

Peer Victimization in Children with Learning Disabilities

Audrey L. Baumeister · Eric A. Storch · Gary R. Geffken

Published online: 30 October 2007
© Springer Science+Business Media, LLC 2007

Abstract This study examined the nature and psychosocial correlates of peer victimization in a clinical sample of children with Learning Disabilities (LD). A total of 303 patient charts were searched at a university child psychiatry clinic, and 77 participants met LD diagnostic criteria. Data collected included the Child Behavior Checklist (which contains items assessing peer victimization), Conners Parent Rating Scale, Revised Children's Manifest Anxiety Scale, and Children's Depression Inventory. Peer victimization was positively correlated with parent reports of withdrawal, anxiety, depressive symptoms, social problems, thought problems, attention problems, and disruptive behavior. Children with LDs who had comorbid psychiatric diagnoses reported a significantly higher amount of peer victimization than children without a comorbid psychiatric condition. Implications of this study regarding the role of peer victimization and healthy psychological adjustment among children with LDs are discussed.

Keywords Learning disabilities · Peer victimization · Depression · Anxiety · Children

Peer victimization involves one individual intentionally causing injury to another through physical or interpersonal means (Kumpulainen et al. 1999). Peer victimization within schools occurs at a rate of 2.4 instances per hour (Atlas et al. 1998), with a total of 10–20% of youth being persistently tormented (Olweus 1994; Storch and Masia-Warner 2004). Peer victimization has been linked to the presence of psychiatric disorders such as attention deficit hyperactivity disorder, oppositional defiant/conduct disorder, anxiety, depression, and somatization (Kumpulainen et al. 1999). Peer victimization has also shown a positive correlation with depressive

A. L. Baumeister · E. A. Storch (✉) · G. R. Geffken
Department of Psychiatry, University of Florida, P. O. Box 100234, Gainesville, FL 32610, USA
e-mail: estorch@psychiatry.ufl.edu

symptoms (Craig 1998; Storch et al. 2003b), general anxiety (Grills and Ollendick 2002), social anxiety (Crick and Bigbee 1998; Crick and Grotpeter 1996; Storch and Masia-Warner 2004; Storch et al. 2003a; Storch et al. 2005), externalizing and internalizing behaviors (Hanish and Guerra 2002; Wolke et al. 2000), and loneliness (Kochenderfer and Ladd 1996; Storch and Masia-Warner 2004; Storch et al. 2003a, b). Indeed, peer victimized children are more likely to have had contact with mental health professionals in the past 3 months (Kumpulainen et al. 1999).

Teachers are often unaware of peer victimization that is occurring in the classroom (Martlew and Hodson 1991), perhaps because events take place when he or she is absent (Atlas et al. 1998). For example, Atlas et al. (1998) found that teachers were present only 50% of the time when a bullying episode occurred. Of this 50%, teachers were judged to be aware of such episodes only one half of the time. Overall, teachers intervened in 18% of the recorded bullying incidents. As for peer intervention, peers were in close proximity 85% of the time, yet intervened only 10% of the time. Atlas et al. (1998) concluded that “(a) bullying is pervasive in the classroom, (b) teachers are generally unaware of bullying, and (c) the peer group is reluctant to intervene to stop bullying (p. 93).”

Recently, researchers have theorized how negative peer treatment may result in psychosocial maladjustment (c.f., Storch and Ledley 2005). Repeated exposure to peer aggression may contribute to negative self-appraisals and selective avoidance of social interactions (Grills and Ollendick 2002; Storch et al. 2004a, b). Such social isolation may reduce victims’ exposure to positive peer relationships and interfere with the development of healthy interpersonal skills and self-esteem (Storch et al. 2003a). By being ostracized and isolated from peers, victims may experience a lack of peer companionship that might have otherwise physically protected against bullying and aided in coping with bullying-related stress (Storch et al. 2004a, b).

Identification of negative social influences on children’s mental health allows us to discover what environmental factors should be targeted to promote well-being. Teachers are often unaware of the frequency of peer victimization, yet it has been linked to symptoms of psychiatric disorders, loneliness, school maladjustment, and school avoidance (see Hawker and Boulton 2000; Storch and Ledley 2005 for reviews). Such a harmful influence must be better understood to determine methods of school-based prevention and intervention for victimized youth.

