

Facilitating Social Inclusion of Individuals with Autism Spectrum Disorder



Tiffany Otero and Susan Copeland

Abstract As a result of characteristic deficits in social communication, individuals with Autism Spectrum Disorder (ASD) often struggle to engage in social interaction and form meaningful relationships with their peers. They face disproportionate levels of social exclusion when compared to their peers with and without disabilities. Through a comprehensive understanding of social competence, authors provide an integrated framework in which to base intervention, and utilize interdisciplinary practice to facilitate social inclusion of individuals with ASD. A brief review of factors impacting social inclusion and the current state of evidence-based practices that facilitate social competence and inclusion are provided. Finally, authors discuss examples for how readers might coordinate with professionals, family members, community members, and peers to promote social inclusion of individuals with ASD across time and settings.

Elijah sat quietly as I interviewed his parents. With eyes downcast, he shifted his gaze between me, his parents, and the napkin twisted between his fingers. “Does Elijah participate in any extracurricular activities?” “No,” his parents responded, “we’re taking a break right now. But he used to.” It was a common response to an important question. Elijah had recently entered middle school. A time when many children his age begin to prioritize friendships over family relationships. However, as it is for many children with Autism Spectrum Disorder (ASD), Elijah struggled with the constant changes, transitions, and social demands. Despite therapies, intervention, and school-based supports, he came home exhausted, moody, and needing time to recharge. “Elijah,” I asked, “when do you get together with friends?” He shrugged, “at lunch, sometimes.” His parents chimed in, “he tends to sit alone unless his teachers make him talk to someone.”

I addressed him again, “Are you lonely?” He hummed, “Hmmm, yeah. Kinda.”

His experience is not uncommon. Due to characteristic deficits in social communication, individuals with ASD face greater levels of social rejection and lower levels

T. Otero (✉) · S. Copeland

Department of Special Education, University of New Mexico, Albuquerque, NM, USA
e-mail: oterot@unm.edu

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of peer acceptance than others their age, and are more likely to function on the periphery of the social network (Kasari, Locke, Gulsrud, & Rotheram-Fuller, 2011; Locke, Ishijima, Kasari, & London, 2010; Symes & Humphrey, 2010). When compared to those with intellectual disability, learning disability, and emotional disorders, adolescents and young adults with ASD face greater social isolation (Orsmond et al., 2013; Shattuck, Orsmond, Wagner, & Cooper, 2011). This social isolation is manifested in varied ways such as by never receiving phone calls, never seeing friends, and never being asked to go out to an activity. They also report increased feelings of loneliness and have few or no close friendships (Bauminger & Kasari, 2000; Kasari et al., 2011; Orsmond, Krauss, & Seltzer, 2004), and the ones who do form friendships rate them as being of poorer quality than the friendships reported by their typically developing peers (Calder, Hill, & Pellicano, 2013).

As I spoke to Elijah, I couldn't help but reflect on how social inclusion is established. For many of us, social inclusion results from the successful development of social competence. The development of social competence is a complex process that begins in infancy with attachment, and progresses to instrumental social learning (i.e., learning that communication with others helps to obtain goals), and finally experience-sharing (i.e., reciprocal) relationships (Gutstein & Whitney, 2002). Our initial inclusion in non-familial social settings is fueled first by our interests, circumstances, or ambitions. As children, our interests and circumstance might have led our parents to identify activities in which to involve us or to enroll us in particular care centers, schools, or instructional settings where we were surrounded by other peers. This involvement in activities led to social contacts. Through social contact and engagement, we learned new behaviors and ways of relating. Our social contacts expanded until our core group of friends were those who shared our interests, such as teammates, dance partners, bandmates, or group members. We also developed skills to form acquaintances across social circles. We formed tighter bonds that helped us to feel comfortable, protected, liked, and included. This process is how many of us remain socially included as adults. We meet others at work, within hobbies, and through mutual contacts. We enjoy relationships that vary in depth and purpose, but all of these help us to feel connected.

