

**Perceptions about Bullying of Students with Autism Spectrum Disorder:  
A Survey of School-Based Speech-Language Pathologists**

by

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## Abstract

The purpose of the current investigation was to examine speech-language pathologists' (SLPs') knowledge and perceptions of bullying, with an emphasis on Autism Spectrum Disorder (ASD). A 46-item, web-based, nationally-distributed survey was used. Seventy school-based SLPs completed the survey. Results indicated that the majority of respondents considered bullying to be a problem in their schools. Participants demonstrated knowledge of many aspects of bullying research; however, demonstrated weaknesses in others. All respondents agreed that SLPs should intervene in moments of bullying, but not all indicated that they feel comfortable intervening. Only 20% of participants indicated that their school district implemented anti-bullying campaigns specific to children with special needs, such as ASD. As recognized experts in working with children with communication deficits, including individuals with ASD, SLPs have the opportunity to be proactive in bullying situations by creating safe environments, consulting with teachers and school personnel, and utilizing recommended response strategies to intervene.

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## **Chapter 1**

### **Introduction**

In recent years bullying in the schools has received significantly increased attention. According to the 2011 Nationwide Study of Bullying by the National Education Association (NEA), 43% of NEA members viewed bullying as a moderate or major problem in their schools, with 62% having witnessed bullying two or more times in the past month alone (Bradshaw, Waasdorp, O'Brennan, Gulemetova, & Henderson, 2011). In the same year, 28% of students aged 12-18 reported being bullied at school, and 9% reported being cyber-bullied during the school year (Robers, Kemp, Truman, & Snyder, 2013). A plethora of websites and organizations have been developed to increase awareness of this issue. Such websites and organizations include Pacer's National Bullying Prevention Center; the Ambassadors 4 Kids Club, which is dedicated to ending bullying and abuse through education; ViolencePreventionWorks.org, which features the Olweus Bullying Prevention Program; stopbullying.gov, which is managed by the U.S. Department of Health and Human Services; and thebullyproject.com, which highlights the social action campaign to end bullying as inspired by the film *Bully*. In addition, October is now recognized as National Bullying Prevention Month, which further reflects the impact of bullying on society (Chester, 2013).

Research has found bullying to be of greatest concern during elementary school and early adolescence, with a decrease in bullying as students reach the end of their high school years (Chapell et al., 2006; Espelage & Swearer, 2003; Frisé, Jonsson, & Perrson, 2007). Because adolescence marks a period in which students strive to "fit in" with their same-aged peers in order to be accepted, any atypical behavior, such as having a disability, puts the child at risk for bullying or victimization (Carney & Merrell, 2001). In fact, in 2006, the Office of the Children's



Commissioner in England found that children with disabilities were twice as likely as their peers to become victims of bullying (Mepham, 2010). With this in mind, it is important that teachers and school-based speech-language pathologists (SLPs) be mindful of the emotional or physical damage that could be occurring to their students who are being bullied. Speech-language pathologists in particular are uniquely suited for awareness of bullying, because students on their caseload may possess an array of disabilities, from stuttering to autism spectrum disorder (ASD). Students with ASD are especially at risk due to their deficits in communication and social skills (Cappadocia, Weiss, & Pepler, 2012; Schroeder, Cappadocia, Bebko, Pepler, & Weiss, 2014).

The Diagnostic and Statistical Manual of Mental Disorders-5<sup>th</sup> edition (DSM-5; 2013) lists a deficit in social communication/interaction as a primary criterion for diagnosis of ASD. The degree of social interaction exhibited by a child with ASD varies depending on where the child lies along the spectrum; however, any degree of deficits in social abilities places these children at greater risk for being bullied due to their deviance from the “norm” established by peers. Mepham (2010) reported that in 2006 the National Autistic Society found that 40% of children with ASD had been bullied that year. Similarly, Cappadocia and colleagues (2012) reported that bullying was twice as likely to happen among students with ASD as in the general population. These findings provide further support for the need for awareness of bullying for all students, especially those with disabilities or disorders.

The question for school-based speech-language pathologists may be what their role is in handling bullying of students with ASD or if it is within their scope of practice to intervene. Multiple published studies have reported that teachers and other school personnel are often unaware of most cases of bullying, considering that they sometimes lack the ability to interact with students individually, or students fail to report instances of bullying (Card & Hodges, 2008;

Carney & Merrell, 2001; Espelage & Swearer, 2003; Frisé et al., 2007; Peterson & Ray, 2006). Because SLPs are trained to be aware of the social deficits associated with ASD and spend time with these students individually or in small group sessions, they may have better opportunity to determine if students on their caseloads are being bullied than teachers and other school personnel (Hughes, 2014). Once bullying has been identified, a decision on intervention must be made. The decision on whether and/or how to intervene will no doubt be influenced by the SLP's knowledge and perception of bullying as it pertains to individuals with ASD.

## Chapter 2

### Review of the Literature

This chapter describes literature relevant to the research purposes of this thesis. It is organized into the following sections: a) Definition and Types of Bullying; b) Roles in Bullying; c) Outcomes Associated with Bullying; d) Bullying in the Educational System; e) Bullying of Children with Special Needs; f) Bullying of Children with ASD; and g) SLPs' Perceptions of Bullying.

#### **What is Bullying?**

Although bullying is a problem that has most likely existed throughout time, studies of its effects and implications have increased relatively recently (Olweus, 2003). According to Olweus, an often-cited expert in the field of bullying, efforts for studying bullying began in the 1970s with a focus on schools in Scandinavia. Norway followed suit in 1982, when the suicide of three 14-year-old boys due to severe harassment from classmates sparked the Ministry of Education to implement prevention programs against bullying in every primary and secondary school (Espelage & Swearer, 2003). Bullying of schoolchildren gained increased attention in the United States in the 1980s and early 1990s (Olweus, 2003). Many definitions of bullying have been established over these years of research, but Olweus' (1997; p.496) definition is the most widely cited and well-known. Olweus defined bullying as having three characteristics: (1) It is aggressive behavior or intentional "harmdoing"; (2) it is carried out repeatedly and over time; and (3) it is done in an interpersonal relationship characterized by an imbalance of power.

**Types of Bullying.** Researchers and experts in the field have identified four different types of bullying: physical, verbal, relational, and, most recently, cyberbullying (Beran & Li, 2005; Calvete, Orue, Estevez, Villardon, & Padilla, 2010; Chapell et al., 2006; Crick &

Grottpeter, 1995; Kowalski & Limber, 2007; Li, 2007; Lipton, 2011; Mishna, Saini, & Solomon, 2009; Perry, Kusel, & Perry, 1988; Slonje & Smith, 2008; Smokowski & Kopasz, 2005; Unnever & Cornell, 2004; Willard, 2007; Ybarra & Mitchell, 2004). Physical bullying involves overt, direct behaviors such as pushing, hitting, and kicking. In their article discussing aspects of school bullying, Smokowski and Kopasz (2005) described physical bullying as the least sophisticated, as this type is action-oriented, resulting in bullies being identified with ease. Wang, Iannotti, and Nansel (2009) investigated the four forms of bullying by collecting data from self-reports of 7,508 youth via the Health Behavior in School-Aged Children (HBSC) 2005/2006 Survey. Among the results, boys were found to engage in physical bullying most often. Twenty-eight percent of boys reported engaging in physical bullying, while only 14.3% of girls reported such involvement. With regard to the likelihood of victims reporting being physically bullied, Unnever and Cornell (2004) administered an anonymous survey to 2,437 students in six middle schools to examine factors that influence a student's decision to report being physically, verbally, or socially bullied at school. The survey identified 898 students who experienced bullying. Of these students, 25% of victims told no one that they had been bullied, while 40% did not tell an adult. Additionally, victims of physical bullying were slightly more likely to report their victimization to an adult than were victims of other types of bullying. Likelihood of reporting victimization increased if the child experienced chronic bullying.

Smokowski and Kopasz (2005) described verbal bullying as the use of hurtful words to humiliate or harm an individual. A common example is name-calling. While physical bullying can be stopped by peers or adults, it is difficult to intervene in verbal bullying because it happens rapidly. Once hurtful words have been said, they cannot be taken back. Thus, this type of bullying can be devastating for its victims. Chapell et al.'s (2006) study involving a retrospective

questionnaire of 119 college students' history of victimization found verbal bullying to be the most commonly used form of bullying among elementary school, high school, and college students. The study also found that bullies continue to use verbal means of abuse at all ages, and it is associated with students who also engage in physical bullying at the college level.

Relational bullying occurs through such means as spreading rumors, gossiping, and purposefully excluding peers from social groups (Crick & Grotpeter, 1995). While boys mainly bully through physical means, relational bullying is more commonly used by girls (Crick & Grotpeter, 1995; Smokowski & Kopasz, 2005; Wang et al., 2009). Wang et al.'s (2009) study of the HBSC found that 55.1% of girls reported being involved in relational bullying, in comparison to 47.5% of boys. Further, Crick and Grotpeter (1995) administered peer nomination instruments and self-report indices involving social-psychological adjustment and overt aggression to 491 third through sixth grade children from four public schools. Results indicated that girls engaged in relational aggression significantly more often than boys, with 17.4% of girls identified as belonging to a relationally aggressive group vs. 2.0% of boys. Additionally, significant social-psychological maladjustment was found to be related to relational bullying for girls, including depression, loneliness, social isolation, and poor peer acceptance. The authors explained that girls who bully may become disliked because of their relational aggression or their aggression may be a result of peer rejection. Girls involved in this type of bullying may be unhappy and distressed about their peer relationships, so they resort to bullying methods to compensate for their lack of friendships.

With the rapid growth of technology and the internet, the fourth type of bullying—cyberbullying—has become a major area of concern. Cyberbullying provides anonymity through electronic means such as the internet, text messages, phone calls, online chat rooms, e-mail, and

a variety of other media. Kowalski and Limber (2007) examined the pervasiveness of cyberbullying among 3,767 middle school students via completion of a questionnaire. The questionnaire included the Olweus Bully/Victim Questionnaire and an additional 23 questions exploring students' experiences with cyberbullying as both victims and perpetrators. Results indicated that almost half (48%) of cyberbullying victims did not know the identity of their bullies. However, victims also reported being cyberbullied by friends, siblings, and strangers. According to the authors, cyberbullying may appeal to bullies for several reasons: 1) For adolescents who are unlikely to engage in traditional bullying, the anonymity of cyberbullying allows them to seek revenge on traditional bullies without fear, and 2) The internet lacks non-verbal cues that convey an individual's emotional state, allowing perpetrators to deny that they are doing anything wrong due to lack of knowledge of the victim's feelings. Using a survey about cyberbullying administered to 360 adolescents (12-20 years old) in Swedish schools, Slonje and Smith (2008) found that cyberbullying may also be chosen by bullies because of the large audience they can reach. While traditional bullying usually involves only a small group of bullies and bystanders, cyberbullying provides endless opportunities for individuals to view the method of bullying, such as posting an embarrassing picture on the internet.

Willard's 2007 book on cyberbullying describes multiple cyberbullying strategies, including flaming, denigration, impersonation, trickery, outing, exclusion, and cyberstalking. Flaming begins as a normal chat room interaction but intensifies to contentious online arguments between two or more kids. As it usually occurs in a public online environment, such as a chat room or discussion board, it can be restricted to two users or can involve many users, and it can cause strong emotional reactions. The duration of flaming is usually short, unless the child continues to participate in the chat room.

Another strategy, denigration, involves a malicious rumor being spread through various media, such as e-mail or text messaging, with the intention of humiliating or embarrassing the victim or denigrating the victim's character and reputation. Further, impersonation occurs when a victim's online identity is stolen, and the bully poses as the victim to execute such acts as sending fake e-mails or altering profiles on social networking sites. This serves to humiliate the victim or make it seem as though the victim sent hateful messages to their friends. Trickery, a popular cyberbullying strategy, is achieved by a cyberbully encouraging a victim to share messages or images under the pretense that the information will remain private, all the while tricking the victim into saying something embarrassing that the cyberbully will then send to other individuals. Similar to trickery, outing involves publicly posting or sending information or images that were meant to remain private, such as distributing pictures of a sexually explicit nature that were only meant for an individual's partner to see. Exclusion occurs through blocking victims from online social activities, similar to being excluded from groups outside of the internet. Finally, cyberstalking often results from ending an in-person or online sexual relationship and involves messages that are sent repeatedly, threaten the victim, include highly intimidating or offensive remarks, or involve extortion.

Willard (2007) also discusses online harassment, another cyberbullying strategy that involves the exertion of power and control over victims and can result in humiliation and distress. Harassment is defined as "an intentional and overt act of aggression toward another person online" (Ybarra & Mitchell, 2004, p. 320). In a clinical report about the impact of social media, O'Keeffe and Clarke-Pearson (2011) explain that the terms "online harassment" and "cyberbullying" are often used interchangeably, but online harassment is an entity of its own. According to the National Conference of State Legislatures (2013), cyberharassment includes

threatening or harassing emails, instant messages, blog entries, or websites with the purpose of tormenting a targeted individual. In an article discussing abusive online conduct and methods by which victims can legally protect themselves, Lipton (2011) noted that online harassment has the power to damage a person's reputation, and it can include sexual harassment.

Jones, Mitchell, and Finkelhor (2012) used three separate Youth Internet Safety Surveys to assess the trends in 1,500 youth reports of online sexual solicitation, harassment, and exposure to pornography over time. Participants were aged 10 through 17 years, and data was collected in 2000, 2005, and 2010. In the area of online harassment, there was an increase of 11% reported in 2010 from 9% in 2005 and 6% in 2000. These results suggest that the likelihood of an individual to experience the negative effects of online harassment is rising. With all of this in mind, cyberbullying can have injurious effects on victims, as will be discussed below.

### **Roles in Bullying**

According to Olweus (1997), bullying interactions consist of more than just one type of bully and victim. Instead, there are multiple characteristics of both bullies and victims. These characteristics can include popularity, aggressiveness, passivity, and reactivity. In addition, individuals who take part in the bullying cycle are not always simply a bully or a victim. Haynie et al. (2001) described an additional category to be discussed—the bully-victims, who are both victims and perpetrators in the bullying cycle. Finally, bystanders also play an important role in bullying. These children are aware of bullying but ignore it. Bystanders' roles within the bullying cycle may negatively or positively affect the outcome of victimization, as their silence can be interpreted by bullies as approval and can perpetuate bullying (Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996).



**Characteristics of bullies.** In his discussion of bully/victim problems in school, Olweus (1997) defined bullies as having an aggressive reaction pattern combined, in the case of boys, with physical strength. Bullies are aggressive toward not only their peers, but also teachers and parents. They tend to view violence more positively and have a need for dominance of others, and they are characterized by impulsivity and lack of empathy. Adding to their discussion of characteristics of bullies, Smokowski and Kopasz (2005) noted that bullies can be either popular aggressive, who befriend other popular children without fearing negative social stigmas due to their aggression, or unpopular aggressive, who are rejected by other children. Additionally, a subtype of bullies includes passive bullies, also known as henchmen; this is a mixed group that may include anxious or insecure children (Olweus, 1997). Another subtype of bullies, reactive bullies, are the most difficult to identify, as they taunt others into fighting them but then claim self-defense (Smokowski & Kopasz, 2005).

Olweus (1997) offered three interrelated motives for the psychological sources underlying a bully's behavior: 1) Bullies have a need for power and dominance; 2) they may have developed hostility towards the environment, depending on the family environment in which they were raised; and 3) their behavior contains an "instrumental component" for demanding victims to give them such items as money, cigarettes, and beer (p. 500). Due to the aggressive and antisocial nature many bullies develop, their actions as young people can lead to later criminality. This idea is discussed further in a later section.

The environment in which a child was raised can have a large impact on a child's development of aggression. Olweus (1980) retrospectively interviewed the parents of 76 13-year-old boys and 51 16-year-old boys in Sweden to determine the effect of childcare conditions and temperamental characteristics on the development of aggression. Four factors that can cause

children to develop aggression were identified: 1) parents' negative emotional attitude, characterized by lack of warmth and involvement in the child's life; 2) parents' tolerance of aggressive behavior; 3) parents' use of power-assertive methods for raising a child, including physical punishment and harsh emotional outbursts; and 4) the child having an active and "hot-headed" disposition. The cycle of aggression may continue as children practice the behaviors they learn at home in their school.

**Characteristics of victims.** A different set of psychological and environmental factors characterize victims. Olweus (1997) discussed that opposite from bullies, who have positive attitudes toward violence and physical strength, victims have negative perceptions of violence and tend to be physically weaker. The most common type of victims—passive/submissive victims—are generally anxious, insecure, cautious, sensitive, and quiet. They also may suffer from low self-esteem and may consider themselves to be unattractive or lacking worth, thus blaming themselves for their victimization. In most situations, victims have very few, if any, friends for emotional support and feel abandoned at school. Their reactions to bullying commonly include crying, especially in the lower school grades, and withdrawal. Wang and colleagues' (2009) collection of data from the Health Behavior in School-Aged Children (HBSC) 2005/2006 Survey also investigated forms of bullying and their association with multiple factors, including friendship. Results indicated that children's relationships with others influenced their susceptibility to being bullied, as there was a negative relationship between having more friends and being physically, verbally, or relationally bullied. Therefore, children with a strong group of friends are more likely to be protected. However, Olweus (1997) noted that being bullied can drive friends away in their effort to avoid victimization, leaving victims vulnerable to further bullying.