As the deleterious effects of peer victimization are becoming better understood, studies have increasingly focused on identifying children at increased risk to be victimized (Storch et al. 2004a, b). For a number of reasons, children with Learning Disabilities (LD) may be at risk to be targeted by aggressive peers. Yet, to date, few studies have examined this issue. Learning Disabilities (LD) are a constellation of disorders of listening, speaking, reading, writing, reasoning, or mathematics believed to be caused by central nervous system dysfunction (American Psychiatric Association 2000). These disabilities are not due to sensory impairment, mental retardation, serious emotional disturbance, cultural differences, or inappropriate instruction, although they may co-occur with these conditions (Greenham 1999).

Children and adolescents with learning disabilities have demonstrated impaired social tendencies, such as social skill deficits (Kavale and Forness 1996; Forness and Kavale 1996; McIntosh et al. 1991), peer rejection (Kavale and Forness 1996;

Greenham 1999; Kuhne and Wiener 2000), and a lower social status (Greenham 1999). Kavale and Forness (1996) conducted a meta-analysis of 152 studies and found that 8 of 10 children with a LD were peer-rated as rejected, and 8 of 10 were rated as deficient in social competence and social problem solving. LD students were less popular, less cooperative, and were less often selected as friends by their peers (Kavale and Forness 1996; Kuhne and Wiener 2000).

With evidence indicating that LD students are less popular and frequently peer rejected, it is possible that children with LDs are also at greater risk of being peer victimized. The social skills deficits of these youth may be indicative of an inability to decode social cues from others, causing them to be viewed as uncooperative or prime targets for aggressors (Nabuzoka 2003). Children with LDs may frequently need teacher and peer assistance for tasks that their peers are able to do independently (Kuhne and Wiener 2000). As well, youth with LDs may be separated from general education classmates during the day, or set in a completely different classroom. Such factors may spotlight LD children as being different, which may result in their being targeted by peers (Bakker and Bossman 2003; Shessel and Reiff 1999).

The few studies that have examined peer victimization in youth with LDs, have found that these students are victimized more often than their non-LD peers. For example, children with LDs are involved in more acts of violence than their peers (Miguel et al. 1996; Svetaz et al. 2000). Svetaz et al. (2000) gathered data from the National Longitudinal Study of Adolescent Health using a sample of over 20,000 youth, and found that youth with LDs were significantly more likely than others to report involvement in violent behaviors. In addition, they were more likely to have witnessed or been a victim of a violent act. In a study by Martlew and Hodson (1991), children with LDs from both a mainstream integrated school and a special education school, reportedly experienced more teasing and made fewer friends than their peers. Sabornie (1994) found victimization of students with LDs to be significantly higher than that of their peers. Similarly, Llewellyn (2000) found that children with disabilities in mainstream education are often ostracized, and frequently teased.

Overall, the extant literature suggests that children with LDs may be peer victimized more than children without a LD. Given the link between peer victimization and poor psychological adjustment found in non-clinical samples, it may be that youth with LDs are more negatively affected due to their frequent victimization. To our knowledge, no study has directly examined the psychosocial correlates of peer victimization in a sample of children with LDs. The heterogeneity of psychosocial and academic variables, such as psychiatric comorbidity and number of LDs, has not been accounted for in most studies of peer victimization in children with LDs. The comorbidity of psychiatric diagnoses and LD will be examined among those who are victimized. Bryan et al. (2002) found that children with LD and ADHD were less accepted by peers and had fewer developed social skills than children with LD-ADHD. Their data showed that children with LD and ADHD had fewer reciprocated friendships, and experienced more conflicts in their relationships with their best friend than children with LD without ADHD. Accordingly, Miguel et al. (1996) suggest that differences in social skills ratings

between LD and non-LD samples may be reflective of higher rates of psychiatric disorders among those with learning disabilities. If this is the case, it is possible that such psychiatric diagnoses in children with LD may also cause higher rates of peer victimization.

