ABSTRACT: This study examined the perceived communicative competence, self-esteem, and vulnerability to bullying of 53 adolescents who stutter and 53 adolescents who do not stutter. Adolescents who stutter were at a significantly higher risk of experiencing bullying behavior (43%) than were adolescents who do not stutter (11%). The majority of adolescents who stutter (57%) rated themselves as having poor communicative competence. In contrast, only 13% of the adolescents who do not stutter rated themselves as having poor communicative competence. Seventy-two percent of adolescents who stutter scored within 1 SD from the mean on a standardized measure of self-esteem, which is indicative of positive self-esteem. Students with low self-esteem and poor confidence in their communicative competence were more likely to be victimized by bullies. The importance of perceived communication skills, especially in establishing and maintaining positive social interactions, and their relationship to potential victimization by bullies is discussed. Social and communication skills training programs may be an important part of treatment programs for some adolescents who stutter to manage potential bullying behavior.

KEY WORDS: bullying, stuttering, adolescents, self-esteem
negative stereotypes are remarkably similar to how bullies define their “targets,” and may place adolescents who stutter at high risk for being bullied and victimized in school settings. The underlying framework for this study includes (a) the relationship between social and communication skills in adolescents, (b) the negative effects of bullying behavior, and (c) the possible relationship between bullying and stuttering.

SOCIAL AND COMMUNICATION SKILLS

Social relationships and belonging to peer groups play critical roles in adolescent development (Parker & Asher, 1987, 1993; Parkhurst & Asher, 1992). Peer relationships influence adolescents’ social identity, self-esteem, and social status. A number of studies report on the influence of peer acceptance and peer rejection (Brown & Lohr, 1987; Callaghan & Joseph, 1995; Espelage, 2002; Espelage & Holt, 2001; Hodges, Boivin, Vitaro, & Bukowski, 1999; Lerner & Galambos, 1998; Sharp, 1995, 1996). Peer acceptance is linked to popularity in groups, closer friendships, positive self-concepts, academic success, and expanded social competencies. During this time, how adolescents perceive themselves (e.g., the “in” group, part of the clique, leader in a group) often becomes a self-fulfilling prophecy. Social status, academic and/or athletic achievement, physical appearance, socioeconomic class, and social norms all play important roles. “Fitting in” is often one of the keys for peer acceptance, with rigid group expectations for appearance, prosocial and antisocial behaviors, and communication styles and skills. Buhrmester (1996) suggested that peer relationships mature during adolescence through increased social and communicative activities, including initiating interactions, self-disclosure, and intimacy in conversations and activities. Effective social and communicative skills become the foundation for social interactions. Richmond and McCroskey (1998) reported that “effective communicators exhibit assertiveness, responsiveness, and versatility. These skills allow speakers to make requests, actively disagree, express their feelings, initiate, maintain, and disengage in conversations” (p. 85). They also allow individuals to be more flexible in multiple settings and with different conversation partners. Effective communicators show a willingness to communicate and to engage in social interactions. Richmond and McCroskey reported that perceived communicative competence is positively related to high self-esteem, confident attitudes toward communication, and adept social skills. Perceptions of communicative competence are related to individuals’ willingness and desire to communicate and are a critical predictor of positive peer relations and acceptance. As friendships evolve and peer interactions intensify, supportive peer relationships, healthy self-concepts, positive self-esteem, and effective communication also play protective roles against victimization (Garbarino & del Lora, 2002; Garrett, 2003; Geffner et al., 2001; Olweus, 1993; Thompson et al., 2002).