Olweus (1997; p. 500) also described a much less common type of victim—the “provocative victim,” who is characterized by “both anxious and aggressive reaction patterns.” Provocative victims generally have attention problems and poor concentration. Their hyperactive, disruptive nature causes tension and frustration among their peers. In their discussion of psychosocial characteristics of bullies and victims, Carney and Merrell (2011) noted that like passive/submissive victims, provocative victims also suffer from low self-esteem. Due to their behavior, these children often fall among the least liked of their peers, putting them at greater risk of being bullied.

The home environment can also predict victimization at school. Ladd and Ladd (1998) examined the relationship between parenting behaviors and the parent-child relationship to determine if these behaviors could predict peer victimization. The authors videotaped 197 kindergarten children and their primary caregivers during multiple interactional tasks in participants’ homes. Teams of raters analyzed the videos for caregivers’ behaviors (i.e., intrusiveness, demandingness, and responsiveness) and parent-child interactions (i.e., positive engagement and emotional intensity). Additionally, the children were administered a self-report scale at school to determine peer victimization. Results indicated that intrusive demandingness (i.e., parenting behavior that rules children’s decisions and social influences, therefore causing children to be passive and have less power) was associated with high rates of peer victimization as reported by children. On the other hand, high levels of responsiveness were associated with lower reported levels of victimization. Children’s genders were also considered; high intrusive demandingness and low responsiveness affected the likelihood of victimization for both girls and boys, while only boys experienced higher levels of victimization due to intense closeness in the parent-child relationship. In sum, parent-child relationships defined by being demanding,

overprotective, and unresponsive can create a social atmosphere in which children learn to be passive, thus increasing their risk of victimization by peers.

**Characteristics of bully-victims.** In some situations, an individual who is bullied also becomes an aggressor. This forms another role in the bullying cycle—that of the bully-victim. For instance, someone who is physically bullied at school may go home and cyberbully someone else, which serves to displace his or her aggression. Within the literature it is also noted that bully-victims experience the least favorable psychosocial functioning (Frisén et al., 2007; Haynie et al., 2001; Kaltiala-Heino, Rimpelä, Marttunen, Rimpelä, & Rantanen, 1999; Swearer, Song, Cary, Eagle, & Mickelson, 2001). To investigate problem behaviors and psychosocial variables involved in bullying, Haynie et al. (2001) administered a survey to 4,263 middle school students in one Maryland school district. More than half of participants who reported being bullied three or more times over the past year ( $N = 301$ ) also reported being victimized three or more times as well (53%;  $N = 159$ ). This group of bully-victims was characterized as belonging to deviant peer groups with less positive friendships and poor social-functioning, exhibiting depressive and problematic behaviors, and having lower self-control, when compared to peers who had not been bullied or victims. Interestingly, bully-victims also scored less favorably than both bullies and victims on all measures presented in the study. The authors noted that these antisocial behaviors at young ages may continue into adulthood as well.

Ybarra and Mitchell (2004) added additional support to the concept of the bully-victim. Using the Youth Internet Safety Survey (YISS), a telephone survey of 1,501 youth who regularly use the internet, findings indicated that 51% of internet harassers (versus 30% of non-harassers) had been targets of traditional bullying, and 20% (versus 4% of non-harassers) were targets of internet harassment themselves. In comparison to cyberbullies uninvolved in traditional bullying,

those involved in bullying as victims offline were considerably more likely than other individuals to become cyberbullies.

Through a questionnaire regarding 119 Swedish high school students' bullying experiences throughout their school years, Frisé and colleagues (2007) found that bully-victims were bullied mainly during an earlier time period than they bullied others. The ages of victimization were reported as being between seven to nine years of age, and the ages of bullying were between 10 to 12 years of age. These results suggest that bully-victims may remain in the bullying cycle for a number of years, becoming more ingrained in the cycle's deleterious effects.

**Characteristics of the bystander.** Because bullying is a group process, bullies are generally accompanied by other participants who allow the bullying to continue (Salmivalli et al., 1996). Salmivalli and colleagues (1996) administered a questionnaire targeting 573 12-13 year old children in 11 Finnish schools to study roles in bullying. As discussed by the authors, beyond the bully's friends who encourage bullying are other children in school who are aware of bullying but ignore it. By ignoring the victimization of their classmates, these bystanders allow the bullying cycle to continue, as bullies may interpret their silence as approval. In many cases bystanders may not intervene for fear of being victimized themselves if they already have a low social status. Salmivalli and colleagues also noted that research associated with group behavior and sociometric status suggests that social approval is associated with obedience to rules, suggesting that children and adolescents may therefore prefer to follow established social "rules" than to defy them.

In their questionnaire, Salmivalli et al. (1996) referred to bystanders as having Participant Roles, breaking up these roles into Bully, Reinforcer of the bully, Assistant to the bully, Defender of the victim, and Outsider. They described Assistants as being active followers of the

Bullies, who were described as being active and initiative-taking and having leadership qualities. Reinforcers were said to act in ways that encourage bullies, such as laughing or providing an audience for the bully. Outsiders stayed away from and did nothing about bullying situations. Differently from the aforementioned roles, the Defenders were those who supported and consoled victims, along with actively attempting to make bullies stop.

Results of this study found that 87% of students assumed Participant roles, with the most common being Outsider, Reinforcer, and Defender. Defenders and Outsiders were more likely to be girls, with 30.1% and 40.2% respectively, while Reinforcers (37.3%) and Assistants (12.2%) were more likely to be boys. Salmivalli and colleagues suggested that the differences in gender in Participant roles could be due to the fact that “boys use aggression to create social order,” while girls are generally expected to be more prosocial and caring (p. 11). Interestingly, out of all of the Participant roles, Defenders had the highest status. Because Defenders already had a high social status, they did not have to fear being victimized themselves.

Considering that bullying occurs along numerous levels, including four levels of bystanders, bullying can be said to fall along a continuum of behaviors (Bosworth, Espelage, & Simon, 1999; Espelage & Swearer, 2003). Following this idea, children and adolescents may be neither “pure victims” nor “pure bullies,” but may play different roles along the continuum of the bullying cycle (Hong & Espelage, 2012, p.312).

### **Outcomes Associated with Bullying**

In their review of the literature on bullying and victimization in *School Psychology Review*, Espelage and Swearer (2003) noted that the common link between all definitions of bullying is that bullying is a subset of aggression. Dodge and Coie (1987) completed four studies to examine two types of aggression expressed in children’s peer groups: proactive (instrumental)

and reactive (hostile) aggression. The authors defined proactive (instrumental) aggression as a planned event characterized by lack of emotion and deliberateness, with the goal of obtaining a certain outcome, such as dominance. Reactive (hostile) aggression was defined as a less controlled outburst of anger that occurs in response to others' threatening behaviors, such as provocation or frustration

In their second study, Dodge and Coie (1987) completed assessments by 339 first- and third-grade boys to examine behavioral correlates of proactive and reactive aggression. The first step of the study involved asking children to name three peers they liked the least and three peers they liked the most, followed by teachers of all 339 participants completing a teacher-rating instrument to identify subgroups of rejected boys in their classrooms. Students were then instructed to choose three peers who fit eight behavioral descriptions—athletic, fights, unhappy, leader, bothersome, humor, angry, and helpful. Results indicated that proactive and reactive aggression were both related to social rejection; however, the profiles of the two types of aggression differed. Although proactively aggressive boys were characterized as being bothersome, disruptive, and intrusive, they were also viewed with some positive aspects, such as being leaders and having a sense of humor. Those with reactive aggression, on the other hand, were viewed as aggressive and bothersome without any positive aspects. Bullies may display one or both forms of aggression.

Regardless of the type of aggression being expressed, victims of persistent bullying may suffer physical and/or psychological damage (Batsche & Knoff, 1994; Carney, 2000; Chapell et al., 2006; Erling, 2002; Espelage & Swearer, 2003; Hinduja & Patchin, 2010; Rigby & Slee, 1999). A myriad of negative mental health consequences of bullying exist, including anxiety (Chapell et al., 2006; Espelage & Swearer, 2003; Hazler, Hoover, & Oliver, 1992), depression

(Chapell et al., 2006; Espelage & Swearer, 2003), suicidal ideation (Carney, 2000; Chapell et al., 2006; Erling, 2002; Hinduja & Patchin, 2010; Rigby & Slee, 1999), and stress or fear of environments in which bullying occurs (Jacobson, Riesch, Temkin, Kedrowski, & Kluba, 2011). Carney (2000) identified other signs of victimization from a study using a fictional scenario of direct bullying of a boy named Ricki, who was chronically bullied verbally and physically; the School Bullying Survey; and the Suicide Probability Scale (SPS), which were all administered to 201 middle and high school students. These signs, as indicated in reaction to the fictional peer abuse story, included hopelessness, helplessness, isolation, poor interpersonal skills, and low self-esteem, all of which were also judged to be warning signs of suicidal behavior on the SPS.

Further, Jacobson and colleagues (2011) assessed the prevalence and after-effects of feeling unsafe in schools as reported by students. For their study, 243 fifth-grade students completed the Children's Health Risk Behavior Scale (CHRBS). Fifty-seven (23.8%) students reported that they sometimes or always felt unsafe at school due to teasing, bullying, or other threats. Of these 57 respondents, 21 (36.9%) also felt unsafe on the way to or from school. Students also reported after-effects of feeling unsafe to include skipping school, avoiding school-related activities, fearing for safety and feeling at risk for violence or bullying due to race or color, and developing stress. According to the Center for Disease Control and Prevention's 2013 Youth Risk Behavior Surveillance in the United States, the prevalence of not attending school due to feeling unsafe increased from 4.4% in 1993 to 7.1% in 2013, and the percentage of students who skipped school on at least one occasion in the 30 days prior to the survey was 7.1% (Kann et al., 2014). Results from the two above surveys suggest that bullying can create an environment in which students feel unsafe, anxious, and stressful, which may cause decreased academic performance.



Hazler and colleagues (1992) provide further support for the impact of bullying on academic performance. The authors surveyed 204 middle- and high-school students to examine how bullying affects students in these grade levels. A total of 75% of students reported being bullied, and 90% of students who were bullied reported that their school grades declined. Further negative effects of being bullied included anxiety and a loss of friends.

According to Tokunaga (2010), in his review of research on cyberbullying, victims' responses to traditional bullying and cyberbullying vary from trivial frustration to significant psychosocial issues. Carney and Merrell (2001) also discussed that responses may reach extreme measures, such as acts of retribution or suicide. According to the authors, victims are more likely to take weapons to school than non-victims, and some school shootings have been linked to bullying. Investigating familial or psychological profiles of school shooters for the Safe School Initiative, the U.S. Secret Service interviewed friends, families, and neighbors of 41 school shooters (between 1974-2000) and found that 71% had been bullied (Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2002).

Abuse can at times be internalized to the point of victims taking their own lives (Hinduja & Patchin, 2010; Rigby & Slee, 1999). Rigby and Slee (1999) utilized self-reports and peer nomination procedures to identify bullies and victims from samples of adolescent students in South Australia ( $N=1103$  and  $N=845$ ), and they found a significant relationship between involvement in bully/victim problems at school and degree of suicidal ideation. Likewise, Hinduja and Patchin (2010) surveyed 1,963 middle school students to determine their use and experiences of the Internet and to examine the relationship between cyberbullying and suicidal ideation. Results indicated that victimization was strongly related to suicidal thoughts and suicide attempts, as 20% of respondents reported suicidal ideation and 19% reported attempting

suicide. There are numerous tragic stories of young people committing suicide as a result of bullying. In 2010, *The New York Daily News* reported that 15-year-old Phoebe Prince hanged herself after continuous taunting from a group of students at school (Kennedy, 2010). In early 2012, *The New York Times* ran the story of 15-year-old Amanda Cummings, who jumped in front of a bus after being bullied by classmates both at school and on Facebook (Flegenheimer, 2012). In 2013, *The Ledger* reported that 12-year-old Rebecca Sedwick jumped to her death from a silo at an abandoned cement plant after months of being cyberbullied by up to 15 girls (Allen, 2013). Also in 2013, *The New York Daily News* ran the story of 15-year-old Bart Palosz, who shot himself after years of violent bullying at school, such as his head being bashed into a metal locker (Golgowski, 2013). The consequences of persistent bullying can be devastating.

Perpetrators of bullying can also incur negative mental health consequences. Hinduja and Patchin's (2010) survey results also discovered that offenders, as well as victims, of traditional bullying or cyberbullying had suicidal thoughts. In comparison to individuals uninvolved in the bullying cycle, offenders of traditional bullying were 2.1 times more likely to have attempted suicide, while offenders of cyberbullying were 1.5 times more likely to have attempted suicide. Sourander, Helstela, Helenius, and Piha's (2000) eight-year longitudinal study using repeated scales, checklists, and self-reports also discovered that both bullies and victims in Finland reported high levels of depressive symptoms at age eight and again eight years later.

Another aftereffect of bullying behavior in adolescence cited in the literature is later criminality (Olweus, 2011). Olweus (2011) determined that bullies can exhibit significant anti-social behaviors later in life, based on findings from his longitudinal study of criminal activities of 780 former male school bullies in Sweden. In this study, home room teachers and one additional teacher were asked to identify bullies who fit a given definition of a bully, and four to

six randomly selected boys from each classroom were asked to identify bullies by rating classmates on three dimensions of aggressive behavior (start fights, verbal protest against teacher, and hurtful teasing of other boys). Initial identification of bullies occurred during grades six and eight. Crime data was later obtained from the official crime register for a time period of eight years, when the bullies were between the ages of 16 to 24. Two dimensions of crimes were analyzed: Total crimes resulting in convictions (i.e., traffic offenses, theft, burglary, vandalism, maltreatment, fraud, drugs, alcohol) during the eight year period and violent crimes against an individual (i.e., maltreatment). During this time period, approximately 55% of former school bullies had been convicted of one or more crimes, while 36% had been convicted of at least three crimes. Former bullies were more than five times higher than non-bullies to have been convicted of at least three crimes in the total crime category, and odds for bullies were more than six to eight times greater than for non-bullies for violent crimes.

Chappell et al. (2006) studied the continuity of bullying and victimization from elementary school through college via a bullying self-report questionnaire administered to 119 undergraduate students. The authors found a connection between being a bully in elementary school, high school, and college. Twenty-five participants identified as having been bullied in high school and elementary school; 18 (72%) of them bullied others in college. Additionally, of 26 participants who identified as bullies in college, 14 (53.8%) reported being bullies in high school and elementary school. Finally, 12 respondents reported being bully-victims in college; of these, 5 (41.6%) reported being bully-victims in high school and elementary school. These results suggest that individuals may engage in hostile behavior throughout their development into young adulthood.

## **Bullying in the Educational System**

Bullying may occur frequently in the educational system, where children form peer groups that often conform to certain standards and differ among grade levels. Bullying is affected by teacher and school attitudes toward bullying (Cortes & Kochenderfer-Ladd, 2014; Unnever & Cornell, 2004; Waasdorp, Pas, O'Brennan, & Bradshaw, 2011), gender (Crick & Grotpeter, 1995), and grade level (Pellegrini & Bartini, 2000). The severity and frequency of bullying often depend on the extent to which teachers and other school administrators intervene in incidents of bullying (Kochenderfer-Ladd & Pelletier, 2008). Students often consider teachers to be unaware of bullying or doubt that teachers will take an active role in intervention; therefore, they are less likely to report these incidents (Cortes & Kochenderfer-Ladd, 2014; Craig, Pepler, & Atlas, 2000). Further, bullying differs between genders, as separate genders tend to engage in different bullying behaviors (Crick & Grotpeter, 1995; Kowalski & Limber, 2007; Olweus, 1997), and grade levels, as bullying tends to increase in late elementary school and decrease during high school (Pellegrini & Bartini, 2000).

**Teacher and school attitudes toward bullying.** The degree to which teachers and other adults express concern about bullying may significantly affect bullying situations (Cortes & Kochenderfer-Ladd, 2014). Although questionnaire and survey studies have reported that teachers view bullying as a serious problem (Craig, Bell, & Leschied, 2011; Dake, Price, & Telljohann, 2003; Plexico, Plumb, & Beacham, 2013), adults are often unaware of bullying, thus inadvertently perpetuating the bullying cycle by failing to intervene (Craig et al., 2000). Indeed, incidents of bullying may go unnoticed by adults, as they can occur subtly, such as passing malicious notes in the classroom, or occur in areas in which adults are absent (Card & Hodges, 2008). Areas of minimal adult supervision include the lunchroom (Leff, Power, Costigan, &

Manz, 2003), the walk to and from school (Boulton & Underwood, 1992), playgrounds (Craig et al., 2000), hallways (Smokowski & Kopasz, 2005), and bathrooms (Card & Hodges, 2008); consequently, adults may be unlikely to observe bullying episodes in these locations.

Craig and colleagues (2000) observed bullying and victimization in the playground versus the classroom to examine opportunities for bullying and teacher awareness. The authors video- and audio-recorded Canadian elementary students during recess and in the classroom, finding that students had more opportunities to observe, receive, and initiate aggression on the playground than in the classroom. Bullying episodes were more frequent on the playground, occurring 4.5 times per hour versus 2.4 episodes per hour in the classroom. The nature of bullying also differed with location—direct bullying was more common on the playground, where there was less supervision, while indirect bullying, which is more difficult to detect, was common in the classroom. The authors noted that teachers only intervened 15% of the time on the playground and 18% of the time in the classroom, but this lack of intervention could be due to lack of awareness or difficulty detecting bullying.

