4 Bullying Among Youth with Autism Spectrum Disorders

Inge Zweers, Ron Scholte, and Robert Didden

4.1 Introduction

Students with disabilities and/or autism spectrum disorders (ASD) are particularly vulnerable to be involved in bullying compared to their peers without ASD. Studies have found that students with ASD are at higher risk to be involved in bullying as a bully (i.e., perpetrator of bullying), a victim (i.e., victim of bullying), or bully-victim (i.e., both perpetrator and victim of bullying) (see Cappadocia, Weiss, & Pepler, 2012; Humphrey & Hebron, 2014; Maïano, Norman, Salvas, Moullec, & Aimé, 2015; Schroeder, Cappadocia, Bebko, Pepler, & Weiss, 2014). However, due to the nature of their disability (e.g., difficulties in understanding others' feelings and intentions, nonverbal behaviors, and nonliteral speech), it is unclear whether youth with ASD[1] construe bullying and victimization in similar ways as typically developing youth. Researchers generally agree that bullying is characterized by three defining criteria – (1) negative actions, (2) carried out repeatedly and over time, and (3) in an interpersonal relationship characterized by a power imbalance (Smith, Cowie, Olafsson, & Liefooghe, 2002). Different forms of bullying exist: *physical bullying* (e.g., hitting, kicking, and damage to property), *verbal bullying* (e.g., name-calling, insulting, and making fun of another person), and *relational bullying* (e.g., exclusion, ignoring, and spreading rumors) (see an overview by Stassen Berger, 2007). More recent forms of bullying include *cyberbullying* (e.g., hurtful text messaging or emailing, and posting hurtful messages/objectionable content on websites and social networking sites).

Because of the impairments in social understanding, interaction, and communication and difficulties with generalization in youth with ASD (American Psychiatric Association, DSM-5, 2013; Baron-Cohen, 2000; Heerey, Capps, Keltner, & Kring, 2005), many researchers have questioned the ability of youth with ASD to reliably and validly perceive and report on bullying and victimization (e.g., Fisher & Lounds Taylor, 2016; Kloosterman, Kelley, Craig, Parker, & Javier, 2013; Nowell, Brewton, & Goin-Kochel, 2014; Schroeder et al., 2014; Sreckovic, Brunsting, & Able, 2014; Zeedyk, Rodriguez, & Tipton, 2014). For instance, Nowell et al. (2014) collected qualitative data from 50 verbally fluent children with ASD to examine

[1]The research included in this chapter encompassed elementary and secondary school students in regular and special education, with ages varying from 5 to 21. In order to be clear and concise, throughout the chapter we consistently use the term youth with ASD when addressing children and adolescents with ASD in general, despite varying ages.

I. Zweers
Department of Developmental Psychology, Utrecht University, Utrecht, The Netherlands

R. Scholte • R. Didden (✉)
Behavioural Science Institute, Radboud University, Nijmegen, The Netherlands
e-mail: didden.robert@gmail.com

© Springer International Publishing AG 2017

J.B. Leaf (ed.), *Handbook of Social Skills and Autism Spectrum Disorder*, Autism and Child Psychopathology Series, DOI 10.1007/978-3-319-62995-7_4

their understanding of bullying. Of the 20 children who responded to have been bullied, only half of them could provide an example that demonstrated a clear description/understanding of being bullied (e.g., "Most people hate me 'cause they always tease me. About how I watch those stupid kids' shows but I don't"; Nowell et al., 2014, p. 199). The authors suggest that some children with ASD inaccurately perceive what constitutes bullying. Similar findings have been reported by other studies (e.g., Fisher & Lounds Taylor, 2016). Given that individuals with ASD often have difficulties with abstract thought and generalization, the authors stress that adolescents with ASD might not "be able to abstractly relate their unique bullying experiences to examples provided on questionnaires" (Fisher & Lounds Taylor, 2016, p. 407). Therefore, specific incidences of bullying that have not been specified as examples in survey research might not get reported by students with ASD.

It can also be argued, however, that youth with ASD are in fact able to perceive and report on bullying and victimization (see studies by Adams, Fredstrom, Duncan, Holleb, & Bishop, 2014; Begeer, Fink, Van der Meijden, Goossens, & Olthof, 2016; Bitsika & Sharpley, 2014; Chen & Schwartz, 2012; Rieffe, Camodeca, Pouw, Lange, & Stockmann, 2012; van Roekel, Scholte, & Didden, 2010). For example, adolescents with ASD were as able as their regular developing peers to correctly perceive bullying in video fragments of social interactions (van Roekel et al., 2010). Also, boys with high-functioning ASD demonstrated an understanding of bullying, which was consistent with the wider literature (Bitsika & Sharpley, 2014). Moreover, research also shows that self-reports of adolescents with ASD on bullying and victimization are comparable to self-reports of regular developing adolescents. They show high internal consistency (e.g., Adams et al., 2014; Rieffe et al., 2012), correspond with reports of parents (Adams et al., 2014; Chen & Schwartz, 2012), teachers (Chen & Schwartz, 2012), and peers (Begeer et al., 2016), and are similarly correlated with other variables known to be correlated with bullying and victimization from research with typically developing youth (e.g., Adams et al., 2014; Begeer et al., 2016).

Although the literature generally suggests that youth with ASD reliably and validly perceive and report on bullying and victimization, specific impairments common among individuals with ASD might influence their understanding of bullying and victimization. More research is needed to provide insight into how youth with ASD understand, perceive, and report on bullying. When taking on an observer's role, adolescents with ASD were equally able to perceive and report on bullying in video fragments as typically developing adolescents (van Roekel et al., 2010). However, it is unknown whether youth with ASD are equally able to perceive and report on bullying situations when they themselves are involved in these situations. Investigating how youth with ASD perceive and report on bullying in real-life situations (e.g., by combining self-reports with observations) would therefore be an interesting topic for future research. Furthermore, boys with high-functioning ASD as a sample demonstrated an understanding of bullying which was consistent with definitions held in the wider community and literature (Bitsika & Sharpley, 2014). Future research would benefit from a more in-depth examination of youth's, with ASD, spontaneous definitions of bullying and the influence of providing youth with a definition of bullying when soliciting self-reports and from considering possible variations as a function of age and sex.

4.2 Prevalence

Prevalence estimates of bullying and victimization among youth with ASD are difficult to generate, because studies largely vary in sample characteristics (e.g., age, sex, IQ, sizes, countries/locations, context, and diagnoses and comorbid disorders of participants) and data collection methods (e.g., questionnaires, providing a definition or not, informants, and assessment time frame). However, numerous studies and reviews consistently indicate that youth with ASD report higher rates of victimization than their typically developing peers or peers with other special

needs (e.g., Bear, Mantz, Glutting, Yang, & Boyer, 2015; Humphrey & Hebron, 2014; Maïano et al., 2015; Rose, Monda-Amaya, & Espelage, 2011; Rose et al., 2015; Schroeder et al., 2014), both in general and special education settings. Recent meta-analyses indicate that youth with ASD are at risk of general victimization up to three times more than typically developing peers across studies (see a meta-analysis of Maïano et al., 2015). Research on bullying perpetration suggests that youth with ASD are equally likely to bully classmates as compared to their typically developing peers (Rieffe et al., 2012; Rose et al., 2015; Sterzing, Shattuck, Narendorf, Wagner, & Cooper, 2012; Twyman, Saylor, Saia, Macias, & Taylor, 2010; van Roekel et al., 2010; Zablotsky, Bradshaw, Anderson, & Law, 2014). A prevalence of around 10% was found across studies (Maïano et al., 2015).

Very few studies have examined to what extent youth with ASD are involved in bullying, both as a perpetrator and a victim, the so-called bully-victims. The studies that do exist suggest there are no substantial differences between adolescents with ASD and typically developing peers in terms of prevalence of bully-victims (Rose et al., 2015; Sterzing et al., 2012; Zablotsky et al., 2014). This suggests that youth with ASD are neither more nor less likely to be involved in bullying as a bully-victim. Overall prevalence rates are estimated at 16% (Maïano et al., 2015).