In contrast, peer rejection may lead to loneliness, depression, poorer academic performance, lower self-esteem, aggression, withdrawal, irritability, an increased likelihood of antisocial behavior, and high risk for victimization and bullying (Parker & Asher, 1987, 1993; Pope & Bierman, 1999). Peer rejection has also been identified along with poor social skills and perceived low social status as part of the bullying cycle. Peer rejection and victimization during adolescence can have negative lifelong effects. Successful interventions have been reported that were designed to improve both social and communicative interactions and social competencies (Smith & Ananiadou, 2003; Smith & Brain, 2000; Steinberg, 1999; Welsh, Domitrovich, Bierman, & Lang, 2003). However, children who fail to develop or display important communication skills may be less likely to build or maintain social and interpersonal peer relations. These children may also be at higher risk of being bullied. Perceived poor communicative competence has been related to communication apprehension and fear, isolation, loneliness, introversion, and shyness (Daly, McCroskey, Ayres, Hopf, & Ayres, 1997; McCroskey & McCroskey, 1988; Richmond & McCroskey, 1998; Richmond, McCroskey, & McCroskey, 1989).

Studies have also suggested that children with communication disabilities are more likely to be rejected by peers and ignored in social interactions (Botting & Conti-Ramsden, 2000; Brinton & Fujiki, 1999; Fujiki, Brinton, & Todd, 1996; Hadley & Rice, 1991; Knox & Conti-Ramsden, 2003; Rice, Sell, & Hadley, 1991). It appears that children with even mild disabilities are at risk for peer rejection and lower social status in the classroom. Adolescents who are perceived as “different,” or who perceive themselves as “different” due to the absence of or lack of skills in using peer-sanctioned social and communication skills, may be at high risk for victimization or bullying.

EFFECTS OF BULLYING BEHAVIOR

Bullying is a subtype of aggression and an international problem for school-age children (Olweus, 1993; Thompson et al., 2002). American schools are often perceived as a dangerous place by many students. Fried and Fried (1996) reported that more than 160,000 children missed school daily due to fear of attacks and victimization by bullies. In a typical week, students receive an average of 230 verbal put-downs, or approximately 30 per day (Garrett, 2003). In an extensive study of 15,686 students in the United States, nearly 30% of all children in schools are involved in bullying behavior (Nansel et al., 2001). Thirteen percent of the children in their study self-identified as bullies, 11% self-identified as victims, and 6% self-identified as both bullies and victims. The researchers defined bullying as “when a teenager’s behavior is purposely meant to harm or disturb another child, when it occurs over time, and when there is an imbalance in power between the kids involved” (p. 2992). Types of bullying include disparaging verbal comments, shunning, spreading rumors, unwanted physical contact, beatings, stealing, and threats.
Although males and females are bullied equally (Banks, 1997; O’Moore, Kirkham, & Smith, 1999; Rigby, 1997, 1999; Whitney & Smith, 1993), males are more likely to use direct bullying (e.g., threats and physical hitting) whereas females tend to use indirect bullying (e.g., verbal insults and isolation). Victims of bullying were perceived as different from peers in dress, speech, and personal hygiene. Dawkins (1996) reported that children with visible disabilities were twice as likely to be bullied as children with no visible disabilities. Children with physical, intellectual, and sensory disabilities such as cerebral palsy, epilepsy, spina bifida, hearing/visual impairments, emotional problems, severe intellectual disabilities, hyperactivity, or cleft palate have an increased risk of victimization (Bond, Carlin, Thomas, Rubin, & Patton, 2001; Johnson et al., 2002; Sheard, Clegg, Standen, & Cromby, 2001; Sweeting & West, 2001). Similarly, children with learning disabilities, poorer academic achievement, and special needs are also reported to be at higher risk of being bullied (Mishna, 2003; Nabuzoka, 2003; Nabuzoka & Smith, 1993, 1999; Whitney & Smith, 1993). Recently, Knox and Contri-Ramsden (2003) reported on the severity and risk of being bullied in 100 children with specific language impairment (SLI). They found that 36% of the children with SLI self-reported being at high risk for victimization of bullying behavior as compared with 12% of the non-SLI group. Their findings support previous studies that children with special education needs are at higher risk of being bullied.