Further, school and teacher attitudes toward violence influence victims' likelihood of reporting bullying (Cortes & Kochenderfer-Ladd, 2014; Unnever & Cornell, 2004; Waasdorp et al., 2011). Based off of responses from self-reports of middle schoolers, Unnever and Cornell (2004) determined that if a school generally tolerates or overlooks bullying, victims are much less likely to seek help from school personnel. Waasdorp and colleagues (2011) collected multilevel data from a web-based survey administered to 11,674 students, 960 parents, and 1,027 staff in 30 elementary, nine middle, and five high schools. The survey consisted of questions regarding the association between school-level indicators of disorder, norms of bullying and bullies, and participants' views of safety, belonging, and witnessing bullying. Similar to findings

from Unnever and Cornell (2004), results indicated that if a school tolerated bullying and bullies were viewed as popular, both students and staff were less likely to report bullying, whereas schools in which bullies were disliked created an environment in which students and staff felt more safety and belongingness and were likely to report bullying.

Additionally, Cortes and Kochenderfer-Ladd (2014) examined student willingness to report bullying based on the environment teachers created in the classroom. Thirty-eight third and fifth grade teachers administered questionnaires to their eight- to 10- year old students. Questionnaires completed by students addressed the topics of the degree to which children would be willing to involve their teachers if bullying occurred, perceptions of how their teachers would intervene in bullying episodes, the degree to which children blame their own behavior for being victimized, peer victimization, and a peer rating system based on how much each classmate “picks on others.” Teachers also completed a questionnaire examining closeness of the teacher-student relationship. Results indicated that when teachers created classroom environments that are positive and supportive, students felt more comfortable telling their teachers about social problems at school. Levels of classroom victimization dropped in classrooms where students felt safe to report bullying. Willingness to report bullying was also linked to students’ belief that teachers would actively intervene in bullying situations; this was a greater predictor of reporting than characteristics such as grade level, personal blame, and level of aggression. Therefore, teachers have a strong role in influencing bullying, as lack of intervention results in students failing to report bullying and the bullying cycle to continue.

Several studies have suggested that school personnel inadequately respond to bullying at school. Craig, Henderson, and Murphy (2000) administered a survey to 116 prospective teachers in Canada to assess their attitudes toward bullying. Results from multiple regression analysis

indicated that prospective teachers viewed physical bullying as more serious and were less likely to intervene in verbal bullying. Further, Boulton and Underwood (1992) administered a modified version of the Olweus self-report Bullying Inventory to 296 British middle-school students, finding that only one-third of participants reported teachers as “almost always” intervening in bullying situations. This study also observed that teachers often pay more attention to the bully than to the victim.

Kochenderfer-Ladd and Pelletier (2008) conducted a study in which questionnaires were administered to both teachers ( $N = 34$ ) and elementary-age students ( $N = 363$ ) to determine teacher’s management of bullying in relation to children’s coping strategies. Results indicated that common suggestions given to children who are being bullied include telling them to ignore the bully and walk away from the situation, but these types of avoidance behaviors are ineffective and often result in increased bullying. If school personnel fail to express concern or share advice about bullying, students may not feel comfortable approaching them for guidance and support (Cortes & Kochenderfer-Ladd, 2014).

To understand what students themselves perceive to be effective strategies in bullying situations, Davis and Nixon (2010) sent an online questionnaire to 11,893 students in the 5<sup>th</sup>-12<sup>th</sup> grades across 12 states and 25 schools. Students reported the three most beneficial strategies employed by adults to be listening to the victim, giving the victim advice and encouragement, and checking in with the victim later to see if the behavior had stopped. The least beneficial strategies included telling the victim to solve the problem himself/herself, telling the victim that if he/she had acted differently the bullying would not have happened, ignoring the bullying situation, and telling the victim to stop tattling. Blaming students and telling them to stop reporting bullying were linked with bullying situations getting worse, whereas strategies

extending support to the victim (i.e., listening, giving advice, and checking in) were associated with more positive outcomes. These results provide further support for the importance of proactive reactions to bullying situations instead of promoting avoidance behaviors or blaming the victim.

**The role of grade level and gender.** Often the driving force behind bullying is the desire for acceptance among social groups (Pellegrini & Bartini, 2000). Bullying is most common in early adolescence (11-14 years of age; 6<sup>th</sup>-9<sup>th</sup> grade; Hazler, 1996). As these children move schools from fifth grade to sixth grade, they make the transition from being the oldest students in elementary schools to being the youngest, and usually physically smallest, students in middle schools, which puts them at risk for being bullied by older students (Pellegrini & Bartini, 2000). Fear of being bullied, mixed with the need to find a place in the social hierarchy of middle school, drives adolescents to bully if they find this behavior to be socially advantageous, with the outcome of their actions achieving greater popularity among older students (Pellegrini & Bartini, 2000). In addition, adolescents who lag in physical strength or social skills may be the targets of the physically stronger, more outspoken students who become bullies; thus, social roles change significantly during these transitional years (Carney & Merrell, 2000).

Pellegrini and Bartini (2000) collected data from 292 teachers and students in the fifth and sixth grades to examine the relationship between transitioning schools at this age and bullying/peer affiliation. The authors explained that upon entering groups of older and physically larger students, young students' status declines, so they must establish their status within the group. A cost-benefit analysis guides students' decisions in whether or not to engage in these behaviors, as they must decide if the children involved, the social context of the interaction (such as school policies), and the value of the resources motivating the interaction (being peer status)



will provide the benefits they seek. In order to achieve dominance, they resort to “deliberate agonistic strategies,” such as hitting, threatening, or social exclusion (p. 701). The authors found via peer nomination measures, a rating of school transition, and children’s self-reports that rates of bullying increased when students switched to sixth grade because of this need for establishing dominance, but once their roles were established, rates of bullying typically declined. In addition, social isolation increased from the end of fifth grade to the start of sixth grade and then declined near the end of sixth grade. However, regarding cyberbullying, higher rates have been reported on questionnaires in the eighth grade than sixth, possibly due to the fact that older children become more skilled with electronics and the internet, and they also begin joining social network sites (Kowalski & Limber, 2007).

Gender also plays a role in the cycle of bullying. The majority of bullies and victims are male (Carney & Merrell, 2000; Olweus, 1997; Pellegrini & Bartini, 2000), but girls exhibit bullying behaviors as well (Crick & Grotpeter, 1995). Using a peer-nomination instrument administered to third- through sixth-grade children, Crick and Grotpeter (1995) found that on average, both boys and girls exhibit distinct bullying behaviors: girls mainly use relational aggression, while boys usually employ overt aggression. While some studies (Chisholm, 2006; Kowalski & Limber, 2007) have found girls to be likely to cyberbully due to its indirect form of aggression, the literature lacks a definitive answer for which gender cyberbullies most often, with other studies (Hinduja & Patchin, 2008; Slonje & Smith, 2008; Smith et al., 2008; Tokunaga, 2010; Ybarra & Mitchell, 2004) showing no significant gender difference.

In part of their study, Pellegrini and Bartini (2000) analyzed the interactions of gender and emotionality on aggression via teacher completion of a temperament measure and check list regarding students’ emotional intensity and social competence. Interestingly, the authors found

that boys were rated by teachers as more emotional than girls, and they were also rated more highly than girls for reactive aggression. Regarding proactive aggression, Pelligrini and Bartini also found that boys remained stable in this type of aggression from fifth to sixth grade and were rated as more proactively aggressive than girls in sixth grade, while girls' proactive aggression decreased from fifth to sixth grade. Further, results suggested that more girls than boys held negative values toward bullying. These findings indicate that the role of gender in bullying is a significant indicator of who may bully, who may become victims, and what method(s) of bullying may be used.

### **Bullying of Children with Special Needs**

While much of the research on bullying has focused on general education, a small, but growing, amount of the literature focuses on bullying of children with special needs and disabilities. Of the literature that does exist, the consensus is that children with special needs are particularly vulnerable to being bullied (Flynt & Morton, 2004; Hadley & Rice, 1991; Knox & Conti-Ramsden, 2003; Mepham, 2010; Reiter & Lapidot-Lefler, 2007; Rose, Espelage, & Monda-Amaya, 2009; Thompson, Whitney, & Smith, 1994). Similar to the profile of victims presented by Olweus, children with special needs may have fewer friends (Hadley & Rice, 1991), are physically or mentally weaker than their peers (Flynt & Morton, 2004; Rose et al., 2009), and may be socially impaired (Reiter & Lapidot-Lefler, 2007). Reiter and Lapidot-Lefler (2007) also found challenging behaviors—including temper tantrums, arguing with others, being unruly, and lying and stealing—to be a factor involved in bullying. The authors distributed the Harassment/Bullying Questionnaire to 186 students with intellectual disabilities, aged 12-21 years, in special education schools in Israel. Students completed the questionnaire individually, and teachers also evaluated each of their students regarding students' aggression, social skills,

and social adjustment. Eighty-three percent of students reported being bullied by such means as being sworn at, laughed at, “told rude, nasty things,” physically assaulted (e.g., beaten, pinched, pushed, kicked), threatened, forced to do things they did not want to do, had property stolen, and were sexually touched without consent (p. 178). Results from the Social Skills Rating System completed by teachers indicated that bullies, victims, and bully-victims with special needs all lacked appropriate social skills, such as introducing oneself, being helpful to others, and exercising self-control. The social adjustment questionnaire found that being a bully was correlated with being hyperactive and having behavior problems, while being a victim was correlated with having emotional problems and difficulties with interpersonal relationships.

In a study assessing peer interaction among preschoolers, Hadley and Rice (1991) observed conversational responsiveness among preschoolers who were normally developing ( $n = 6$ ), marginal ( $n = 4$ ), language impaired (LI) ( $n = 4$ ), and speech impaired (SI) ( $n = 4$ ). Children were observed in an integrated classroom setting during free play on six separate occasions, each of which was four minutes long, totaling 24 minutes of data per child. These video fragments were stored in an online coding system. The authors examined choice of play area and conversational partners within verbal interactions via the coding system, paying specific attention to responses that followed attempts at interaction. Results indicated that LI and SI children experienced significantly less social interaction with peers than did marginal or normal-language children. Percentages of time spent with peers were 45% for marginal children, 51% for normal-language children, 35% for LI children, and 34% for SI children. Additionally, in comparison to children with normal and marginal language, children with SI and LI were ignored during attempts of initiation with peers twice as often. In general, language-impaired and

speech-impaired children were found to be more likely to be ignored by their normally-developing peers, as children preferred other normally-developing peers as companions.

In an article presenting factors and characteristics that make children and youth with learning disabilities more vulnerable to bullying, Mishna (2003) described that low social status, poor peer relationships, and rejection by peers leave students with intellectual disabilities outside the safety network of friends and put them at an increased risk for victimization. Additionally, in their article describing the relationship between bullying and students with disabilities, Flynt and Morton (2004) described further characteristics that may cause children and adolescents with intellectual disabilities to be bullied as including having low self-esteem, looking to others for guidance, and lacking awareness of an impending unsafe situation. Flynt and Morton also noted that bullies may target these individuals for being weaker, as moderate to low functioning children are likely to have motor skill deficits, physical impairments, or health impairments.

According to Mepham (2010), the Royal Mencap Society, a charity that works with individuals with learning disabilities in the United Kingdom, has devoted research to what they call “disablist bullying.” One survey study involved reports from 507 children and adolescents with learning disabilities in which participants drew or wrote responses to questions in order to communicate their answers to an adult assigned to support each child. Results indicated that six out of 10 children with a learning disability reported being physically bullied, with some instances escalating to assault or abuse. Seven out of 10 children with a learning disability reported verbal abuse, and many also reported social exclusion, theft of their possessions, manipulation to be involved in inappropriate activities, and bullying in multiple areas of the community instead of just school. For four out of 10 children, telling adults was not effective in reducing or eliminating bullying, as their claims of bullying were not taken seriously or handled

adequately. Eight out of 10 children reported being scared to leave their homes for fear of bullies. Feelings of sadness, anxiety, and distress negatively impacted these children's social experiences, with some families even moving to escape bullying. Mepham suggested that the negative stigma associated with learning disabilities perpetuates the disablist bullying cycle, as these children are viewed as "easy targets" due to their lack of understanding. Mencap's findings support the notion that children with disabilities have a high risk of encountering bullying; however, this study did not provide comparative data for children without learning disabilities.

Thompson et al. (1994) examined whether children with special needs truly did encounter more bullying than their same-age peers without disabilities. Ninety-three students without special needs in England between the ages of eight and 16 completed questionnaires about bullying in their schools, as did teachers in each school. Ninety-three children with special needs of the same ages were also interviewed and asked questions about the following topics: life in school, friendships, history of being victimized or bullying others, types of bullying behavior, where bullying occurred in school, which classes contained bullies, how often they reported bullying, and how often they had been bullied or bullied others. Teachers who knew the special needs children well were also interviewed, with questions being similar to those presented to the children with special needs. Teachers also answered questions regarding each child's special needs and were given the chance to offer any additional comments. Results from these interviews and questionnaires determined that bullying did occur more often among children with special needs; two-thirds of children with special needs reported victimization, whereas one quarter of their normally-developing peers reported being bullied. The type of special education need also influenced the likelihood of victimization, as more children with moderate learning difficulties were victimized than those with mild learning difficulties. Children with special

needs were also found to have fewer friends, and teacher interviews suggested that children with special needs chose similar children as their friends. Finally, the study discovered discrepancies between teachers and students, as teachers underestimated the frequency of bullying and the number of friends that children with special needs had.

Although most children with special needs usually fall into the category of victims, some may actually be bullies (Flynt & Morton, 2004; Rose et al., 2009; Van Cleave & Davis, 2006). Rose et al. (2009) examined bullying and fighting perpetration, as well as victimization, among 14,315 middle- and high-school students in general education and those with disabilities in special education classrooms. Several scales were administered to students, including the Illinois Bully Scale to assess self-report of teasing, name-calling, social exclusion, and rumor-spreading; the University of Illinois Victimization Scale to assess victimization from peers (e.g., “Other students call me names,” “I got hit and pushed by other students”); and the University of Illinois Fighting Scale to assess physical fighting behavior (e.g., “I got in a physical fight,” “I fought students I could easily beat”). Data collected from the surveys indicated that students with disabilities in special education classrooms reported greater rates of bullying and fighting perpetration, as well as victimization, than students in the general education population. Additionally, more bullying perpetration was found among students in self-contained classrooms than in inclusive classrooms. The authors also considered age of the participants, finding that rates of fighting perpetration were lower for older students but higher for younger students among students in general education, while rates were similar for younger and older students in special education settings. These findings indicate that adolescents with special needs are more likely to be both victims and perpetrators of bullying.

## **Bullying and Autism Spectrum Disorder**

ASD was first portrayed by Leo Kanner in 1943, when he wrote a paper presenting 11 case studies of children with autism. In his paper Kanner highlighted the children's preference of being alone, lack of imagination, an "obsessive desire for the maintenance of sameness," (p. 245) an exceptional rote memory, and various differences in language development and use. The DSM 5 (2013) characterizes autism spectrum disorders as those with persistent deficits in social communication and restricted, repetitive patterns of behaviors and interests. These symptoms must be present in early childhood (although they may not become apparent until later in development as increasing social demands go beyond their abilities), and the symptoms demonstrated must affect and limit them in their daily lives. Individuals with ASD range from low functioning, where individuals may be nonverbal with intellectual disabilities, to high functioning, where individuals are verbose and possess IQs above normal limits.

Further red flags for autism include "...lack of eye contact, social smiling, ... response to calling by name, interest and pleasure in others, emotional expression, directed vocalizations, joint attention skills, ... and gestures (e.g., waving, clapping, nodding, and shaking head)" (Deconinck, Soncarrieu, & Dan, 2013, p. 226). Individuals with autism also experience difficulty using and understanding pragmatic language for social communication (Paul & Norbury, 2012); this could be attributed to lack of a "theory of mind," which Baron-Cohen, Leslie, and Frith (1985) explained to be a person's inability to understand and identify the thoughts, feelings, and intentions of others. These characteristics may limit their ability to connect with and form relationships with others. Victims among typically-developing children often have few friends for emotional support and are viewed as easy targets, so children with ASD often fall into this same category. In their study documenting peer interaction patterns of 38 British adolescents

with ASD in mainstream schools, Humphrey and Symes (2011) described a cycle of social isolation for children with ASD: students with ASD may develop avoidance behaviors due to negative social experiences, thus losing opportunities for social and communication development, while students within the general education population experience less social contact with students with ASD due to their withdrawal, thus losing opportunities to develop understanding of ASD and further distancing themselves from these children. The significance of peer relationships in the bullying process cannot be overstated.

A number of specific characteristics contribute to the vulnerability of children and youth with ASD to being bullied. To further understand bullying experiences among children with ASD, Cappadocia et al. (2012) administered parent report scales to 192 parents of children diagnosed with ASD in Canada (92% of participants) and the United States (8% of participants). Survey measures included a demographic questionnaire; the Kessler 6-Item Psychological Distress Scale, which assessed frequency of symptoms of psychological distress; the Promoting Relationships and Eliminating Violence Network Assessment Tool—parent version (PREVNet tool), which focuses on parents' perceptions of children's experiences of victimization and bullying perpetration; the Nisonger Child Behavior Rating Form-Parent form (NCBRF), which examines problem behaviors expressed by children; and the Autism-Spectrum Quotient-Adolescent Version, which assesses severity of autistic traits among children and adolescents. Results determined several factors that contributed to vulnerability and victimization; these included having communication difficulties, having internalizing mental health problems, being younger in age, having fewer friends, and having parents with mental health problems.