Although studies have suggested that youth with ASD are vulnerable to bullying and being involved in bullying both as victim and perpetrator (e.g., Rose et al., 2011; van Roekel et al., 2010), the previously mentioned studies show that youth with ASD are particularly vulnerable to being victimized (e.g., Maïano et al., 2015; Sreckovic et al., 2014), while the risk of being involved in bullying as a bully or a bully-victim appears to be similar to typically developing peers (e.g., Maïano et al., 2015; Rose et al., 2015; Sterzing et al., 2012; Zablotsky et al., 2014). This indicates that although bullying and victimization constitutes a major problem among the general population, it constitutes an even larger problem among youth with ASD. Given that victimization is strongly linked to emotional problems (Arseneault, Bowes, & Shakoor, 2010; Due et al., 2005; Stassen Berger, 2007), there is absolute reason for concern in this respect.

Prevalence of Various Forms of Bullying and Victimization As previously described, bullying can take various forms, such as physical, verbal, and relational bullying. All of these forms are common among typically developing youth (Wang, Ianotti, & Nansel, 2009). Yet, although all forms have also been reported among youth with ASD (e.g., Adams et al., 2014; Fisher & Lounds Taylor, 2016; Humphrey & Symes, 2010a), research on the type of bullying and victimization among this population is limited (Sreckovic et al., 2014).

With respect to physical bullying among youth with ASD, Maïano et al. (2015) reported an overall prevalence estimate of 16% for physical bullying perpetration and an overall prevalence estimate of 33% for physical victimization. Compared with typically developing youth, youth with ASD do not seem to be more at risk for involvement in physical bullying, neither as perpetrator nor as victim (Maïano et al., 2015).

Regarding verbal bullying, Kloosterman et al. (2013) estimated the prevalence of perpetration at 8% (varying from 4.2% to 16.7% between individual items assessing verbal bullying), and Maïano et al. (2015) found an overall prevalence estimate of 50% for verbal victimization across six studies. While youth with ASD do not seem to be more at risk of perpetrating verbal bullying than typically developing peers, they have been estimated to be two times more at risk of being verbally victimized (Maïano et al., 2015).

With respect to relational bullying among youth with ASD, Maïano et al. (2015) reported an overall estimate of 18% for relational bullying perpetration across two studies and an overall prevalence estimate of 31% for relational victimization across seven studies. Compared with typically developing youth, youth with ASD do not seem to be more at risk for involvement in either relational bullying perpetration or victimization (Maïano et al., 2015).

Research suggests that it is not only bullying and victimization in general that constitutes a

major problem among youth with ASD, but that – in this population – bullying comes in various forms, as has been established among typically developing youth. A better understanding of the involvement of youth with ASD in various forms of bullying as bullies, victims, and bully-victims seems necessary for several reasons. First, the existing studies are mainly conducted among young adolescents and adolescents with ASD, while studies among typically developing youth have shown that the use of specific forms of bullying differs with increasing age (e.g., younger children are more involved in physical bullying, whereas with increasing social understanding, older youth are more involved in verbal and relational bullying). Given the noted impairments in social understanding characteristic in youth with ASD, involvement in various forms of bullying and victimization might differ related to age. In addition, the difficulties that youth with ASD face in social understanding might be particularly relevant to the more subtle forms of relational bullying. This could suggest that involvement in relational bullying in particular would differ between typically developing youth and youth with ASD. Moreover, research among typically developing youth has shown that involvement in various forms of bullying differs with sex (e.g., boys are more involved in direct physical and verbal bullying, whereas girls are more involved in relational bullying). With diagnoses of ASD being more prevalent among boys than girls (Fombonne, 2005), the influence of sex in the involvement in various types of bullying and victimization might therefore differ between typically developing youth and those with ASD. More insight into the nature and extent of these different forms of bullying and victimization among youth with ASD would help to develop prevention and intervention efforts specifically tailored for this special population at risk.

4.2.1 Prevalence of Cyberbullying

A specific form of bullying and victimization that has become more salient over the years is cyberbullying. Studies among typically developing youth have shown that approximately 16% and 15% of children are involved in cyberbullying as perpetrator or victim, respectively (Zych, Ortega-Ruiz, & Del Rey, 2015). Given that a high percentage of youth with ASD are making use of technology for learning, socializing, and entertainment, similar to that of typically developing youth (e.g., Bannon, McGlynn, McKenzie, & Quayle, 2015; Didden et al., 2009), examining cyberbullying among this special population becomes more and more important. Nevertheless, research on this topic is limited.

A few studies have examined cyberbullying among individuals with various additional support needs, including individuals with ASD. Didden et al. (2009) conducted a study examining the prevalence of cyberbullying among Dutch children with intellectual and developmental disabilities visiting special schools. They found that between 4% and 9% of youth reported cyberbullying or victimization at least once a week. Furthermore, Kowalski and Fedina (2011) found that 21% of the children reported that they had been victims of cyberbullying and 6% reported that they had perpetrated cyberbullying at least once within the past 2 months. In another sample, Cross, Piggin, Douglas, and Vonkaenel-Flatt (2012) found that 16% of a UK sample of young individuals with disabilities were found to be at risk of persistent cyberbullying over a prolonged period. Lastly, Cappadocia et al. (2012) examined cyberbullying among youth with ASD in a predominantly Canadian sample. The youths' parents reported 6% to be cyberbullied two to three times a month, with 2% experiencing cybervictimization once a week or more.

Although Didden et al. (2009) suggest that, in general, students with developmental disabilities seem to have a somewhat lower probability to be involved in cyberbullying and/or cybervictimization, cross-study comparisons with research among typically developing youth suggest a similar risk for involvement in cyberbullying for youth with ASD and typically developing peers (Schroeder et al., 2014; Zych et al., 2015). Increased risk for youth with ASD, however, has also been suggested (e.g., Bannon et al., 2015; Kowalski & Fedina, 2011). A possible reason for this may be the youth's, with ASD, difficulties with social understanding and generalization,

their lack of considering long-term consequences of their behavior, and their deficits in executive functioning (e.g., Bannon et al., 2015; Kloosterman, Kelley, Parker, & Craig, 2014) – characteristics that make youth with ASD more vulnerable to being involved in bullying in the real world – might also lead to higher vulnerability of being involved in cyberbullying (Kowalski & Fedina, 2011). Future research is needed to shed more light on the nature and extent of cyberbullying among youth with ASD and to be able to compare their experiences with those of their typically developing counterparts.

4.2.2 Reporters

When examining prevalence estimates of bullying and victimization, discrepancies in estimates arise from differences in reporters. While older studies predominantly relied on teacher and parent reports (e.g., Carter, 2009; Little, 2002; Montes & Halterman, 2007; Reid & Batten, 2006; Shtayermman, 2007), more recent research also collected self-reported data from youth with ASD (e.g., Adams et al., 2014; Chen & Schwartz, 2012; Rowley et al., 2012; van Roekel et al., 2010; Zeedyk et al., 2014). Studies comparing the prevalence estimates of multiple reporters have found mixed results. Some studies have found that teachers and parents tend to report higher rates of bullying than youth with ASD themselves (Adams et al., 2014; van Roekel et al., 2010), with parents reporting higher levels of victimization than teachers (Nowell et al., 2014) and teachers reporting higher levels of bullying perpetration than parents (Chen & Schwartz, 2012). Generally, however, it seems that peers report lower prevalence estimates for bullying and victimization of youth with ASD than teachers, parents, and youth with ASD themselves, both in mainstream educational settings (Maïano et al., 2015) and in special education settings (van Roekel et al., 2010), while the latter three informants seem to considerably agree on their reports of bullying and victimization (Bitsika & Sharpley, 2014; Chen & Schwartz, 2012; Kloosterman et al., 2013; Maïano et al., 2015; Rowley et al., 2012; Zeedyk et al., 2014). This contrasts with research among typically developing youth, in which youth (i.e., self and peers) generally report higher estimates of bullying and victimization than teachers and parents (Bradshaw, Sawyer, & O'Brennan, 2007; Monks, Smith, & Swettenham, 2003).

