Bullying Experiences, Anxiety About Bullying, and Special Education Placement

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Abstract

Bullying experiences and self-reported anxiety about bullying and were compared in 72 elementary and middle school students including 16 in self contained (SC) special education classes, 20 receiving resource or consultation (RC), and 36 matched peers. Individually administered Bully Victimization Scale and School Violence Anxiety Scale scores (Reynolds, 2003) revealed that children with special needs (both SC & RC) tended to report more peer victimization and higher anxiety about school violence than matched peers from the same schools. Placement was not related to self-reported bullying experiences. Students in self-contained classes were significantly more anxious about possible bullying, especially physical, in spite of being in more protected environments. School placement is an important but under-researched issue in assessment and intervention for bullying of students receiving special education services.

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Research suggests that children with special needs (CSN) in special education placements may be at elevated risk for bullying experiences. Van Cleave and Davis (2006) examined epidemiology data on over 102,000 CSN ages 6-17. Results suggest that CSN were significantly more likely than non-CSN to be victimized by peers and significantly more likely to be bullies. CSN were twice as likely to meet the criteria of a bully-victim as their non-CSN counterparts and having a behavioral, emotional, or developmental

problem is associated to bullying others and being a bully-victim. Twyman, Macias, Saia, Saylor, Spratt, & Taylor (2009) interviewed 312 summer pediatric clinic patients aged 8-17 about their bullying experiences in the previous school year and found that risk for peer victimization was significantly higher for all CSN compared to peers with no diagnoses who were seen in primary care clinics. Specifically, odds ratio analyses indicated that patients with autistic spectrum disorder were 4.43 times more likely to report peer victimization, patients with ADHD were 4.46 times more likely, and patients with documented learning disabilities were 3.46 times more likely.

Mishna (2003) reviewed studies linking bullying and Learning Disability (LD), concluding that the combination of LD and bullying places students in "double jeopardy". More specifically, the research revealed that children and adolescents with learning disabilities are at-risk of both peer victimization and bullying others. Characteristics of LD that include difficulties with language, attention, information processing, and problems with interpreting social information may be interfering with the development of well-adjusted social relationships with peers. Taylor, Saylor, Twyman, & Macias (in press) examined self-reported bullying and peer victimization in pediatric populations of 238 youth aged 8-17 diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), Results suggested that students diagnosed with ADHD are at significantly higher risk for peer victimization and its psychological impact; youth with ADHD who experience bullying- as victims, bullies, or both- are more likely to have psychosocial problems beyond their attention and social competence difficulties.

Thompson, Whitney, and Smith (1994) conducted a study examining incidences of bullying among children 186 8-16 year-old primary and secondary students- 93 with special education needs and 93 without special education needs. Results from teacher and peer interview data showed that CSN receiving special education services were much more likely to be bullied than were the mainstream children with whom they were compared. Children with moderate learning difficulties were victimized more than children with mild learning difficulties. Besides levels of functioning, the visibility of CSN disabilities may also be a predictive factor in their risk to be bullied (Carter & Spencer, 2006).

In addition to research findings, there have been several publicized incidents where CSN were brutally bullied by their peers. For example, a 14-year-old student in special education stabbed an older classmate because he was frustrated by what he recalled as "months of bullying and harassment" by the seventeen year old student he stabbed (Patterson, 2005). In Philadelphia, a 12-year old student diagnosed as mildly mentally disabled, autistic, and partially deaf, was physically bullied and harassed regularly by his classmates, which included a cell-phone videotape recording posted on MySpace by his attackers displaying them repeatedly rubbing their crotch on his head while a group of peers and an adult-figure observed the cruel behavior (DiFilippo, 2008).