Additional characteristics of ASD, as outlined in the DSM 5 (2013), can also contribute to vulnerability for victimization. These individuals may be unable to understand others' feelings



and emotions, as they have profound difficulties deciphering various types of nonverbal behaviors, such as tone of voice, gestures, facial expressions, nuances, jokes, and body language. They may also have unusual patterns of interests, and certain behaviors and interests can become obsessional. Making uncommon comments, having breakdowns in initiating or maintaining conversational topics, and displaying lack of interest in forming friendships are common. As mentioned earlier, victims often lack a protective group of friends, and children who are rejected by their peers may be viewed as easy targets by aggressors (Wang et al., 2009). Therefore, children with ASD who fail to form friendships may be more at risk for bullying. Additionally, some children with ASD are unable to interpret social situations appropriately (Loveland, Pearson, Tunali-Kotoski, Ortegon, & Gibbs, 2001) or are unable to discriminate manipulation and deceit from good intentions (Carter, 2009). Loveland and colleagues (2001) showed video fragments to 19 children and adolescents with ASD and 19 children of similar age without ASD to determine if participants with ASD could judge the social appropriateness of the videotaped scenes. The authors found that children with ASD were less likely to detect inappropriate behaviors for scenes that included verbal behavior and more complex social situations. Inability to judge social cues or discriminate good from bad intentions may result in individuals with ASD being unaware of being bullied.

Despite the fact that some individuals with ASD may be unaware of their victimization, bullying of this population can have significant consequences. Little (2002) distributed the Juvenile Victimization Questionnaire (JVQ) to 411 mothers of children with a diagnosis of ASD to measure victimization and shunning of children and adolescents with Asperger syndrome. Thirty-three percent of parents reported that their child had never been invited to a birthday party, while 31% were almost always picked last for teams in physical education (PE) class and

11% ate lunch alone every day. The study also revealed a 94% prevalence rate of peer victimization as reported by the mothers. In addition to shunning, these instances of bullying included being hit by peers or siblings (73%), being emotionally bullied (75%), being attacked by a gang (10%), and experiencing nonsexual assaults to the genitals (15%). Carter (2009) replicated this survey and found a drop in prevalence rates in all categories, although the overall rate was still 65%. In Carter's study, 34 parents of children with ASD reported such stories as a child with ASD wanting to be run over in the street, a child's eyes being scratched out of his picture on the bulletin board at school, and a girl being ridiculed and harassed on the bus each day.

Students with ASD are often misunderstood and face the challenges of being denied opportunities to express their talents while also being denied services if they are doing well academically (Carter, 2009). In their article advocating a team approach to address bullying of children with ASD in activity-based settings, Biggs, Simpson, and Gaus (2010) explained that PE class can be a particularly difficult area for students with autism spectrum disorders, as this class requires social interaction with peers. Chances of being bullied especially increase during PE when students have physical abnormalities (e.g., unsteady gait, poor motor ability, clumsiness) along with social deficits.

Frequent and prolonged victimization can result in mental health problems in children and youth with ASD, such as anxiety, hyperactivity, self-injurious and stereotypic behaviors, and over-sensitivity (Cappadocia et al., 2012). Depression can also be a factor; Butzer and Konstantareas (2003) assessed levels of depression among 22 Canadian children and adolescents with Asperger's syndrome via questionnaires completed by both parents and children. Results indicated that higher rates of depression are found among children with more severe

symptomatology, lower levels of social skills, and a higher level of awareness of their disability. Additionally, Van Roekel, Scholte, and Didden (2009) investigated the perceptions and prevalence of ASD in special education settings in the Netherlands by administering questionnaires to 230 adolescents with ASD and their teachers. The authors discovered that the more often an individual with ASD was bullied, the more likely he or she was to consider non-bullying situations as bullying. Another retrospective study of 40 adults with Asperger syndrome who were frequently laughed at, teased, or mocked in their childhood and youth found that 45% of these individuals developed at least slight forms of gelotophobia, the fear of being laughed at (Samson, Huber, & Ruch, 2011). Indeed, for children with ASD who desire to belong in a friendship group, social exclusion and prolonged bullying may have a negative impact on their quality of life and psychological wellbeing (Cappadocia et al., 2012).

Just as children and youth in the general population experience many different types of bullying, the types of bullying endured by children and youth with ASD also widely vary. Based on parental and self-reports of 70 boys with ASD in Canada, Kloosterman, Kelley, Craig, Parker, and Javier (2013) found relational (i.e., social exclusion) and verbal (i.e., being called mean names, made fun of, or teased) bullying to be most prevalent, with a high rate of physical bullying also occurring in comparison to the control group. Similarly, Cappadocia et al.s' (2012) results from surveys and questionnaires completed by parents of children with ASD also found verbal and social bullying to be most common. Examining the frequency of victimization and shunning of children and adolescents with Asperger syndrome, Carter's (2009) survey of parents discovered the highest prevalence of bullying behavior to be "being scared by peers" (50%), followed by being hit by peers (47%). In addition to relational, physical, and verbal bullying, Kowalski and Fedina (2011) also found cyberbullying to be common in their survey of 3,767

youth with ADHD and/or Asperger syndrome. Their study found that more than 57% of respondents had been traditionally bullied within the past two months, while 21.4% reported being victims of cyberbullying within the past two months. The most common instances of cyberbullying occurred through instant messaging (66.7%) and social networking sites (60%). Anxiety and depression were found to coincide with these cases of cyberbullying. These results indicate that although the internet can provide children and youth with ASD a means through which to communicate more effectively due to their struggles with face-to-face interactions, the internet can also be another dangerous medium through which bullies target their victims

In a three-part series of articles discussing ASD and bullying, Gray (2004) defined two types of bullying specific to children with ASD: *Backhanded bullying* and *absurd information and requests*. When aggressors engage in *backhanded bullying*, they use kind gestures or statements with the intent of misleading their victims. Aggressors utilize *absurd information and requests* in order to use directives to make victims engage in out-of-context, silly, or inappropriate activities, gestures, or tasks. Arick, Krug, Fullerton, Loos, and Falco (2005) explained that bullies use these forms of victimization because they capitalize on youth with ASDs' limited friendships and tendency to interpret information literally. A further reason for these types of bullying include children and youth with ASD often lacking social intelligence, which includes "the constructs of role taking, empathic judgment, person perception, moral judgment, referential communication, and interpersonal tactics," as well as the constructs of credulity and gullibility (Sofronoff, Dark, & Stone, 2011). Greenspan, Loughlin, and Black (2001) defined credulity and gullibility in their discussion of the relationship between these constructs and individuals with developmental disorders. While not based on empirical findings, their stance on the importance of credulity and gullibility was developed through their personal

experiences and conversations with service providers and family members. The authors defined credulity and gullibility as high risk factors for poor social outcomes, as credulity is the “tendency to believe something, usually a highly questionable statement or claim, despite scanty evidence,” and gullibility is “a vulnerability to being tricked or manipulated” (p. 102). These two constructs are linked in that, a majority of the time, credulity leads to gullibility. Individuals who are suspect to credulity and gullibility may lack the perspective-taking capacity or social insight to see through exploiters or label situations as manipulative. For all of these reasons, children and youth with ASD have a higher risk of falling victim to *backhanded bullying* and *absurd information and requests*.

### **Previous Research Exploring SLPs’ Perceptions of Bullying**

To the authors’ knowledge, only one study directly exploring school-based speech-language pathologists’ perceptions of bullying of children with ASD has been conducted. Blood, Blood, Coniglio, Finke, & Boyle (2013) designed a survey involving eight vignettes depicting all four types of bullying (two for physical, two for verbal, two for relational, and two for cyber), with four of the situations having been witnessed by the SLP and four having been told to the SLP by a student victim. The survey inquired how likely SLPs were to intervene in each situation and what intervention strategies they were most likely to use. The list of 14 strategies included such items as reporting the bully to other school personnel; working with parents of bullies and victims; talking with onlookers about their responsibility; talking with the student-victim to try to calm him/her down or to offer protection; or educating student-victims to respond in various ways—to report the event, to be more assertive, to ignore the bully/bullies, or to blend in better. Results indicated that the majority of SLPs were either “likely” (17.5%) or “very likely” (71.5%) to intervene in bullying situations, regardless of the type of bullying or whether

or not the bullying was directly witnessed by the SLP. Results also indicated the most prevalent strategies as following into the categories of “reporting the bullying and consulting others,” “educating the victim,” and “reassuring the victim.” Blood et al. consider the “report, educate, and reassure” sequence to be the most optimal bullying intervention strategies.

While the information provided by this study is an important step, further investigation is needed to identify SLPs’ knowledge of bullying and perceptions of bullying in real-life situations. By inquiring about bullying situations experienced in school-based SLPs’ personal caseloads, a more realistic conclusion can be drawn about bullying of students with ASD in school environments. This information will contribute to the small body of research surrounding this topic and will increase awareness of bullying in schools, particularly of students with ASD.

## **Chapter 3**

### **Justification**

Bullying has become a major concern in society for both typically-developing children and children with special needs. Many negative consequences may accompany instances of bullying, such as feelings of neglect, anger, anxiety, depression, and, in the most extreme cases, suicidal ideation. Because of this, it is important for bullying awareness to increase. For children with special needs, the chance of being victims of bullying significantly increases, as they exhibit behaviors that deviate from the norm set by their typically-developing peers. Individuals with ASD often lack appropriate social skills and have difficulty effectively communicating, even if they are higher functioning, making them particularly at risk for bullying. With prevalence rates of ASD rising to 1:68 in the United States (Autism and Developmental Disabilities Monitoring Network [ADDM], 2014), the issue of bullying of this population is particularly relevant.

Along with attention to bullying in general is the issue of how authority figures respond to instances of bullying. Bullying may go unnoticed by adults, because bullies often choose areas of low supervision, such as the playground or hallways, to carry out their bullying behaviors. Adults who work one-on-one or in small groups with students, such as school-based SLPs, may have the greatest chance of detecting students who are enduring bullying and observing the effects that bullying is having on these students. Because SLPs frequently have students with ASD on their caseload, they may witness bullying of these students by other students in treatment, the classroom, or other areas of the school. SLPs have the opportunity either to attend to these acts of bullying or to ignore them. Determining the role of the SLP in these situations is essential to understanding how students with ASD cope with victimization.

The aim of the current study was to investigate speech-language pathologists' knowledge and perceptions of bullying, with a particular emphasis on children with ASD in the school environment. By questioning SLPs about bullying conditions on their personal caseloads, a more realistic picture of bullying in the schools could be formed. Because very little research has focused on bullying of children with ASD in the schools, particularly through the perceptions of SLPs, this topic is of importance in determining the frequency and severity of bullying of this population in the schools and how SLPs approach bullying. Specifically, the current study hoped to answer the following questions:

- 1) What are SLPs' knowledge and familiarity with current literature regarding bullying?
- 2) What are SLPs' experiences and perceptions of bullying as it relates to their students with ASD?
- 3) How do SLPs perceive their role in management of bullying, and what management techniques do they employ?
- 4) How much support do school districts provide for bullying awareness and/or prevention?



## Chapter 4

### Method

#### Participants

A total of 70 respondents completed the survey. All respondents had achieved either a master's (93%;  $n = 65$ ) or a doctorate (7%;  $n = 5$ ) degree. Additionally, all participants reported having experience working in the schools as an SLP, and 93% ( $n = 65$ ) of them were currently practicing. Respondents represented all four regions of the U.S. (South, Northeast, Midwest, and West); however, the highest number of participants came from the South (See Table 1).

#### Materials

To answer the questions of the study, the investigators created a web-based, 46-item survey via Qualtrics software (see Appendix A) to address questions in five main areas: (a) background information, (b) knowledge and perceptions of bullying, (c) bullying and ASD, (d) management of bullying, and (e) school district support. Questions with regard to bullying were adopted from Plexico et al. (2013), with further emphasis on bullying of children with ASD and intervention methods to stop bullying.

- Part I questions were designed to acquire information about school-based SLPs' general professional background and experience with providing services to children with ASD, including number of children with ASD on their caseload and ages of children with ASD served.
- Part II questions addressed the participants' familiarity with current research in the area of bullying. Participants were asked questions based on the literature with regard to bullying to assess their knowledge in this area. All questions in which participants could

select more than one option contained foils, in the event that some questions may be leading.

- Part III questions addressed the participants' familiarity with and perceptions of bullying of children with autism spectrum disorders. Questions addressed SLPs' perceptions of the severity of bullying of this population and the factors that contribute to children with ASD being targets of bullying.
- Part IV questions were designed to determine SLPs' management of instances of bullying of children with ASD, including what, if any, intervention strategies are used and what methods they find to be effective. Participants were also asked questions regarding their attitudes toward bullying of children with ASD and their personal experiences of witnessing and handling these situations.
- Part V questions were designed to assess district support of bullying. Questions assessed whether district support was available to educate students and staff on bullying. District support included the provision of in-services to faculty/staff, and/or whether any specific anti-bullying programs were being utilized at the schools in which they work. Participants were also asked if they were aware of where to obtain information about bullying should they choose to see it on their own.

## **Procedure**

Participants in the current study were obtained via four methods. Initially, the coordinators for two special interest divisions of ASHA were contacted regarding the project. The selected divisions were the Language Learning and Education Special Interest Division (Division 1) and the School-Based Issues Special Interest Division (Division 16), due to their focus on school-based speech-language pathology and the resulting probability that many of their

members would be employed in a public school system. An introductory e-mail/information letter containing the web link to the online survey was sent to the coordinators of these divisions and then posted on the respective listservs.

Following the initial recruitment attempts, a search of the ASHA membership directory through the ASHA Community was conducted to find potential participants who (a) had their Master's degrees and were licensed to practice speech-language pathology in their state (participants could be in their CFY or hold their CCC); (b) listed their current employment setting as either elementary school or secondary school; (c) allowed community members to contact them via email per their privacy settings; and (d) were currently employed in the United States. As participants who fit these criteria were found, the researchers emailed the same information letter that was posted on the listservs to the first 50 and last 50 community members in all 50 states in addition to the District of Columbia, to ensure equal representation across all geographic areas of the United States. In states where 100 or fewer potential participants resided (i.e., Alaska, District of Columbia, Hawaii, Montana, Wyoming), all potential participants were emailed. Messages were sent via their ASHA Community profile page. Interested participants were asked to provide consent to participate by clicking on a link provided in the introductory e-mail.

Finally, a message conveying a brief description of the survey and its purpose was posted on the ASHA Community site and ASHA Facebook page. These messages also contained an embedded link to direct interested individuals to the survey. Once potential participants clicked on the embedded link, they were then directed to the survey, which also contained the information letter embedded within and an opportunity to provide consent by selecting "yes" or "no."

The survey was administered using the online survey tool Qualtrics, which is a secure Internet-based software program. All data was collected anonymously. A total of 4,987 e-mails were sent, and 95 potential participants initiated the survey. Respondents were then filtered for survey completion, leaving a final participant pool of 70 responses. A total of 48 participants (69%) were recruited from emails via ASHA Community profile pages, yielding a response rate of 1% for that particular recruitment method. While response rates could not be calculated for the other recruitment methods, three of the 70 participants (4%) were recruited from the ASHA Community discussion board; five (7%) were recruited from ASHA SIG 1; 11 (16%) were recruited from ASHA SIG 16, and three (4%) indicated “other.”

## **Chapter 5**

### **Results**

#### **Data Analysis**

Survey responses were filtered for completion. In conjunction with the creation of the web-based survey, a spreadsheet was created to combine and analyze the research data. Upon closing the survey, responses were transferred to the spreadsheet for analysis. To determine a mean response for each item, the responses for all participants who responded were averaged. In cases where some participants selected not to respond to a question, the averages were calculated using the number of respondents who answered that item, as opposed to the number who completed the survey.

#### **Background Information**

A total of 70 participants completed the survey and met inclusion criteria. Regarding the location in which participants were currently practicing and professionally licensed, participants represented demographic regions of the South, Northeast, Midwest, and West. The largest percentage of participants reported currently practicing and being professionally licensed in the South, followed by the Midwest, Northeast, and West (see Table 1).