Hodges and Perry (1999) reported that children who are bullied are more likely to be disliked by their peers and to have fewer friends than those who are not bullied. As stated previously, peer relationships play an important role in bullying behavior. Poor social skills, low social status, and poor social relationships may be both a cause and a result in the bullying cycle. Research suggests that victims of bullying show similar characteristics: They tend to be more cautious, anxious, quiet, withdrawn, passive, unassertive, insecure, unhappy, and hypersensitive than children who are not victims of bullying (Byrne, 1994; Garrett, 2003; Geffner et al., 2001; Olweus, 1993). Unfortunately, these children tend to respond to their victimization with greater avoidance of social situations, absenteeism, emotional problems, and insecurities. These response behaviors are the same ones that bullies report as the target behaviors of their victims (Garbarino & de Laura, 2002; Garrett, 2003; Thompson et al., 2002).

Victims of bullying during childhood and adolescence show long-term psychosocial and physical health problems (Geffner et al., 2001; Olweus, 1993; Rigby, 1997, 1999, 2000; Smith et al., 2002). Students who are repeatedly bullied report sleeplessness, lower self-esteem, poorer self-concepts, increased rates of absenteeism, truancy, depression, loss of confidence, greater isolation, and poorer academic performance than students who are not bullied (Callaghan & Joseph, 1995; Garrett, 2003; Olweus, 1993; Sharp, 1995). One purpose of this preliminary study was to determine if stuttering contributes to the reported “stereotype of difference” that is characteristic of bullied adolescents (Garrett, 2003).
Hugh-Jones and Smith (1999) designed a 19-item questionnaire and surveyed adults from the British Stammering Association. Results from the 276 participants (31% response rate from a mailed survey) revealed that participants recalled difficulties in peer relationships and bullying during their school experience that were directly related to their stuttering. Eighty-three percent of the participants reported being bullied at school, with 18% reporting being “bullied daily” and 41% recalling that they were “bullied weekly.” The authors recognized that the recall technique (in some cases recalling events that occurred more than 25 years ago), lack of a control group, low response rate, and the fact that all participants were members of a self-help group may have confounded their results. They suggested that children who stutter could be at higher risk for poor peer relationships and bullying due to their stuttering and that further research should be conducted in this area.

CURRENT STUDY

The disruptive nature of stuttering during social interactions, negative stereotypes held by peers, impact on peer relationships, overrepresentation of students with disabilities who are bullied, and retrospective research suggesting that victimization/bullying occurs during the school years to individuals who stutter, all seem to suggest a relationship between bullying and stuttering. However, few studies have explored the relationship between bullying and stuttering in adolescents who are currently experiencing the behavior. It is possible to examine the risk and frequency of bullying currently being experienced by students using methodology reported in the literature (Arora, 1994; Thompson et al., 2002). It is also possible that students who stutter may not perceive themselves as effective communicators and thereby may reduce the actual behaviors necessary for fostering positive social/peer relationships, thereby making them more vulnerable to bullying. In response to negative stereotypical reactions of peers, adolescents who stutter may have developed negative perceptions of their own communicative competence, avoidance strategies, and less outgoing interaction styles. In light of the fact that research on bullying clearly indicates that one of the devastating results of being bullied is lowered self-esteem in victims, it also seems important to clarify this relationship in adolescents who stutter. Previous research suggests that adolescents who stutter may have developed protective techniques to maintain their positive self-esteem (Blood et al., 2003; Yovetich et al., 2000). However, bullying may compromise the ability of adolescents who stutter to apply these protective techniques. The relationship between perceived communicative competence and self-esteem may be important in understanding the complex interactions among bullying, stuttering, and psychosocial adjustment in some fluency clients. Therefore, four research questions were posited to examine how a number of factors are associated with the experience of bullying in adolescents who stutter:

- Are there significant differences between adolescents who stutter and adolescents who do not stutter on the risk of being bullied in a school setting?
- Are there significant differences between adolescents who stutter and adolescents who do not stutter on a measure of communicative competence critical to developing and fostering positive peer relations?
- Are there significant differences between adolescents who stutter and adolescents who do not stutter on a standardized measure of self-esteem?
- Are there significant positive relationships among the risk of being bullied, perceived communicative confidence, and self-esteem in adolescents who stutter and adolescents who do not stutter?