Conversely, individuals with ASD often have less access to peers throughout their lifetime and have smaller social networks (Kasari et al., 2011; Orsmond, Shattuck, Cooper, Sterzing, & Anderson, 2013), resulting in a cycle of circumstances wherein deficits in social communication result in fewer social opportunities to develop social skills, further increasing social impairment and isolation. While significant research efforts have been put toward the development of interventions to address social skill deficits, these interventions alone have not helped to address the problem of limited social inclusion. As a result, individuals with ASD continue to report increased levels of social rejection and low levels of acceptance (Symes & Humphrey, 2010), poorer academic achievement (Welsh, Parke, Widaman, & O'Neil, 2001), loneliness (Bauminger & Kasari, 2000), lower Quality of Life (Arias et al., 2018), and increased vulnerability to bullying (Sreckovic, Brunsting, & Able, 2014). Therefore, the purpose of this chapter is to provide a more comprehensive understanding of social competence and propose a framework to apply the use of evidence-based

practices that facilitate social inclusion across settings for children, adolescents, and young adults with ASD. To achieve this, we define social competence and inclusion and present a brief review of factors impacting social inclusion and the current state of evidence-based practices that facilitate social competence and inclusion. Finally, we provide examples for how readers might coordinate with professionals, family members, community members, and peers to promote social inclusion of individuals with ASD.

Social Characteristics in ASD

Deficits in social communication are a core feature of the ASD diagnosis. However, the presentation of these deficits is varied and complex. According to the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM-5; American Psychiatric Association, 2013, p. 50), social communication deficits are manifested by impairment in: (a) social and emotional reciprocity; (b) understanding and use of nonverbal communicative behaviors; and (c) developing, maintaining, and understanding relationships. These deficits range along a spectrum of severity with some individuals displaying more overtly challenging social behaviors and having comorbid medical and developmental challenges (including intellectual impairment and/or language disorders) that further influence the severity of social communication deficits (please refer to chapter “[Medical Comorbidities in Pediatric Autism Disorder](#)” for more information). On the opposite end of the spectrum, individuals may have intact, or age-appropriate, cognitive and language skills, but still exhibit clinically significant deficits in social communication. Generally speaking, these deficits may include limited eye contact, difficulty expressing and understanding nonverbal communication, limited engagement with others, a tendency to be alone, poor emotional recognition, impaired Theory of Mind and executive functioning, and the inability to infer sociocultural constructs of interaction (Attwood, 2000; Carrington, Templeton, & Papinczak, 2003; Kroeger, Schultz, & Newsom, 2007; Lopata, Thomeer, Volker, Nida, & Lee, 2008; Ochs, Kremer-Sadlik, Sirota, & Solomon, 2004). For diagnostic purposes, individuals with ASD are identified along the spectrum according to the level of support they require in the domains of social communication and repetitive behaviors or restricted interests. These levels range from requiring “very substantial support” to “substantial support,” to “support.” In addition, individuals with ASD commonly exhibit difficulty in regulating emotions, and have restricted interests or repetitive behaviors that interfere with their functioning.

Furthermore, in addition to the variability of skills that individuals with ASD can possess, they also vary with regard to social preferences similar to individuals without ASD. Researchers have proposed a multi-factored model to explain this variability (Mundy, Henderson, Inge, & Coman, 2007). Initial Causal Processes (ICPs), or neurological deficits specific to autistic symptomatology, as well as the variability of social characteristics found in the typical population (e.g., introversion, extroversion, cultural differences) interact to form a unique presentation of ASD in

each individual. In other words, preference for social engagement of individuals with ASD varies significantly based on the nature of their symptoms, social personality, and individual social/cultural factors.

Social Inclusion and Competence

For the purpose of this chapter, social inclusion is defined as the degree to which a person is engaged in age-appropriate social relationships with others that fosters a sense of belonging. It represents the outcome of the interaction between a person and his or her social environment. If the skills or goals of an individual are not well understood or well-matched to the social group, that person is at risk of marginalization, neglect, or stigmatization.

