Peers' Knowledge About and Attitudes Towards Students with Autism Spectrum Disorders

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Introduction

The prevalence of autism spectrum disorders (ASD) has increased rapidly over the past decade with recent prevalence rates reported to be as many as 1 in 77 eight-year-olds affected (Pinborough-Zimmerman et al. 2012). The increased identification of students with ASD has implications for public education as access to general education for students with ASD is a right protected by federal special education law, which ensures that students with autism are educated in the least restrictive environment possible (Individuals with Disabilities Education Improvement Act [IDEA] 2004). Recent reports indicate that approximately 30–40 % of elementary and middle school students with autism receive at least some of their instruction in general education settings in the United States (Sanford et al. 2008). Approximately 60 % of children and adolescents with ASD are educated in mainstream settings in the United Kingdom (Wainscot et al. 2008). As such, students with ASD and typically developing peers will likely encounter each other during school hours.

The practice of mainstreaming and inclusive education for students with special education needs, including students with ASD, is based upon protecting children's access to education (i.e., an ideological justification) and benefitting from inclusive educational practice (i.e., an empirical justification; Lindsay 2007). For students with ASD, many of the assumed benefits of inclusive education center on improved

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V.B. Patel et al. (eds.), *Comprehensive Guide to Autism*,
DOI 10.1007/978-1-4614-4788-7_7,

social acceptance as well as improved social communication skills. Frederickson (2010) cogently summarized the hypothesized social benefits for all children with special education needs. First, inclusion may reduce stigma fostered by segregated educational placements. Second, inclusion may allow for social learning of appropriate social behavior exhibited by typical classmates. Third, inclusion may engender social acceptance and improve the social standing of students with disabilities.

Despite the potential educational and social benefits of inclusion, the empirical evidence is generally mixed with marginal positive effects for students in inclusive educational settings versus segregated settings (Lindsay 2007 for review). In the specific case of autism, inclusive education has yet to yield robust and consistent improvements in attitudes, social acceptance, and social status. As reviewed in the next section, recent investigations reveal that the social experience of students with autism is frequently characterized by negative attitudes and difficulties with peer interactions.

Social Experience of Students with Autism in Education Settings

Although a general intent of inclusive education is to improve social outcomes for students with ASD, particularly social acceptance and interaction, evidence suggests that social benefits are not universally realized. A growing amount of literature has documented the social experiences of students with ASD in inclusive settings and generally found social difficulties in various domains (see Table 1). Although the majority of evidence suggests that students with ASD experience social difficulties, a minority of students appear to experience positive social interactions.

Social Isolation and Loneliness

For both children and adolescents with ASD, social experiences are frequently characterized by social isolation. When compared to typical counterparts, elementary school students with autism experience lower levels of social acceptance, social reciprocity, and companionship when compared to their typical peers (Chamberlain et al. 2007). During playground activities, Kasari et al. (2011) found that elementary school students with ASD were not engaged with peers roughly 66 % of the time, most frequently involved in solitary behavior or other unengaged behaviors, such as watching peers play. For adolescents with ASD, social isolation difficulties persist. Adolescents with HFA report fewer social interactions during the school day and having fewer friends than non-affected peers (Wainscot et al. 2008). Little (2002) found that a roughly one-third of students with Asperger's syndrome (AS) often sat alone at lunchtime during school. Humphrey and Symes (2011) found that adolescents with ASD were more isolated and spent less time engaged in cooperative interactions with peers. Using sociometric ratings, Symes and Humphrey (2010) reported that secondary school students with ASD

Table 1 Snapshot of social experiences of students with ASD in inclusive settings

Domain	General summary of findings
Social interactions	↓ Social acceptance, ↓ social reciprocity, ↑ solitary behavior
Bullying	↑ Rates of peer victimization; 30–75 % bullied
Loneliness	↑ Rates of self-reported loneliness
Social support/ friendship	↓ Levels of perceived social support
	↓ Reciprocated friendships; only 20–35 % of students with ASD have reciprocated friendships

experienced higher levels of social rejection and lower levels of peer acceptance when compared to typical peers or peers with reading disability. Likewise, Pisula and Lukowska (2012) found that adolescents with AS reported a greater degree of social isolation when compared to typical peers. Locke et al. (2010) found that high school students with autism reported more loneliness than typical classmates. Similarly, Lasgaard et al. (2010) reported that 21 % of adolescent boys with ASD (vs. 4 % of controls) described themselves as "often" or "always" feeling lonely.