METHOD

Participants

Participants were 53 adolescents who stutter between the ages of 13 and 18 years (mean age 15:2 [years;months]) and 53 adolescents who do not stutter (mean age 14:8) who were currently enrolled in school. All adolescents met the following criteria: no repetition of a grade level, no placement in a special classroom, absence of a history of chronic physical or psychological disabilities (diabetes, asthma, or neurological, learning, reading, or mental disabilities), and no history of chronic truancy. Adolescents who do not stutter were matched with adolescents who stutter on grade level, ethnicity, gender, and approximate age. Assent and consent forms were completed before the beginning of the study.

The demographic characteristics of the adolescents included 89% (94) male, 11% (12) female, 85% (90) Caucasian, 11% (12) African American, and 4% (4) Hispanic American. Adolescents who stuttered were currently enrolled in treatment with a speech-language pathologist. Stuttering severity was rated by the Stuttering Severity Instrument for Children and Adults (Riley, 1994). The ratings revealed that 11% (6) of the participants’ stuttering was rated in the mild category, 40% (21) in the moderate category, 26% (14) in the severe category, and 23% (12) in the very severe category.

Procedures

The procedures used in the present investigation parallel those reported in earlier studies (Blood et al., 1998; Blood et al., 2001, 2003). Briefly, demographic information, stuttering history, onset, duration, spontaneous speech samples, and socioeconomic status (SES) were obtained before the administration of the scales. SES was determined using Hollingshead’s Four Factor Index (1975), which uses parent’s educational level and employment position. All participants were tested individually using the standardized instructions that required them to complete paper and pencil tests. Although the test battery consisted of a number of scales and questionnaires, for the purposes of this study, the results of the Life in School (LIS) checklist
(Arora, 1994), the Rosenberg Self-Esteem Scale (RSES, Rosenberg, 1965), and the Self-Perceived Communication Competence (SPCC) scale (McCroskey & McCroskey, 1988) will be reported.

**Instruments**

**LIS.** The LIS checklist (Arora, 1994) is a published scale that is used as an indirect, precise measure of bullying. According to Arora, because the LIS never asks the question “Are you bullied?” many of the problems with other measures of bullying behavior are eliminated. She reports that using the word “bullying” may elicit an emotional response from participants and consequently less accurate data due to shame, embarrassment, and/or concern with identification as a victim of bullies. The LIS provides more precise information about what is “actually happening” to the student within a specific time interval, the past week. This eliminates the recall issue inherent in retrospective studies. The data obtained from students is based on specific observable actions in the past week.

The LIS consists of 39 statements that a student might experience during the past week in school. Each statement is preceded by “During this week, another child in school…” and followed with one of the 39 statements. The student is instructed to check one of the three columns labeled “no,” “once,” or “more than once.” Half of the statements are pleasant or neutral, such as “During this week, another child in school…told me a joke; smiled at me; said something nice to me; talked about TV with me; asked me a stupid question.” The remaining statements are classified as unpleasant occurrences that a student might experience, such as “During this week, another child in school…said they would tell on me; told me a lie; shouted at me; tried to get me in trouble, was unkind about something I did.” Six of the remaining negative items were labeled as bullying by 70% of secondary school students and teachers in samples from two different countries (Arora, 1994, 1996; Arora & Thompson, 1987; Smith, 1999). All of the items that were selected by students and teachers included direct bullying and were related to physical aggression. The six items include “During this week, another child in school… 1) tried to kick me; 2) threatened to hurt me; 3) demanded money from me; 4) tried to hurt me; 5) tried to break something of mine; and 6) tried to hit me.” Interestingly, indirect forms of bullying (name calling, frightening someone, laughing at someone) were categorized by less than 30% of the sample as bullying and therefore are not included as part of the Bullying Index.