Several researchers have focused on skill deficits and social competence as potential reasons for the increased bullying vulnerability of CSN. Kavale and Forness (1996) suggested that rejection and low acceptance of children with learning disabilities (LD)

were related to a lack of communication (verbal and nonverbal) and ability to empathize with others. Similarly, Hugh-Jones and Smith (1999) examined the nature, frequency, and causes of bullying among children who stammer, along with short and long-term effects of their victimization. Their sample included 276 teenagers and adults who stammer, 83% of whom reported being bullied in school. Hugh-Jones et al. (1999) findings suggest that bullying and peer relationship difficulties are common in dysfluent children's school experiences; the difficulties are correlated with their dysfluency. More recently, learning skills, social intelligence, and self-concept were all found to be correlated to each other and to bully/victim issues in 141 fifth-grade children (Kaukiainen et al., 2002). The results support the theory that children with LD have problems in their peer relations and are bullies more often than their classmates. It was also suggested that a certain level of social competence is required for making and maintaining social relations, and for protecting oneself against bullying (Kaukiainen et al., 2002).

Opportunities for positive social interactions with peers may be a protective factor against bullying and fear of bullying for CSN in special education placements. Saylor & Leach (2009) examined bullying fears and experiences of 24 students in self-contained LD classrooms and 24 peers who participated in a year-long middle-school and community-based program that combined the two populations for inclusive arts, sports, and community service programs. The students in special education classrooms were significantly higher than hand-picked peer participants in both self-reported victimization and fear of victimization at the beginning of the program. They showed significant declines in both by the end of 24 weeks but the change was not great enough to make their experiences and fears comparable to those of the peer volunteers.

Family issues and emotional/behavioral problems have also been examined as sources of bullying vulnerability in CSN. Baumeister, Storch, and Geffken (2008) examined the nature and psychosocial relationship of peer victimization in a clinical sample of children diagnosed with a Learning Disability (LD). The study involved 303 patient charts from a university child psychiatry clinic, and 77 participants that met LD diagnostic criteria. The findings from this study suggested that peer victimization was positively related with parent problems, attention problems, and disruptive behavior. Peer victimization among children diagnosed with LD is significantly associated with reports of withdrawal, anxiety, depression, social problems, thought problems, attention problems, and disruptive behavior. In addition, children with LD who had comorbid psychiatric diagnoses reported more peer victimization than children without a comorbid psychiatric condition (Baumeister et al. 2008). Humphrey, Storch, and Geffken (2007) found a correlation between these factors in a sample of children diagnosed with attention-deficit hyperactivity disorder (ADHD). Like Baumeister et al. (2008), Humphrey et al. (2007) also found that CSN with additional comorbid psychiatric diagnoses reported higher rates of peer victimization than those without a comorbid diagnosis.

Although individual student characteristics and family context have been examined as factors in bullying of CSN, few studies have examined level of day-to-day social interaction (inclusion) of CSN peers as a potential source of vulnerability or as a protective factor. In spite of obvious social and practical implications, placement in self-contained versus mainstreamed environments has been under-studied as a factor in CSN report of bullying experiences. The purpose of this study was to further examine bullying

experiences, anxiety about bullying, and special education placement in elementary and middle school students with and without disabilities. The study compares CSN placed in self-contained/remedial classrooms, CSN who are mainstreamed into general education classrooms, and students (peers) in general education classrooms.

Method

Participants

Potential participants were included if they met four criteria: a) parents provided informed consent; b) students demonstrated willingness to participate and appeared to the research assistant to understand questions and provide comprehensible answers; c) students were 3rd, 5th, 6th, 7th or 8th grade students that attend one of the four target schools, and d) students had identifiable placement in regular classes, resource classes, consultation for learning support, or self-contained classes. For three of the four public schools the procedures were identical. Letters describing the study, demographic questionnaires, and requests for participation were sent to the parents of youth who were in target grades or in special education classes in participating schools. Interested parents returned consents directly to investigators by mail. The resulting pool of potential participants in the first three schools included 151 elementary students and 96 middle school students ranging in age from 8 to 16. Potential participants at the fourth school were students that previously participated in a pilot extracurricular inclusion program 1-2 hours a week (Saylor et al., 2009). As in the other schools, letters were sent from school and returned by mail. However, participation was only offered to the youth in special education and student volunteers offering to be peers in the new program. It was emphasized that declining to participate in the research protocol would in no way influence selection for the inclusion program. In all, 24 of the 46 program participants elected to complete the protocol, 15 CSN and nine peers.