With regard to location of practice, the largest percentage of participants reported that they currently practice as a speech-language pathologist in the schools (93%;  $n = 65$ ), whereas only 7% ( $n = 5$ ) responded that they do not currently practice in the schools but do have experience in this setting. Participants were asked to select all grade levels in which they currently work. The majority of participants reported currently working in elementary schools (79%;  $n = 55$ ), with fewer participants providing services in middle school (44%;  $n = 31$ ), high school (26%;  $n = 18$ ), and specialized schools (7%;  $n = 5$ ). The participants' professional

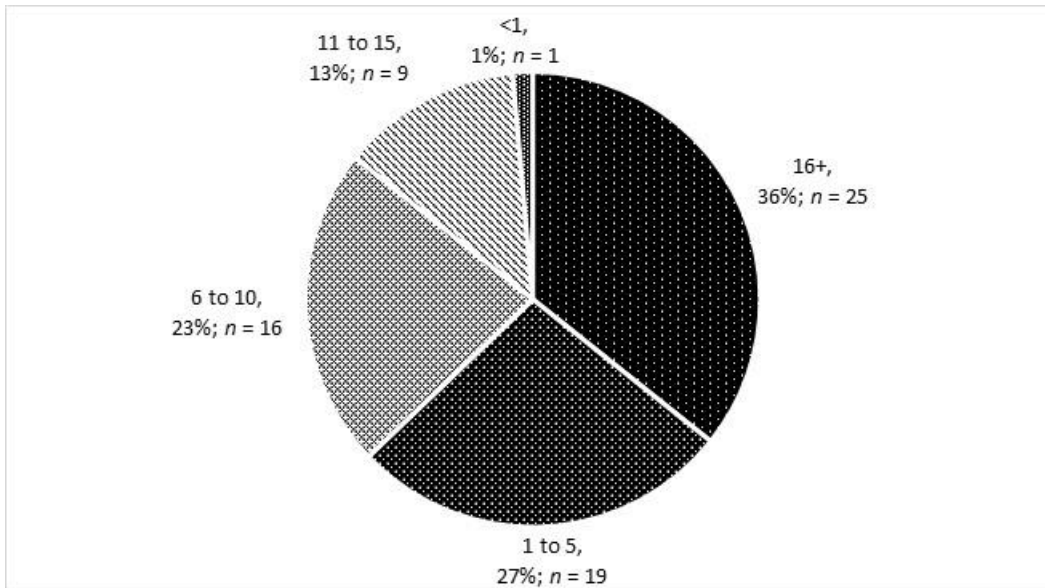
experience in the schools ranged from less than 1 year to 16 or more years, with the highest amount of years reported as 16 or more (see Figure 1).

Table 1

*States in Which Participants were Currently Practicing and Professionally Licensed*

Area of Residence	<i>n</i> (%)
<b>South</b>	<b>27 (40)</b>
Alabama	6 (9)
Arkansas	2 (3)
Delaware	1 (1)
Florida	5 (7)
Georgia	1 (1)
Kentucky	1 (1)
Louisiana	1 (1)
Maryland	4 (6)
Mississippi	1 (1)
South Carolina	2 (3)
Texas	3 (4)
<b>Midwest</b>	<b>16 (24)</b>
Illinois	4 (6)
Michigan	6 (9)
Missouri	1 (1)
Nebraska	5 (7)
<b>Northeast</b>	<b>14 (20)</b>
Connecticut	6 (9)
Massachusetts	3 (4)
New Jersey	1 (1)
New York	2 (3)
Pennsylvania	2 (3)
<b>West</b>	<b>11 (16)</b>
Arizona	1 (1)
California	4 (6)
Montana	2 (3)
New Mexico	1 (1)
Utah	2 (3)
Washington	1 (1)

*Note:* *n* = number of respondents; % = percentage of respondents

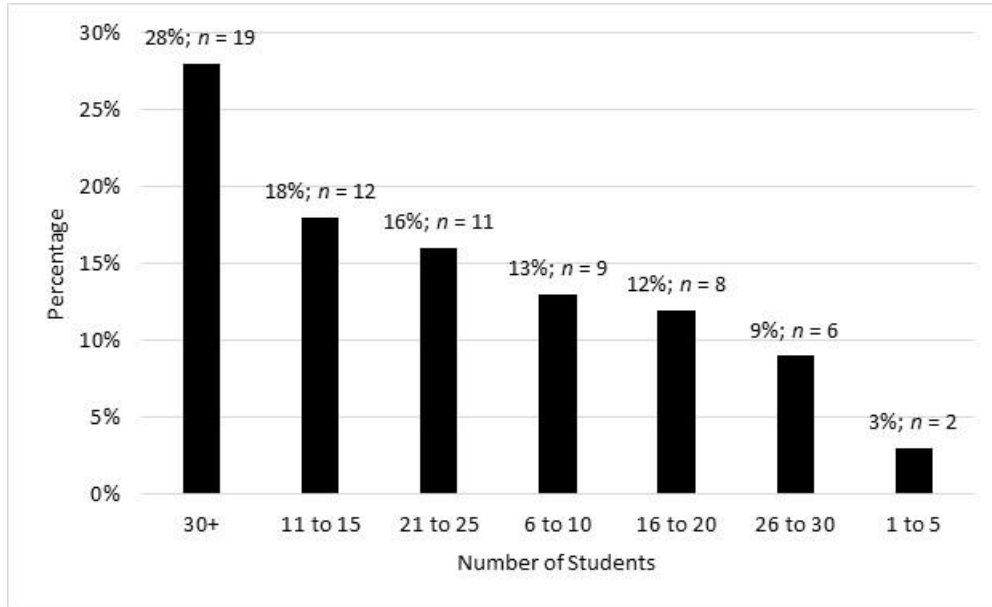


*Figure 1.* Participants' years of professional experience working in the schools

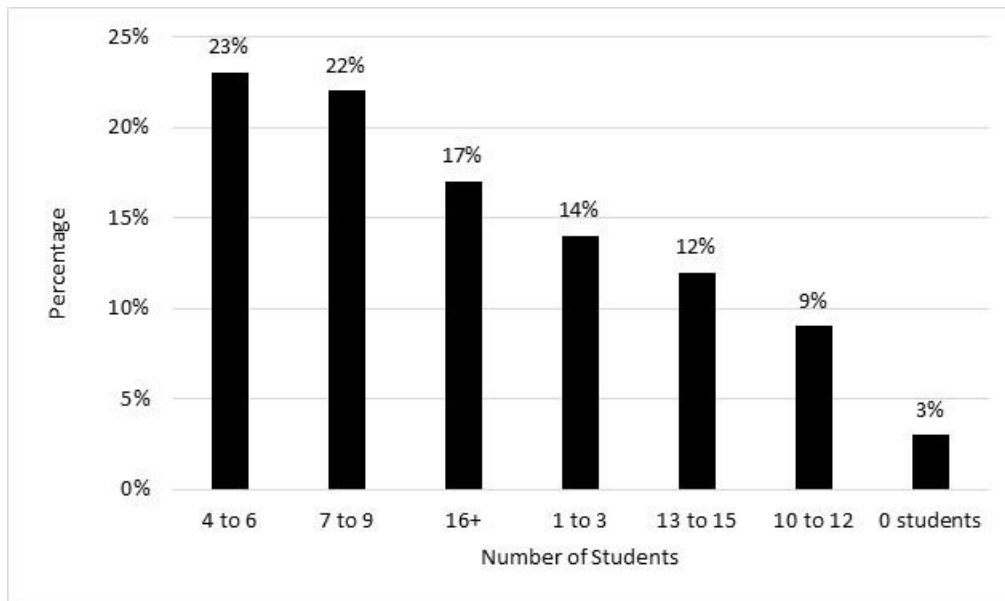
To determine participants' familiarity with ASD, the survey asked about past and current interactions with students on their caseload with the disorder. The number of students with a formal diagnosis of ASD with whom participants have worked in the past five years ranged from three to 30 or more students. Of the 67 participants who responded to this question, the largest percentage reported experience with 30 or more students, and no participants reported working with zero students with a formal diagnosis of ASD (see Figure 2). With regard to the number of students with ASD currently on participants' caseloads, of the 69 participants who answered the question, responses ranged from zero to 16 students, with the highest numbers of respondents reporting 4-6 students and 7-9 students (see Figure 3).

When asked the ages of children with ASD currently on participants' caseloads, respondents were asked to select all age groups of students with ASD with which they currently work. The largest number of respondents indicated working with children between 5 and 7 (66%;

$n = 45$ ), while 62% ( $n = 42$ ) reported ages 8 to 10, 56% ( $n = 38$ ) reported ages 11 to 13, and 16% ( $n = 24$ ) reported ages 14 to 17.



*Figure 2.* Number of students with a formal diagnosis of ASD with whom participants have worked in the past five years



*Figure 3.* Number of students with ASD currently on participants' caseloads



Participants were also asked about their typical sessions with students with ASD. Of the 66 respondents who answered this question, the largest percentage of respondents reported that on average, they see students with ASD for two sessions per week (50%;  $n = 33$ ), whereas 27% ( $n = 18$ ) reported seeing students with ASD for one session per week and 23% ( $n = 15$ ) reported three or more sessions per week. Respondents were then queried as to the location in which a typical intervention session was held. Of the 69 respondents who answered this query, the majority reported that they typically hold sessions with students with ASD in the speech room as a group session, with smaller numbers indicating typically holding sessions in the speech room in a pull-out, individual session format, the special education classroom (inclusion), and the regular education classroom (inclusion; see Figure 4).

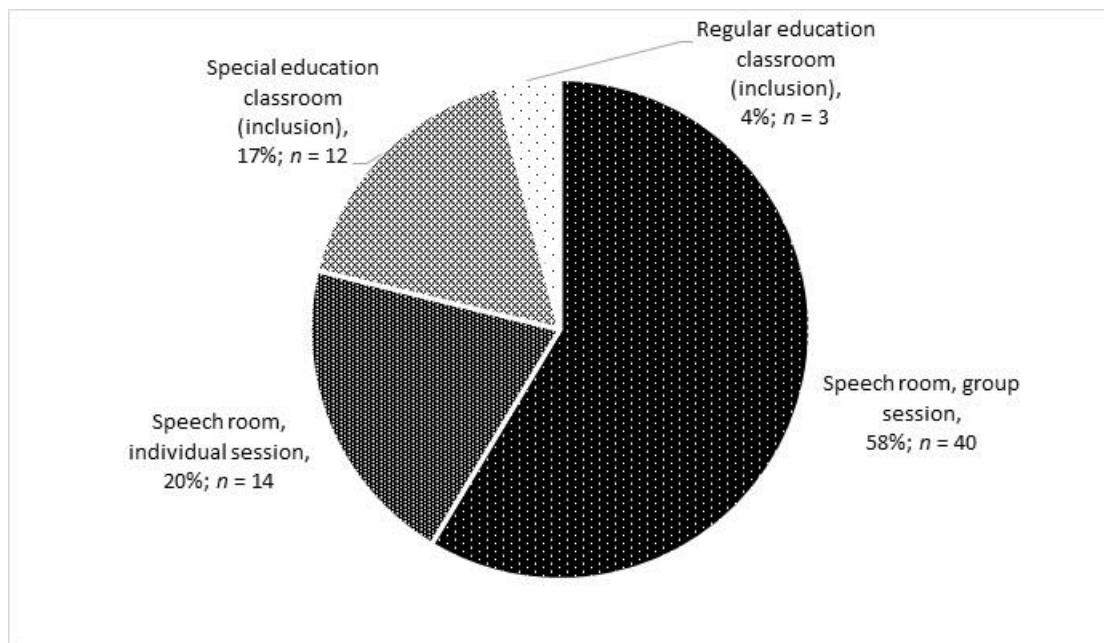


Figure 4. Location in which typical intervention sessions are held

## General knowledge and perceptions regarding bullying

Participants were asked a series of true/false questions to determine their current knowledge of the bullying literature (see Table 2). The first question asked if bullying is of greatest concern during elementary school and early adolescence. Of the 69 respondents who answered this question, the majority of participants correctly indicated “true.” The majority of participants also correctly answered “false” when asked whether girls are more likely to be bullied than boys. When asked if bullying of children exists in the community outside of school as well as in school, all but one respondent correctly answered “true.” To the question asking if victims are usually likely to report bullying to adults (e.g., parents, teachers, other school personnel), the majority correctly answered “false.”

Table 2

### *Results of True/False Questions Regarding Current Knowledge of the Bullying Literature*

Survey Statement	<i>N</i>	True <i>n</i> (%)	False <i>n</i> (%)
Bullying is of greatest concern during elementary school and early adolescence.	69	47 (68)	22 (32)
Girls are more likely to bully and be bullied than boys.	70	23 (33)	47 (67)
Bullying of children exists in the community outside of school as well as in school.	70	69 (99)	1 ( 1)
Victims are usually likely to report bullying to adults (e.g., parents, teachers, other school personnel).	70	16 (23)	54 (77)

*Note:* *N* = total number of respondents; *n* = number of respondents per category; % = percentage of respondents

Participants were then given a list of types of bullying and were asked to indicate actual types of bullying as specified in the bullying literature. Respondents were able to select more than one answer. Results indicated that the majority of respondents correctly selected cyberbullying, verbal bullying, physical bullying, and relational bullying; however, the foils (i.e., situational bullying, confrontational bullying) were also selected by the majority of participants

(see Table 3). Participants were also asked which type of bullying has been shown to be the most prevalent amongst males and which type is most prevalent amongst females; however, it was necessary to omit these responses from analysis due to technical difficulties encountered with the response format of those two survey questions.

Table 3

*Types of Bullying as Indicated in the Bullying Literature*

Type of bullying	<i>n</i>	%
Cyberbullying	68	99%
Verbal bullying	56	81%
Physical bullying	69	100%
Relational bullying	54	78%
Confrontational bullying	56	81%
Situational bullying	51	74%

*Note:* *n* = number of respondents; % = percentage of respondents

Regarding perceptions of bullying, participants were presented with Likert-type scale questions to indicate how likely they feel that the victim would experience certain outcomes as a result of being bullied (see Figure 5). Participants were asked to rate the degree to which victims would experience each outcome on a sliding scale from 0 (unlikely) to 100 (very likely), with 50 representing “likely.” Results were presented as averages of participants’ selections. Participants rated anxiety and impaired self-confidence as most likely to be experienced. These were followed by deep emotional trauma, lower academic success, and impaired ability to form peer relationships, all of which fell above the cut off of 50, which indicated “likely” to be an outcome of being bullied. Impaired ability to form adult relationships in the future and suicidal ideation fell slightly below that cutoff and were viewed by participants as the least likely of the presented outcomes.

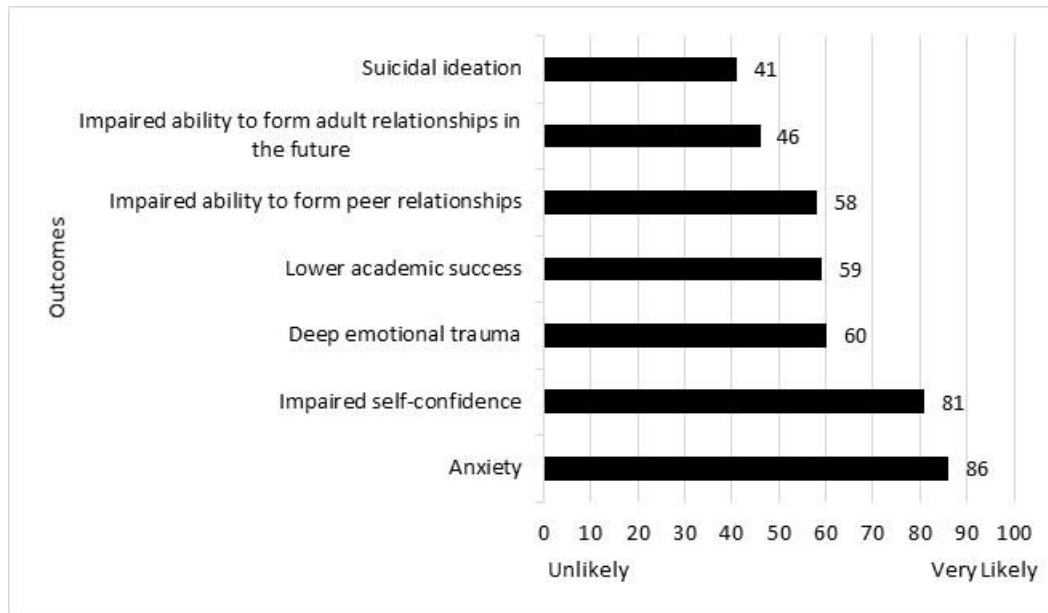
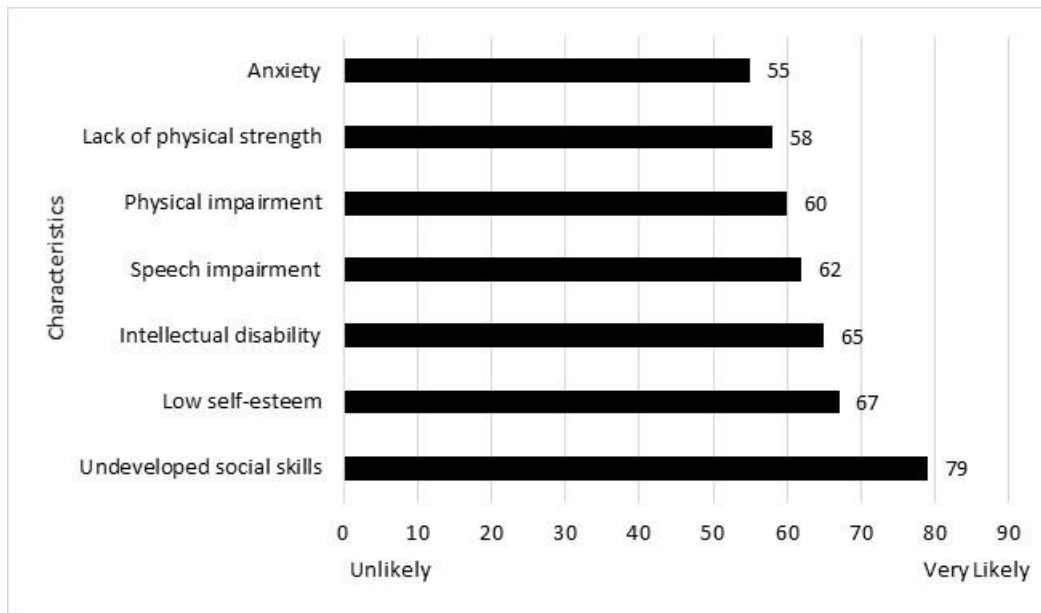


Figure 5. Likelihood of victims experiencing certain outcomes as a result of being bullied

Participants were additionally queried as to the likelihood that certain characteristics would put a child at an increased risk for being bullied (see Figure 6). Results indicated that participants believed undeveloped social skills put a child most at risk for being victimized (average score = 79). Although lower average scores were obtained for the other characteristics presented with this question, all were somewhat above “likely,” indicating that a number of characteristics may put a child at risk of being bullied. These characteristics included low self-esteem, intellectual disability, speech impairment, physical impairment, lack of physical strength, and anxiety.

