Including Children with Autism in Social and Imaginary Play with Typical Peers

Integrated Play Groups Model

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Peer-play experiences are a vital part of children's socialization, development, and culture. Children with autism face distinct challenges in social and imaginary play, which place them at high risk for being excluded by peers. Without explicit support, they are likely to remain isolated from peers and the consistent interactive play that encourages developmental growth. This article focuses on the theory and use of Integrated Play Groups (IPGs), which offer a comprehensive, research-based intervention that helps children on the autism spectrum engage in play with typical peers in regular social settings. The article examines the nature of play and the developmental and sociocultural problems it presents for children with autism. The authors describe IPGs, focusing on their conceptual design and the interventional approach to them called guided participation. They highlight innovative uses of IPGs for older populations and discuss Integrated Teen Social Groups. They summarize research and development efforts and discuss the implications of IPGs for the future. **Key words:** children with autism and developmetal growth; guided participation; Integrated Play Groups (IPGs); Integrated Teen Social Groups; peer play

The significance of peer-play experiences for children's development, socialization, and cultural participation has been extensively documented in over a half century of research (Elkind 2007; Miller and Almon 2009). While typically developing children need little motivation or guidance to play with peers, children with autism encounter significant obstacles gaining equal access to and benefits from inclusion in peer-play experiences. Autism refers here to a broad definition of autism spectrum disorders, which includes severe, moderate, and mild forms as proposed for the future edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) due out in May 2013 (American

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Psychiatric Association 2012). Children with autism face distinct challenges in social and imaginary play, which place them at high risk for being excluded by peers. Without explicit support, they are likely to remain isolated and thus to be deprived of consistent interactive play experiences that encourage developmental growth and meaningful peer relationships.

The Integrated Play Groups (IPG) model grew from a concern for the many children excluded from common peer-play experiences. IPGs support children with autism by engaging them in play with typical peers and siblings in regular social settings. With two decades of research and practice, IPGs have evolved, often shaped by new developments in the ever-expanding field of autism. The Autism Institute on Peer Socialization and Play (www.autiminstitute.com) advances IPG training, research, and development efforts. Recognized as one of the established best practices for children on the autism spectrum (American Speech-Language-Hearing Association 2006; Darling-Hammond et al. 2005; Disalvo and Oswald 2002; Iovannone 2003; National Autism Center 2009), IPGs have been widely used in regional, national, and international school and community programs. Originally developed for children in early and middle childhood (ages three to eleven years), IPGs are now being adapted for older populations by incorporating creative activities that are playful in nature and appealing to diverse age groups.

This article focuses on the theory behind the IPG model as applied to children and as adapted for adolescents. We begin with an examination of the nature of play and the problems it presents for children with autism from developmental and sociocultural perspectives. We next describe the conceptual design of IPGs and the intervention approach (guided participation) for children. We highlight innovative extensions of the IPG model for older populations through Integrated Teen Social Groups (ITSGs). We conclude by summarizing the relevant research and discussing their implications.

Play Challenges for Children with Autism

While individuals across the autism spectrum naturally differ from one another, as a group they face remarkably similar obstacles when it comes to play. Children with autism present distinct challenges for both social and representational forms of play, challenges intricately tied to the core features of the condition. As first presented in Wing's (1978) seminal research, the hallmarks of this

neurological condition include a "triad of impairments" in social interaction, communication, and imagination. Developmental delays and differences in underlying capacities for joint attention, imitation, and social reciprocity are all closely intertwined with an emerging capacity for play. In sharp contrast to the richly diverse social and imaginary pursuits of typical children, the play of children with autism is typified by restricted, repetitive, and stereotyped patterns of behavior, interests, and activities, which they often pursue in isolation (American Psychiatric Association 2012).

Play Patterns and Variations

With respect to representational forms of play, children with autism present unique profiles that manifest in spontaneous engagement with toys, activities, and themes. Their play often becomes fixated. Many of them exhibit preoccupations ranging from a fascination with objects to an intense focus on arcane topics. Their engagement in these types of activities often appears void of purpose, and they often repeat activities without variation.