Thankfully, human beings are socially dynamic, meaning that we have the ability to interact with varied social groups to meet varied needs. Our social groups are not uniform, adhering to the same rules, norms, and customs. In fact, from one group to the next, there is a different set of norms, requiring a different set of skills that one must employ. A person who successfully integrates him or herself into many different social circles, and is, therefore, less likely to be socially excluded, is referred to as having a high level of social competence. Dodge and colleagues (Dodge, Pettit, McClaskey, Brown, & Gottman, 1986) defined social competence as an interaction between the environment and biologically determined characteristics. Rubin and Rose-Krasnor describe social competence as “the ability to achieve personal goals in social interaction while simultaneously maintaining positive relationships with others over time and across settings” (Rubin & Rose-Krasnor, 1992, p. 285). For example, a person with the goal to maintain positive family relationships will develop and employ skills such as expressions of affection, hospitality, and conflict resolution because these skills support and strengthen those bonds. Similarly, a child who values relationships with peers in a certain social circle will seek to understand and employ the behaviors and skills valuable to that group. In summary, social competence is an interactional process between individuals and their social environments that involves: (a) social cognition, (b) social behaviors, and (c) the norms and customs of the social group. Finally, what is often ignored in developing social interventions, but highlighted in the definition of social competence by Rubin and Rose-Krasnor (1992), is the importance of achieving personal goals.

Figure 1 models this integrated definition of social competence. At the center is the primary motivation behind all voluntary social interaction: the personal goal of the social agent. Goals are infinite, varied, and personal, and have a direct influence on the social settings in which the agent chooses to engage. Goals also dictate how the individual chooses to behave in these settings.

Operating in a feedback loop are environmental factors and personal factors. The environmental side (to the left) includes the social context and the normative value system. The social context refers to the literal environment in which the person is socially engaged. Examples may include settings such as school, home, store, faith

communities, and are even further defined by event. Is the person at school in a classroom or an assembly? Is the person in a faith community attending a sermon or a concert? The normative value system refers to culturally defined patterns of social behavior and rules. For example, rules dictating personal space, tone of confrontation, regard for elders, etc., are defined by this value system. Together, the social context and the normative value system dictate the exact behaviors that result in successful social engagement. For children, or those developing social competence, time is also a key component of the context as the social context takes into account the developmental level of the peer group. Waters and Sroufe (1983) argued that the development of social competence hinges not only on the execution of behaviors that meet goals in the immediate setting, but also on behaviors that promote positive developmental outcomes later in life.

Individual characteristics include the individual’s ability to understand social cues to successfully adapt to their social environment, or social cognition. Social cognition includes the receptive processes that allow a person to “read” a social environment for cues. These include looking for models, perspective-taking, empathy, and other cognitive social behaviors. This cognitive process, then, directly influences the behaviors exhibited by the individual. In order to be successful, behaviors have to be appropriate to the context and the value system. Well-developed social cognition and social behaviors allow a person to decipher social codes and behave accordingly in a fluent and accurate manner. As previously explained, a person’s success is measured by the degree they are able to accomplish his or her goals in this environment. The ability to be highly adaptable across various contexts and maintain the delicate balance between the needs of the self and the needs of others is where children with ASD are at a particular disadvantage.

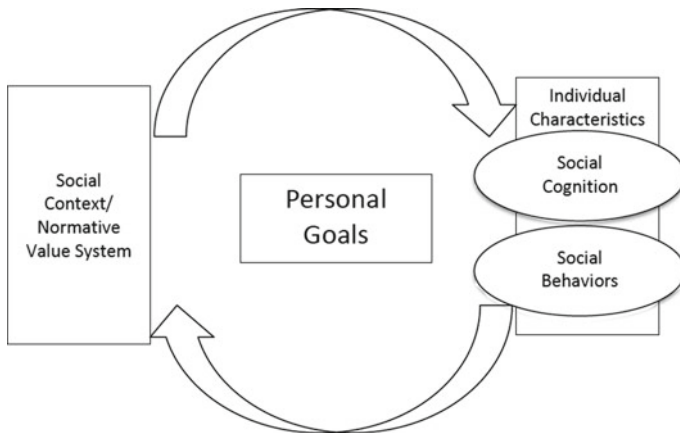


Fig. 1 Integrated model for social competence

Factors Impacting Social Inclusion of Individuals with ASD

Given the amount of variability in symptom presentation in ASD, it is difficult to use broad generalizations to describe the social involvement of all individuals with that diagnosis. Rather, there are several factors that impact the degree to which some individuals with ASD are socially integrated. Consistent with the components of the model presented in Fig. 1, these can be categorized as individual, or within-person characteristics, and contextual factors, including others in the social circle and setting.