This study will add to the current research on heterogeneity among children with LDs, and also examine the relationship of peer victimization to psychosocial maladjustment in a clinical sample of children with LDs via parental reports. Parents of children with LD interact more with school personnel than parents of children without an LD. Social problems are also concerns which parents of children with LD must frequently contend (Llewellyn 2000; Morrison and Cosden 1997). Therefore the study of family observations regarding children's social adjustment may add valuable information (Margalit 1998). There are two primary aims. Given the lack of data on the issue of heterogeneity among children with LDs, the first goal of this study is to examine the effect of psychiatric comorbidity on reports of peer victimization among children with LDs. Based on previous reports that children with learning disabilities indeed report higher rates of psychiatric disorders, it is expected that comorbidity will be related to higher rates of peer victimization. Relatedly, it is expected that children who also have ADHD will experience higher rates of peer victimization than those who do not have comorbid ADHD. The second goal is to examine the relationship between peer victimization and child-rated depressive symptoms and anxiety, and parent-rated internalizing and externalizing symptoms in this sample of children with LDs. Based on previous research with non-clinical samples, it is expected that peer victimization will be positively associated with psychosocial maladjustment indices.

Method

Participants and Procedures

The University of Florida institutional review board approved data collection procedures. All psychoeducational assessment files at the University of Florida Division of Child and Adolescent Psychiatry ($n = 303$) were searched for children and adolescents with a Learning Disability (LD) diagnosis. Assessments took place between the years 1994 and 2003. Children were either referred by a psychiatrist ($n = 141$), pediatrician ($n = 97$), or self-referred ($n = 65$) for a variety of presenting problems. The most common referral questions were to (1) assess for the presence of a learning disability; and (2) provide psychiatric treatment recommendations. Files found with an LD diagnosis were searched for the Child Behavior Checklist (CBCL; Achenbach 1991). Seventy-seven children and adolescents with a LD diagnosis and completed CBCL were used for this study. Children with an additional diagnosis of mental retardation were excluded. Further data was collected from each file that contained the Children's Depression Inventory ($n = 28$), Revised Children's Manifest Anxiety Scale ($n = 19$), or Conners Parent Rating Scale-Revised ($n = 36$). Data collection involved transcription of original data (items on

the CBCL, Conners, CDI, RCMAS) and demographics (age, gender, and diagnoses) to a record sheet.

The 77 participants with an LD (68 male, 9 female) ranged in age from 5 to 18 ($M = 11.30$ years, $SD = 3.15$). The majority of children were Caucasian (87.0%), with 7.8% of African American, 1.3% of Hispanic, and 3.9% of other descent.

Measures

Child Behavior Checklist

The Child Behavior Checklist (CBCL; Achenbach 1991) is a 113-item questionnaire designed to assess the behavior problems and social competencies of children and adolescents ages 4–18. The CBCL provides eight clinical subscales: Withdrawn ($\alpha = .78$; e.g., “Would rather be alone than with others”), Somatic Complaints ($\alpha = .77$; e.g., “Stomach aches”), Anxious/Depressed ($\alpha = .78$; e.g., “Fears certain animals, situations, or places other than school”), Social Problems ($\alpha = .80$; e.g., “Doesn’t get along with other kids”), Thought Problems ($\alpha = .83$; e.g., “Hears sounds or voices that are not there”), Attention Problems ($\alpha = .81$; e.g., “Can’t sit still, restless, or hyperactive”), Delinquent Behavior ($\alpha = .82$; e.g., “Lying or cheating”), and Aggressive Behavior ($\alpha = .94$; e.g., “Cruel to animals”). Questions are answered on a 3-point scale (0 = never true, 1 = sometimes true, 2 = always true). The CBCL has good test-retest reliability, inter-parent agreement, internal consistency, and external validity (Achenbach 1991).

McCloskey and Stuewig’s (2001) CBCL Peer Victimization Scale, embedded within the CBCL, was used as an assessment of peer victimization. This scale contains four items that assess parental views of child peer problems. These items ask if the child (a) doesn’t get along with other kids, (b) gets in many fights, (c) gets teased a lot, and (d) is not liked by other children. Cronbach’s α in this sample was .80.

