schools, the topic had remained largely unexplored in the United States. Subsequent to Butler and Marinov-Glassman (1994) in Israel, only two additional investigations looked at students in special schools, Bakker and Bosman (2003) in the Netherlands and Kelly and Norwich (2004) in England. A lingering question remained about whether an investigation in the United States would reveal results consistent with those of those studies.

Support from parents emerged as the strongest predictor of global self-worth, consistent with the findings of previous researchers. For example, Rothman and Cosden (1995) noted that students with LD who perceive more support from their parents and classmates had higher self-perceptions. In a longitudinal study, DuBois et al. (2002) also found that social support, especially from significant adults, enhanced feelings of self-worth among early adolescents. Hagborg (2003), investigating social support and self-perceptions in a sample of middle school students with LD, likewise found support from parents and peers to be positively associated with self-esteem. Findings from additional researchers who have demonstrated the important impact of support from adult family members on self-esteem (Helsen et al., 2000; Quatman & Watson, 2001; Richman et al., 1998; Williams & Galliher, 2006) were also echoed in the current investigation.

In the current study, social support from parents predicted 35% of the variance in self-esteem. This may seem like a small figure. However, it is important to consider that similar studies in the field of social support and perceptions of self have reported near identical findings. When one also considers the myriad factors that no doubt have a considerable impact on self-esteem, it seems impressive that support from parents would be such a key contributor. It would be impossible in any study to explore every variable that might contribute to the development of self-esteem. Given the complexity of human beings, and that current findings mirror the assertions of prior researchers, a 35% variance does not seem as insignificant as it might appear at first glance.

The results of the present study also support the findings of investigations conducted at private schools, thereby lending strength the opinion that attendance at a specialized school enhances the self-esteem of students with LD (Bakker & Bosman, 2003; Butler & Marinov-Glassman, 1994; Kelly & Norwich, 2004). The sum of experiences encountered at such a school, where specially trained teachers

are familiar with the academic and emotional needs of students with LD, combined with special support from classmates and family, can be considered key contributors to self-esteem during early adolescence.

Particular features of attendance at a private school may serve to enhance the self-esteem of students with LD. In the current investigation, for example, perceived levels of support from parents and classmates were positively associated with self-esteem. Out of concern for their children's academic and social needs, supportive parents (Richman et al., 1998) may have made the decision to place their children at a private school, where support from teachers and classmates with similar disabilities would likely be evidenced. Pronounced levels of social support combined with social interactions exclusively with other students who also have an LD diagnosis may be an especially unique feature of private schools that have positively influenced self-esteem in the current sample.

The findings of this investigation linking social support and private school attendance to self-esteem have important implications. The conclusions reached herein can offer guidance to those who work with students diagnosed with LD in determining the optimal placement environment for their students. Researchers have stressed the importance of settings where children with LD receive individualized instruction with positive feedback from teachers (Bear & Minke, 1996). Such a focus, according to those authors, may help protect feelings of self-worth (Bear & Minke, 1996). Ultimately, it is believed that developing and maintaining the self-esteem of students with LD is of particular importance to school psychologists and other education professionals as well as the parents of LD students. Private schools for students with LD, or isolated placements modeled after the private school environment, with individualized instruction by supportive teachers specially trained to meet the academic and social needs of students, are seen as a viable and essential approach to fostering positive self-esteem.

### ***Limitations and Future Prospects***

The current study suffers from several limitations. Thus, caution should be exercised when interpreting the data. The research was, in essence, an extension of Renick and Harter's investigation, comparing a private school sample to their public school data. One must be careful, however, when comparing mean scores over different studies and populations (Butler & Marinov-Glassman, 1994). Because detailed demographic data were not available for the current sample, it was impossible to match the two samples with respect to SES, cultural background, or the presence of other learning difficulties. It is interesting to note that, according to Renick and Harter (1988), their public school sample consisted of 97% Caucasian, 1% Hispanic, and 2% other background students from middle to upper socio-economic homes. In the current investigation, the school-wide population of 205 kindergarten through eighth-grade students consisted of 63% White (not Hispanic), 13% Hispanic, 8% other, and 12% unknown backgrounds. Moreover, given that the school is located in a middle- to upper-income area of Orange County, California, and that the school's yearly tuition was \$17,500 at the time of the study, it is reasonable to assume the majority of students to be of middle- to upper-income backgrounds, much like Renick and Harter's (1988) sample.

Two other limitations include the reliance on self-reported measurements to assess social support and self-esteem and the fact that only perceived social support and self-esteem were explored, giving a limited picture of adolescent self-esteem. Clearly, there are a myriad potential influences on self-esteem that could not be addressed here, such as parenting styles, parenting behaviors, relationships with parents or other family members, body image, the media, peer pressures, exposure to violence, or other childhood experiences. Thus, future research could be strengthened through the use of a matched control group of students with LD who attend public school, more comprehensive social support and self-esteem measurements, and a larger sample size.