Individual Factors

Regardless of the severity of the symptom presentation, having ASD places one at risk of social exclusion. When looking at inclusion of individuals with disabilities, broadly, Koller and colleagues (Koller, Pouesard, & Rummens, 2018) found that individuals with disabilities that impacted their behavior, social, or emotional skills tend to experience more social exclusion than those with specific physical disabilities (e.g., visual impairment, mobility limitations). Diamond and Tu (2009) found that peers make their decisions on whether to include someone with a disability based on the extent to which the disability may interfere with the chosen activity. Therefore, a child with ASD may be less likely to be included in a recreational setting highly dependent on reciprocal skills, but more likely to be included in a physical or team-based activity.

There are conflicting findings with regard to the impact that symptom severity and comorbid conditions have. Some studies report that those with higher cognitive abilities and adaptive skills are more likely to form meaningful social relationships than those who are more severely impacted (Farley et al., 2009; Howlin, 2000). Young adults with impairments in verbal communication skills were also more likely to be socially isolated (Orsmond et al., 2013). However, others have found that when individuals present with more overt symptoms, they receive more social support in the form of assistance and tolerance from others (Jones & Frederickson, 2010; Tuersley-Dixon & Frederickson, 2016). So, in some ways, the invisibility of the disability in those who are diagnostically identified as requiring only “support” (versus “substantial support” or “very substantial support”) may actually function as a deterrent to social inclusion, as peers are less likely to tolerate and support an individual with ASD with intact cognitive and adaptive skills, but still presents with clinically significant social deficits.

Gender also impacts the degree to which individuals are socially included. In a study conducted in Spain on the Quality of Life (QoL) of individuals with Intellectual Disability (ID) and co-occurring ASD with ID, researchers found that respondents for male participants reported higher levels of social inclusion than females (Arias et al., 2018). When examined further, researchers found that it was not due to the

severity of the presentation of symptoms among the sample of girls, but was related to the nature of female versus male social interactions. Males tend to engage in more action-based interaction through play, sports, or games. Females, on the other hand, tend to engage in more verbally mediated interaction, placing a greater demand on an area of deficit for girls with ASD.

As previously mentioned, individuals with ASD vary by tendencies of introversion and extroversion, in the same way that the typically developing population does. However, they also differ from typically developing individuals in the way they perceive friendship, and the need for it. In the literature, this variability is sometimes referred to as social motivation, and refers to how motivated one is to engage in social interaction and form relationships. In one particularly thorough study of perceptions of friendships shared by a group of children with ASD, the authors concluded that children with ASD may not want or need the same amount of social engagement that is desired by their typically developing peers (Calder et al., 2013). Therefore, some individuals with ASD may be satisfied with less social inclusion than one might assume given their age.

Contextual Factors

Peer attitudes toward others with ASD impact social engagement. In one study, Jones and Frederickson (2010) found that typically developing peers tended to rate children with ASD as significantly more shy, less cooperative, and more help-seeking than other students. Students in this study were also less likely to choose children with ASD as workmates. To address this perceived bias, researchers (Jones & Frederickson, 2010; Ochs, Kremer-Sadlik, Solomon, & Sirota, 2001) have found that that social inclusion of students with ASD may be facilitated when their social partners have an awareness about the characteristics of ASD. Based on associations identified through rating scales and observation, both sets of researchers found that when the diagnosis of ASD was known by the peers, they made more social allowances and provided more support for those with ASD.

It is possible that the presence of adults or other support providers reduces the possibility of contact with others, further inhibiting social inclusion. While additional adult support is often necessary for those with ASD in inclusive classrooms and social settings, the presence of an adult or support staff may actually hinder naturalistic social inclusion (as opposed to prearranged social interactions). For example, Kasari et al. (2011) found that children with ASD were generally less socially engaged during recess than their typically developing peers and that those with one-to-one adult support were even less likely than their peers with ASD without additional adult support to engage socially with their classmates. They also did not consistently engage with adult aides, so overall were even less likely to participate in any type of social interactions during recess. Young adults with ASD living with a parent were more likely than their peers with and without disabilities to never see friends (Orsmond et al., 2013). However, this finding should be considered in context, as

individuals who have greater functional impairment and communication deficits are most likely to live with their parents in adulthood. Therefore, the factors related to the presentation of the disability, and not specifically the individual's living situation, could be more impactful to their social participation in adulthood.