Conners Parent Rating Scale-Revised

The 80-item Conners Parent Rating Scale-Revised (Goyette et al. 1978) provides an assessment of symptoms of hyperactivity, oppositional behavior, and cognitive problems. The Conners uses a 4-point scale ranging from 0 (*not true at all*) to 3 (*very much true*). The test has shown good convergent and divergent validity with other related measures, as well as discriminant validity. Internal consistency coefficients range from .75 to .90, and six- to eight-week test-retest reliability coefficients range from .60 to .90 across scales (Conners 1997).

Children’s Depression Inventory

The Children’s Depression Inventory (CDI; Kovacs 1992) is a 27-item self-rated scale for children and adolescents. The child endorses one of three statements,

scored as 0, 1, or 2, describing his or her cognitive, affective, or behavioral symptoms of depression during the previous 2 weeks. A total depression score is obtained by summation of all items. The CDI has good internal consistency (Eckert et al. 2000), test–retest reliability, and scores correlate significantly with other self-report and interview measures of depression in children and adolescents (Kovacs 1992).

Revised Children’s Manifest Anxiety Scale

The Revised Children’s Manifest Anxiety Scale (RCMAS; Reynolds and Richmond 1978) is a 37-item yes/no questionnaire that assesses symptoms of general anxiety. Examples of items include “my hands feel sweaty” and “I am nervous.” Adequate reliability (e.g., $KR_{20} = .85$ and $\alpha = .80$), validity (e.g., correlation of .85 with State-Trait Anxiety Inventory for Children), and normative data have been reported (e.g., Reynolds and Paget 1981, 1982; Reynolds and Richmond 1978).

Data Analysis

To examine relations between peer victimization and indicators of psychosocial adjustment, Pearson product moment correlations were computed among the CBCL Peer Victimization Score and CBCL subscales, Conners subscales, RCMAS, and CDI. Correlations are presented in terms of effect sizes. Cohen (1977) defines correlations of .50 or greater as a large effect size, .30 or greater as a medium effect size, and correlations below .10 as a small effect size. Independent *t*-tests were conducted to examine peer victimization differences between children with a comorbid psychiatric diagnosis versus those without.

Results

Correlational Analyses

Table 1 reports Pearson product moment correlations among the CBCL Peer Victimization Score and CBCL subscales. The CBCL Peer Victimization Score was positively and significantly correlated with the CBCL Withdrawn, Anxious/Depressed, Social Problems, Thought Problems, Attention Problems, Delinquent Behavior, and Aggressive Behavior subscales with correlations of a large effect size. The CBCL Peer Victimization Score was correlated to the CBCL Somatic Complaints Subscale and CDI Total Score with correlations of a medium effect size. The CBCL Peer Victimization Score was not significantly related to the RCMAS Total Score.

Table 2 reports Pearson product moment correlations among the CBCL Peer Victimization Score and Conners subscales. The CBCL Peer Victimization Score was correlated with the Conners Oppositional Anxious-Shy subscales with relations

Table 1 Pearson product moment correlations for various measures of psychological functioning and child behavior

	(1) <i>n</i> = 77	(2) <i>n</i> = 77	(3) <i>n</i> = 77	(4) <i>n</i> = 77	(5) <i>n</i> = 77	(6) <i>n</i> = 77	(7) <i>n</i> = 77	(8) <i>n</i> = 77	(9) <i>n</i> = 77	(10) <i>n</i> = 19	(11) <i>n</i> = 28
(1) CBCL Peer Score	2.8 (2.3)	.52**	.30**	.62**	.84**	.55**	.52**	.61**	.64**	.09	.42*
(2) CBCL Withdrawn	4.8 (3.7)		.42**	.57*	.57**	.52**	.49**	.33**	.32**	.26	.52**
(3) CBCL SomatCompl		3.1 (3.0)		.39**	.30**	.30**	.24*	.25*	.31*	.38	.58**
(4) CBCL AnxDepres			7.4 (4.7)		.54**	.42**	.41**	.55**	.62**	.20	.51**
(5) CBCL SocProbs				5.4 (3.7)		.64**	.63**	.54**	.55**	.39	.44*
(6) CBCL ThoughtProbs					3.5 (3.4)		.72**	.49**	.49**	.04	.22
(7) CBCL AttnProbs						11.0 (4.9)		.51**	.66**	.28	.38*
(8) CBCL DelinqBehav							5.4 (4.4)		.77**	-.28	.29
(9) CBCL AggressBehav								18.0 (10.8)		.06	.50**
(10) RCMAS Total									15.6 (6.3)		.68**
(11) CDI Total											12.6 (8.1)