Among typically developing youth, teachers and parents are suggested to underestimate bullying and victimization among youth, especially among (young) adolescents (e.g., Bradshaw et al., 2007). Possible explanations for this phenomenon are that parents and teachers usually are not present in situations in which bullying occurs, while peers have been found to be present during the majority of bullying episodes (Atlas & Pepler, 1998; Hawkins, Pepler, & Craig, 2001); teachers often fail to identify the more covert and subtle forms of bullying (Craig, Henderson, & Murphey, 2000); and students often do not report incidences of bullying to adults (Whitney & Smith, 1993).

Among youth with ASD, in contrast, different processes might be at work due to their condition-related difficulties (e.g., impaired social understanding, communication difficulties, and having fewer friends). Parents and teachers might be more attentive to negative social experiences of vulnerable youth (Kloosterman et al., 2013). They might, for instance, monitor vulnerable youth like those with ASD more closely, while typically developing peers are regularly left in unsupervised situations. Consequently, parents and teachers might be able to observe more incidences of bullying among youth with ASD than among typically developing youth. Another explanation might be that, while typically developing youth might refrain from reporting incidences of bullying to adults, youth with ASD are more likely to confide in their parents and teachers (Humphrey & Symes, 2010b; Kloosterman et al., 2013). While typically developing youth tend to share more information with friends, especially with increasing age, youth with ASD report having fewer, if any, friends with whom to share information (Cappadocia et al., 2012; Humphrey & Symes, 2010b). In addition, parents and teachers of youth with ASD might interact more regularly about the youth's development and experiences. Consequently, parents and teachers would be more aware of youth's

bullying and victimization experiences (Chen & Schwartz, 2012).

It is important to note that no conclusions can be drawn about who is the best reporter of bullying and victimization. Instead, as among typically developing youth (Juvonen, Nishina, & Graham, 2001), reports of different informants are suggested to be complementary. For instance, self-views – subjective experiences from the child's own perspective – provide a unique insight in youth with ASD's internal experiences (Adams et al., 2014). In contrast, peer reports – that reflect agreement among peers about the relative standing of an individual – provide unique insights in youth with ASD's social reputation. Both reports are differentially associated with social adjustment. That is, self-reported bullying and victimization is more strongly associated with self-reported adjustment measures such as internalizing problems (Adams et al., 2014; Juvonen et al., 2001), while peer-reports are more strongly associated with peer-reported adjustment measures such as peer acceptance and perceived popularity (Juvonen et al., 2001). Furthermore, parent and teacher reports are considered especially useful because data about youth across the full spectrum of functioning can be collected (Fisher & Lounds Taylor, 2016). Specifically, teachers and parents are able to provide information on experiences of low-functioning youth with ASD who are not able to participate themselves. In addition, teachers and parents can provide information on bullying and victimization in various contexts (i.e., school and home/community; Nowell et al., 2014). Hence, the different reports may represent different aspects of bullying and victimization, particularly among youth with ASD.

4.3 The Role of the Social Environment

Given that bullying has recently been considered a group process (Salmivalli, 2010), it becomes more and more important to consider the role of the social environment in bullying and victimization research. Peers are present in 85% to 88% of all bullying episodes (Atlas & Pepler, 1998; Hawkins et al., 2001) and appear to play specific roles – called participant roles (Goossens, Olthof, & Dekker, 2006; Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen, 1996; Sutton & Smith, 1999) – that either maintain bullying and victimization or put it to an end. The participant roles that have been identified among typically developing youth include (Salmivalli et al., 1996; Salmivalli, Lappalainen, & Lagerspetz, 1998):

- *Bullies* show active, initiative-taking, leader-like bullying behavior.
- *Assistants* eagerly join in the bullying and show follower-like bullying behavior. They actively support the bully in attacking the victim.
- *Reinforcers* provide positive feedback to the bully by laughing, cheering, inciting, and/or providing an audience for the bully.
- *Outsiders* stay away from the bullying situation and do not take sides with either party. However, by "doing nothing" they may also encourage bullying by sending a silent message that bullying behavior is acceptable.
- *Defenders* take sides with the victim by standing up for the victim and actively trying to stop the bullying situation and/or by supporting and consoling the victim.
- *Victims* are the targets of attacks and are unable to defend themselves.

Prevalence estimates for these participant roles among typically developing youth (across sexes) are 4–14% for bullies, 6–13% for assistants, 15–20% for reinforcers, 8–32% for outsiders, 5–20% for defenders, and 5–14% for victims (Goossens et al., 2006; Salmivalli, 1999; Salmivalli et al., 1996; Salmivalli et al., 1998).

More recently, these participant roles have also been identified among homogeneous groups of youth with ASD in special education (e.g., Begeer et al., 2016; Schrooten, Scholte, Cillessen, & Hymel, 2016). Schrooten et al. (2016) found prevalence estimates of 3–7% for bullies, 8–11% for followers (i.e., assistants and reinforcers combined), 30–42% for outsiders, 16–19% for

defenders, and 13–14% for victims across sexes. Based on these results, the authors suggest that the social difficulties of youth with ASD do not prevent them from taking on various participant roles in bullying situations.

While Begeer et al. (2016) did not find any differences in the rates of peer-reported bullying, victimization, and defending between youth with ASD in special education and typically developing peers in regular education, Schrooten et al. (2016) did find such differences. That is, Schrooten et al. found more outsiders and defenders, and fewer followers among boys with ASD in special education than among typically developing boys in regular education. The authors suggested that boys with ASD in special education were more inclined to stay away from bullying situations or stand up for the victim than typically developing boys in regular education, who often fail to support the victim (Atlas & Pepler, 1998; Hawkins et al., 2001). The possible explanations the authors provided include that youth with ASD in special education are more likely to adopt the defender and outsider role because prosocial behavior is more explicitly valued in special education (Rodkin et al., 2006), or that differences in role distributions are the result of the social difficulties that youth with ASD face. That is, the outsider role may be adopted more often by youth with ASD who do not know how to act, even though they want to (Bauminger, Shulman, & Agam, 2003), and the defender role may be adopted more often by youth with ASD who do not anticipate that helping a victim might increase the likelihood that they will become victimized themselves (Bannon et al., 2015). In contrast to the encouraging results that boys with ASD in special education seem somewhat less actively involved in bullying than typically developing boys in regular education, Schrooten et al. also found that girls with ASD in special education were more often victims than typically developing girls in regular education. A possible explanation the authors provide is that girls with ASD are more vulnerable to victimization because they compose a minority group in special education (Schumann, Craig, & Rosu, 2013). Yet, victimization rates of both boys and girls with ASD in special education were lower than those reported among youth with ASD in regular education (Carter, 2009; Little, 2002; Rose et al., 2011).

4.4 Educational Setting

In addition to the participant roles that peers play in bullying episodes, the wider context (e.g., peer group) is important to consider as well. Much research on bullying is conducted in schools because youth spend a fairly large amount of time in school settings. The composition of the peer group in school settings differs to a considerable extent between regular and special education settings. That is, in regular education settings, the peer group consists of typically developing peers who generally do not experience substantial difficulties in their development, whereas in special education settings, the peer group consists of peers who all face substantial difficulties leading to additional support needs. Whether youth with ASD attend special education as opposed to general education might therefore influence their involvement in bullying and victimization.