Thus, within the combined sample of 271 from four schools there were a total of 42 participants receiving special education services (CSN), 20 students through resource or consultation service (CSN-RC), and 22 in a self-contained classroom setting (CSN-SC). Out of the 22 participants from a self-contained setting, 16 of the participants had their results reexamined and were added to the present study's analysis following the conclusion of a different pilot study researching bullying experiences, fear of school violence, and social support of students only in self-contained classes (Saylor et al., 2009). In order to make the cleanest comparisons possible each CSN was matched with a peer from the same school whose gender, age, and race were comparable. Six of the CSN-SC students from the fourth school (inclusion program) sample were not included because they could not be matched to a peer in their own school, a criterion thought to be crucial in the study of bullying. Subsequent analyses of results with and without these six SC students yielded comparable findings but this study reports only on the 36 CSN (almost) perfectly matched to a peer in the same school- 20 CSN-RC and 16 CSN-SC. Six of the children were not a perfect match on age, due largely to the fact that some children in special education were older than most others in their school. In the final sample, *t*-tests revealed no significant age differences between students in special education and matched peers. Two were not a perfect match on race.

The final sample of 72 students included 50 males and 22 females, 74% of whom were Caucasian and 26% of whom were African American. The 44 middle school and 28 elementary school children ranged in age from 8-16, with a mean of 11.6 years. The parent population included 54% college graduates and 73% who were married. The CSN sample consisted of youth with a variety of disabilities. Primary diagnoses (n=36) and secondary diagnoses (n=18) obtained from the participating school district's records revealed that the sample included 9 students with a moderate mental disability, 5 students with a mild mental disability, 21 students with a documented learning disability, 10 students with speech impairment, 3 students with an emotional disability, 4 students with an orthopedic impairment, and 2 students with autism.

Measures

This study utilized the *Bully Victimization Scale* (BVS) (Reynolds, 2003), which is used to measure bullying behavior and bully-victimization experiences in children and adolescents by having them report the frequency of 46 specific experiences or behaviors on a Likert scale. The BVS is designed for administration with third to twelfth grade students, and takes approximately 5-10 minutes to complete. The BVS is used to identify children and adolescents who are being bullied (Victimization Scale) and also students who engage in bullying behavior (Bullying Scale). Psychometric analyses in the standardization sample of 2,000 students demonstrated a strong internal consistency reliability coefficient of .93 for both the BVS Bully Scale and the BVS Victimization Scale. There is also good evidence of content and construct validity in the general population sampled (Reynolds, 2003).

For this study *T*-scores were calculated relative to grade and gender using BVS norm tables. The CSN in "ungraded" classes were scored based on their age (calculated at the grade most children start at that age). Students were categorized as having significantly elevated victimization or bully scores if their *T*-scores were > 60, which is one standard deviation above the mean.

The *School Violence Anxiety Scale* (SVAS) (Reynolds, 2003) is used to assess student's perception of school violence and safety in grades fifth through twelfth grade. In the present study, SVAS was used to assess only students attending middle school (6^{th}-8^{th} grades). The SVAS evaluates students' level of anxiety about their school environment, including anxiety specific to physical harm at school, harassment at school, and the potential for violence occurring at school. SVAS items assess physiological, cognitive, and emotional parts of anxiety (Reynolds, 2003). SVAS total raw score has a high internal consistency reliability coefficient of .95. There is evidence of content and construct validity. For this study the SVAS Total T-score was considered significantly elevated if it was > 60. The three factor scores were compared as raw scores as *T*-scores were not available for factors.

Demographic questionnaire. A demographic questionnaire was filled-out by parent/caregiver respondent which included participant's mother, father, stepmother, stepfather, grandmother, or other relative. The questions referred to participant's gender, race, age, school, parent-reported diagnoses, family income, parents' level of education, and parents' marital status.

Procedure

Teachers in target classrooms were asked to send home parental consent forms with their students. Faculty and graduate students from the authors' college conducted face-to-face interviews with properly consented students. Interviews consisted of verbatim reading of the instruments and writing down the students' verbal answers. They took place in either the participant's school library or in another quiet location within their school environment. The interview session took approximately 15 to 20 minutes per student. After each interview, participants were given an opportunity to pick a prize or candy for their participation.