Research suggests that children with autism present specific impairments in spontaneous symbolic play that may also extend to functional play (Jarrold 2003; Williams, Reddy, and Costall 1999; Williams 2003). As compared to children of a similar maturational age, the manipulative play of children with autism has been found to occur at higher rates than either functional or symbolic-pretend play (Dominguez, Ziviani, and Rodger 2006; Libby et al. 1998; Tilton and Ottinger 1964). Studies have shown that children with autism produce fewer different functional-play acts and functional-play sequences, especially when their play includes dolls (Mundy et al. 1987; Sigman and Ungerer 1984; Williams, Costell, and Reddy 2001). They incorporate fewer novel play acts (Charman and Baron-Cohen 1987; Jarrold et. al. 1996) and exhibit less advanced forms of symbolic play—play, for example, that includes object substitutions, treats a doll as an active agent, or invents imaginary entities (Baron-Cohen 1987; Lewis and Boucher 1988; Ungerer and Sigman 1981). Researchers report that the pretend-play scripts of children with autism are less integrated, less varied, and less flexible than those of developmentally matched peers (Harris 1993).

With respect to social play, children across the autism spectrum share some common characteristics. Studies have shown that compared to typically developing children and children with developmental delays, children with autism direct fewer overt social initiations to peers (Hauck et al. 1995; Sigman and

Ruskin 1999), and they inconsistently respond to peers when the peers initiate with them (Attwood, Frith, and Hermelin 1988; Volkmar 1987). The challenges children with autism face in play with peers are complicated by severe and persistent deficiencies in social communication—in attention, imitation, and social responsiveness, for example (Dissanayake, Sigman, and Kasari 1996; Sigman and Ruskin 1999). Problems in verbal and nonverbal communication (limited use of eye contact, facial expressions, conventional gestures, or spoken, signed, or written words to ask for objects, request information, and share emotions, for example) both notably affect the capacity of children with autism to enter into, coordinate, and sustain social play with peers (Sigman and Ruskin 1999; Schuler 2003; Schuler and Fletcher 2002).

Children with autism have profiles of social play that differ from their peers in various contexts and in a range of time periods. Given free-play conditions, some children with autism appear aloof because they avoid or withdraw from peers while others seem passive because they merely watch or, at most, imitate peers. Still other children seem strange even when they exhibit an active interest in play because they approach peers—and talk to them—in an idiosyncratic manner (Wing and Attwood 1987; Wolfberg 2009).

In light of such challenges, we find it easy to understand the enduring misconception that children with autism lack a drive to play and socialize with peers. However, strong clinical and research-based evidence suggests otherwise. Indeed, children with autism share many of the same desires and capacities for play, friendship, and peer-group acceptance as typically developing children (Bauminger and Kasari 2000; Bauminger et al. 2008a; Bauminger et al. 2008b; Chamberlain, Kasari, and Rotheram-Fuller 2007). Children with autism, however, express their play interests spontaneously and make social overtures in ways uniquely their own (Boucher and Wolfberg 2003; Jordan 2003). Their initiations are often too ambiguous for peers to recognize and respond to positively. After such attempts to obtain a response fail, children with autism often quit trying and withdraw from peers (Wolfberg and Schuler 1993; 2006; Wolfberg 2009). Thus, the aloofness associated with the child with autism results largely from peer group responses to them.

Influence of Peer-Play Culture

Rutherford and colleagues (2007) urge us to consider the nature of play in children with autism in terms of performance (independent spontaneous play) and in terms of competence (socially scaffolded play) while also emphasizing

the triadic nature involved in social learning: "Children need to integrate the partners and the action on the object. [Joint attention] reflects a child's ability to coordinate mind and attention with that of a social partner and allows the child to take in information from other people" (1036).