The checklist can provide a Bullying Index, which Arora states provides “a comprehensive picture of the student’s life in school and a means of identifying individuals who are likely to be victims of bullying” (p. 156). Instructions for computing the Bullying Index are provided, as are the criteria for children identified as most likely to be at risk of being bullied. Studies show that more than 66% of the children who select the “more than once” category later admit to actually being bullied (Thompson et al., 2002). Data have been collected on children in schools varying in geographic location (rural, suburban, and urban) and size (schools with less than 100 students enrolled to more than 1,000 students enrolled). The LIS has been used with children in regular classrooms, with special needs, with learning disabilities, and with SLI (Arora, 1994, 1996; Arora & Thompson, 1987; Johnson et al., 2002; Knox & Conti-Ramsden, 2003; Smith, 1999).

**RSES.** Self-esteem was evaluated using the RSES (Rosenberg, 1965). As mentioned in previous research (Blood et al., 2003), this scale is one of the most widely used scales for measuring self-esteem in the world (Hagborg, 1996; Rosenberg, 1986). Scores on the RSES are the average rating of the five positively worded (e.g., I feel I have a number of good qualities) and 5 negatively worded (e.g., I feel I do not have much to be proud of) items. Higher scores indicate poorer self-esteem. Extensive research has demonstrated the scale’s reliability and validity. This scale has a reliability coefficient of .92. Criterion validity of the scale has been demonstrated as the scale correlates significantly with other measures of self-esteem (Rosenberg, 1979). Researchers have demonstrated significant positive relationships between self-esteem and other measures of self-concept and self-regard for school-aged children and adolescents (Hagborg, 1996).

**SPCC.** The SPCC scale (McCroskey & McCroskey, 1988) is a 12-item self-evaluation measure of an individual’s perception of his or her ability to communicate effectively. Participants are required to rate their competence on a scale from 0 to 100 in four settings (public, meeting, group, and dyad) and among three communication receivers (strangers, acquaintance, and friend). The overall SPCC score ranges from 0 (completely incompetent) to 100 (completely competent). According to the authors, higher SPCC total scores (>87) indicate higher self-perceived communicative competence; lower scores (<59) suggest low self-perceived communicative competence. Subscores also range from 0 to 100 for the four settings (public, meeting, group, and dyad) and among three communication receivers (strangers, acquaintance, and friend). Specified subscores ranges are also included. The SPCC has good reported reliability (0.92) and good predictive and construct validity on a sample of 2,444 individuals (Daly et al., 1997; McCroskey, 1977, 1982, 1997; McCroskey & McCroskey, 1988; Richmond & McCroskey, 1998; Richmond et al., 1989).

Researchers have found negative correlations between communication apprehension, neuroticism, and introversion and the SPCC and positive correlations between self-esteem and sociability in adults and adolescents and the SPCC (Chesebro et al., 1992; Richmond et al., 1989; Rosenfeld, Grant, & McCroskey, 1995; Zakahi & Duran, 1984, 1985).

**Data Analyses**

In addition to descriptive data analyses, separate t tests and analyses of variance (ANOVAs) were computed between the group mean total scores of the LIS (question #1), RSES (question #2), and SPCC (question #3) to determine if significant differences existed between the two groups of participants. The subscores of the SPCC were also analyzed. In order to determine if significant relationships existed among the measures, Pearson product moment
correlations were computed for adolescents who stutter and adolescents who do not stutter (question #4).