Results

Bullying and Victimization of Students Relative to Special Education Placement

Grade and gender norms for the BVS (Reynolds, 2003) were used to compute Bullying and Victimization *T*-scores. These scores in turn were used to create bully-group categories based on significantly elevated scores (*T*-score >60) on neither scale (Minimally Exposed) Bully only (Bully), Victim only (Victim) or both Bully and Victim (Bully-victim). This process allowed for a rigorous and norm-referenced test of the hypothesis that CSN in special education placements (CSN-SC, CSN-RC) would experience higher rates of bullying compared to relative to match peers. Specifically chi square analyses were used to examine significant patterns of placement group assignment categories by bully group assignment categories (minimal bullying exposure, Bully, Victim, Bully-Victim). When *T*-scores could not be calculated, e.g. on SVAS subscale scores, Analysis of Variance ANOVA was used to compare raw scores of school placement groups.

When compared to participants matched by school, gender, race, and age (as closely as possible), a higher percentage of students in any special education placement (CSN) reported significant levels of victimization (*t*-score > 60) on the BVS victim scale. Chi square analyses showed this to be a significant pattern, χ^2 (72) = 6.55, $p < .02$. In all, 44% of the CSN reported significantly elevated victimization experiences while only 17% of the peers reached this level. Chi square analyses were also used to further compare the victimization scores of students in self-contained classes (CSN-SC), students in resource or consultation (CSN-RC), and peers. The chi square analysis revealed significant placement differences, χ^2 (72) = 6.96, $p < .03$. Unlike matched peers, 17% of whom had significantly elevated scores, 40% of CSN-RC and 50% of CSN-SC had significantly elevated BVS victimization scores.

All three groups reported relatively low rates of bullying – peers (8.3%), CSN-RC (10%), and BVS-SC (0 %). Chi square analyses revealed no significant differences in the percentage of each group admitting to bullying others and significantly elevated rates (BVS bully score > 60).

A final chi square analysis compared the rates at which peers versus CSN were categorized into four bully-victimization groups based on BVS *T*-scores: "Victim" only (victim score >60), "Bully" only (bully score > 60), "Bully-Victim" (both scores > 60), or minimally exposed to bullying (neither score > 60). A chi square analysis showed a significant difference between CSN (RC & SC combined) and peers, χ^2 (72) = 7.93, $p<$ .05. It appeared in this analysis that only peers reported bullying alone. Both of the CSN who admitted to engaging in bullying were also Victims (Bully-victims).