Peer Bullying, Teasing, and Aggression

In addition to experiencing social isolation, students with ASD are at risk for bullying and targeting for peer aggression. Little (2002) found that 94 % of students with Asperger's syndrome were victimized by peers with 75 % being bullied. More recently, van Roekel et al. (2010) reported that up to 30 % of students with autism are socially victimized at school. Humphrey and Symes (2010) found higher frequency of bullying for adolescents with ASD when compared to either typical peers or peers with reading disorder. Humphrey and Symes (2011) also found that adolescents with ASD experienced more unprovoked verbal aggression from peers when compared to students with learning disabilities and typical students.

Using qualitative methodology, Humphrey and Lewis (2008) discovered that many adolescents with ASD were teased or bullied during their school experiences. Teasing and bullying often took the form of name-calling, such as being called "weirdo"; however, several students also reported instances of physical aggression, such as being punched, tackled, or pinned behind a door (Humphrey and Lewis 2008).

Social Support and Friendships

In the presence of feelings of loneliness and social isolation, social support may serve to lessen negative effects, particularly during adolescence. Lasgaard et al. (2010) identified the potential role of social support as a protective factor against feelings of loneliness for adolescent boys with ASD. Investigators found that self-reported feelings of loneliness were negatively related to perceived social support from classmates, close friends, and parents. Findings provide initial suggestion that

improving social support may reduce feelings of loneliness in adolescence. Recent reports indicate, however, that adolescents with ASD enjoy lower levels of social support, particularly from peers, when compared to other students. Pisula and Lukowska (2012), for example, surveyed adolescents with AS and found students with AS endorsed less social support from peers when compared to typically developing adolescents.

In the area of friendship, elementary school students with ASD experience fewer reciprocated friendships when compared to their typical classmates. On the cautiously optimistic side of the ledger, however, Kasari et al. (2011) and Chamberlain et al. (2007) found that roughly 20–35 % of elementary school-age students with ASD do enjoy a reciprocated friendship. Kasari et al. (2011) found that elementary school-age students with ASD with a reciprocated friendship were perceived as more socially involved by the larger peer group when compared to students without a reciprocated friendship. These findings suggest that friendships are attainable for students with ASD and that the presence of at least a single reciprocated friendship is suggestive of an improved social experience.

Peers' Knowledge of ASD

Several reports published roughly a decade ago indicated that peers in both elementary and middle school reported no awareness of autism or ASD (Gus 2000; Magiati et al. 2002). Peers' lack of knowledge about autism has been identified as a potential barrier to successful inclusive experiences for students with ASD. Lack of knowledge and information about a student with ASD may contribute to social isolation, teasing, and bullying. In a case study involving an adolescent with autism, for example, Gus (2000) found that peers reported no awareness of autism and no understanding that autism resulted in social and communicative difficulties. Lack of awareness of autism was associated with stereotypic attitudes (e.g., the student with autism was "slow") and social rejection.

In contrast to 10 years ago, students report greater knowledge and awareness of autism, and a small literature has examined what peers know and believe about autism for both elementary school-age and middle school-age students. For example, Silton et al. (2011) and Campbell and Barger (2011) found that many elementary (77 %) and middle school students (46 %) reported at least some awareness of the term autism and its meaning.

Accuracy of Knowledge About Autism

Campbell and Barger (2011) surveyed 1,015 middle school students' prior awareness of the term autism and sampled their knowledge of autism using a 10-item survey. Results revealed that 46 % of middle school students reported prior awareness of autism and that those students who had heard of autism earned higher scores on a knowledge survey than those students who had not heard of autism.