In response to the question asking to what degree participants consider bullying to be a problem in their schools, 9% ( $n = 6$ ) indicated bullying to be a serious problem in their schools, 54% ( $n = 38$ ) indicated bullying in their schools to be somewhat of a problem, and 34% ( $n = 24$ ) indicated bullying to be not much of a problem. While 3% ( $n = 2$ ) were unsure if bullying was a problem, no participants selected that it was not a problem at all.



*Figure 6.* Likelihood that certain characteristics would put a child at an increased risk for being bullied

### **Bullying and autism spectrum disorder (ASD)**

With regard to bullying and autism spectrum disorder, participants were asked whether or not they have witnessed bullying of children with ASD in their schools. Of the 68 participants who responded to this question, 41% ( $n = 28$ ) indicated that they have witnessed bullying of children with ASD, while 59% ( $n = 40$ ) answered that they have not. Participants were asked to rank from least to most where they were likely to witness a child with ASD being bullied. As shown in Table 4, respondents indicated that they were least likely to witness bullying in the speech room (pull-out) and most likely to witness bullying in the lunchroom and in the car line before or following school.

Table 4

*Areas of School Where Bullying is Likely to be Witnessed*

<i>Location</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>N</i>
	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	
In the car line before or following school	6 (10)	6 (10)	4 ( 7)	10 (17)	13 (22)	19 (33)	58
In the lunchroom	3 ( 5)	3 ( 5)	4 ( 6)	2 ( 3)	25 (38)	29 (44)	66
In the regular education classroom (inclusion)	1 ( 2)	4 ( 7)	5 ( 8)	31 (51)	15 (25)	5 ( 8)	61
In small group sessions	2 ( 3)	17 (28)	32 (52)	7 (11)	3 ( 5)	0 ( 0)	61
In the special education classroom	6 (10)	26 (44)	14 (24)	9 (15)	4 ( 7)	0 ( 0)	59
In the speech room (pull-out)	48 (73)	9 (14)	2 ( 3)	1 ( 2)	0 ( 0)	6 ( 9)	66
<i>N</i>	<i>66</i>	<i>65</i>	<i>61</i>	<i>60</i>	<i>60</i>	<i>59</i>	

*Note:* *N* = total number of respondents; *n* = number of respondents per category; % = percentage of respondents

When asked to what degree participants considered bullying of children with ASD to be a problem in their schools, 26% ( $n = 18$ ) indicated that it is a serious problem, while 59% ( $n = 41$ ) indicated that it is somewhat of a problem, 11% ( $n = 8$ ) indicated that it is not much of a problem, 3% ( $n = 2$ ) indicated that it is not a problem at all, and 1% ( $n = 1$ ) was unsure. Participants were then asked if they feel that children with ASD are more susceptible to being bullied than children in the regular education population, to which 83% ( $n = 58$ ) responded that they are and 17% ( $n = 12$ ) responded that they are not. Similarly, participants were also queried as to whether they feel that children with ASD are more susceptible to being victims of bullying than children with other communication disorders (e.g., stuttering, articulation, language impairment), to which the majority (60%;  $n = 42$ ) answered that they are and 40% ( $n = 28$ ) responded that they are not. Participants were also queried as to which types of bullying they considered to be most problematic for children with ASD. As can be seen in Figure 7, the largest

percentage of respondents selected verbal bullying, followed by relational bullying. No participants selected cyberbullying.

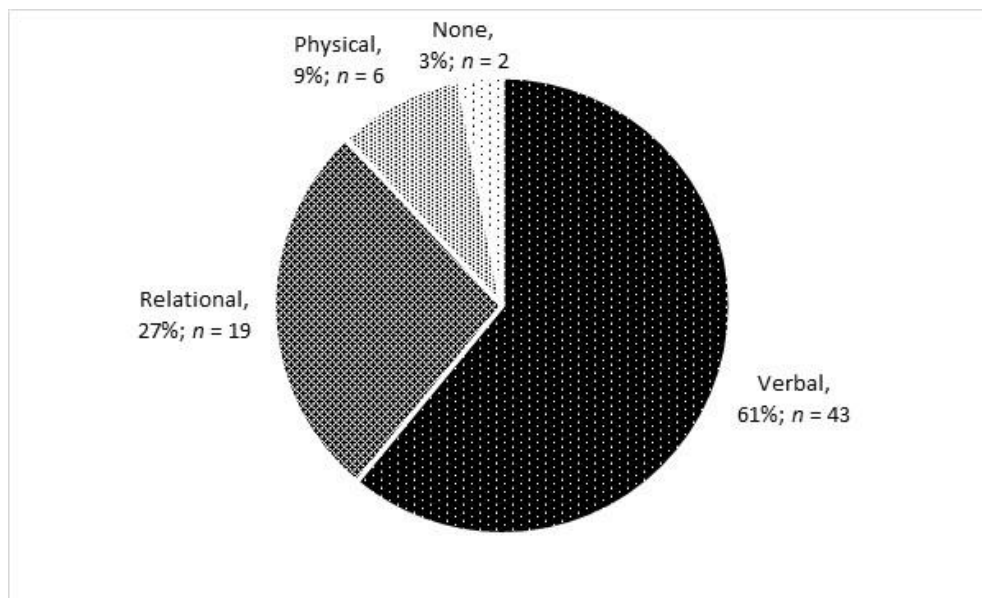


Figure 7. Types of bullying considered to be most problematic for children with ASD

When provided with four types of bullying, the participants were asked to indicate which type of bullying they witness most often in relation to children with ASD. Of the 69 participants who responded to this question, verbal bullying was most frequently reported (59%;  $n = 41$ ). Additionally, 6% ( $n = 4$ ) chose physical bullying, 16% ( $n = 11$ ) chose relational bullying, and 19% ( $n = 13$ ) selected the option “none.” No participants selected cyberbullying.

Participants were then queried as to how they feel when they see a child with ASD being bullied and were instructed to select all answers that apply to them (see Table 5). The majority of respondents selected the choices “frustrated,” “annoyed with the situation,” and “sorry for the child,” with smaller percentages indicating “embarrassed for the child being bullied,” “anxious,” and “overwhelmed with the situation.” No participants indicated that they were “unconcerned.”

Almost one-third of the participants chose “other” and were given the opportunity to write in how they would feel in the situation. Seventeen of these participants (85%) wrote in the provided text box, with the terms “angry” or “mad” written in most frequently (53%;  $n = 9$ ). Other feelings reported by one to three individuals included “concerned,” “upset,” “annoyed,” and “defensive.” One of these participants also noted that his or her feelings would not be the main concern, as the bullying situation would require professional involvement in order to be stopped.

Table 5

*How Participants Feel When They See a Child with ASD Being Bullied*

Response	<i>n</i>	%
Frustrated	41	59%
Annoyed with the situation	38	55%
Sorry for the child	37	54%
Embarrassed for the child being bullied	22	32%
Anxious	15	22%
Overwhelmed with the situation	6	5%
Unconcerned	0	0%
Other	20	29%

*Note:*  $n$  = number of respondents; % = percentage of respondents

**Management of Bullying**

Participants were asked a number of questions to determine how they manage instances of bullying of children with ASD. Participants were asked if they feel that it is their responsibility as speech-language pathologists to intervene in moments of bullying. All respondents ( $n = 70$ ) indicated that they feel it is their responsibility. In response to the question of whether participants feel adequately prepared to intervene in moments of bullying, 74% ( $n = 52$ ) selected that they do feel adequately prepared, while 26% ( $n = 18$ ) selected that they do not. With regard to whether participants feel comfortable intervening in moments of bullying, of the



69 respondents who answered this question, 83% ( $n = 57$ ) indicated that they do feel comfortable and 17% ( $n = 12$ ) selected that they do not. Participants who responded that they did not feel comfortable intervening in moments of bullying were then asked if they tend to overlook instances of bullying; no participants indicated that they overlook these instances.

Participants were asked how they respond when a child is being bullied, with the instructions of selecting all that apply (see Table 6). Of the 69 participants who responded to this question, the largest percentage of respondents selected the choices “talk to the child being bullied and offer strategies for coping with bullying” and “report the behavior to other school personnel,” with selections such as “have the bully apologize,” “talk to the child being bullied and offer condolence,” and “give the child who is bullying three warnings” selected less frequently. No participants selected “ignore the situation until the child being bullied confronts you with the problem.” Participants who selected “other” were given the opportunity to write in how they would respond. Of the 21 participants who described how they would respond, more than half (57%;  $n = 12$ ) reported that they would talk to the bully about his or her behavior. Additional responses, which were written in one to two times each, included “report to another authority,” “stop the interaction,” “the bully loses their recess time,” “call parents of both children if principal requests and type up a note on what happened,” “talk to bystanders about their behavior,” “follow the guidelines of IDEA protection,” “have a discussion with all involved,” and “peer education/empowerment.”

Table 6

*How Participants Respond When a Child is Being Bullied*

Response	<i>n</i>	%
Talk to the child being bullied and offer strategies for coping with bullying	61	88%
Report the behavior to other school personnel	58	84%
Have the bully apologize	27	39%
Talk to the child being bullied and offer condolence	20	29%
Give the child who is bullying three warnings	4	6%
Ignore the situation until the child being bullied confronts you with the problem	0	0%
Other	23	33%

*Note:* *n* = number of respondents; % = percentage of respondents

Participants were asked what type of advice they give children who are being ostracized by their peers or are victims of gossip (i.e., relational bullying), with the instructions of selecting all that apply (see Table 7). All 69 participants responded that they would give the advice to “tell an adult at school when someone is bullying you.” A smaller number of participants chose “deal with it because bullying is a normal part of growing up,” “deal with it because it will help you gain character,” “ignore the bully,” “stand up for yourself and fight back,” “tell your parents so that the situation can be handled outside of school,” and “other.” Responses that were written in under the category of “other” centered around advocacy and support for the victim of relational bullying, with suggestions, which were written in one to three times each, such as “seek help from peers who are not part of the bullying,” “go over a list of appropriate comebacks with the child being bullied,” “work to strengthen social skills and ways to make new friends,” “social/emotional counseling,” “self-advocacy,” “don’t let how other people act determine your behavior,” and “remind them of their strengths as an individual and that often people bully others because they don’t feel comfortable themselves.” One participant noted that his or her students

with ASD often need to be informed that they are being bullied, so students with ASD may need to be taught to recognize bullying when it occurs.

When participants were asked what type of advice they give to children who are being bullied through such means as pushing, hitting, and kicking (i.e., physical bullying), with the instructions of selecting all choices that apply, all respondents ( $n = 70$ ) selected “tell an adult at school when someone is bullying you” (see Table 7). No respondents selected “deal with it because bullying is a normal part of growing up” or “deal with it because it will help you gain character.” Additional responses, which were written in one to four times each under the category of “other,” included “ask friends to stay close,” “stand up for yourself with peer support but do not use physical aggression,” “stay as far away as possible from the bully,” “leave the situation,” “encourage kids to use words to express dislike and tell an adult,” “report to principle,” and “social/emotional counseling.”

When asked what type of advice participants give to children who are being bullied through hurtful words meant to humiliate them (e.g., excessive name-calling; i.e., verbal bullying), with the instructions of selecting all choices that apply, the largest percentage of respondents selected “tell an adult at school when someone is bullying you” (see Table 7). “Other” was selected by 24% ( $n = 17$ ) of participants, with such responses written in one or two times each as “stand up for yourself but do not resort to name-calling in return,” “walk away,” “talk it out and tell the bully how it makes you feel,” “seek advice from an adult,” “get school counselor involved if possible for peer problem-solving groups,” “social/emotional counseling,” and “peer education/empowerment and self-advocacy for the victim.”

Participants were asked what type of advice they give to children who are being bullied over the internet, text messages, or social media (i.e., cyberbullying), with the instructions of

selecting all that apply (see Table 7). Of the 68 participants who responded to this question, the majority selected “tell an adult at school when someone is bullying you” and “tell your parents so that the situation can be handled outside of school.” No respondents selected “deal with it because bullying is a normal part of growing up” or “deal with it because it will help you gain character.” Responses written in one or two times each under the category of “other” included “tell your parents, who can contact school administrators,” “block the [bully],” “seek help from a trusted adult/mentor,” “don’t engage in social media,” “do not get rid of the comments, as they will be proof of what has happened, and do not respond to the bully,” “suspension or expulsion of the bully,” and “social/emotional counseling.” Several respondents noted that this type of bullying is not common at the elementary or primary school level, so they lack experience dealing with cyberbullying.

Table 7

*Types of Advice Given to Children Experiencing Relational, Physical, Verbal, or Cyber Bullying*

Advice	Relational <i>N</i> = 69 <i>n</i> (%)	Physical <i>N</i> = 70 <i>n</i> (%)	Verbal <i>N</i> = 70 <i>n</i> (%)	Cyber <i>N</i> = 68 <i>n</i> (%)
Tell an adult at school when someone is bullying you	69 (100)	70 (100)	68 (97)	57 (84)
Tell your parents so that the situation can be handled outside of school	26 ( 38)	31 ( 44)	29 (41)	43 (63)
Ignore the bully	27 ( 39)	3 ( 4)	26 (37)	13 (19)
Stand up for yourself and fight back	15 ( 22)	13 ( 19)	13 (19)	6 ( 9)
Deal with it because bullying is a normal part of growing up	3 ( 4)	0 ( 0)	1 ( 1)	0 ( 0)
Deal with it because it will help you gain character	1 ( 1)	0 ( 0)	0 ( 0)	0 ( 0)
Other	18 ( 26)	19 ( 27)	17 (24)	14 (21)

*Note:* *N* = total number of respondents; *n* = number of respondents per category of advice; % = percentage of respondents

## School district support

Participants were queried as to whether or not their school districts are aware of bullying in schools. The majority of participants (97%;  $n = 68$ ) indicated that their schools were aware of bullying, while only 3% ( $n = 2$ ) indicated they were not aware. Participants were also asked whether their school district offers in-services regarding the management of bullying and use of anti-bullying language. The largest number of participants (84%;  $n = 59$ ) indicated that their schools do provide in-services, while 16% ( $n = 11$ ) indicated that their schools do not. When asked how often participants' school districts hold in-services regarding the management of bullying and use of anti-bullying language, the largest percentage of respondents indicated that in-services occur 1-2 times per year, with smaller numbers indicating that in-services occur 3-4 times per year, 7 or more times per year, or no annual discussions occur (see Figure 8). No respondents selected that in-services occur 5-6 times per year.

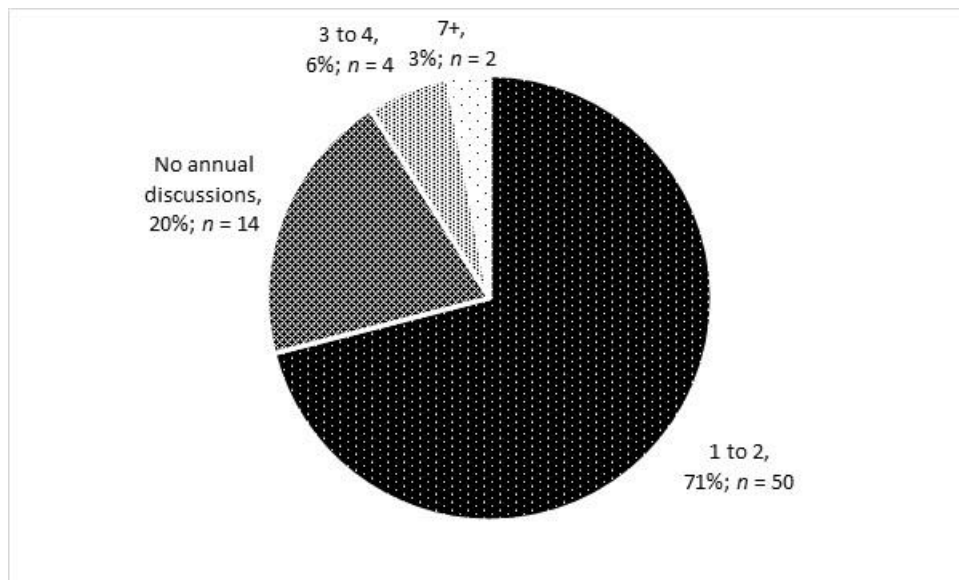


Figure 8. Number of anti-bullying in-services provided by school districts per year.

Participants were then queried as to whether their school districts provide access to printed materials about bullying and/or management of bullying. Of the 69 respondents who answered this question, 84% ( $n = 58$ ) indicated that their school districts do provide access to printed materials, while 16% ( $n = 11$ ) indicated that their school districts do not provide access to printed materials. When asked if participants were aware of where printed materials about bullying can be obtained, 76% ( $n = 53$ ) responded that they are aware, while 24% ( $n = 17$ ) responded that they were not aware. Participants were also asked if their school district offers counseling services for bullies and victims, to which 90% ( $n = 63$ ) indicated that counseling services are provided, while only 10% ( $n = 7$ ) indicated that services are not provided.