Note: CBCL Peer Score = Child Behavior Checklist items # 25, 37, 38, 48 mean; CBCL Withdrawn = Child Behavior Checklist Withdrawn Score; CBCL SomatCompl = Child Behavior Checklist Somatic Complaints Score; CBCL AnxDepres = Child Behavior Checklist Anxious/Depressed Score; CBCL SocProbs = Child Behavior Checklist Social Problems Score; CBCL ThoughtProbs = Child Behavior Checklist Thought Problems Score; CBCL AttnProbs = Child Behavior Checklist Attention Problems Score; CBCL DelinqBehav = Child Behavior Checklist Delinquent Behavior Score; CBCL AggressBehav = Child Behavior Checklist Aggressive Behavior Score; CDI Total = Children's Depression Inventory Total Score; RCMAS Total = Revised Children's Manifest Anxiety Scale Total Score

* $p < .05$

** $p < .001$

Table 2 Pearson product moment correlations for various measures of psychological functioning and child behavior

	(1)	(2) <i>n</i> = 36	(3) <i>n</i> = 36	(4) <i>n</i> = 36	(5) <i>n</i> = 36	(6) <i>n</i> = 36	(7) <i>n</i> = 36	(8) <i>n</i> = 36
(1) CBCL Peer Score	2.8 (2.3)	.37*	.12	.09	.36*	.22	.77**	.28
(2) ConnA	14.6 (8.4)		.22	.54**	.16	.34*	.06	.31
(3) ConnB	22.4 (7.3)			.59**	.02	.02	.04	.07
(4) ConnC					.16	.29	-.05	.16
(5) ConnD				10.9 (6.4)		.55**	.50**	.34*
(6) ConnE					5.8 (4.3)		.22	.30
(7) ConnF						5.0 (4.3)		.26
(8) ConnG							4.1 (3.9)	3.5 (3.7)

Note: ConnA = Conners Parent Rating Scale-Revised Oppositional Scale; ConnB = Conners Parent Rating Scale-Revised Cognitive Problems/Inattention Scale; ConnC = Conners Parent Rating Scale-Revised Hyperactivity; ConnD = Conners Parent Rating Scale-Revised Anxious-Shy; ConnE = Conners Parent Rating Scale-Revised Perfectionism Scale; ConnF = Conners Parent Rating Scale-Revised Social Problems; ConnG = Conners Parent Rating Scale-Revised Psychosomatic Scale

* $p < .05$

** $p < .001$

of a medium effect size. Correlations of small effect size were found between the CBCL Peer Victimization Score and the Conners Cognitive Problems/Inattention, Perfectionism, and Psychosomatic subscales. Table 3

Peer Victimization Between Children with a Comorbid Psychiatric Diagnosis and Those Without

Children with a comorbid psychiatric diagnosis reported greater peer victimization than those without a comorbid psychiatric diagnosis, $t(75) = 2.99, p < .05$. There was no difference in peer victimization between children with an LD and ADHD, and those with an LD who did not also have ADHD, $t(75) = -0.17, ns$.

Discussion

This study is the first to examine psychosocial correlates of peer victimization in a clinical sample of children with learning disabilities. Previous research has shown that children with LDs may experience more peer rejection, lower social status, and possess fewer adaptive social skills than youth without an LD (McIntosh et al. 1991; Kavale 1996; Miguel et al. 1996; Greenham 1999; Kuhne and Wiener 2000). Given that negative peer experiences have been linked to psychosocial maladjustment in non-clinical samples along with the risks that children with LDs may have to be peer rejected, it is necessary to examine the nature of peer victimization in children with LDs. Consistent with others (see Hawker and Boulton 2000; Storch and Ledley 2005 for reviews), peer victimization was positively correlated with reports of withdrawal, anxiety, depressive symptoms, social problems, thought problems, attention problems, and disruptive behavior with effect sizes ranging from small to large. Frequent peer attacks may cause children to withdraw from age-appropriate educational and social activities. Children may also internalize peer comments, incorporating the content of verbal attacks into their own self-views (Grills and Ollendick 2002; Storch et al. 2004; Storch et al. 2003b). Such negative self-views are believed to be at the core of their depression and anxiety (Grills and Ollendick 2002; Storch et al. 2004a, b; Storch et al. 2003b) and suggest the need for school-based efforts targeting peer victimization.