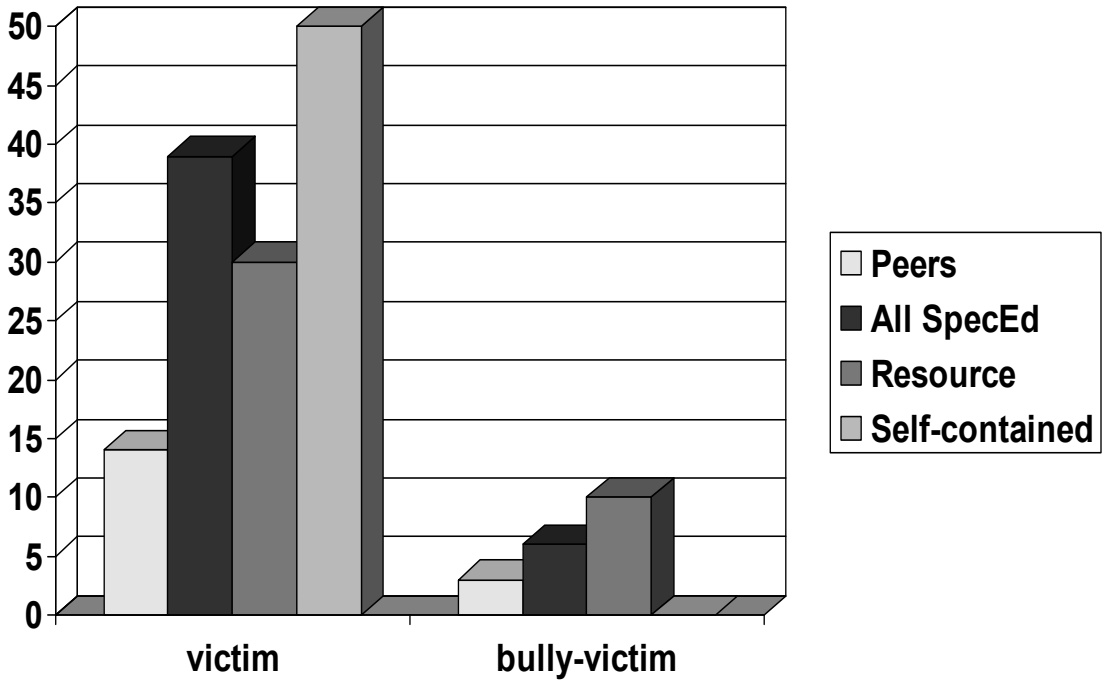
There were trends but no significant differences in the three-way comparison (peer, CSN-RC, and CSN-SC) on assignment to the four bully groups, χ^2 (72) = 11.54, $p<.07$. Two of the participants who fell in the Bully-Victim group were CSN-RC and one was a peer. No CSN-SC reported bullying others. The small numbers prohibited more in-depth analysis of these findings, but it raised the possibility that a second vulnerability of CSN-RC may be the tendency to becoming a bully-victim, perhaps subsequent to being a victim. Figure 1 depicts the percent of each population whose significantly elevated BVS scores categorized them as Victims or Bully-Victims, while table 1 summarizes the percentage of each placement group which was categorized in each victimization group.

Table 1

Summary of Percentages of Each of Three Placement Groups that Were Categorized as Minimally Exposed, Victims, Bullies, and Bully-Victims

	CSN–SC n = 16 %	CSN–RC *n* = 20 %	Matched Peers *n* = 36 %	Total Sample *N* = 72 %
Minimal	50	60	78	67
Victim Only	50	30	14	26
Bully Only	0	0	6	3
Bully-Victim	0	10	2	4

Figure 1. Percentages of student placement groups categorized into Victim only, or Bully-Victim groups based on BVS t-scores > 60



Anxiety about School Violence in Middle School Relative to Special Education Placement