With regard to anti-bullying campaigns, participants were asked if their school district uses an anti-bullying campaign to address bullying. Of the 69 participants who responded to this question, 78% ( $n = 54$ ) indicated that their school districts do use anti-bullying campaigns, while 22% ( $n = 15$ ) do not. When asked if participants' school districts use anti-bullying campaigns specific to children with special needs, only 20% ( $n = 14$ ) indicated that their schools do, while 80% ( $n = 56$ ) of school districts do not. Finally, participants were queried as to whether their school district has implemented a formal program addressing intervention and prevention of bullying. The majority of respondents indicated that their districts do not use formally implemented anti-bullying campaigns (59%;  $n = 41$ ), while 41% ( $n = 29$ ) indicated that their school districts do use formal anti-bullying campaigns. Participants whose school districts utilize formal anti-bullying programs were asked to provide the name of the program. Of the 21 participants who answered this question, such programs included: Olweus Bullying Prevention Program (9%;  $n = 2$ ), Text Response (9%;  $n = 2$ ), Positive Behavioral Interventions & Supports (PBIS) (9%;  $n = 2$ ), Anti-Bullying Program (5%;  $n = 1$ ), Boys Town Social Skills (5%;  $n = 1$ ),

Character Counts (5%;  $n = 1$ ), Name It, Claim It, Stop It (5%;  $n = 1$ ), Project Cornerstone (5%;  $n = 1$ ), Safe School Ambassadors (5%;  $n = 1$ ), Second Step (5%;  $n = 1$ ), Stop It! (5%;  $n = 1$ ), and Whole School Response (5%;  $n = 1$ ); however, five participants (24%) were not aware of the name of their district's program, and one participant (5%) responded that their program has no formal name but is a district-wide initiative and part of their district's goals.

## **Chapter 6**

### **Discussion**

The purpose of this study was to explore school-based speech-language pathologists' (SLPs') knowledge and perceptions of bullying, with a particular emphasis on children with ASD. The findings of this study were mixed in that the majority of school-based SLPs demonstrated insight into many areas of bullying, but misperceptions in others. Results highlight the need for SLPs to receive further information about the nature, context, and extent of bullying. SLPs may also benefit from training on bullying intervention strategies when they observe a child being bullied.

#### **Experience**

All respondents reported that they had worked with students with a formal diagnosis of ASD within the past five years, and 98.5% reported that they work with students with ASD on their current caseload. This finding is not surprising in light of the increasing prevalence rate of ASD, which is currently reported as 1 in 68 (ADDM; 2014). This finding also closely mirrors the findings of Plumb and Plexico (2013), who found that 98.8% of participants reported having at least one client with ASD on their caseload.

The ages of children on participants' caseloads encompassed the period of elementary through late high school, with the smallest percentage serving students in high school. The large number of participants working in elementary schools is consistent with data from ASHA's Schools Survey (2014); of the 1,686 participants who answered this question, 60% reported working in elementary schools, versus 12% in secondary schools. More than half of participants indicated that they worked with students in the period of early adolescence, which is cited in the literature as the period in which bullying is most likely to occur (Chapell et al., 2006; Espelage &



Swearer, 2003; Frisé at al., 2007; Hazler, 1996; Pellegrini & Bartini, 2000); however, the largest number of respondents indicated working with younger ages (five to 10 years), which could explain why the majority of participants later reported that they have not witnessed bullying of children with ASD. SLPs serving students in early adolescence are more likely to witness the transition between elementary and middle school, as well as middle to high school, during which students strive to “fit in” in their new social environments, often by bullying if their behavior is socially advantageous (Pellegrini & Bartini, 2000).

### **General Knowledge and Perceptions Regarding Bullying**

The majority of respondents demonstrated appropriate knowledge of current research regarding bullying in the school system, including period of time in which bullying is most likely to occur, the gender that exerts most bullying behaviors, locations in which bullying occurs, and the likelihood of reporting bullying. Although many SLPs answered these questions correctly, it should still be noted that up to 33% of participants answered incorrectly, suggesting that almost a third of school-based SLPs could potentially benefit from further information about bullying in order to understand the nature, context, and extent of this issue. In addition, when asked to identify types of bullying, the majority of respondents correctly identified all four types of bullying (i.e., cyber, verbal, physical, relational); however, the majority also incorrectly selected the two foils as types of bullying (i.e., confrontational, situational). This result further highlights the need for education on the nature and types of bullying for school-based SLPs.

The possible outcomes of being bullied selected by participants were primarily consistent with the bullying literature. Outcomes rated as “most likely” and “likely” to follow bullying that coincide with the literature include anxiety (Chapell et al., 2006; Espelage & Swearer, 2003; Hazler et al., 1992; Salmon, James, & Smith, 1998), lower academic success (Hazler et al.,

1992), and impaired ability to form peer relationships (Carney, 2000; Nansel et al., 2001). Similar to impaired self-confidence, the literature cites impaired self-esteem as a common outcome of bullying (Carney, 2000). Additionally, similar to deep emotional trauma, a number of studies have noted depression as an outcome (Chapell et al., 2006; Espelage & Swearer, 2003; Kaltiala-Heino et al., 1999). However, suicidal ideation was rated as the least likely outcome of being bullied in the current survey, which is inconsistent with the literature. Multiple studies have found suicidal ideation to be a severe outcome of bullying (Carney, 2000; Chapell et al., 2006; Erling, 2002; Hinduja & Patchin, 2010; Kaltiala-Heino et al., 1999; Rigby & Slee, 1999). It is possible that because the largest number of participants in the current study reported serving children of younger ages who may not have experienced years of bullying, they are less likely to observe suicidal behavior. It is also possible that this is not something expressed outwardly by students toward school professionals, as opposed to consequences that may be more visible to the outside observer, such as decreased peer relationships and impaired self-confidence.

Characteristics chosen to put children at risk for being bullied were also consistent with the bullying literature. As indicated in the survey, low self-esteem (Carney & Merrell, 2011; Olweus, 1997), anxiety (Olweus, 1997), lack of physical strength (Olweus, 1997), undeveloped social skills (Cappadocia et al., 2012; Hughes, 2014; Loveland et al., 2001; Reiter & Lapidot-Lefler, 2007), intellectual disability (Flynt & Morton, 2004; Mepham, 2010; Mishna, 2003), speech impairment (Hadley & Rice, 1991), and physical impairment (Biggs et al., 2010) have all been found to contribute to victimization. Given that participants rated all of these above 50, which indicated “likely,” respondents acknowledged that a number of characteristics may put children at risk for being bullied. “Undeveloped social skills” was the only characteristic rated as “most likely” to put a child at risk for bullying; this answer could have been chosen most often

due to the professional background of the survey population. Because SLPs are trained to evaluate and treat social communication deficits, it is likely that this academic and clinical training in language use (i.e., pragmatics) allows SLPs to observe undeveloped social skills among their students who are bullied, as well as understand the social impact that pragmatic deficits can have.

More than half of participants reported that bullying is “somewhat of a problem” in their schools, with no participants indicating that bullying is not a problem at all. This response supports the current bullying literature, which suggests that bullying is a problem amongst schools (Carney & Merrell, 2001; Espelage & Swearer, 2003; Hughes, 2014; NEA, 2011; Olweus 1997, 2003, 2011; Olweus & Limber, 2010; Robers et al., 2013; Smokowski & Kopasz, 2005).

### **Bullying and Autism Spectrum Disorder (ASD)**

Results of this study indicated that the majority of respondents consider bullying of children with ASD to be a problem in their schools. This is in keeping with the literature, as several studies have found bullying of children with ASD to occur at a rate of 40-46% (Mepham, 2010; Sterzing, Shattuck, Narendorf, Wagner, & Cooper, 2012; Wainscott, Naylor, Sutcliffe, Tantam, & Williams, 2008). Additionally, Cappadocia and colleagues (2012) reported that bullying is twice as likely to happen among students with ASD as in the general population.

Participants indicated that they were most likely to witness children with ASD being bullied in the lunchroom or the car line before or following school. This finding is consistent with studies regarding locations of bullying, as it has been found that bullying often occurs in areas of minimal adult supervision. Such areas include the lunchroom (Leff et al., 2003), the walk to and from school (Boulton & Underwood, 1992), playgrounds (Craig et al., 2000; Leff et

al., 2003), hallways (Smokowski & Kopasz, 2005), and bathrooms (Card & Hodges, 2008). Results of this survey also indicated that bullying was unlikely to be witnessed in small group sessions and the special education classroom. Given the adult presence associated with these settings, this finding further highlights previous conclusions that bullying is more likely to be observed in situations with less adult supervision.

The most problematic type of bullying for children with ASD was indicated to be verbal bullying, followed by relational bullying. The finding with regard to relational bullying is somewhat surprising, as it is frequently overlooked when compared to other types of bullying (i.e., verbal and physical) due to its covert nature (Bauman & Del Rio, 2006; Boulton, Trueman, Chau, Whitehand, & Amatya, 1999). The possibility exists that SLPs' training in social communication makes them particularly well-suited to perceive instances of relational bullying. Additionally, social skills training is often a crucial part of therapy for students with ASD, so SLPs may be perceptive of social behaviors that could result in students being bullied. Social vulnerability and exclusion have been recognized in the literature as factors that can have a negative impact on the quality of life and psychological wellbeing in children with ASD (Cappadocia et al., 2012; Sofronoff et al., 2011); therefore, the finding that SLPs may be able to recognize relational bullying is positive.

No participants indicated cyberbullying as problematic for children with ASD, which is interesting in light of the increased risk of harassment for internet users (Jones et al., 2012). This is somewhat consistent with the literature, though; several studies have determined verbal and relational bullying to be more common than cyberbullying for this population (Cappadocia et al., 2012; Carter, 2009; Kloosterman et al., 2013), while fewer have considered cyberbullying a threat (Kowalski & Fedina, 2011). The possibility also exists that cyberbullying may be more

evident at home, where students are more likely to engage in social networking activities, such as Facebook, Twitter, etc. (Dehue, Bolman, & Völlink, 2008; Tokunaga, 2010).

### **Management of Bullying**

Regarding management of bullying, all respondents agreed that it is SLPs' responsibility to intervene in moments of bullying. This is in keeping with Blood et al.'s (2013) vignette study regarding SLPs' perceptions of bullying of students with ASD, as no participants in the vignette study noted being "not at all likely" to intervene in instances of bullying. Additionally, the majority of respondents in the current survey indicated that they felt comfortable and prepared to intervene in moments of bullying; however, more than a quarter of respondents did not feel adequately prepared. These SLPs could most likely benefit from training on bullying intervention strategies. As SLPs are typically viewed as authorities on ASD and other special needs in the school environment, they may be distinctly qualified to help educate teachers and other school personnel on how to create a safe environment for these students (Hughes, 2014).

When observing a child being bullied, the majority of respondents indicated two main methods of responding: Talking to the child being bullied and offering strategies for coping with the situation, as well as reporting the behavior to other school personnel. Both of these methods are supported in the literature. Blood et al. (2013) found a "Report, Educate, Reassure" pattern among their participants' choices of how to respond. No SLPs in the current study selected ignoring the situation until the child confronts you; the fact that participants reported proactive methods of responding to bullying situations is a positive finding. Students are more likely to report bullying to adults who they believe will actively intervene in bullying situations (Cortes & Kochenderfer-Ladd, 2014). In addition, avoidance strategies have been reported as ineffective. Kochenderfer-Ladd and Pelletier (2008) found that telling victims to use avoidance behaviors,

such as ignoring the bully and walking away from the situation, are ineffective and often result in increased bullying. Additionally, adults ignoring bullying situations has been reported by students as one of the most likely factors for the perpetuation of bullying (Davis & Nixon, 2010).

Participants were also asked what type of advice they give to children experiencing the four different types of bullying. Similar responses were chosen for all four types of bullying. All participants chose the advice “Tell an adult at school when someone is bullying you” for relational and physical bullying, while 97% ( $n = 68$ ) chose this answer for verbal bullying. For cyberbullying, the majority of participants selected both “Tell an adult at school when someone is bullying you” and “Tell your parents so that the situation can be handled outside of school.” Similar to Blood et al.’s (2013) study, participants did not differentiate between verbal, relational, and physical bullying in terms of how they would respond; however, responses for cyberbullying on the current survey differed. The high number of responses for both of the categories—telling an adult at school and telling parents at home—indicate that cyberbullying is an issue that may need to be resolved by adults in the school and/or the child’s home, since home is where most cyberbullying usually occurs (Dehue et al., 2008; Tokunaga, 2010). However, just as studies have found that children are not likely to report bullying to teachers, the literature also cites that children are often unwilling to report cyberbullying to their parents because they fear losing their electronic privileges (Mishna et al., 2009).

### **School District Support**

The final section of the survey focused on support SLPs receive from their school districts regarding bullying. Respondents indicated that the majority of school districts are aware of bullying and offer in-services about management of bullying one to two times per year. Additionally, most participants reported that school districts provided access to printed materials

about bullying and/or management of bullying, and a majority also knew where to obtain these materials. Awareness in the schools could coincide with the increase of awareness in society as a whole, as a number of websites, organizations, and even films have been created to combat bullying.

When asked if school districts provide counseling services for bullies and victims, a large majority indicated that these services are provided. Given that a plethora of negative outcomes can accompany both bullying and being bullied, as cited previously, counseling services are crucial to the mental health of children and youth. Perpetrators of bullying may also suffer suicidal ideation (Hinduja & Patchin, 2010) and continue anti-social behaviors later in life (Olweus, 2011); therefore, the availability of help for these individuals is reassuring.

The majority of respondents indicated that their school districts utilize anti-bullying campaigns; however, only 20% of these school districts utilize anti-bullying campaigns specific to children with special needs. Given that over half of SLPs in the current study indicated that children with ASD are more at risk for being bullied than children in the regular education population, more awareness of bullying of children with special needs, such as ASD, may be helpful to many professionals working with this population (Hughes, 2014; Mephram, 2010; Mishna, 2003; Sofronoff et al., 2011; Thompson et al., 1994; Van Cleave & Davis, 2006).

Although most school districts use anti-bullying campaigns, less than half of respondents indicated that their school districts have implemented formal anti-bullying programs. Two of the most commonly mentioned programs—the Olweus Bullying Prevention Program (OBPP) and Positive Behavioral Interventions & Supports (PBIS)—have been found in the literature to be effective anti-bullying programs.

The Olweus Bullying Prevention Program (OBPP) originated from the suicide of three adolescent boys due to severe bullying in Norway in 1983 (Olweus, 2010). The OBPP consists of four principles designed to reduce existing bullying, prevent the development of new bullying problems, and achieve better peer relations at school (Olweus & Limber, 2010). The key principles for teachers and other adults to follow are: 1) showing warmth and positive interest in students, 2) setting limits of unacceptable behavior, 3) applying consistent nonphysical, non-hostile sanctions when rules are broken, and 4) being authorities and positive role models (Olweus, 1997; Olweus & Limber, 2010). Principles function at the level of schools (e.g., introducing school rules against bullying), classrooms (e.g., enforcing rules against bullying), individuals (e.g., intervening immediately when bullying is observed; Olweus, 1997), and, in some situations, the community (e.g., creating school-community partnerships; Olweus & Limber, 2010). Additionally, there are four major sub goals: 1) Increasing awareness of bully/victim issues and advancing knowledge about it, 2) Achieving active involvement on the part of teachers and parents, 3) Developing clear rules against bullying, and 4) Providing support and protection for victims (Olweus, 1997). In order to reduce bullying behaviors, schools' existing social environments must be restructured in order to reduce opportunities and rewards for bullying and to create camaraderie among students and adults (Olweus & Limber, 2010).

Several evaluations of the effectiveness of the OBPP have been conducted. The First Bergen Project Against Bullying, which followed approximately 2,500 fourth- through seventh-grade students from 1983 to 1985, initially implemented and assessed the OBPP (Olweus, 1997). The main findings of the study were significant: There were marked reductions, by 50% or more, in student self-reports of bully/victim problems; improvements in the social climate of the classroom, such as satisfaction with school life; and reductions of anti-social behavior, such as



vandalism, pilfering, fighting, truancy, and drunkenness (Olweus, 1997). In their review of large-scale studies of the OBPP, Olweus and Limber (2010) described that three more large-scale studies were carried out from 2001-2003 after the Department of Education and Research and the Department of Children and Family Affairs offered the OBPP to all Norwegian schools in grades one through 10. These studies found similar positive results to the First Bergen Project Against Bullying, with the additional discovery that effects of the OBPP have the potential to be long-lasting, as intervention schools were able to change their “culture” of bully/victim issues in a permanent manner. The OBPP was estimated to be effective for more than 2,000 Norwegian students escaping victimization. Studies have also weighed the value of the OBPP in several U.S. states, finding slightly inconsistent but positive impact.