Peer victimization frequency was examined in relation to comorbidity. Results indicate that among our clinical sample, children with LDs who experience comorbid psychiatric diagnoses reported a significantly higher amount of peer victimization

Table 3 Mean and standard deviation for peer score of number of LDs and comorbidity groups

	<i>n</i>	Mean	Standard deviation
Comorbidity	66	3.1	2.2
No Comorbidity	11	1.0	1.7

than children without a comorbid psychiatric condition. Children experiencing LDs in addition to psychiatric diagnoses may stand out as targets more so than non-diagnosed peers. For example, children with attention problems may be bullied because of social skill deficits or academic difficulties secondary to attentional difficulties. Alternatively, overtly anxious or distressed children may be targeted due to observable symptoms. Sadly, victimized youth, regardless of comorbidity, may avoid experiences with social or educational benefits.

Several limitations to this study are of note. First, causality cannot be determined due to the correlational nature of this study. It is possible that psychiatric symptoms such as depression invite peer aggression or that the relationship is bidirectional. Given this, it is impossible to determine the directionality of relationships. Second, we examined a clinical sample of children diagnosed at one specific clinic in Florida. A more accurate picture could be produced given a broader spectrum of children with LDs who were evaluated by several different practitioners at different clinics or school settings in a broad geographic area. As well, given that our sample consisted of patients at a psychiatry clinic, findings may not generalize to other samples (e.g., our sample may have had high comorbidity) collected at more diverse settings (e.g., schools). Indeed, there is the possibility that the LD may be secondary to the psychiatric diagnosis. Third, this sample consisted mostly of male Caucasian participants. In order to generalize findings, samples that are more diverse in terms of gender and ethnicity should be examined. Fourth, complete demographic information was not available for this sample. For example, no information was systematically available on the family socioeconomic status or degree of behavior challenges. Finally, the parent reported peer victimization. It is possible that the parent may have had an inaccurate concept of their child's peer experiences, and thus reported peer relationships inaccurately. On balance, some children may have been reluctant to disclose negative peer experiences.

There are several implications for this study. First, clinicians and teachers are well advised to identify children with LDs (and those without) who are victimized, particularly since children with LDs are less likely to seek support than those without (Wenz-Gross and Siperstein 1997). Lemerise and Arsenio (2000) suggested that individual differences in emotionality and emotion regulation can influence each step of social information processing. The nature of the emotional ties between a child and others involved in an aggressive encounter may also bias information processing. Teachers should understand the social-emotional aspects of youngsters with learning disabilities (Bryan et al. 2002). Second, given that children with comorbid diagnoses are at greater risk for peer victimization, these children should be identified and their psychosocial health and peer experiences closely monitored. Finally, school-wide measures should be taken to prevent victimization. Many countries have installed intervention programs in their schools to thwart peer victimization (Mishna 2003). Such programs increase awareness of bullying, involve parents in planning and intervening, promote pro-social behavior, and create no-tolerance rules in regards to bullying. These programs also provide skills training for bullies, assisting them in redirecting their efforts in pro-social ways, while creating compensatory activities to make-up to the class or victim (see Mishna 2003 for a review). Leff et al. (2001) suggest that to prevent social problems among

youth, it is important to implement early intervention programs in preschool and elementary schools that teach students respect, anger management skills, and prosocial behaviors. It is also suggested that these treatment programs generalize across contexts (i.e., lunchroom, playground, and classroom), and that school psychologists use empirically supported school-wide programs with well-documented treatment procedures (Leff et al. 2001).