Evidence-Based Practices (EBP) for Social Skills Development

Fortunately, researchers have successfully established evidence-based practices to address the multiple factors influencing social inclusion of individuals with ASD. Although there has been debate on what specific standards apply when determining what constitutes a practice as evidence-based (an EBP), in general these are interventions based on sound research, conducted with multiple groups of participants, that result in empirical evidence that supports their effectiveness in improving participant outcomes (Agran, Spooner, & Singer, 2017; Cook & Odom, 2013). Use of EBPs by teachers, therapists, and other service providers results in improved outcomes for individuals with disabilities (Cook & Odom, 2013). Indeed, federal laws related to provision of services for children and youth with disabilities, including those with ASD, mandate use of EBPs in service delivery (ESSA, 2015; IDEA, 2004 [Note: IDEA, 2004 used the term “scientifically-based” while ESSA uses the more current term “evidence-based”]).

Interest in developing EBPs related to social inclusion of individuals with ASD has grown steadily as researchers, practitioners, and families have recognized the critical importance of social skills for positive life outcomes (e.g., Reichow & Volkmar, 2010). Multiple research groups and national organizations such as the National Professional Development Center on ASD (NPDC; Wong et al., 2014) have conducted reviews of existing social intervention research seeking to establish EBPs to facilitate social inclusion of children and adults with ASD (Hughes et al., 2012; Reichow & Volkmar, 2010; Whalon, Conroy, Martinez, & Werch, 2015). In the sections below we will provide a description of evidence-based practices determined to support social inclusion of individuals with ASD across the age span. We will also highlight limitations to these practices and identify gaps in research and practice. This overview will be organized into practices that focus on building specific skills associated with social competence of individuals with ASD and practices that focus on teaching social partners of individuals with ASD skills to facilitate social inclusion or social skill development of their peers with ASD.

EBPs for Individual Social Skills Development

As mentioned previously, the social cognitive skills and social behaviors individuals use when interacting with others in their environments are one aspect of an integrated model of social competence (see Fig. 1). The majority of social skills taught through EBPs are related to increasing the frequency or quality of interactions with peers and others in the social environment. Most of the practices judged to be EBPs across all age groups have largely been derived from behavioral principles (e.g., prompting, reinforcement, imitation/modeling, self-management). In addition, naturalistic interventions (i.e., a group of practices that build on child motivation and interest within typical settings or activities), pivotal response training (i.e., teaching the foundational skills necessary for building more complex skills within typical routines and settings), video modeling (i.e., a group of practices that teach social skills by video recording the skill being performed correctly and having the individual view the video), visual supports (e.g., using words, photos, or icons, as cues to perform social behaviors), social narratives (i.e., individualized narratives describing a social situation and highlighting the cues and responses required for that situation), and technology-aided social skills instruction (e.g., using an electronic device to cue social responses) all have an established a research base supporting their use to teach or support social skills development (e.g., Wong et al., 2014). Cognitive-behavioral interventions (i.e., teaching individuals to monitor their thoughts and emotions and use specific strategies to alter their behavior) have shown promise with older children as has scripting (i.e., providing a written or verbal script for an individual to use that is specific for a particular social setting, such as playing a game) for older adolescents and young adults (Wong et al., 2014).

Limitations. Despite determination of a large number of EBPs supporting social skill development of individuals with ASD, several crucial limitations and gaps in knowledge and practice exist. One critical limitation of the research and practice in this area is that most EBPs are focused on teaching discrete skills (e.g., social initiation). While learning discrete social skills is necessary, it is not sufficient for developing social competence. In reality, as described in the previous sections, the process of building social relationships is complex, comprised of many skills that require both recognizing subtle social cues across varying settings and selecting and using multiple behaviors in response to these cues.

Moreover, there is a dearth of EBPs focused on social skill development of older adolescents and adults with ASD. The majority of research has focused on teaching young children with ASD (preschool and early elementary school-aged) skills to increase social interactions, yielding a larger number of EBPs identified for this age group (e.g., Reichow & Volkmar, 2010; Wong et al., 2014). There is a significant gap in social skills intervention research conducted with adults with ASD over the age of 30, despite growing documentation that social skills deficits persist into adulthood and are associated with social isolation and accompanying mental health issues (Howlin & Taylor, 2015). The lack of documented effective practices affects

individuals' successful employment, ability to have satisfying intimate relationships, and full participation in their communities.