RESULTS

Performance on Bullying Measures

As shown in Table 1, 43% (23) of the adolescents who stutter and 11% (6) of the adolescents who do not stutter checked at least one of the six bullying items in the “more than once” column, providing a measure for risk of being bullied on the LIS during the past week. The severity of the risk of being bullied was calculated by counting the number of items that individuals checked in the “more than once” column. The severity was rated from 2 to 6. Table 1 also presents the number and percentage of participants who were classified in each severity rating. It can be seen that there were no students who do not stutter who checked more than three items. In contrast, 13 (24%) students who stuttered were not only at risk of being bullied, but with varying degrees of severity of victimization. Only 3 (6%) students who do not stutter reported varying degrees of victimization.

The mean Bullying Index is also presented. Adolescents who stutter had a group mean Bullying Index of 9.3 (SD = 3.1); adolescents who do not stutter had a group mean Bullying Index of 6.6 (SD = 2.7). The higher the number, the greater the risk of being bullied. Results of the t test revealed that the group means were significantly different, t(103) = 6.14, p < .001. Adolescents who stutter were at higher risk of being bullied than adolescents who do not stutter.

Performance on the Communicative Competence Scale

Table 2 shows that adolescents who do not stutter (group M of 66.2; SD = 10.4) were more confident in their perceived level of communication than were adolescents who stutter (group M of 77.4; SD = 13.5). Results of the t test revealed that the group means were significantly different, t(103) = 8.9, p < .001. Significant differences (p < .001) were also found between the two groups on the public speaking, group discussion, interpersonal conversations, and stranger subscores of the SPCC. The group discussion subscore data revealed poor communication competence for 24 (45%) participants who stutter and 7 (13%) participants who do not stutter. The interpersonal conversations subscore data revealed poor self-perceived communicative competence for 28 (53%) participants who stutter and 8 (15%) participants who do not stutter. The stranger subscore data revealed poor self-perceived communication competence for 27 (51%) participants who stutter and 11 (21%) participants who do not stutter. Similarly, the public speaking subscore data revealed poor communicative competence for 28 (53%) participants who stutter and 8 (21%) participants who do not stutter. The data revealed that participants who stutter had higher scores (poorer performance) on four of the seven subscales of the SPCC. Significant differences between groups at the p < .001 level of confidence were found for group discussions, interpersonal conversations, stranger, and public speaking subscores; no significant differences were found for between group means for the meeting, acquaintance, and friend subscores of the SPCC.

Table 2. Means and standard deviations for adolescents who stutter and adolescents who do not stutter on the Self-perceived Communication Competence scale total scores and subscores.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Adolescents who stutter</th>
<th>Adolescents who do not stutter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Total score*</td>
<td>65.7</td>
<td>14.3</td>
</tr>
<tr>
<td>Public*</td>
<td>55.4</td>
<td>8.1</td>
</tr>
<tr>
<td>Meeting</td>
<td>68.1</td>
<td>8.5</td>
</tr>
<tr>
<td>Group discussion*</td>
<td>55.1</td>
<td>9.1</td>
</tr>
<tr>
<td>Interpersonal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>conversations*</td>
<td>54.7</td>
<td>6.6</td>
</tr>
<tr>
<td>Stranger*</td>
<td>55.5</td>
<td>5.9</td>
</tr>
<tr>
<td>Acquaintance</td>
<td>82.1</td>
<td>6.1</td>
</tr>
<tr>
<td>Friend</td>
<td>83.5</td>
<td>9.3</td>
</tr>
</tbody>
</table>

*Indicates significant differences at the p < .001 level of confidence.