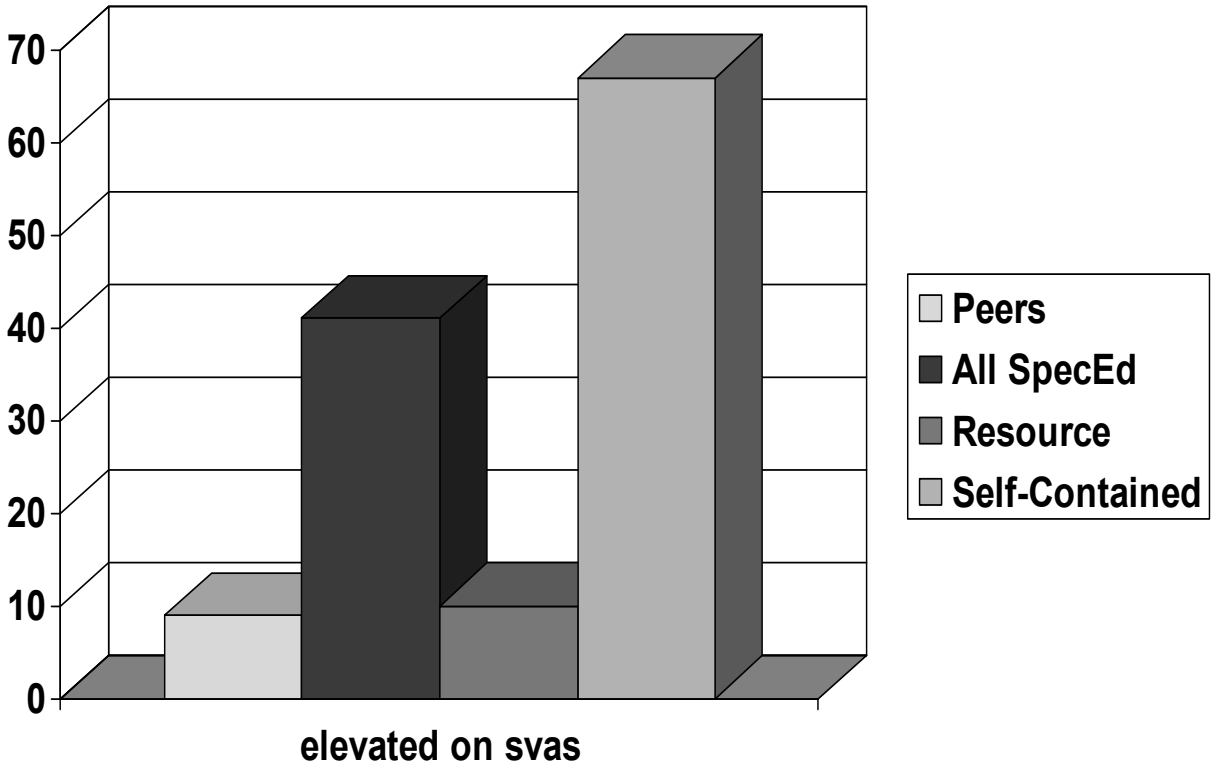
In similar fashion, chi square analyses were also used to compare the groupings based on SVAS total *T*-scores of CSN and peers in the 44 middle school students who completed this measure. As a group the CSN were more likely to report significantly elevated anxiety on this measure than their peers at the same school, χ^2 (44) = 5.94, p<.02 . The three way comparison among placement groups yielded a significant pattern as well, χ^2(44) =15.28, p<.001. While only 9% of the peers and 10% of the CSN-RC reported significantly high levels of anxiety about being victimized by peers, 67% of the CSN-SC endorsed items at these high levels. Figure 2 summarizes placement group rates of categorization based on SVAS Total score. Elevated versus non-elevated *T*-scores cannot be calculated for the factor scores

Analyses of variance with Duncan post hoc tests revealed more specific patterns to these placement differences. The significant difference in the total SVAS *T*-score [$F(2,41)=5.27$, $p<.009$] appeared to be primarily related to the CSN-SC group's extremely high scores on the Physical Injury Anxiety factor. The CSN-SC had a mean Physical Injury Anxiety raw score of 10.9 compared to 4.9 for CSN-RC and 2.7 for peers, which resulted in significant differences on this factor, $F(2,41)=4.64$, $p<.02$. The three placement groups did not differ significantly on the *Fear of Harassment* or *Worry about School Safety* factors. Table 2 summarizes ANOVA comparisons of SVAS scores.

Table 2
Summary of ANOVA's Comparing SVAS Factor Scores and Total T-score of Middle School Students in Three Placement Groups

	CSN-SC $n = 12$	CSN-RC $n = 10$	Matched Peers $n = 22$	*df*	*F*	*p* <
Fear of Harrassment factor raw score	5.2	4.2	2.7	2, 43	1.85	.17
Physical Injury Anxiety factor raw score	10.9	4.9	3.0	2, 43	4.64	.02
Worry About School Safety factor raw score	3.7	3.2	2.3	2, 43	1.12	.33
SVAS Total *T*-score	61.0	52.6	49.6	2, 43	5.27	.009

Figure 2. Percentage of middle school student placement groups reporting significantly elevated anxiety about school victimization based on SVAS total t-score >60



Demographic factors potentially associated with Bullying and Victimization

The matching of subjects in this study based on gender, age, race, and same school environment was based on awareness of these factors as potential correlates of bullying and victimization in previous literature and pilot research. To further examine these issues in the present sample, chi square analyses were conducted to compare bully and victim classifications by gender, race, and Middle School (MS) vs Elementary School (ES). In this sample girls were significantly more likely to admit to bullying others, χ^2 (72)= 6.19, $p< .02$, and three of four girls admitting to significant bullying were categorized as Bully-Victims, not simply Bullies. There were no gender differences in rates of elevated victimization (BVS Victim) or anxiety about victimization (SVAS).

There were also no differences in BVS Bully, BVS Victim or SVAS elevation rates in Caucasian vs. African American students or in MS vs. ES students.