It is also important to highlight that the majority of social skills intervention research studies conducted with individuals with ASD has included individuals considered to have moderate to high functioning levels versus individuals with ASD who have cognitive impairment (e.g., ASD and intellectual disability [ID]) (e.g., Walton & Ingersoll, 2013; Wong et al., 2014). This gap leaves practitioners and families at a loss of how to effectively support social competence of a substantial number of individuals with ASD.

EBPs Focused on Social Partners

As the integrated model of social competence illustrates, the social context is an important component of competence and includes the particular environments an individual encounters and the social partners in those environments. Not surprisingly, the behaviors of social partners have been found to facilitate or inhibit social inclusion of those with ASD (Carter, Hughes, Copeland, & Breen, 2001). Recognizing this, researchers have developed a group of interventions that focus on the social partners encountered by individuals with ASD across home, school, and community settings. These interventions focus upon the normative value system and social context can balance the interaction, so the onus of improvement does not rest entirely upon the individual with a disability. Many of these practices fall under a broad category of peer-mediated interventions and typically include components such as providing information to peers about the characteristics of ASD and/or teaching them specific strategies to successfully engage their peers with ASD in social interactions or to teach their partners with ASD specific behavioral, academic, or social skills. This group of interventions has proved successful in increasing social engagement with both young children (Lee, Odom, & Loftin, 2007) and adolescents with ASD (Hochman, Carter, Bottema-Beutel, Harvey, & Gustafson, 2015) as well as increasing reciprocal conversational skills, and social interactions between peers with and without ASD outside of school contexts.

Limitations. As with individual social skill instruction, interventions focused on social partners have primarily been examined in children and adolescents rather than with adult populations. Adult relationships may differ in important ways from those of younger people so it is crucial that EBPs are investigated and identified for adults with ASD across the lifespan.

Some researchers and adolescents and adults with ASD have also criticized peer-mediated interventions facilitated by adults as sometimes intrusive and likely to increase stigma (Bottema-Beutel, Mullins, Harvey, Gustafson, & Carter, 2016). Engaging older adolescents and adults in determining their own social goals and participating in selecting intervention and support strategies with which they are comfortable is one way to ensure the social validity of social development strategies.

Interdisciplinary Coordination to Promote Social Inclusion

In light of these findings, it is evident that a comprehensive, multidisciplinary approach to intervention is necessary in order to adequately target the complexities of social inclusion for individuals with ASD. Therefore, in reference to Fig. 1, we propose an integrated model of intervention that targets both individual characteristics (e.g., personal goals and values, social cognitive skills, and social behaviors) and contextual factors (e.g., peer/adult interventions, consideration of social context). Within this person-centered model, members of the team include, but are not limited to, the individual, the individual's parents or other family members, their therapeutic and medical service providers (e.g., psychologists, behavior therapists, speech and language pathologists, occupational therapists, social workers), case managers, educators, and those with whom they would like to have social contact (e.g., circles of support that include peers). While coordinating schedules to have everyone meet is often impossible, communication can be enhanced through clear and concise articulation of goals so that each person can contribute his or her expertise to meet the individual's needs. For more information on coordinating services between providers, please refer to chapters "[Partners in School: An Example of Care Coordination to Ensure Consistency of Evidence-Based Practices Across Home and School for Youth with Autism Spectrum Disorder \(ASD\)](#)", "[Coordinating ABA Services](#)", "[Coordinating Speech-Language Pathology Services for Youth with Autism Spectrum Disorder](#)", and "[Care Coordination in Primary Care](#)".

Therefore, facilitation of social inclusion should begin with a careful assessment of the individual's goals, values, and interests. For many with ASD, their ability to form and articulate abstract concepts such as goals and values may be hindered by their disability; however, they often have very clearly defined interests that can operate as both indicators of potential social goals as well as motivation for social engagement. This initial assessment may answer the following questions: (a) What purpose does social interaction serve for this individual and what do they hope to obtain?, (b) What environment and with whom do they hope to engage?, and (c) What skills do they need to be successful? This initial assessment can be done by any interprofessional team member or provider who is facilitating intervention for the individual. For young children, or those with limited communication skills, efforts should be made to ensure enough collateral data are collected to pinpoint the goals and values of the individual and not just the preferences of those surrounding or working with the individual. To the greatest degree possible, the views and perspectives of the individuals with ASD should be central to the initial assessment with careful attention to the amount of social engagement the individual needs in order to feel included (Calder et al., 2014). For example, a child's teacher may wish for the child to interact with more peers at lunch. However, after assessing the child's needs and preferences, it is found that the child needs the time during lunch to socially disconnect and recharge for the school day, but may be more interested in engaging socially in an after school club. By considering these preferences and modifying supports accordingly, we can develop a system of intervention that is more ecologically and socially valid, targeted to the

needs of the individual, and based on naturally occurring sources of motivation and reinforcement.