Findings related to the effects of educational settings on bullying and victimization, however, have been inconsistent. Whereas Rose et al. (2011) found in their review that students with disabilities educated in segregated classrooms or schools were victimized more often than students with and without disabilities in regular education, other studies found no significant differences in the rates of bullying or victimization across youth with ASD in special education and typically developing youth in regular education (Begeer et al., 2016; van Roekel et al., 2010). Yet, the majority of studies found that students with ASD who were educated in regular education classrooms or mainstream schools were more likely to be victimized than students who were educated in segregated settings (Hebron & Humphrey, 2014; Maïano et al., 2015; Rowley et al., 2012; Sterzing et al., 2012; Zablotsky et al., 2014). The main explanation for these findings is that, in educational settings in which youth with ASD

have more social interactions with typically developing peers, they face a higher likelihood of being victimized, simply because they stand out for being different (Schroeder et al., 2014). In addition, the social and emotional difficulties that youth with ASD face (e.g., lack of understanding others' intentions, feelings, and nonliteral speech, and emotional dysregulation) may be a cause of misinterpretation between youth with ASD and their typically developing counterparts. In special education settings, students with ASD may be less likely to stand out from their peers, because – despite the heterogeneity in specific difficulties that they show – all students in special education settings have additional support needs (Begeer et al., 2016; Hebron & Humphrey, 2014; van Roekel et al., 2010).

The explanation of standing out for clearly being different can, in contrast, also serve as a protective factor. Researchers have shown that students with more severe additional support needs (either social or cognitive in nature) were less likely to be bullied, regardless of educational setting (Rowley et al., 2012; Shtayermman, 2007; Zablotsky et al., 2014). This could provide evidence that youth who are more noticeably different – that is, those who have more obvious disabilities visible to their peers – are being protected from victimization (Kasari, Locke, Gulsrud, & Rotheram-Fuller, 2011, as cited in Sreckovic et al., 2014). Another explanation might be that youth with more severe ASD are just less likely to be socially involved with their peers and therefore less likely to experience victimization (Rowley et al., 2012). Furthermore, the more severely affected youth with ASD could be better monitored by teachers (Nowell et al., 2014; Shtayermman, 2007) or other adults in their environment, which protects them from experiencing victimization.

School factors that vary across educational settings (e.g., smaller classrooms, amount of adult supervision, structure and routine organization, and teachers trained in additional support needs) complicate the comparisons made even more. Some researchers have posited that smaller class sizes and more adult supervision in special education might decrease the risk for youth with ASD to become victimized in school (Hebron & Humphrey, 2014; Sterzing et al., 2012). Interestingly, however, parents of children with ASD included in regular education reported that their schools more effectively dealt with bullying incidences than parents of children with ASD in special education settings (Reid & Batten, 2006).

All in all, these studies seem to suggest that especially youth with high-functioning ASD, who are more often included in regular education, are at increased risk for experiencing victimization (Nowell et al., 2014; Zablotsky et al., 2014). The higher skills of these youth may mask the pervasive (social) difficulties that they face (Shtayermman, 2007), leaving them less protected and vulnerable to peer victimization in settings in which there is not much adult supervision (Zablotsky et al., 2014). Humphrey and Symes (2011) explained the underlying mechanism causing this increased risk for victimization (i.e., a social outcome for included students with ASD) in their "Reciprocal Effects Peer Interaction Model" (REPIM; Humphrey & Symes, 2011, pp. 400–401). That is, the noted impairments characteristic of youth with ASD (e.g., difficulties in social understanding and a lack of social skills) combined with characteristics of their typically developing peers (e.g., lack of awareness and understanding of ASD, low acceptance of differences and atypical behavior) lead to reduced quality and frequency of peer interactions. This in turn leads to a limited social network and lower levels of support, which makes youth with ASD more vulnerable to victimization. These processes appear to follow a vicious cycle in which the negative social experiences of youth with ASD lead them to be less motivated for future social interactions with peers. The subsequent avoidant and solitary behaviors of youth with ASD causes even less awareness and understanding among their typically developing peers (Humphrey & Hebron, 2014; Humphrey & Symes, 2011). In contrast, youth with ASD who are educated in segregated settings for special education and who are surrounded by peers with additional support needs, do not seem to differ from typically developing peers in regular education with respect to their involvement in bullying

and victimization (Begeer et al., 2016; van Roekel et al., 2010). This preliminary evidence is particularly important considering that increasing numbers of students with disabilities, including students with ASD, participate in regular education classrooms for at least part of their school day. Even students with ASD who are in special education classrooms are increasingly included in regular education schools in which they have opportunities to interact with their typically developing peers (Chen & Schwartz, 2012).

Of additional interest in future research would be efforts to distinguish individual (personal) and contextual (school) factors in understanding the social experiences of students with ASD. Large variability exists in the extent to which students with ASD have the opportunity to interact with typically developing peers and peers with other psychological and/or behavioral needs when educated in various settings (regular education, special needs classroom in regular education, specialist ASD classroom in regular education, special needs classroom in segregated special school, etc.). Thus, examining the perpetration and victimization of youth with ASD attending different educational settings is an interesting and relevant topic for future research. Furthermore, despite the relatively homogeneous composition of classrooms in segregated specialist ASD schools (e.g., Begeer et al., 2016; Schrooten et al., in press; van Roekel et al., 2010), comparable rates of bullying and victimization were found in youth with ASD and their typically developing counterparts in regular education. Investigating which characteristics of youth with ASD lead to increased risk of bullying and victimization is another fruitful area of further research.

4.5 Causes and Consequences

There is a growing literature on risk and protective factors for bullying and victimization of youth with ASD. Studies to date have provided preliminary evidence for differences and similarities in risk and protective factors among youth with ASD and typically developing youth (Hebron & Humphrey, 2014; Humphrey & Hebron, 2014; Sreckovic et al., 2014). Youth with ASD tend to exhibit risk factors for bullying and victimization that reflect characteristics or behaviors associated with the diagnosis of ASD, and in addition, they tend to lack protective factors that are associated with decreased risk of victimization among typically developing youth (Schroeder et al., 2014). Yet, much of the work in this area has relied on cross-sectional, regression-based, or qualitative methods: caution in interpretation is thus required. Although directions of effects have been suggested, we cannot infer *causality* from these studies; in fact, many associations have the potential to be bidirectional. To this end, we discuss *correlates* of bullying and victimization that might act as risk or protective factors: when high rates of a particular factor are associated with an increased risk of victimization (i.e., considered as a risk factor), lower rates of that factor are associated with a decreased risk (i.e., considered as a protective factor), and the other way around.

Correlates of Victimization Several studies on the association between victimization and autistic symptomatology, such as impaired social skills, social vulnerability, communication difficulties, and stereotypic behaviors, have shown mixed results. On the one hand, youth with ASD who show higher levels of autistic symptoms have been found to be more at risk for victimization (Cappadocia et al., 2012; Sofronoff, Dark, & Stone, 2011; Zablotsky et al., 2014), which is consistent with research among typically developing peers that shows that youth who have difficulties in these areas are more at risk for victimization. On the other hand, youth with ASD who show less severe autistic symptoms (Rowley et al., 2012; Shtayermman, 2007; Sterzing et al., 2012) have been found to be more at risk for victimization, which seems to reflect a difference in risk factors with typically developing youth. Two different mechanisms might be at work here. First, it seems that the context determines to a certain extent whether the level of autistic symptoms is a risk factor. That is, when youth with ASD are surrounded by typically developing peers, they stand

out for being different because of their autistic behavior (Schroeder et al., 2014; Wainscot, Naylor, Sutcliffe, Tantam, & Williams, 2008). When youth with ASD are surrounded by peers with additional support needs (e.g., in special classrooms or segregated special education), they may be less likely to stand out from their peers due to their autistic behavior, because – despite the heterogeneity in specific difficulties – all youth show certain difficulties (Begeer et al., 2016; Hebron & Humphrey, 2014; van Roekel et al., 2010). Second, instead of clearly showing that either higher or lower levels of autistic symptomatology are associated with victimization, autistic symptomatology seems to show a curvilinear relationship with victimization. That is, the more youth with ASD are perceived as deviating from peer group norms due to their socially incongruent behavior, the more rejected/neglected they are among peers and the more at risk they are for victimization. This would explain why, in some studies, higher levels of autistic symptomatology are associated with increased risk of victimization (Cappadocia et al., 2012; Sofronoff et al., 2011; Zablotsky et al., 2014). When autistic symptomatology becomes more and more severe, however – to such an extent that the disabilities of youth with ASD are clearly visible to their peers – the risk of victimization seems to decrease, and sometimes youth with ASD are even protected from victimization (Kasari et al., 2011). This would explain why, in other studies, lower levels of autistic symptomatology are associated with increased risk of victimization (Rowley et al., 2012; Shtayermman, 2007; Sterzing et al., 2012).