Previous research has established a clear relationship between LD and negative self-perceptions (Bear, Minke, & Manning, 2002; Chapman, 1988; Elbaum & Vaughn, 2003; Tabassam & Grainger, 2002) and has shown that low self-esteem can lead to depressive tendencies (Harter, 1999; Quatman & Watson, 2001) and behavioral or emotional disorders (Coopersmith, 1967; Harter, 1999). It, therefore, is critical for educators and support providers to identify potential means to enhance the self-esteem of children with LD. The current investigation revealed the positive benefits of private schools or classrooms with teachers who have been specially trained to best meet students' unique learning needs as one way to protect the self-esteem of students who struggle with learning differences. Support from parents, classmates, and trained teachers in a private school environment may provide the ideal setting for the self-perceptions of students with LD to flourish.

## REFERENCES

- Bakker, J.T.A., & Bosman, A.M.T. (2003). Self-image and peer acceptance of Dutch students in regular and special education. *Learning Disability Quarterly*, 26, 5-14.
- Bear, G. G., & Minke, K. M. (1996). Positive bias in maintenance of self-worth among children with LD. *Learning Disability Quarterly*, 19, 23-32.
- Bear, G. G., Minke, K. M., & Manning, M. A. (2002). Self-concept of students with learning disabilities: A meta-analysis. *The School Psychology Review*, 31, 205-427.
- Butler, R., & Marinov-Glassman, D. (1994). The effects of educational placement and grade level on the self-perceptions of low achievers and students with learning disabilities. *Journal of Learning Disabilities*, 27, 325-334.
- Chapman, J. W. (1988). Learning disabled children's self-concepts. *Review of Educational Research*, 58, 347-371.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Coopersmith, S. (1967). *The antecedents of self-esteem*. San Francisco: W. H. Freeman & Company.
- Cosden, M. A., & McNamara, J. (1997). Self-concept and perceived social support among college students with and without learning disabilities. *Learning Disability Quarterly*, 20, 2-12.
- DuBois, D. L., Burk-Braxton, C., Swenson, L. P., Tevendale, H. D., Lockerd, E. M., & Moran, B. L. (2002). Getting by with a little help from self and others: Self-esteem and social support as resources during early adolescence. *Developmental Psychology*, 38, 822-839.
- Elbaum, B., & Vaughn, S. (2003). Self-concept and students with learning disabilities. In H. L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of learning disabilities* (pp. 229-241). New York: Guilford Press.

- Forman, E. A. (1988). The effects of social support and school placement in the self-concept of LD students. *Learning Disability Quarterly*, 11, 115-124.
- Gans, A. M., Kenny, M. C., & Ghany, D. L. (2003). Comparing the self-concept of students with and without learning disabilities. *Journal of Learning Disabilities*, 36, 397-295.
- Garnefski, N., & Diekstra, R. (1996). Perceived social support from family, school, and peers: Relationship with emotional and behavioral problems among adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 1657-1664.
- Graziano, W. G., & Ward, D. (1992). Probing the big five in adolescence: Personality and adjustment during a developmental transition. *Journal of Personality*, 60, 425-439.
- Hagborg, W. (2003, August). *Sources of school belonging for students with learning disabilities*. Paper presented at the meeting of the American Psychological Association, Toronto, ON, Canada.
- Harter, S. (1985). *Manual for the Social Support Scale for Children*. Denver, CO: University of Denver.
- Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: The Guilford Press.
- Helsen, M., Vollebergh, W., & Meeus, W. (2000). Social support from parents and friends and emotional problems in adolescence. *Journal of Youth and Adolescence*, 29, 319-335.
- Jordan, A., & Stanovich, P. (2001). Patterns of teacher-student interaction in inclusive elementary classrooms and correlates with students self-concept. *International Journal of Disability, Development and Education*, 48, 33-52.
- Kelly, N., & Norwich, B. (2004). Pupils' perceptions of self and of labels: Moderate learning difficulties in mainstream and special schools. *British Journal of Educational Psychology*, 74, 411-435.
- Lackaye, T., Margalit, M., Ziv, O., & Ziman, T. (2006). Comparisons of self-efficacy, mood, effort, and hope between students with learning disabilities and their non-LD-matched peers. *Learning Disabilities Research & Practice*, 21, 111-121.
- LD Resources.org. (2007). *K-12 schools*. Retrieved November 10, 2007, from <http://www.ldresources.org/?cat=7>.
- Quatman, T., & Watson, C. M. (2001). Gender differences in adolescent self-esteem: An exploration of domains. *The Journal of Genetic Psychology*, 162, 93-117.
- Renick, M. J., & Harter, S. (1988). *Manual for the Self-Perception Profile for Learning Disabled Students*. Denver, CO: University of Denver.
- Richman, J. M., Rosenfeld, L. B., & Bowen, G. L. (1998). Social support for adolescents at risk of school failure. *Social Work*, 43, 309-323.
- Rothman, H. R., & Cosden, M. (1995). The relationship between self-perception of a learning disability and achievement, self-concept and social support. *Learning Disability Quarterly*, 18, 203-212.
- Schweitzer, R. D., Seth-Smith, M., & Callan, V. (1992). The relationship between self-esteem and psychological adjustments in young adolescents. *Journal of Adolescence*, 15, 83-97.
- Tabassam W., & Grainger, J. (2002). Self-concept, attributional style and self-efficacy beliefs of students with learning disabilities with and without attention deficit hyperactivity disorder. *Learning Disability Quarterly*, 25, 141-151.
- Williams, K. L., & Galliher, R. V. (2006). Predicting depression and self-esteem from social connectedness, support, and competence. *Journal of Social and Clinical Psychology*, 25, 855-874.

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