The Schoolwide Positive Behavioral Interventions and Supports (SWPBIS) was also selected by many participants as a specific anti-bullying program offered by their school district(s). According to the Positive Behavioral Interventions & Supports website ([www.pbis.org](http://www.pbis.org)), the SWPBIS offers a school-wide system of creating a positive school environment for both typically developing students and students with disabilities. Rather than implementing punishment for negative behavior, such as suspensions or office referrals, PBIS focuses on modeling and reinforcing positive social behavior. Systems of support are introduced at primary (school-wide), secondary (classroom), and tertiary (individual) levels and are implemented in classrooms and throughout the school (e.g., hallways, buses, restrooms). The program is comprised of four key elements: 1) outcomes, which are academic and behavior targets that support social competence and academic achievement; 2) practices, which are evidence-based interventions and strategies that support student behavior; 3) data, which is information used to support decision making; and 4) systems, which are the supports needed to

implement SWPBIS. The SWPBIS is implemented in approximately 9,000 schools across the nation (Bradshaw, Mitchell, & Leaf, 2010).

Several studies have evaluated the effectiveness of SWPBIS in schools (Bradshaw et al., 2010; Muscott, Mann, & LeBrun, 2008). Bradshaw and colleagues (2010) conducted a 5-year longitudinal randomized controlled trial in 37 elementary schools to assess whether SWPBIS would affect suspensions, office referrals, and academic achievement, finding that these schools significantly reduced levels of student suspensions and office referrals. Muscott et al. (2008) examined the SWPBIS in 28 early childhood educational programs and K-12 schools, finding that the program resulted in 6,010 fewer office referrals and 1,032 fewer suspensions. Middle and high schools were found to benefit the most from implementation of the SWPBIS. Overall, the success of the OBPP and SWPBIS programs demonstrates that well-structured intervention programs have the capability of improving the school environment and/or reducing bully/victims problems; however, still needed is the development of similar programs specific to children with special needs and/or ASD.

### **Limitations and Future Directions**

The primary limitation of this investigation is the low response rate. Of the 4,987 individuals invited to participate in the survey by email, 48 completed the survey through this recruitment method, yielding a 1% response rate. This response rate suggests that the sample may not represent the target population; however, the similarities between the demographic data for the participant pool in the current investigation and that of the ASHA 2014 Schools Survey (i.e., the largest number of respondents came from the South and the largest number serve elementary-aged students) may increase the chance of generalization.

Another factor that could limit generalization is the possibility that only SLPs particularly interested in ASD and bullying may have responded to this survey. For example, although reported knowledge of the bullying literature and awareness from school districts was high, these results may be somewhat inflated. If an SLP has a particular interest in this subject, they may seek out information on the topic and be more aware than an SLP who does not have a particular interest in the subject; thus, the possibility exists that SLPs are not as knowledgeable about the topic of bullying as indicated by the results of this survey.

The current survey was developed via review of published surveys in the literature; however, its lack of validation could be considered a limitation. Also, several of the survey's questions could have been leading. For example, when asked if participants believe it to be SLPs' responsibility to intervene in moments of bullying, all participants indicated that it is. The possibility exists that this answer could have been chosen due to the nature of the survey. Respondents may have felt obligated to choose the most socially and professionally appropriate answer.

Because bullying generally occurs during elementary school and early adolescence, SLPs who work solely with children under the age of five were not included in this survey. However, it would be of interest in the future to examine the dynamics between typically-developing preschool children and those with autism. Research has found language-impaired and speech-impaired preschool children to be more likely to be ignored by their normally-developing peers, as children preferred other normally-developing peers as companions (Hadley & Rice, 1991); exploring autism in this age group could help to determine when children begin to perceive social differences and whether they embrace or reject these differences.

It would also be of interest to examine qualitative data pertaining to SLP's personal experiences with bullying of children with ASD, how they respond in these situations, and their preparation to do so. This could shed light on the perceptions of the roles and responsibilities of the school-based SLP related to bullying of children on their caseloads. For example, school-based SLPs could be interviewed.

In addition, future research could investigate how regular and special education teachers view the role of the SLP with regard to bullying of children with ASD. For instance, it would be of interest to examine whether teachers consult SLPs for potential collaboration when students with ASD are being bullied. Given that the literature highlights the essential role of school personnel in stopping bullying, understanding how teachers and SLPs collaborate to help their students could provide further information on intervention strategies. Such strategies might include social skills intervention to decrease behaviors that may set the child with ASD apart from his or her peers, which increases the likelihood of bullying, or direct bullying prevention or intervention strategies, such as peer or educator training (Hughes, 2014).

### **Conclusions and Clinical Implications**

The results of this study are consistent with Blood et al.'s (2013) findings regarding speech-language pathologists' perceptions of bullying of children with ASD. Participants in the current investigation believed bullying of children with ASD to be a problem in their schools, and all participants indicated that it is their responsibility to intervene in moments of bullying. However, not all respondents demonstrated an in-depth knowledge of bullying, nor did they feel comfortable intervening; therefore, it appears that some speech-language pathologists in the schools could benefit from more information on bullying in order to understand the nature,

context, and extent of this issue, as well as ways in which to respond to bullying when it is observed.

In addition, while the majority of SLPs indicated that their school used a specific anti-bullying campaign, very few responded that a program was in place specifically to address the bullying of children with special needs, such as ASD. Given that SLPs are trained in all areas of language, including social communication, they have the potential to take a primary role in both the management of social communication deficits and anti-bullying efforts for children on the autism spectrum. As the majority of SLPs reported seeing the students on their caseloads in small groups, for example, this may allow the opportunity to create a safe environment in which students feel free to report bullying behaviors. The school-based SLP can then utilize a recommended response strategy, such as talking with the student being bullied and listening to their concerns, providing advice and coping strategies, and being proactive with intervention instead of ignoring the situation, which is known to be ineffective. Proactive SLPs who seek out this information can also consult with teachers and school personnel to provide constructive guidance on how to manage both communication needs of children with ASD and anti-bullying efforts within the classroom.

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## Appendix A. Survey

### Part I. Background

1. We appreciate your participation. How did you hear about the survey?
  - Email via ASHA Community Profile Page
  - ASHA Community Discussion Board
  - ASHA Facebook Page
  - ASHA Special Interest Group 1, Language Learning and Education
  - ASHA Special Interest Group 16, School-based Issues
  - Other \_\_\_\_\_
  
2. Highest degree received:
  - Bachelor's
  - Master's
  - Doctorate
  
3. I have professional experience working as a speech-language pathologist in the schools.
  - Yes
  - No
  
4. Are you currently practicing as a speech-language pathologist in the schools?
  - Yes
  - No
  
5. In which state are you currently practicing and professionally licensed?
  
6. Years of professional experience in the schools:
  - < 1 year
  - 1-5 years
  - 6-10 years
  - 11-15 years
  - 16+ years
  
7. Grade levels I currently serve (check all that apply):
  - Elementary school
  - High school
  - Middle school
  - Specialized school

8. Autism Spectrum Disorder is defined by the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) as persistent deficits in social communication and restricted, repetitive patterns of behaviors and interests. These symptoms must be present in early childhood and must affect and limit them in their daily lives. Individuals with ASD range from low functioning, where they may be nonverbal with intellectual disabilities, to high functioning, where they are verbose and possess IQs above normal limits. Based on this definition, please indicate the number of students with a formal diagnosis of autism spectrum disorder (ASD) currently on your caseload:

- 0 students
- 1-3 students
- 4-6 students
- 7-9 students
- 10-12 students
- 13-15 students
- 16+ students

9. What is the approximate number of students with a formal diagnosis of ASD whom you have worked with in the past 5 years?

- 0 students
- 1-5 students
- 6-10 students
- 11-15 students
- 16-20 students
- 21-25 students
- 26-30 students
- 30+ students

10. What are the ages of children with ASD currently on your caseload? (Check all that apply.)

- 5-7
- 8-10
- 11-13
- 14-17
- N/A; I do not currently have children with ASD on my caseload

11. On average, how many sessions per week do you see students with ASD for speech therapy?

- 1 session
- 2 sessions
- 3+ sessions

12. Where is your typical session with a child with ASD held? (Check all that apply.)
- In the regular education classroom (inclusion)
  - In the special education classroom (inclusion)
  - In the speech room (pull-out; individual sessions)
  - In the speech room (pull-out; group sessions)

**Part II. Familiarity with Current Research on Bullying**

13. Bullying is of greatest concern during elementary school and early adolescence.
- True
  - False
14. Girls are more likely to bully and be bullied than boys.
- True
  - False
15. Bullying of children exists in the community outside of school as well as in school.
- True
  - False
16. Victims are usually likely to report bullying to adults (e.g., parents, teachers, other school personnel).
- True
  - False

17. Please answer the following questions with regard to types of bullying.

	Which of the following are types of bullying?	Which has been shown to be the most prevalent amongst males?	Which has been shown to be the most prevalent amongst females?
	Select all that apply	Select only one	Select only one
Cyberbullying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confrontational	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relational	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Situational	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Verbal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

18. How likely do you feel that the victim would experience the following outcomes as a result of being bullied?
- Anxiety
  - Deep emotional trauma
  - Impaired ability to form adult relationships in the future
  - Impaired ability to form peer relationships
  - Impaired self-confidence
  - Lower academic success
  - Suicidal ideation
19. What is the likelihood that the following characteristics would put a child at an increased risk for being bullied?
- Anxiety
  - Intellectual disability
  - Lack of physical strength
  - Low self-esteem
  - Physical impairment
  - Speech impairment
  - Undeveloped social skills

**Part III. Familiarity with and Perceptions of Bullying of children with ASD**

20. To what degree do you consider bullying to be a problem in your schools?
- Serious
  - Somewhat of a problem
  - Not much of a problem
  - Not a problem at all
  - Unsure
21. Have you witnessed bullying of children with ASD?
- Yes
  - No
22. Please rank from least (1) to most (6) where you are likely to witness a child being bullied.
- In the car line before or following school
  - In the lunchroom
  - In the regular education classroom (inclusion)
  - In small group sessions
  - In the special education classroom (inclusion)
  - In the speech room (pull-out)

23. To what degree do you consider bullying of children with ASD to be a problem?
- A serious problem
  - Somewhat of a problem
  - Not much of a problem
  - Not a problem at all
  - Unsure
24. Do you feel that children with ASD are more susceptible to being bullied than children in the regular education population?
- Yes
  - No
25. Do you feel that children with ASD are more susceptible to bullying than children with other communication disorders (e.g., stuttering, articulation, language impairment)?
- Yes
  - No
26. Which of the following types of bullying do you consider to be the most problematic for children with ASD?
- Cyberbullying
  - Physical
  - Relational
  - Verbal
  - None
27. Which of the following types of bullying do you witness the most with children with ASD?
- Cyberbullying
  - Physical
  - Relational
  - Verbal
  - None
28. How do you feel when you see a child with ASD being bullied? (Check all that apply.)
- Annoyed with the situation
  - Anxious
  - Embarrassed for the child being bullied
  - Frustrated
  - Overwhelmed with the situation
  - Sorry for the child
  - Unconcerned
  - Other \_\_\_\_\_



#### Part IV. Management of Bullying

29. Do you feel that it is your responsibility as a speech-language pathologist to intervene in moments of bullying?

- Yes
- No

30. Do you feel adequately prepared to intervene in moments of bullying?

- Yes
- No

31. Do you feel comfortable intervening in moments of bullying?

- Yes
- No

32. Do you tend to overlook instances of bullying?

- Yes
- No

33. How do you respond when a child is being bullied? (Check all that apply.)

- Give the child who is bullying three warnings
- Have the bully apologize
- Ignore the situation until the child being bullied confronts you with the problem
- Report the behavior to other school personnel
- Talk to the child being bullied and offer strategies for coping with bullying
- Talk to the child being bullied and offer condolence
- Other \_\_\_\_\_

34. What type of advice do you give to children who are being ostracized by their peers or victims of gossip? (Check all that apply.)

- Deal with it because bullying is a normal part of growing up
- Deal with it because it will help you gain character
- Ignore the bully
- Stand up for yourself and fight back
- Tell an adult at school when someone is bullying you
- Tell your parents so that the situation can be handled outside of school
- Other \_\_\_\_\_

35. What type of advice do you give to children who are being bullied through such means as pushing, hitting, and kicking? (Check all that apply.)
- Deal with it because bullying is a normal part of growing up
  - Deal with it because it will help you gain character
  - Ignore the bully
  - Stand up for yourself and fight back
  - Tell an adult at school when someone is bullying you
  - Tell your parents so that the situation can be handled outside of school
  - Other \_\_\_\_\_
36. What type of advice do you give children who are being bullied through hurtful words meant to humiliate them (e.g., excessive name-calling)? (Check all that apply.)
- Deal with it because bullying is a normal part of growing up
  - Deal with it because it will help you gain character
  - Ignore the bully
  - Stand up for yourself and fight back
  - Tell an adult at school when someone is bullying you
  - Tell your parents so that the situation can be handled outside of school
  - Other \_\_\_\_\_
37. What type of advice do you give children who report being bullied over the internet, text messages, or social media? (Check all that apply.)
- Deal with it because bullying is a normal part of growing up
  - Deal with it because it will help you gain character
  - Ignore the bully
  - Stand up for yourself and fight back
  - Tell an adult at school when someone is bullying you
  - Tell your parents so that the situation can be handled outside of school
  - Other \_\_\_\_\_

#### **Part V. School District Support**

38. My school district is aware of bullying in schools.
- Yes
  - No
39. My school district offers in-services regarding the management of bullying and use of anti-bullying language.
- Yes
  - No

40. My school district holds in-services regarding the management of bullying and use of anti-bullying language.
- 1-2 times per year
  - 3-4 times per year
  - 5-6 times per year
  - 7 or more times per year
  - No annual discussions
41. My school district provides access to printed materials about bullying and/or management of bullying.
- Yes
  - No
42. I am aware of where printed materials about bullying can be obtained if needed.
- Yes
  - No
43. My school district offers counseling services for bullies and victims.
- Yes
  - No
44. My school district utilizes an anti-bullying campaign to address bullying.
- Yes
  - No
45. My school district utilizes an anti-bullying campaign specific to children with special needs.
- Yes
  - No
46. My school district has implemented a formal program addressing intervention and prevention of bullying (e.g., Olweus Bullying Prevention Program, Quit It!, Whole School Response).
- Yes
  - No

Name of formal bullying intervention and prevention program: \_\_\_\_\_

Appendix B. Information Letter

**(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL STAMP WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)**

**INFORMATION LETTER**

**for a Research Study entitled**

**“Perceptions of Bullying of Students with Autism Spectrum Disorder: A Survey of School-Based Speech-Language Pathologists”**

**You are invited to participate in a research study** to learn about school-based speech-language pathologists’ knowledge and perceptions of bullying of children with autism spectrum disorder (ASD), as well as their management of instances of bullying and how much school district support is provided in the area of bullying. This study is being conducted by Erin E. Ofe, Master’s student in Communication Disorders at Auburn University, and Dr. Allison M. Plumb, associate professor in the Auburn University Department of Communication Disorders. You were selected as a possible participant because you are currently working as an ASHA certified speech-language pathologist or a Clinical Fellow in the public school setting.

**What will be involved if you participate?** If you decide to participate in this research study, you will be asked to complete an online survey form. Your total time commitment will be approximately 15 minutes.

**Are there any risks or discomforts?** There is always a risk of breach of confidentiality with surveys, but this possibility is being addressed by keeping all responses completely anonymous with no identifying information whatsoever being collected and using all reasonable and customary security measures. The data will be stored behind a secure firewall, and all security updates are applied in a timely fashion.

**Are there any benefits to yourself or others?** There is no direct benefit to you for participating in this study, but it is hoped that the results of this study will help to provide needed information on bullying of students with autism spectrum disorder from the perspectives of school-based speech-language pathologists. This information will aid in developing an understanding of the extent to which bullying is a problem that school-based SLPs face and may aid in the development of strategies to reduce bullying for students with ASD on their caseloads.

**Will you receive compensation for participating?** There is no compensation for completing this survey; however, your participation would be greatly appreciated.

**Are there any costs?** There are no costs associated with this survey, except for the few minutes of your time that it takes to complete the survey.

**If you change your mind about participating,** you can withdraw at any time by closing your browser window. Once you have submitted anonymous data, it cannot be withdrawn due to it being unidentifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University or the Department of Communication Disorders.

**Any data obtained in connection with this study will remain anonymous.** We will protect your privacy and the data you provide by NOT asking for any identifiable information. Information collected through your participation may be presented at state or national conferences and may be published in a professional journal.

**If you have questions about this study,** please contact Dr. Allison Plumb at [amp0016@auburn.edu](mailto:amp0016@auburn.edu)

**If you have any questions about your rights as a research participant,** you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844-5966 or email at [IRBadmin@auburn.edu](mailto:IRBadmin@auburn.edu) or [IRBChair@auburn.edu](mailto:IRBChair@auburn.edu).

HAVING READ THE INFORMATION ABOVE, PLEASE DECIDE IF YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. IF YOU DECIDE TO PARTICIPATE, INDICATE THAT YOU AGREE TO DO SO BY CLICKING ON THE FOLLOWING LINK TO ACCESS THE SURVEY.

I AGREE TO PARTICIPATE:

[http://auburncla.az1.qualtrics.com/jfe/form/SV\\_a4Y7iFyEz8JLK5v](http://auburncla.az1.qualtrics.com/jfe/form/SV_a4Y7iFyEz8JLK5v)

YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

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Erin E. Ofe, Master's Student

Date

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Allison M. Plumb, Ph.D., CCC-SLP

Date

**"The Auburn University Institutional Review Board has approved this document for use from August 18, 2014 to August 17, 2015. Protocol #14-280 EP 1408."**