Table 2 Examples of inaccurate knowledge about autism reported by middle school students

Item content	Overall % incorrect
Students with autism may have difficulty looking at others	42.3
Students with autism cannot perform many activities, even with help	36.5
Students with autism may rock back and forth	31.4
Autism affects a student's brain	24.0
Students with autism sometimes have difficulty with changing activities	21.4

Note: $N = 1{,}015$

Table 3 Accuracy and content for elementary and middle school students' definitions of autism

	Elementary school ($n = 99$)	Middle school ($n = 450$)
Sample characteristics		
Age (in years) *M* (*SD*)	10.39 (0.97)	13.07 (0.93)
Grades	4th–6th	6th–8th
Location	Baltimore, MD Syracuse, NY	Metro Atlanta, GA
Accuracy of definition for autism		
Entirely accurate[a]	70.7 %	71.3 %
Reported "don't know"	20.2 %	9.6 %
Content of definition for autism		
Autism as disability	53.5 %	65.8 %
Communication difficulties	12.1 %	8.4 %
Social difficulties	22.2 %	8.2 %
Restrictive/repetitive behavior	1.7 %	1.6 %

[a]The majority of definitions judged to be accurate defined autism simply as a disability

Both groups of peers reported some knowledge about various aspects of autism, although the degree of random responding was not accounted for in the analysis for both naïve and non-naïve groups. Critical inaccuracies were reported for middle school students; for example, 5 % of the combined sample reported that autism was communicable and many students did not accurately identify common symptoms of autism, such as difficulties with looking at others (see Table 2 for other examples).

Peers' Spontaneous Definitions, Thoughts, and Attitudes About Autism

Campbell et al. (2011) also conducted a qualitative analysis to document 450 middle school students' spontaneous knowledge, beliefs, and perceptions of autism. Roughly 70 % of middle school students provided a definition of autism that was judged to be accurate; however, the content of students' correct definitions reflected only a basic understanding that autism is a disability (Table 3).

Another 10 % of students provided definitions that consisted of a combination of accurate and inaccurate information, and 4.4 % of the sample provided a definition of autism that was judged to be entirely inaccurate. Inaccuracies spanned various content areas, such as misconceptions about core features, etiology, and problems associated with autism. For example, several middle school students reported that autism was associated with memory loss and caused by mercury poisoning. Interestingly, a small percentage of middle school students provided additional information regarding autism that fell outside of the requirements of the task, which was to define autism. In these responses, students provided narrative about how students with autism should be supported within educational settings, such as being provided special services and deserving of love and acceptance.

Silton et al. (2011) also conducted a qualitative analysis of elementary school students' knowledge, beliefs, and perceptions of autism as captured in written definitions of the term autism. Similar to Campbell et al.'s (2011) findings, roughly 70 % of respondents provided an accurate definition of autism. Within Silton et al.'s (2011) sample, roughly half of students' responses indicated knowledge that autism was a disability; however, only about 2 % of the sample identified restrictive interests or repetitive behaviors as core features of autism. Overall, the combined findings from Campbell et al. and Silton et al. indicate that a growing number of typical peers are aware of autism; however, many peers simply understand that autism is a disability. Lack of understanding that autism consists of social, communicative, and behavioral difficulties may contribute to peers' isolating and rejecting students with ASD due to potential misinterpretations of behavior.

Educational Programming to Improve Attitudes and Behavior Towards Students with ASD

A consistent suggestion in the literature is that peer education and peer sensitivity interventions may counteract the negative social experiences of students with ASD (Frederickson et al. 2010). One approach to improve peers' attitudes towards students with ASD is to provide information about the disorder to increase knowledge, improve understanding of behaviors observed within educational contexts, and, ultimately, improve attitudes and behavior towards students with ASD. Peer education interventions are apparently not uncommon; for example, Frederickson et al. (2010) found that 40–50 % of schools conducted peer educational or awareness interventions on behalf of students with ASD.