Peers support the play of children with autism in unique ways that cannot be duplicated by adults. Most notably in play with peers, children cocreate social and imaginary worlds within which they share meanings. In this constructed world, children learn how to socialize and play while transforming their understanding of the skills, values, and knowledge of society and culture at large (Corsaro 1992; Corsaro and Rizzo 1988; Mouritsen 1996; Selmer-Olson 1993; Wolfberg et al. 1999; Wolfberg 2009). Thus, the transactional experiences between children with autism and typical peers influence the extent to which children with autism access peer culture and reap the benefits of play.

Relating to objects and people in an unconventional manner may set children with autism apart from peers, particularly those peers who lack knowledge and experience with this population. Without a framework of understanding, typical peers perceive children with autism as being of limited social interest or as deviant in their behavior. Consequently, children with autism are especially likely to be ignored by tolerant and benevolent peers and taunted or bullied by those more intolerant and malevolent (Sterzing et al., forthcmoing; Wolfberg et.al 1999). For many children with autism, repeated neglect or rejection by the peer group perpetuates a cycle of social isolation and play deprivation, which affects development and psychological well-being and can have a significant effect on adulthood (Ghaziuddin, Ghaziuddin, and Greden 2002; Mayes et. al 2011).

Integrated Play Groups

It is important to provide specialized support for children with autism for their active participation in peer play. Yet, over the years, there have been relatively few interventions designed for children with autism that decidedly target play, particularly with typical peers (for comprehensive reviews, see National Autism Center 2009; National Professional Development Center on Autism Spectrum Disorders 2011; Prendeville, Prelock, and Unwin 2006; Williams 2003; Wolfberg 2009). Wolfberg and Schuler (2006) explain the dearth of such interventions this way: "Particularly when dealing with children whose behaviors defy

developmental expectations, play is more likely to be viewed as a luxury only to be targeted when more basic deficiencies have been remedied. Moreover, the [field's] current emphasis on accountability, quantification and empirically validated programs may have inadvertently discouraged the pursuit of play in a broader developmental and cultural context" (182).

Conceptual Design

Integrated Play Groups were conceived to provide children with autism sufficient and contextually relevant support for social and imaginary play. This multidimensional model encompasses the developmental and environmental features framed in sociocultural theory (Vygotsky 1966, 1978). IPGs focus on children with autism mutually engaging in culturally valued activity (i.e., play) through the guidance, support, and challenge offered by companions who vary in skill and status (Rogoff 1990). As explicitly detailed in the IPG Field Manual (Wolfberg 2003), IPGs use a cohesive, competency-based curriculum grounded in up-to-date theory, research, and practice. They address core challenges of socialization, communication, and imagination in children with autism while building relationships between children with autism and typical peers and siblings in inclusive social settings.

Program and Environmental Design

IPGs join together children with autism (novice players) with more capable peer-play partners (expert players) in mutually engaging play experiences facilitated by a qualified adult (IPG Guide). Fully qualified IPG providers include a variety of experienced professionals—educators, psychologists, speech and language pathologists, and occupational therapists—who complete an advanced-level apprenticeship offered by the Autism Institute on Peer Socialization and Play. The facilitators demonstrate knowledge and skill needed to implement IPGs for children representing diverse ages, abilities, socioeconomic groups, languages, and cultures.

IPG facilitators customize each session as a part of a child's educational and therapy program. These IPGs use specially designed play environments in natural school, home, and community settings. Groups consist of three to five children with a higher ratio of expert to novice players. Novice players include children of all abilities across the autism spectrum. Expert players include typical peers and siblings who demonstrate competent social, communication, and play abilities and express an interest and willingness to participate. IPG programs

take a minimum of twelve weeks, during which groups meet twice weekly for thirty- to sixty-minute play sessions.

Play sessions follow a predictable structure that incorporates routines, rituals, and visual supports, all of which capitalize on the distinctive ways in which children with autism think and learn. Embedded in this structure are guided-play experiences that center on mutually engaging materials, activities, and themes, each tailored to the interests, developmental capacities, and sociocultural experiences of both novice and expert players.