Other aspects related to the condition of ASD, such as comorbid disorders, difficulties with emotions, and behavioral problems, have more consistently been shown to play a role in the likelihood that youth with ASD are victimized. Higher levels of both externalizing (Cappadocia et al., 2012; Hebron & Humphrey, 2014) and internalizing behavior problems (Adams et al., 2014; Cappadocia et al., 2012; Didden et al., 2009; Hebron & Humphrey, 2014; Kowalski & Fedina, 2011; Zeedyk et al., 2014) have generally been related to increased risk for victimization, although these associations were not found in all studies (Shtayermman, 2007). Furthermore, comorbid disorders such as ADHD (Zablotsky, Bradshaw, Anderson, & Law, 2013; Sterzing et al., 2012), depression (Zablotsky et al., 2013), or multiple conditions (Zablotsky et al., 2014) have also been related to increased risk for victimization, as well as impairments in executive functioning (Kloosterman et al., 2013) and emotion regulation (Rieffe et al., 2012). These studies provide further evidence that (additional) emotional or behavioral difficulties are risk factors of victimization among youth with ASD, which is consistent with what is found among typically developing youth.

The previously mentioned factors have often been considered individual factors: that is, cognitive, behavioral, and psychological features of the child. However, contextual factors – features of the child's environment such as peers, school, and family – can act as risk and protective factors as well. Many studies have shown that peer difficulties are associated with increased risk for victimization among youth with ASD. Specifically, difficulties with making friends (Zablotsky et al., 2014), having fewer friends (Cappadocia et al., 2012), conflict in friendships (Zeedyk et al., 2014), social exclusion, rejection, and unpopularity among peers (Rowley et al., 2012; Schrooten et al., in press), and peer problems in general (Begeer et al., 2016) have all been found to be risk factors for victimization, while having positive social relationships has been found to be associated with less victimization (Hebron & Humphrey, 2014). Although peer difficulties have also been found to be a risk factor for victimization among typically developing youth, they seem to be particularly prevalent among youth with ASD because of their difficulties with social interaction and communication inherent to their condition (American Psychiatric Association, 2013; Baron-Cohen, 2000; Heerey et al., 2005).

Other contextual factors that have been associated with increased risk for victimization are school factors like educational placement, provision of special education services, and use of school transportation. Most studies indicate that educational placement in mainstream settings is

related to increased risk for victimization (Hebron & Humphrey, 2014; Reid & Batten, 2006; Rowley et al., 2012; Sterzing et al., 2012; Zablotsky et al., 2014) and that attending a special school is associated with reduced exposure to bullying (Hebron & Humphrey, 2014). Furthermore, provision of special educational needs services within a mainstream school and use of school transportation were related to higher levels of victimization (Hebron & Humphrey, 2014; Sreckovic et al., 2014). These results seem to confirm that youth with less severe ASD, who are more functionally independent and who more often find themselves in situations with limited adult supervision, are more at risk for victimization.

In addition to the more well-established correlates of victimization among youth with ASD, research has indicated several other factors that have been associated with victimization among this group: sex (Cappadocia et al., 2012; Reid & Batten, 2006), age (Cappadocia et al., 2012; Hebron & Humphrey, 2014; Little, 2002), ethnicity (Sterzing et al., 2012; Zablotsky et al., 2014), socioeconomic status (Zablotsky et al., 2014), parental engagement in school (Hebron & Humphrey, 2014), and parental mental health problems (Cappadocia et al., 2012). Since research on these factors is limited, the results are difficult to interpret. These studies provide interesting preliminary evidence that demographic and family factors should be considered as potential risk or protective factors for victimization of youth with ASD. More research is definitely needed, however, to investigate if these variables are related to victimization specific to youth with ASD, to examine the differences and similarities with risk and protective factors among typically developing youth, and to establish causal directions of effects.

4.5.1 Correlates of Bullying Perpetration

Although correlates of bullying perpetration are less extensively examined than correlates of victimization, there seems to be considerable overlap in the risk and protective factors of being a perpetrator or a victim. Also in bullying perpetration, studies on the association between perpetration and autistic symptomatology have shown mixed results. Zablotsky et al. (2014) found that children with high levels of autistic traits were more likely to be perpetrators of bullying than children with low levels of autistic traits. Rowley et al. (2012), in contrast, found that children whose lack of social and communication skills were smaller reported higher levels of bullying. There are several explanations for these opposing findings. Some researchers have suggested that youth with more severe ASD are more likely to bully because they generally are more aggressive than typically developing peers (Carr, 2006), because they misinterpret social communication as hostile (Whitney, Smith, & Thompson, 1994), or as a response to previous experiences of being victimized themselves (Rose et al., 2011). Others, however, pose that more socially capable youth with ASD are likely to be more socially involved with peers, and consequently face an increased likelihood of negative social experiences including bullying perpetration (Rowley et al., 2012). Furthermore, among typically developing youth, perpetrators have been found to strategically pick victims that they have an advantage over (Salmivalli, 2010). Youth with ASD with more developed social understanding, might similarly use these skills to bully peers. Given these opposing results and explanations, investigating which aspects of autistic symptomatology are related to bullying perpetration is a fruitful area of further research.

Other aspects related to the condition of ASD, such as comorbid disorders and difficulties with emotions have also been shown to be associated with bullying perpetration. For instance, externalizing comorbid disorders such as conduct disorder, oppositional defiant disorder (Zablotsky et al., 2013) or ADHD (Montes & Halterman, 2007; Sterzing et al., 2012) have been related to increased risk of perpetration. Furthermore, bullying perpetration has been related to fewer feelings of guilt, more feelings of anger (Rieffe et al., 2012), more anxiety (Kowalski & Fedina, 2011), higher depressive symptomatology (Didden et al., 2009; Kowalski & Fedina, 2011), higher

rates of emotional regulation difficulties in general (Zablotsky et al., 2013), and lower self-esteem (Didden et al., 2009). These studies provide evidence that, while internalizing problems have also been related to bullying perpetration, externalizing problems and emotion regulation difficulties seem to be particularly important correlates of bullying perpetration, which is consistent with what is found among typically developing youth.

In addition to individual factors, contextual factors have been associated with bullying perpetration as well. Specifically, fewer peer difficulties (Begeer et al., 2016) and more frequent involvement with peers (Sterzing et al., 2012) – often seen as positive for youth with ASD – have been related to increased risk of bullying perpetration. This may be due to the fact that youth with ASD who are more involved with peers, also have increased social opportunity to experience bullying involvement (Sterzing et al., 2012). However, other studies have shown associations between perpetration and more negative peer experiences, such as having difficulties in making friends (Zablotsky et al., 2014) and peer rejection (Schrooten et al., 2016). These mixed results are difficult to interpret and indicate that more insight into peer processes is needed to qualify how social experiences of youth with ASD with their peers might influence their risk of bullying perpetration.