One organizing model has been articulated by Campbell (2006), who argued that peer education should be based on social persuasion theories, particularly the ideas of Triandis (1971). Within this model, Campbell (2006) highlighted the importance of considering various aspects of the peer education context, including (a) source (i.e., who is providing education), (b) message (i.e., what is being said), (c) channel (i.e., how the message is provided),

Table 4 Persuasive communication model components

Domain	Factors/components	Purpose, expectations, and findings
Source (who)	Credibility	↑ Credibility, ↑ persuasive
	Likability	↑ Likability, ↑ persuasive
	Power, status, authority	↑ Authority, ↑ persuasive
Message (what)	Explanatory information	Correct attributions of personal responsibility for unusual behavior
	Descriptive information	Highlight similarities between audience and target to ↑likability
	Directive information	Provide direct guidance to peers
Audience (whom)	Sex	Girls' attitudes > boys' attitudes
	Age	Suggestions that attitudes ↑in childhood then ↓ in adolescence
	Prior knowledge	For autism, naïve audience responds ↑explanatory information

(d) audience (i.e., to whom), and (e) targeted outcomes (i.e., what changes are expected; see Table 4). Findings relevant to source, message, and audience are introduced and discussed briefly.

Source

Within the social persuasion literature, the impact of source characteristics, such as likability, credibility, and power, has been studied for decades. In general, persuasion theory predicts that individuals are more persuaded by arguments presented by those who are perceived to be likable, credible, and authoritative. For peer educational interventions, various individuals might be called upon to provide information about autism on behalf of a student, such as a teacher, parent, other school professional (e.g., school psychologist), or, perhaps, an outside professional (e.g., pediatrician). Within the peer education literature on autism, the impact of source on peers' responsiveness to educational messages has begun to be examined. For example, Morton and Campbell (2008) found that older elementary school students responded more favorably to informational messages presented by teachers or a professional as opposed to parents. Campbell (2007) also documented that elementary school students responded favorably to a message presented by a child actor portraying a child with autism when he was perceived as similar to themselves. In this case, the source presenting information was the child with autism (i.e., the source was "self"). In general, investigators in the peer education literature have not attended to the potential impact of source on the effectiveness of peer education messages.

Informational Message

Arguably, the most frequently studied aspect of peer education has consisted of examining the effects of different types of messages presented to peers on behalf of a student with ASD. Three general types of messages have been proposed in the peer education literature: (a) descriptive messages, (b) explanatory messages, and (c) directive messages (Campbell 2006). Descriptive messages are designed to describe a child with autism with the purpose of highlighting similarities between the child with autism and typical peer group. Campbell's (2007) investigation found that perceived similarity between an unfamiliar child with autism and typical peers served as a mediator for the benefit of a descriptive message. That is, peers responded more favorably to a message that described similarities between themselves and the child with autism, and the greater the perceived similarities, the more favorable the response to the message.

Explanatory messages are based on social attribution theory, which asserts that humans strive to make sense of the behavior of themselves and others via forming causal interpretations of events that occur in their everyday lives (e.g., Weiner 1993). For atypical behavior, such as aggression, peers' perceptions of personal responsibility predict negative affective responding, such as annoyance, and less social support (e.g., Juvonen 1992). In the case of autism, for example, a peer may ask herself, "Why does that child never look me in the eye when I talk to him?" The response may be that the child may be engaging in this behavior purposefully, which, in turn, may lead to a negative emotional response (e.g., annoyance), and, ultimately, reduced social interaction. In the case of peer education, an explanatory message might explain that behaviors exhibited by a student with autism (e.g., poor eye contact) arise due to the condition of autism, as opposed to purposeful behavior. Providing explanatory messages in isolation, however, has not produced consistent findings. For example, Campbell (2007) found that the addition of an explanatory message to a descriptive message, as opposed to an explanatory message alone, produced more favorable peer attitudes towards an unfamiliar student with autism. Similarly, Campbell et al. (2004) found that adding an explanatory message to a descriptive message resulted in improved attitudes when compared to descriptive information alone (see Fig. 1 for theoretical model).