Once needs, preferences, and values are identified, intervention planning can begin. Using established evidence-based practices and the individual's preferences as a starting point, teachers, therapists, or other providers can work with the individual and family to identify the most appropriate combination of interventions that target both the environment and individual characteristics. For example, once a setting and potential peers have been identified, teachers or therapists may decide to provide peers with awareness training or select certain peers for formalized "peer buddy" training.

One issue with social skills interventions is that they often fail to generalize from the setting in which they are taught to the setting they are intended to be used (Bellini, Peters, Benner & Hopf, 2007; Rao, Beidel, & Murray, 2008). Therefore, when identifying targets for behavioral skills training of the child with ASD, it is important to identify the specific social skills that they will need to be successful in the setting they have chosen. This goes beyond just teaching an individual how to initiate a conversation and respond to questions simply because those are important parts of conversation. Rather, whomever will be developing or implementing the intervention (likely a therapist or team of therapists) should observe the social setting to gain an understand of how individuals interact in the setting. For example, a behavior analyst may choose to conduct a task analysis or take observational data to determine the topography (or "look") of the social behaviors required for that setting and develop appropriate operational definitions of needed skills. Peers may also be a valuable source of this information.

Finally, multiple team members should play a role in teaching skills to the individual. Behavior analysts, speech therapists, psychologists or other specialized providers, and trained peers can conduct the discrete skills training using established evidence-based practices. It is imperative that providers then work closely with parent or teachers, either through communication, observation, and training, to facilitate generalization of learned skills. For example, if a child is learning how to take turns with materials, parents can be coached on how to target and reinforce this skill on multiple opportunities in the time between teaching sessions. Similarly, teachers can support and maximize naturally occurring social situations that allow the child to use the targeted skill with peers and access naturalistic reinforcement. Peer-mediated or self-management approaches, that reduce reliance on adult presence, may be particularly helpful to adolescents and young adults in order to generalize skills while at the same time promoting their social inclusion and independence.

Conclusion

Social inclusion is what allows us to feel bonded, connected, and not alone. Some may argue it is a basic human need. For many individuals with ASD, the nature of their disability makes their inclusion in authentic and meaningful social relationships

challenging. However, social inclusion is not easily intervened upon, because it is the outcome of several integrated parts working together. These include both individual characteristics and the environmental context. However, at the center, and perhaps the most important component, is the impetus for social engagement: the goals, desires, and values of the person seeking social inclusion.

Fortunately, advancements in research have led to the development of practices that help individuals with ASD develop social skills that support social inclusion and inform practices for peers and facilitators. However, these practices are often studied and developed in isolation from one another, resulting in applied practice that is grounded in sound but disparate theories and lacks integration. Furthermore, there is often emphasis placed on addressing someone's skill deficit, rather than focusing on the goals and interests of the individual as the starting point for interventions.

The Integrated Model for Social Competence (Fig. 1) introduced in this chapter provides a framework not only for the definition of social competence, but also how to structure intervention through a comprehensive approach that aims to promote social inclusion of individuals with ASD. Facilitation of social inclusion is a team effort, with the individual with ASD operating as the team captain. In this model, multidisciplinary collaboration is centered upon careful evaluation of the individual's needs and goals for social engagement. With common goals identified among collaborative interdisciplinary partners, multi teams can develop more targeted, efficient, and socially valid intervention packages that address the complex social needs of the individual. Individual team member can then each address the needs of the individual most fitting to their scope of practice, or role, by making appropriate environmental modifications, training aides and peers, teaching any necessary skills to the individual, and helping the individual to generalize across settings. It is through this approach that individuals with ASD can access skills that appeal to their needs, help them to be successful achieving their social goals, and promote their social inclusion.

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