4.5.2 Conclusion

In sum, the majority of the studies examining correlates of bullying and victimization have focused on victimization of youth with ASD. This is understandable, given that youth with ASD are particularly vulnerable to become victimized (e.g., Maïano et al., 2015; Sreckovic et al., 2014), while the risk of being involved in bullying as a bully or a bully-victim appears to be similar to typically developing peers (e.g., Maïano et al., 2015; Rose et al., 2015; Sterzing et al., 2012; Zablotsky et al., 2014). The existing literature seems to show that vulnerability for victimization is primarily related to autistic symptomatology and related internalizing problems (with externalizing emotional outbursts resulting from difficulties related to their condition), and clear difficulties in establishing and maintaining social relationships with peers. The educational context (e.g., available peer group, provision of additional support, and extent of adult supervision) seems to play a major role as well in victimization among youth with ASD. Vulnerability for bullying perpetration, in contrast, seems to be primarily related to externalizing problems, while associations with autistic symptomatology and peer difficulties are less consistent.

Research regarding the risk and protective factors of bullying and victimization among youth with ASD is still in its infancy. Research with larger samples is needed to address the problems with generalizability often found in existing studies. Furthermore, as recommended in the general bullying field (e.g., Swearer, Espelage, Vaillancourt, & Hymel, 2010), a multi-informant approach should be adopted to yield more valid results than single-informant measures (Maïano et al., 2015; Monks et al., 2003; Zablotsky et al., 2013). Moreover, various educational contexts should be considered when examining bullying and victimization among youth with ASD, as research has shown that their experiences vary across mainstream and special education settings, and across various locations in and surrounding school (e.g., school transport, playground, and classroom). Lastly, but maybe most importantly, future research would benefit from collecting longitudinal data on potential risk and protective factors to examine causes and consequences of both bullying and victimization among youth with ASD.

4.6 Prevention and Intervention

Very limited information currently exists on best practices to reduce rates of victimization among youth with ASD. Research that has made recommendations for prevention and intervention often builds upon what is known about bullying prevention among typically developing youth (Hebron & Humphrey, 2014). Systematic reviews

and meta-analyses of research among the general population have shown that, although some interventions only resulted in modest positive outcomes (Merrell, Guelder, Ross, & Isava, 2008; Smith, Schneider, Smith, & Ananiadou, 2004), school-based antibullying programs generally showed a reduction in bullying and victimization by 20–23% and 17–20%, respectively (Farrington & Ttofi, 2009; Ttofi & Farrington, 2011).

Effective prevention and intervention programs involve a comprehensive strategy that approaches bullying at multiple levels. That is, not only all members of the school community, including students, teachers, and support staff but also parents should be aware of what bullying is and how to respond to it. The entire school environment should be engaged in preventing bullying and intervening when it occurs (Smith et al., 2004). In order to effectively reduce perpetration and victimization among youth, these prevention and intervention programs need to be long-lasting and intensive, probably because a considerable time period is needed to build up a strong antibullying school climate, which is endorsed by all school community members (Ttofi & Farrington, 2011). Effective elements of whole-school prevention and intervention programs contain: encouragement of positive and healthy relationships among children by adults; clear and consistent antibullying policies involving nonphysical disciplinary methods (e.g., restorative justice approaches) to address perpetration behaviors; classroom management focused on detecting and addressing bullying, and promoting the development of prosocial, communication, and conflict-resolution skills among students; active supervision of student behavior in all school locations (i.e., also in the playground and hallways); encouragement of youth to report incidences of bullying to a trusted adult; collaborations among professionals within schools to address bullying; individualized interventions for the children directly involved in bullying as victims and/or bullies; and parental involvement (Farrington & Ttofi, 2009; Smith et al., 2004; Ttofi & Farrington, 2011).

Effective prevention and intervention programs for typically developing youth have been suggested to be effective to reduce bullying and victimization among youth with ASD as well. However, several elements on each level are recommended to be intensified or added to address the needs of youth with ASD (Bitsika & Sharpley, 2014; Cappadocia et al., 2012; Fisher & Lounds Taylor, 2016; Humphrey & Hebron, 2014; Reid & Batten, 2006; Sterzing et al., 2012). First, on the individual level, the core deficits of ASD (e.g., social understanding, conversational ability, and social skills) and comorbid difficulties (e.g., behavior problems and emotion regulation difficulties) need to be targeted (Sterzing et al., 2012) in order for these students to be less likely to stand out among their peers (Sreckovic et al., 2014). To this end, youth with ASD might be trained to develop social skills (Humphrey & Hebron, 2014) and learn alternative behaviors that they can use to positively engage with peers and to replace awkward social behaviors (Bitsika & Sharpley, 2014; Sreckovic et al., 2014). In addition, interventions might want to focus part of their efforts on youth's perceptions and understanding of positive and negative social behavior (Adams et al., 2014; Sreckovic et al., 2014), since students with ASD may misperceive bullying situations (van Roekel et al., 2010) and friendships (Bitsika & Sharpley, 2014).

Second, on the level of the peer group, awareness of ASD should be raised and inclusiveness should be promoted (Cappadocia et al., 2012; Humphrey & Hebron, 2014; Reid & Batten, 2006; Sterzing et al., 2012). Awareness-raising can help typically developing peers understand why someone may act differently to them (Reid & Batten, 2006) and may increase the empathy and social skills of typically developing peers towards youth with ASD (Sterzing et al., 2012). Promoting inclusiveness may result in youth with ASD to be more integrated into protective peer groups (Sterzing et al., 2012). While some researchers also recommend specific peer engagement approaches such as peer mentoring, befriending, and buddying schemes (Reid & Batten, 2006), others discourage these due to conflicting findings for peer engagement among typically developing youth (Farrington & Ttofi, 2009; Ttofi & Farrington, 2011).

Third, on the level of teacher and support staff, teachers can actively discuss exceptionalities and difficulties among children along with modeling empathy, respect, and liking for students with ASD and other disabilities (Cappadocia et al., 2012; Humphrey & Hebron, 2014). By actively teaching peers not to avoid students who are different and serving as positive role models for (typically developing) students, teachers promote inclusiveness (Cappadocia et al., 2012; Fisher & Lounds Taylor, 2016). In line with this atmosphere of encouraging differences and individuality, teachers and support staff need to flexibly use and adjust pedagogical approaches, since "standard" pedagogic approaches often do not work for students with ASD (Humphrey & Hebron, 2014). Furthermore, in situations in which a student is victimized – especially in case of a student with ASD – more intensive adult support is needed. That is, students with ASD might need help with regulating their emotions and behavior, to cope with the negative situation, to communicate assertively, to constructively solve the problem, and/or to engage with supportive peers (Cappadocia et al., 2012). Mixed results have been found, however, for the provision of additional assistance by support staff like teaching assistants. On the one hand, support staff can enhance the academic engagement of adolescents with ASD, but their presence could also increase social distance from peers (Humphrey & Hebron, 2014), which could increase the risk of victimization.

Lastly, on the level of the entire school environment, all school community members should endorse respect for diversity and differences in all its forms (Humphrey & Hebron, 2014). In addition to that, several structural adjustments could be made to provide youth with ASD with opportunities to positively engage with peers (e.g., structured play activities during breaks; Reid & Batten, 2006) or to withdraw from social interactions when needed (e.g., provide safe havens in school; Bitsika & Sharpley, 2014). Furthermore, it is recommended to form strong school-home systems to monitor youth with ASD's bullying experiences, especially considering the fact that youth with ASD are suggested to underreport bullying and victimization to both parents and teachers (e.g., Nowell et al., 2014).

While several of the suggested prevention and intervention efforts have already been implemented with students with ASD (Sreckovic et al., 2014), their effectiveness in terms of reducing bullying and victimization has yet to be explored. Furthermore, it has to be examined to what extent the effects of current evidence-based programs among typically youth are also suitable for populations in special education (i.e., special education classrooms and/or segregated schools for special education). Initiatives to adjust whole-school approaches to such contexts have been undertaken; however, their effects on bullying and victimization have yet to be explored as well.