Finally, directive messages are those that provide guidance and instruction about how to interact and assist students with autism. For example, peers might learn that they can help students with autism by talking with them during lunchtime, helping them find their place during a school lesson, and including them throughout the school day (see Campbell 2006 for other examples). Although there are several examples of directive messages in peer education and awareness materials, their impact on peers' attitudes and behavior has not been systematically studied. It is also not clear what mechanism might explain the usefulness of directive messages, if they are found to be helpful. It is possible that receiving direct guidance allays fears or, perhaps, may improve peers' self-efficacy beliefs that they may be able to assist a child with autism. The interactive

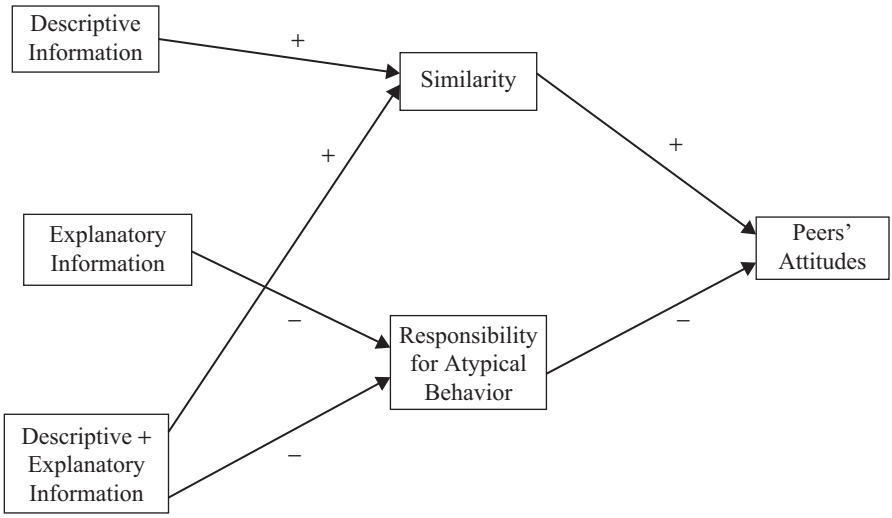

Fig. 1 Hypothesized links between two persuasive messages and peers' attitudes towards a peer with ASD

effects of combining descriptive, explanatory, and directive information have yet to be examined in the peer education literature.

Audience

Gender and age are the two most common variables studied across all peer education and awareness investigations. In general, girls consistently report more favorable attitudes than boys for peers with physical and developmental disabilities (see Campbell 2006 for overview). In the specific case of autism, girls consistently report more favorable attitudes than boys when provided with descriptive and explanatory information. Although some investigators hypothesize that girls report more positive attitudes due to being socialized to be more caring and nurturing than boys, there is no definitive explanation that accounts for gender differences noted in the literature.

Although the impact of gender is clearly demonstrated in the literature, the influence of age is less clear. Some have speculated that attitudes improve from childhood to adolescence then decline from adolescence to adulthood; however, Nowicki and Sandieson (2002) did not find a relationship between age and attitudes towards individuals with various disabilities. In the specific case of autism, Campbell et al. (2004) found that attitudes towards autism declined slightly for 3rd- through 5th-grade students (i.e., 9- to 11-year-olds); however, attitudes increased slightly for 6th through 8th graders (i.e., 12- to 14-year-olds; Campbell 2007). The relationships between age and attitudes were small in magnitude across both

Table 5 Examples of peer education materials

Author	Description/components	Age group
Examples in the professional literature		
Gus (2000)	Modification of Circle of Friends	High school
	Single class meeting, teacher led	
Lisser and Westbay (2001)	Provided peers with autobiography in booklet form. Includes description of Asperger's syndrome. Includes direct suggestions for peer interaction	Elementary school
Examples of published materials		
Indiana Resource Center for Autism (1991)	Videotape presentation. Provides explanation of autism. Provides direct suggestions for peer action	Elementary school
Maich and Belcher (2012)	Picture book recommendations. Various titles are recommended in the review article	Elementary school
Organization for Autism Research (2012)	Fold out book for peers. Classroom poster and teacher lesson plan. Includes definition and suggestions for peer interaction	Elementary/ middle school

groups, with $r = -.14$ for the elementary school sample and $r = .21$ for the middle school sample.