Discussion

The present study found higher rates of perceived peer victimization among students receiving special education services in carefully matched samples of students in the same middle and elementary schools. Both students with special needs receiving resource or consultation in a mainstreamed environment (CSN-RC) and students receiving their special education services primarily in self-contained placements (CSN-SC) reported higher rates of victimization compared to peers of the same race, age, and gender in the same schools. Although their reports of actual bullying and victimization experiences were more or less comparable (to each other; both groups were higher than peers), the CSN-RC and CSN-SC were markedly different in their reported fear or anxiety about being victimized, especially physically injured, by their peers. CSN-SC, whose day-to-day involvement with peers was much more limited (usually just lunch and physical education, if that) reported significantly higher levels of anxiety that their peers might hurt them compared to either CSN-RC or peers, who presumably have more day-to-day peer social interaction.

Previous studies (e.g. Baumeister et al. 2008, Cater & Spencer, 2006, Humphrey et al. 2007) found higher rates of bullying experienced by CSN and have explored specific personal characteristics that might make a person with special needs more vulnerable to being a target for bullying (e.g. differences in appearance, speech difficulties, social skill deficits, difficulty cognitive processing of events). Whatever personal characteristics CSN bring to the peer interaction, the fact that students in self contained special education classes were significantly higher on fear scores than students receiving their special education services using mainstreamed resource or consultation models suggest that at least the apprehension of peer victimization may be minimized by the greater exposure provided by more inclusive environments.

Unlike previous researchers (e.g. Kaukiainen et al., 2002) this sample demonstrated no significant elevations in the self-reported rates of bullying by CSN. Indeed, no CSN-SC reported elevated bullying behavior beyond what is normative for their grade and gender, and the few CSN-RC who reported bullying others at high rates were also high in victimization. Future investigations should be attentive to methodological and sampling issues which may lead to varied conclusions about CSN as bullies. Across methods, data sources, and diagnoses of CSN, the increased vulnerability of CSN to be victims relative to peers is a robust and consistent finding that mandates further studies in prevention and intervention with these populations.

Generalization and interpretation of these findings are certainly limited by the small sample size and diverse diagnoses of the participants. However, several emerging trends suggest important areas of further investigation. One is the relatively high rate at which CSN-RC are represented among the students whose scores categorize them as “Bully-Victims”. In this sample no special education students were categorized as “Bullies”

alone. Any who admitted to significant levels of bullying also reported significant levels of victimization. The fact that girls were also more likely to be bully-victims in this sample suggests that future studies need to factor gender and other demographic characteristics into analyses as sample sizes allow. While most of the sparse literature in bullying of CSN has addressed prevention of the initial victimization, it may also be important to look at secondary prevention for CSN who have known victimization incidents to prevent their becoming bullies as well. Taylor, Saylor, Twyman, and Macias (in press) have suggested that students with ADHD may be vulnerable to this same combination of bullying and victimization. Perhaps being developmentally immature and/or more impulsive makes some CSN more likely to react to peer bullying with aggression toward others without fully estimating the impact or the consequences of their own bullying behaviors.

This study examined the perceptions of youth with special needs in integrated (resource/consultative services) and isolated (self-contained) school settings. Further research is needed to examine the perceptions of children and adolescents receiving special education in elementary and middle school. Based on this preliminary study, we recommend that school districts continue in their efforts to prevent school bullying for all their students, but especially for those students in special education classes who may be most vulnerable to victimization caused by bullying and worry about victimization. School boards need to develop effective policies, procedures, and preventive education for staff and students. Principals need to ensure that their schools are fully inclusive and take a leading role in demonstrating contagious attitudes and behaviors that will benefit all students in a positive manner. Teachers need to feel confident in their knowledge and skills in order to socially include students with or without special needs. As a society, we all need to appreciate children, adolescents, and adults for their uniqueness in order to better understand the realities of their disability. In school and within our homes we all have an opportunity to model behavior and attitudes that we want our children to take with them into public situations. Overall, we need to provide the necessary educational policies and resources to guarantee that all children with or without a disability are respected and treated fairly.

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