References

- Achenbach, T. M. (1991). *Manual for the child behavior checklist/4–18 and 1991 profile*. Burlington: University of Vermont Department of Psychiatry.
- American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th Ed.). Washington, DC: American Psychological Association.
- Atlas, R. S., Rona, S., & Pepler, D.J. (1998). Observations of bullying in the classroom. *Journal of Educational Research*, 92, 86–99.
- 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.
- Bryan, T. H., Wong, B. L., & Donahue, M. (2002). *The social dimensions of learning disabilities: Essays in honor of Tanis Bryan*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Cohen, J. (1977). *Statistical power analysis for the behavioral sciences*. New York: Academic Press.
- Conners, C. K. (1997). *Conners' rating scales-revised technical manual*. North Tonawanda: Multi-Health Systems.
- Craig, W. M. (1998). The relationship among bullying, victimization, depression, anxiety, and aggression in elementary school children. *Personality and Individual Differences*, 24, 123–130.
- Crick, N. R., & Bigbee, M. A. (1998). Relational and overt forms of peer victimization: A multi-informant approach. *Journal of Consulting and Clinical Psychology*, 35, 337–347.
- Crick, N. R., & Grotpeter, J. K. (1996) Children's treatment by peers: Victims of relational and overt aggression. *Development and Psychopathology*, 8, 367–380.
- Eckert, T., Dunn, E., Guiney, K., & Coddling R. (2000). Self-reports: Theory and research in using rating scale measures. In E. S. Shapiro, & T. R. Kratochwill (Eds.), *Behavioral assessment in schools: Theory, research, and clinical foundations* (2nd Ed., pp. 288–322). New York: Guilford.
- Forness, S. R., & Kavale, K. A. (1996). Treating social skill deficits in children with learning disabilities: A meta-analysis of the research. *Learning Disability Quarterly*, 19, 2–13.
- Goyette, C. H., Conners, C. K., & Ulrich, R. F. (1978). Normative data on revised Conners Parent and Teacher Rating Scales. *Journal of Abnormal Child Psychology*, 6, 221–236.
- Greenham, S. (1999). Learning disabilities and psychosocial adjustment: A critical review. *Child Neuropsychology*, 5, 171–196.
- Grills, A. E., & Ollendick, T. H. (2002). Peer victimization, global self-worth, and anxiety in middle school children. *Journal of Clinical Child & Adolescent Psychology*, 31, 59–68.
- Hawker, D. S., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry*, 41, 441–455.
- Hanish, L. D., & Guerra, N. G. (2002). A longitudinal analysis of patterns of adjustment following peer victimization. *Developmental Psychopathology*, 14, 69–89.
- Kavale, K. A., & Forness, S. R. (1996). Social skill deficits and learning disabilities: A meta-analysis. *Journal of Learning Disabilities*, 29, 226–237.
- Kochenderfer, B. J., & Ladd, G. W. (1996). Peer victimization: Cause or consequence of school maladjustment? *Child Development*, 67, 1305–1317.
- Kovacs, M. (1992). *The children's depression inventory*. Tonawanda: Multi-Health Systems.
- Kuhne, M., & Wiener, J. (2000). Stability of social status of children with and without learning disabilities. *Learning Disability Quarterly*, 23, 64–75.
- Kumpulainen, K., Rasanen, E., & Puura, K. (1999). Psychiatric disorders and the use of mental health services among children involved in bullying. *Aggressive Behavior*, 27, 102–110.