The larger persuasion literature suggests that audiences who are naïve are more responsive to sources with high levels of credibility when compared to non-naïve audiences. Within the peer education literature for autism, the impact of prior awareness and knowledge of autism has begun to be evaluated. For example, Campbell (2007) found that middle school students who reported no prior awareness responded negatively to a message that included descriptive information (i.e., highlighted similarities) but omitted explanatory information (i.e., provided no causal explanation about autism). In contrast, non-naïve students responded more favorably to a message that provided descriptive information only. Based upon these initial findings, it is important to consider the potential impact of prior awareness on peers' attitudes towards autism. Coupled with the findings presented regarding misperceptions about autism (e.g., Campbell and Barger 2011), it may be beneficial to survey students' prior awareness about autism prior to conducting a peer education intervention. Although it appears that providing an explanation about autism to naïve students is warranted, it may be necessary to correct misperceptions for peers who report familiarity with autism (e.g., that autism is communicable).

Examples of Peer Education Approaches and Materials

Peer educational materials have appeared in the literature and several professionally developed materials have been published by various agencies (Table 5). Published in the professional literature, Gus (2000) presented an adapted version of the "Circle of Friends" curriculum to educate a class of students about autism on behalf of a student, Adam, who was being excluded by classmates. Adam had

recently transferred to a new school and was the first student served in the school setting who had been identified with autism. Peer education occurred over one session while Adam was out of the classroom. No peers had heard of autism; the presentation included information that defined autism, including core features, as well as how autism accounted for Adam's social and communicative difficulties. The presentation concluded with examples of how the class could help Adam in the classroom, such as talking with him more often; utilizing clearer, more concrete language during interactions; and being more patient with him. Roughly 6 months after the peer education session, over 90 % of Adam's peers reported that their attitudes had improved towards him, such as them feeling more patient and having a better understanding of some of his difficulties. Similarly, peers reported making more efforts to talk with Adam, including him during lunchtime, and intervening with other students who were teasing him.

Another applied example of peer education is presented by Lisser and Westbay (2001). In this example, Max, a second-grade student with AS, and his mother developed a handout for Max's classmates in order to introduce himself and explain that he has Asperger's syndrome. The materials are autobiographical and Max provides information about AS, including how AS is manifested in various behaviors, including sometimes being inattentive during social interactions and classroom instruction. Further, Max provides information about similarities between himself and other students his age and also includes suggestions for how to interact with him during the school year. For example, Max explains that classmates may help him by including him in social activities even though he may seem inattentive.

The Indiana Resource Center for Autism ([IRCA] 1991) has developed a DVD entitled, "Autism: Being Friends," which describes characteristics of autism and also provides direct guidance to peers regarding how to interact with students with autism. The materials also include short interactions between students with autism and typical peers, which may provide useful modeling of behavior to facilitate acceptance for students with autism. The DVD includes a brief interview with a student with high-functioning autism who provides explanatory information about autism. The video also provides simple directives to guide student interactions with students with autism, such as advising peers to talk and listen to students with autism, show students with autism how to play, and to help them find their place during classroom instruction.

A set of peer education materials has been published recently by the Organization for Autism Research ([OAR] 2012) designed for use with 4th- through 8th-grade students. The materials include a teacher guide, educational poster, and peer handouts. The context described in the peer handout is one where a new student, Nick, has joined a new class of students who are wondering why Nick engages in unusual activities and is accompanied by a paraprofessional. The materials include explanatory information about autism (e.g., autism is a disorder and explains why Nick may not look classmates directly in the eyes) and additional information that specifically targets peers' misperceptions reported in the literature (e.g., autism is not like the flu; you cannot catch autism). The handouts also include descriptive information about Nick, such as explaining that he understands some

things differently from his peers but that he also understands many things just like his classmates. Finally, the peer handouts provide directive information and outline how classmates may interact with a student with autism (e.g., suggesting shared activities). The materials are accessible via: www.researchautism.org.