References

Adams, R. E., Fredstrom, B. K., Duncan, A. W., Holleb, L. J., & Bishop, S. L. (2014). Using self- and parent-reports to test the association between peer victimization and internalizing symptoms in verbally fluent adolescents with ASD. *Journal of Autism and Developmental Disorders*, *44*, 861–872.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th edition). Arlington, VA: American Psychiatric Association.

Arseneault, L., Bowes, L., & Shakoor, S. (2010). Bullying victimization in youths and mental health problems: 'much ado about nothing'? *Psychological Medicine*, *40*, 717–729.

Atlas, R. S., & Pepler, D. J. (1998). Observations of bullying in the classroom. *Journal of Educational Research*, *92*, 86–99.

Bannon, S., McGlynn, T., McKenzie, K., & Quayle, E. (2015). The internet and young people with additional support needs (ASN): Risk and safety. *Computers in Human Behavior*, *53*, 495–503.

Baron-Cohen, S. (2000). Theory of mind and autism: A fifteen-year review. In S. Baron-Cohen, H. Tager-Flusberg, & D. J. Cohen (Eds.), *Understanding other minds: Perspectives from developmental cognitive neuroscience* (pp. 3–20). New York, NY: Oxford University Press.

Bauminger, N., Shulman, C., & Agam, G. (2003). Peer interaction and loneliness in high-functioning children with autism. *Journal of Autism and Developmental Disorders*, *33*, 489–507.

Bear, G. G., Mantz, L. S., Glutting, J. J., Yang, C., & Boyer, D. E. (2015). Differences in bullying victimization between students with and without disabilities. *School Psychology Review*, *44*, 98–116.

Begeer, S., Fink, E., Van der Meijden, S., Goossens, F., & Olthof, T. (2016). Bullying-related behaviour in a mainstream high school for autism: Self-report and peer-report. *Autism*, *20*, 562–571.

Bitsika, V., & Sharpley, C. F. (2014). Understanding, experiences, and reactions to bullying experiences in boys with an autism Spectrum disorder. *Journal of Developmental and Physical Disabilities, 26*, 747–761.

Bradshaw, C. P., Sawyer, A. L., & O'Brennan, L. M. (2007). Bullying and peer victimization at school: Perceptual differences between students and school staff. *School Psychology Review*, *36*, 361–382.

Cappadocia, M. C., Weiss, J. A., & Pepler, D. (2012). Bullying experiences among children and youth with autism Spectrum disorders. *Journal of Autism and Developmental Disorders*, *42*, 266–277.

Carr, A. (2006). Autism and pervasive developmental disorders. In A. Carr (Ed.), *Handbook of child and Adolescent clinical Psychology* (pp. 288–331). London: Routledge.

Carter, S. (2009). Bullying of students with Asperger's syndrome. *Issues in Comprehensive Pediatric Nursing*, *32*, 145–154.

Chen, P.-Y., & Schwartz, I. S. (2012). Bullying and victimization experiences of students with autism Spectrum disorders in elementary schools. *Focus on Autism and Other Developmental Disabilities*, *27*, 200–212.

Craig, W. M., Henderson, K., & Murphy, J. B. (2000). Prospective teachers' attitudes toward bullying and victimization. *School Psychology International*, *21*, 5–21.

Cross, E., Piggin, R., Douglas, T., & Vonkaenel-Flatt, J. (2012). *Virtual violence II: Progress and challenges in the fight against cyberbullying*. London: Beat Bullying.

Didden, R., Scholte, R., Korzilius, H., De Moor, J., Vermeulen, A., O'Reilley, M., et al. (2009). Cyberbullying among students with intellectual and developmental disability in special education settings. *Developmental Neurorehabilitation*, *12*, 146–151.

Due, P., Holstein, B. E., Lynch, J., Diderichsen, F., Nic Gabhein, S., Scheidt, P.,…, & The Health Behaviour in School-Aged Children Bullying Working Group. (2005). Bullying and symptoms among school-aged children: International comparative cross sectional study in 28 countries. *European Journal of Public Health, 15,* 128–132.

Farrington, D. P., & Ttofi, M. M. (2009). School-based programs to reduce bullying and victimization. *Campbell Systematic Reviews 2009*, *6*, 1–149.

Fisher, M. H., & Lounds Taylor, J. (2016). Let's talk about it: Peer victimization experiences as reported by adolescents with autism spectrum disorder. *Autism*, *20*, 402–411.

Fombonne, E. (2005). Epidemiological studies of pervasive developmental disorders. In F. R. Volkmar, R. Paul, A. Klin, & D. Cohen (Eds.), *Handbook of autism and pervasive developmental disorders* (pp. 42–69). Hoboken, NJ: Wiley.

Goossens, F. A., Olthof, T., & Dekker, P. H. (2006). New participant role scales: Comparison between various criteria for assigning roles and indications for their validity. *Aggressive Behavior*, *32*, 343–357.

Hawkins, L. D., Pepler, D. J., & Craig, W. M. (2001). Naturalistic observations of peer interventions in bullying. *Social Development*, *10*, 512–527.

Hebron, J., & Humphrey, N. (2014). Exposure to bullying among students with autism spectrum conditions: A multi-informant analysis of risk and protective factors. *Autism*, *18*, 618–630.

Heerey, E. A., Capps, L. M., Keltner, D., & Kring, A. M. (2005). Understanding teasing: Lessons from children with autism. *Journal of Abnormal Child Psychology*, *33*, 55–68.

Humphrey, N., & Hebron, J. (2014). Bullying of children and adolescents with autism spectrum conditions: A 'state of the field' review. *International Journal of Inclusive Education*, *19*, 845–862.

Humphrey, N., & Symes, W. (2010a). Perceptions of social support and experience of bullying among pupils with autistic spectrum disorders in mainstream secondary schools. *European Journal of Special Needs Education*, *25*, 77–91.

Humphrey, N., & Symes, W. (2010b). Responses to bullying and use of social support among pupils with autism spectrum disorders (ASDs) in mainstream schools: A qualitative study. *Journal of Research in Special Educational Needs*, *10*, 82–90.

Humphrey, N., & Symes, W. (2011). Peer interaction patterns among adolescents with autistic spectrum disorders (ASDs) in mainstream school settings. *Autism*, *15*, 397–419.

Juvonen, J., Nishina, A., & Graham, S. (2001). Self-views versus peer perceptions of victim status among early adolescents. In J. Juvonen & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 105–124). New York: The Guilford Press.

Kasari, C., Locke, J., Gulsrud, A., & Rotheram-Fuller, E. (2011). Social networks and friendships at school: Comparing children with and without ASD. *Journal of Autism and Developmental Disorders*, *41*, 533–544.

Kloosterman, P. H., Kelley, E. A., Craig, W. M., Parker, J. D. A., & Javier, C. (2013). Types and experiences of bullying in adolescents with an autism spectrum disorder. *Research in Autism Spectrum Disorders*, *7*, 824–832.

Kloosterman, P. H., Kelley, E. A., Parker, J. D. A., & Craig, W. M. (2014). Executive functioning as a predictor of peer victimization in adolescents with and without an autism Spectrum disorder. *Research in Autism Spectrum Disorders*, *8*, 244–254.

Kowalski, R. M., & Fedina, C. (2011). Cyber bullying in ADHD and Asperger syndrome populations. *Research in Autism Spectrum Disorders, 5*, 1201–1208.

Little, L. (2002). Middle-class mothers' perceptions of peer and sibling victimization among children with Asperger's syndrome and non-verbal learning disorders. *Issues in Comprehensive Pediatric Nursing*, *25*, 43–57.

Maïano, C., Norman, C. L., Salvas, M.-C., Moullec, G., & Aimé, A. (2015). Prevalence of school bullying among youth with autism Spectrum disorders: A systematic review and meta-analysis. *Autism Research*, *9*, 601–615.