- Leff, S. S., Power, T. J., Manz, P. H., Costigan, T. E., & Nabors, L. A. (2001). School-based aggression prevention programs for young children: Current status and implications for violence prevention. *School Psychology Review*, *30*, 344–362.
- Lemerise, E. A., & Arsenio, W. F. (2000). An integrated model of emotion processes and cognition in social information processing. *Child Development*, *71*, 107–118.
- Llwylllyn, A. (2000). Perceptions of mainstreaming: A systems approach. *Developmental Medicine and Child Neurology*, *42*, 106–115.
- Margalit, M. (1998). Loneliness and coherence among preschool children with learning disabilities. *Journal of Learning Disabilities*, *31*, 173–180.
- Martlew, M., & Hodson, J. (1991). Children with mild learning difficulties in an integrated and in a special school: Comparisons of behaviour, teasing and teachers' attitudes. *British Journal of Educational Psychology*, *61*, 355–372.
- McCloskey, L. A., & Stuewig, J. (2001). The quality of peer relationships among children exposed to family violence. *Development and Psychopathology*, *13*, 83–96.
- McIntosh, R., Vaughn, S., & Zaragoza, N. (1991). A review of social interventions for students with learning disabilities. *Journal of Learning Disabilities*, *24*, 451–458.
- Miguel, S. K., Forness, S. R., & Kavale, K. A. (1996). Social skills deficits in learning disabilities: The psychiatric comorbidity hypothesis. *Learning Disability Hypothesis*, *19*, 252–261.
- Mishna, F. (2003). Learning disabilities and bullying: Double jeopardy. *Journal of Learning Disabilities*, *36*, 336–347.
- Morrison, G. M., & Cosden, M. A. (1997). Risk, resilience, and adjustment of individuals with learning disabilities. *Learning Disability Quarterly*, *20*, 43–60.
- Nabuzoka, D. (2003). Teacher ratings and peer nominations of bullying and other behaviour of children with and without learning difficulties. *Educational Psychology*, *23*, 307–321.
- Olweus, D. (1994). Annotation: Bullying at school: Basic facts and effects of a school based intervention program. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *35*, 1171–1190.
- Reynolds, C. R., & Paget, K. D. (1981). Factor analysis of the Revised Children's Manifest Anxiety Scale for Blacks, Whites, males, and females with a national normative sample. *Journal of Consulting and Clinical Psychology*, *49*, 352–359.
- Reynolds, C. R., & Paget, K. D. (1982). National normative and reliability data for the Revised Children's Manifest Anxiety Scale. Paper presented at the annual meeting of the National Association of School Psychologists, Toronto.
- Reynolds, C. R., & Richmond, B. O. (1978). What I think I feel: A revised measure of children's manifest anxiety. *Journal of Abnormal Child Psychology*, *6*, 271–280.
- Sabornie, E. J. (1994). Social-affective characteristics in early adolescents identified as learning disabled and nondisabled. *Learning Disability Quarterly*, *17*, 268–279.
- Shessel, I., & Reiff, H. B. (1999). Experiences of adults with learning disabilities: Positive and negative impacts and outcomes. *Learning Disability Quarterly*, *22*, 305–316.
- Storch, E. A., Masia-Warner, C., & Brassard, M. R. (2003a). The relationship of peer victimization to social anxiety and loneliness in adolescence. *Child Study Journal*, *33*, 1–18.
- Storch, E. A., Nock, M. K., Warner, C. M., & Barlas, M. E. (2003b). Peer victimization and social-psychological adjustment in Hispanic and African-American children. *Journal of Child and Family Studies*, *12*, 439–452.
- Storch, E. A., Lewin, A., Geffken, G. R., Silverstein, J. H., Heidgerken, A. D., Strawser, M. S., & Baumeister, A. (2004a). Peer victimization and psychosocial adjustment in children with type one diabetes. *Clinical Pediatrics*, *43*, 467–472.
- Storch, E. A., Lewin, A. B., Silverstein, J. H., Heidgerken, A. D., Strawser, M. S., Baumeister, A., et al. (2004b). Social-psychological correlates of peer victimization in children with endocrine disorders. *Journal of Pediatrics*, *145*, 784–789.
- Storch, E. A., & Masia-Warner, C. L. (2004). The relationship of peer victimization to social anxiety and loneliness in adolescent females. *Journal of Adolescence*, *27*, 351–362.
- Storch, E. A., & Ledley, D. R. (2005). Peer victimization and psychosocial adjustment in children: Current knowledge and future directions. *Clinical Pediatrics*, *44*, 29–38.
- Storch, E. A., Masia-Warner, C., Crisp, H., & Klein, R. G. (2005). Peer victimization and social anxiety in adolescence: A prospective study. *Aggressive Behavior*, *31*, 437–452.
- Svetaz, M. V., Ireland, M., & Blum, R. (2000). Adolescents with learning disabilities: Risk and protective factors associated with emotional well-being: Findings from the National Longitudinal Study of Adolescent Health. *Journal of Adolescent Health*, *27*, 340–348.

- Wenz-Gross, M., & Siperstein, G. N. (1997). Importance of social support in the adjustment of children with learning problems. *Exceptional Children, 63*, 183–193.
- Wolke, D., Woods, S., Bloomfield, L., & Karstadt, L. (2000). The association between direct and relational bullying and behaviour problems among primary school children. *Journal of Child Psychology and Psychiatry, 41*, 989–1002.