Performance on the Self-Esteem Scale

The results of the RSES revealed a range of scores from 10 to 32, with a group mean score for adolescents who stutter of 17.1 (SD = 4.5) and a group mean score for adolescents who do not stutter of 15.9 (SD = 4.3). Results of a t test revealed no significant differences between the group means (p = 0.21). Adolescents who stutter reported similar levels of self-esteem as adolescents who do not stutter.
Figure 1 displays the group mean responses for all participants. The higher scores are indicative of lower self-esteem. The group mean and standard deviation for the “at risk for bullying” group of 23 adolescents who stutter was 20.7 ($SD = 5.8$) and for the 6 adolescents who do not stutter was 19.1 ($SD = 6.4$). The group mean and standard deviation for the “not at risk for bullying” group of 30 adolescents who stutter was 15.1 ($SD = 3.9$) and for the 47 adolescents who do not stutter was 15.3 ($SD = 3.5$). Results of a one-way ANOVA revealed significant differences among the four groups (adolescents who stutter at risk for bullying; adolescents who do not stutter at risk for bullying; adolescents who stutter and are not at risk for bullying; adolescents who do not stutter and are not at risk for bullying), $F(3,102) = 25.4, p < .001$. Tukey Kramer HSD post hoc test revealed that adolescents who stutter who were at risk for bullying had significantly lower self-esteem (higher scores) than adolescents who were not at risk for bullying. Similarly, adolescents who do not stutter who were at risk for bullying had significantly lower self-esteem (higher scores) than adolescents who were not at risk for bullying. Participants who were at risk for being bullied had lower self-esteem (higher scores), regardless of fluency.

It is possible that the number of years in current treatment programs (Guitar, 1998; Shapiro, 1999; Silverman, 2004; Van Riper, 1982) that may have focused on self-esteem, general well-being, and self-concept skills could have a confounding effect on the data. Therefore, we determined if any relationship existed between the number of years in treatment and self-esteem scores. No significant correlations were found between number of years in treatment and self-esteem scores ($r = +0.09; p = 0.41$).

**Correlations Among Measures**

Correlations between the Bullying Index (# of items checked from 0 to 6) and the RSES total score and SPCC total score were calculated. A significant, positive correlation was found between risk of bullying and self-esteem ($r = +0.69; p < .001$). As the risk of bullying increased (higher scores), the likelihood of poorer self-esteem also increased (higher scores). A significant, negative correlation was found between the risk of bullying and communicative competence ($r = -0.51; p < .001$). As the risk of bullying increased (higher scores), all participants displayed poorer communicative competence (lower scores). A low, negative, significant correlation was also found between self-esteem and communicative competence (lower scores). Low self-esteem (higher scores) was associated with poor perceived communicative competence (low scores).

**DISCUSSION**

In this study, 43% of the adolescents who stutter and 11% of the adolescents who do not stutter reported experiencing bullying within the past week. The rates reported for adolescents who do not stutter are similar to those reported in other studies, suggesting that 10%–15% of all children in schools are victims of bullying (Garbarino & deLara, 2002; Garrett, 2003; Nansel et al., 2001; Thompson et al., 2002). Similarly, the significantly higher percentage reported by participants who stutter parallels studies with children with other mild and moderate disabilities who are reported to be victims of bullying (Bond et al., 2001;
teasing and bullying top the list of school-age children’s problems. For adolescents who stutter, social integration may cause problems due to the daily variability in their communicative interactions. This research suggests that adolescents who stutter are at greater risk of being bullied and presents another issue for consideration when planning the optimal learning environment in schools for adolescents who stutter. These data provide empirical support for programs that address teasing and bullying issues in students who stutter (Blood, 1995; Bloodstein, 1995; Bloom & Cooperman, 1999; Conture, 2001; Gregory, 2003; Guitar, 1998; Manning, 2001; Murphy & Quesal, 2002; Ramig & Bennett, 1995; Shapiro, 1999; Sheehan, 1970; Silverman, 2004; Van Riper, 1982). Although this study provides evidence that students who stutter were faced with direct bullying during the past week before testing, we did not obtain data on the perpetrators who did the bullying, other students’ responses, teachers’ perceptions, and measures of indirect bullying. Future studies are being conducted that will provide this additional information.