Merrell, K. W., Guelder, B. A., Ross, S. W., & Isava, D. M. (2008). How effective are school bullying intervention programs? A meta-analysis of intervention research. *School Psychology Quarterly*, *23*, 26–42.

Monks, C. P., Smith, P. K., & Swettenham, J. (2003). Aggressors, victims, and defenders in preschool: Peer, self-, and teacher reports. *Merrill-Palmer Quarterly*, *49*, 453–469.

Montes, G., & Halterman, J. S. (2007). Bullying among children with autism and the influence of comorbidity with ADHD: A population-based study. *Ambulatory Pediatrics*, *7*, 253–257.

Nowell, K. P., Brewton, C. M., & Goin-Kochel, R. P. (2014). A multi-rater study on being teased among children/adolescents with autism Spectrum disorder (ASD) and their typically developing siblings: Associations with ASD symptoms. *Focus on Autism and Other Developmental Disabilities*, *29*, 195–205.

Reid, B., & Batten, A. (2006). *B is for bullied: The experiences of children with autism and their families*. London: National Autistic Society.

Rieffe, C., Camodeca, M., Pouw, L. B. C., Lange, A. M. C., & Stockmann, L. (2012). Don't anger me! Bullying, victimization, and emotion dysregulation in young adolescents with ASD. *The European Journal of Developmental Psychology*, *9*, 351–370.

Rodkin, P. C., Farmer, T. W., Van Acker, R., Pearl, R., Thompson, J. H., & Fedora, P. (2006). Who do students with mild disabilities nominate as cool in inclusive general education classrooms? *Journal of School Psychology*, *44*, 67–84.

Rose, C. A., Monda-Amaya, L. E., & Espelage, D. L. (2011). Bullying perpetration and victimization in special education: A review of the literature. *Remedial and Special Education*, *32*, 114–130.

Rose, C. A., Simpson, C. G., & Moss, A. (2015). The bullying dynamic: Prevalence of involvement among a large-scale sample of middle and high school youth with and without disabilities. *Psychology in the Schools*, *52*, 515–531.

Rowley, E., Chandler, S., Baird, G., Simonoff, E., Pickles, A., Loucas, T., et al. (2012). The experience of friendship, victimization, and bullying in children with an autism spectrum disorder: Associations with child characteristics and school placement. *Research in Autism Spectrum Disorders*, *6*, 1126–1134.

Salmivalli, C. (1999). Participant role approach to school bullying: Implications for interventions. *Journal of Adolescence*, *22*, 453–459.

Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behavior*, *15*, 112–120.

Salmivalli, C., Lagerspetz, K. M. J., Björkqvist, K., Österman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior*, *22*, 1–15.

Salmivalli, C., Lappalainen, M., & Lagerspetz, K. M. J. (1998). Stability and change of behavior in connection with bullying in schools: A two-year follow-up. *Aggressive Behavior*, *24*, 205–218.

Schroeder, J. H., Cappadocia, M. C., Bebko, J. M., Pepler, D. J., & Weiss, J. A. (2014). Shedding light on a pervasive problem: A review of research on bullying experiences among children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, *44*, 1520–1534.

Schrooten, I., Scholte, R. H. J., Cillessen, A. H. N., & Hymel, S. (2016). Participant roles in bullying among Dutch adolescents with Autism Spectrum Disorders. *Journal of Clinical Child & Adolescent Psychology*. 1–14.

Schumann, L., Craig, W., & Rosu, A. (2013). Minority in the majority: Community ethnicity as a context for racial bullying and victimization. *Journal of Community Psychology*, *41*, 959–972.

Shtayermman, O. (2007). Peer victimization in adolescents and young adults diagnosed with Asperger's syndrome: A link to depressive symptomatology, anxiety symptomatology and suicidal ideation. *Issues in Comprehensive Pediatric Nursing*, *30*, 87–107.

Smith, P. K., Cowie, H., Olafsson, R. F., & Liefooghe, A. P. D. (2002). Definitions of bullying: A comparison of terms used, and age and gender differences, in a fourteen-country international comparison. *Child Development*, *73*, 1119–1133.

Smith, D. J., Schneider, B. H., Smith, P. K., & Ananiadou, K. (2004). The effectiveness of whole-school antibullying programs: A synthesis of evaluation research. *School Psychology Review*, *33*, 547–560.

Sofronoff, K., Dark, E., & Stone, V. (2011). Social vulnerability and bullying in children with Asperger syndrome. *Autism*, *15*, 355–372.

Sreckovic, M. A., Brunsting, N. C., & Able, H. (2014). Victimization of students with autism spectrum disorder: A review of prevalence and risk factors. *Research in Autism Spectrum Disorders*, *8*, 1155–1172.

Stassen Berger, K. (2007). Update on bullying at school: Science forgotten? *Developmental Review*, *27*, 90–126.

Sterzing, P. R., Shattuck, P. T., Narendorf, S. C., Wagner, M., & Cooper, B. P. (2012). Bullying involvement and autism Spectrum disorder. *Archives of Pediatrics and Adolescent Medicine*, *166*, 1058–1064.

Sutton, J., & Smith, P. K. (1999). Bullying as a group process: An adaptation of the participant role approach. *Aggressive Behavior*, *25*, 97–111.

Swearer, S. M., Espelage, D. L., Vaillancourt, T., & Hymel, S. (2010). What can be done about school bullying? Linking research to educational practice. *Educational Researcher*, *39*, 38–47.

Ttofi, M. M., & Farrington, D. P. (2011). Effectiveness of school-based programs to reduce bullying: A systematic and meta-analytic review. *Journal of Experimental Criminology*, *7*, 27–56.

Twyman, K. A., Saylor, C. F., Saia, D., Macias, M. M., Taylor, L. A., et al. (2010). Bullying and ostracism experiences in children with special health care needs.

Journal of Developmental and Behavioral Pediatrics, *31*, 1–8.

Van Roekel, E., Scholte, R., & Didden, R. (2010). Bullying among adolescents with autism Spectrum disorders: Prevalence and perception. *Journal of Autism and Developmental Disorders*, *40*, 63–73.

Wainscot, J. J., Naylor, P., Sutcliffe, P., Tantam, D., & Williams, J. V. (2008). Relationships with peers and use of the school environment of mainstream secondary school pupils with Asperger syndrome (high-functioning autism): A case-control study. *International Journal of Psychology and Psychological Therapy*, *8*, 25–38.

Wang, J., Ianotti, R. J., & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health*, *45*, 368–375.

Whitney, I., & Smith, P. K. (1993). A survey of the nature and extent of bullying in junior/middle and secondary schools. *Educational Research*, *35*, 3–25.

Whitney, I., Smith, P. K., & Thompson, D. (1994). Bullying and children with special educational needs. In P. K. Smith & S. Sharp (Eds.), *School bullying: Insights and perspectives* (pp. 213–240). London, UK: Routledge.

Zablotsky, B., Bradshaw, C. P., Anderson, C., & Law, P. A. (2013). The association between bullying and the psychological functioning of children with autism Spectrum disorders. *Journal of Developmental & Behavioral Pediatrics*, *34*, 1–8.

Zablotsky, B., Bradshaw, C. P., Anderson, C. M., & Law, P. (2014). Risk factors for bullying among children with autism spectrum disorders. *Autism*, *18*, 419–427.

Zeedyk, S. M., Rodriguez, G., Tipton, L. A., Baker, B. L., & Blacher, J. (2014). Bullying of youth with autism spectrum disorder, intellectual disability, or typical development: Victim and parent perspectives. *Research in Autism Spectrum Disorders*, *8*, 1173–1183.

Zych, I., Ortega-Ruiz, R., & Del Rey, R. (2015). Systematic review of theoretical studies on bullying and cyberbullying: Facts, knowledge, prevention, and intervention. *Aggression and Violent Behavior*, *23*, 1–21.