Maich and Belcher (2012) provide a helpful introduction and overview of how regular educators and school professionals might utilize picture books to conduct a peer awareness lesson about ASD. Authors identify a list of ten recommended titles for consideration when conducting a peer education intervention for elementary school students of various ages. Incorporating picture books within a larger peer education intervention may be particularly helpful when intervening with younger students.

Chapter Summary and Conclusions

The combined increase in the numbers of students identified with ASD and the commitment to educate students with ASD alongside typically developing peers has resulted in increased contact between students with ASD and typical peers in public education settings. Despite these circumstances, the social experiences for most students with ASD are characterized by misperceptions, negative attitudes, social isolation, and, at times, teasing and bullying. Recent findings have documented that peers hold incorrect beliefs about autism that may contribute to negative social experiences for students with autism in educational settings. Peer education and awareness approaches constitute one approach to improve peers' understanding of ASD and social acceptance of students with ASD. Peer education approaches vary in their content; however, authors recommend messages that provide (a) an explanation about ASD, (b) a description of similarities between students with ASD and peers, and (c) direct suggestions about how to interact with a student with ASD. It is important to note, however, that peer education alone is likely insufficient to produce significant changes in peers' social interactions with students with ASD. Additional peer-mediated strategies, such as peer tutoring or peer mentoring interventions, are recommended alongside peer education and awareness campaigns to comprehensively intervene on behalf of a student with ASD.

Key Terms

Social attribution. Psychological process where individuals explain the degree to which the behavior of others is purposeful and controllable.

Persuasion theory. Collection of psychological concepts that attempt to explain how to use communication to change individual's attitudes and behavior.

Explanatory information. Peer educational message that explains that social, communicative, and behavioral symptoms are caused by autism, which is a brain-based disability.

Descriptive information. Peer educational message that highlights similarities between students with autism and typical peers.

Directive information. Peer educational message that provides peers with guidance about how to interact with students with autism.

Key Facts About Peers' Knowledge, Perceptions, and Attitudes Towards Students with Autism Spectrum Disorder

- In public education settings, students with ASD are often socially isolated, lack friendships, and are sometimes teased and bullied.
- Roughly 25–50 % of elementary and middle school students report not having heard of autism.
- Middle school students report significant misperceptions about autism, such as 5 % reporting that autism is contagious.
- Elementary and middle school students who have heard of autism typically define autism in general terms and understand that autism is some type of disability.
- Peer education efforts have been shown to improve peers' attitudes towards unfamiliar students with ASD.
- Peer education and awareness programs should include various types of messages that are designed to correct misperceptions, highlight similarities between peers and students and ASD, and provide direct advice for how to interact with a student with ASD.

Summary Points

- The chapter reviews the social experiences of students with ASD in inclusive education settings, describes areas of peers' misperceptions about ASD, and reviews literature focused on educating peers about autism.
- Federal special education laws mandate that students with ASD should be educated alongside typically developing peers to the greatest extent possible. Coupled with increases in the number of students identified with ASD, inclusive educational practice has resulted in typical peers and students with ASD encountering each other more frequently than before in educational settings.
- Although students with ASD have greater opportunities for interaction with peers, students with ASD are often isolated, lack friendships, and are sometimes teased and bullied by classmates.
- In addition, peers report negative attitudes about unfamiliar students with ASD and report incorrect beliefs about the causes and course of ASD. For peers who have heard of autism, many report a general understanding that ASD is a disability, but few identify social and communicative difficulties that may be exhibited in the classroom.

- Efforts to educate peers may correct misperceptions and improve social acceptance by peers.
- Peer education efforts should consider various aspects from the social persuasion literature, including who says what to whom and how peer education is delivered.
- Peer education is only part of a multifaceted strategy to improve social functioning of students with ASD in inclusive settings.

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