The relationship between self-esteem and bullying is not surprising. The literature is replete with studies documenting the negative effects of bullying on self-esteem. However, this study reports a higher percentage of participants with low self-esteem than earlier studies (Blood et al., 2003; Yovetich et al., 2000). In students who stutter, the increased likelihood of being bullied may lead to negative self-esteem. Of course, the inverse relationship may also be valid, suggesting that low self-esteem makes students who stutter more vulnerable to bullying. Bullies target specific students. Adolescents who stutter may be perceived “different” because of their communication skills. However, some students who are perceived as different may develop specific attributes that serve as compensatory strategies and assist in developing and/or maintaining positive self-esteem and healthy peer relations. Hodges et al. (1999) suggested that having a close personal friend can actually serve to buffer the negative effects of victimization and bullying. The majority of adolescents who stutter (57%) did not report being bullied in the past week. It is interesting to speculate that these students have discovered successful ways to buffer the negative effects of bullying while maintaining their positive self-esteem. Although this study provides the foundation for information about adolescent development in the context of stuttering, there is a need for longitudinal studies examining the influences of social and communicative relationships within the school and family environments.

In view of the research that social and peer relationships rely heavily on communicative competence and skills, adolescents who stutter appear to have developed successful strategies for dealing with a lack of communicative confidence. The data show that a relationship exists between communicative competence and the risk of being bullied. The results also suggest that significantly more adolescents who stutter (57%) reported poorer self-perceived communicative competence than did adolescents who do not stutter (13%), especially during public speaking, group discussions, interpersonal conversations, and when talking with strangers. If bullies tend to select targets who show poor communication skills, avoidance strategies, and unassertive behaviors, then treatment strategies and programs that work on attitudes and feelings appear to be warranted as a technique to build general communication and social skills. For some adolescents who stutter, changing motor speech behaviors may not result in accompanying attitudinal and cognitive changes. Programs that reinforce assertive skills, positive communication models, acceptance of stuttering, and ways of dealing with stuttering may actually assist in dealing with potential co-occurring issues like bullying (Blood, 1995; Bloodstein, 1995; Bloom & Cooperman, 1999; Conture, 2001; Gregory, 2003; Guitar, 1998; Manning, 2001; Murphy & Quesal, 2002; Ramig & Bennett, 1995; Shapiro, 1999; Sheehan, 1970; Silverman, 2004; Van Riper, 1982).

Similar to earlier research, students with fluency disorders reported less confidence in their communication skills in public speaking, group discussions, interpersonal conversations, and with strangers than did students without disorders. The school environment promotes active learning, small group interactions, and public speaking. Fears or concerns about communicative participation in classroom or school activities may compromise opportunities for social interactions and skill building by adolescents who stutter. If these skills are not developed and practiced, students who stutter may be perceived as more introverted, quiet, submissive, antisocial, and less outgoing. These perceptions by peers could lead to negative stereotypes and could result in increased risk of being bullied.

Low confidence in communicative competence was also linked to low self-esteem. Avoidance strategies and a lack of confidence in communication skills could be a direct result of dealing with the negative consequences of stuttering. It may be that students who stutter elect not to participate in social interactions because of lack of experience, fear of failure, prior negative reactions, and increased communicative pressure and stress. This could result in increased isolation, negative stereotyping by peers, and poor self-esteem. Fortunately, the majority of students who stutter demonstrated positive self-esteem. As suggested in other research, many students who stutter appear to have developed protective techniques to maintain positive self-esteem even while receiving negative reactions from peers, teachers, and the public.

Our findings also support the earlier work of Hugh-Jones and Smith (1999), Langevin et al. (1998), and Mooney and Smith (1995), who reported that bullying and/or teasing was a problem for individuals who stutter. The finding that the risk of being bullied in adolescents who stutter is high when compared to their fluent peers should be of considerable concern. Speech-language pathologists need to be aware of this information as they often serve as the strongest advocates for students who stutter in the school setting. Concern about the potential for being bullied and the need for school personnel and parents to take proactive roles in monitoring and/or reducing bullying behaviors appear warranted. These findings lay the foundation for future research in this area.
REFERENCES


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