All children (novices and experts) have opportunities to participate in Autism Demystification activities as a part of the IPG experience (Wolfberg, McCracken, and Tuchel 2008). These activities foster awareness, understanding, and empathy for individuals with autism and how they play, relate, communicate, think, and learn. Primary activities include viewing a puppet presentation designed for younger children or participating in a simulation game designed for older populations offered by the Friend 2 Friend Social Learning Society (www.friend2friendsociety.org). Others include reading books, holding discussions, and playing games.

Assessment and Intervention Practices

Sensitive assessments specifically designed for use with IPGs guide intervention strategies, set realistic and meaningful goals, and document and analyze the children's progress. IPG assessments incorporate both quantitative and qualitative data (observations; interviews with parents, key professionals, and children; and collected artifacts) to document children's development and experiences over time. IPG providers use data to construct developmental profiles of children's social and symbolic play, social communication with peers, play preferences, and diversity of play. Such data also help validate and generalize the acquired social skills to other settings and play partners.

IPG intervention, called also guided participation, offers explicit support to both novice and expert players. It allows them to initiate and incorporate the desired activity into socially coordinated play while it challenges novice players to practice new and increasingly complex forms of play. For novice players, IPGs place the emphasis on fostering each child's development and his or her motivation to play, socialize, and form meaningful relationships with other children. For expert players, IPGs emphasize the need to accept—and respond

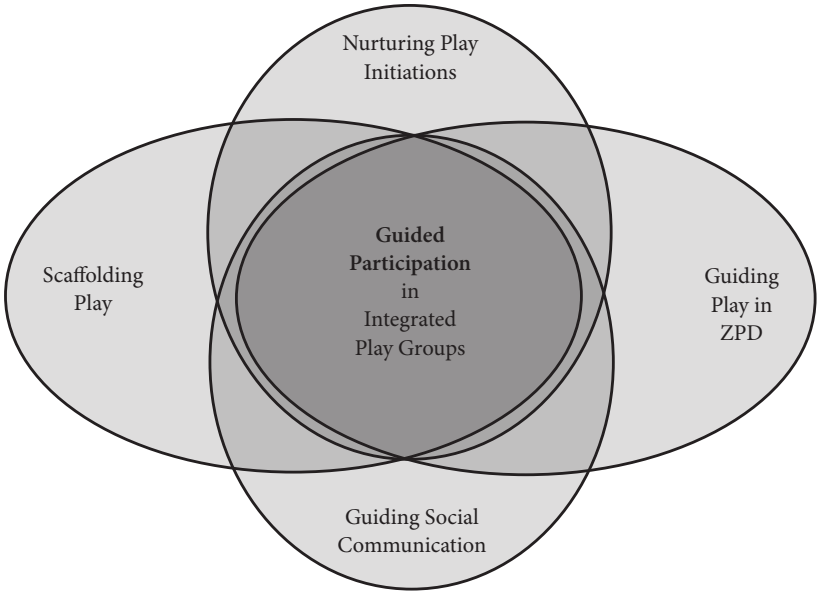

Figure 1. Conceptual model of guided participation in Integrated Play Groups

to—children with autism. Ultimately, novice and expert players are encouraged to mediate their own play activities with minimal adult guidance. Guided participation includes a set of overlapping practices resembling a lotus flower as depicted in figure 1.

Nurturing Play Initiations

This practice focuses on recognizing, interpreting, and responding to each child's play initiations. Play initiations—including virtually any act or display directed at oneself, one's peers, or the materials involved in the play—may be either conventional or unconventional. They might include unusual fascinations or obscure forms of communication but still be interpreted as purposeful, adaptive, and meaningful attempts to participate in play. These play initiations serve as springboards for novice and expert players to become involved in mutually engaging activities that create the foundation on which novice players can expand their social and symbolic play repertoire. For instance, a child with autism who chooses to hide under a blanket might offer others an

opportunity to interpret such behavior as a desire to play hide-and-seek with the other children.

Scaffolding Play

Scaffolding play involves systematically adjusting the assistance offered a child to match or slightly exceed the level at which the child can independently play with peers—all within the child's "zone of proximal development" or ZPD (Vygotsky 1978). The process relies on finding the right amount of support without impeding the natural flow of play. The adult might initially provide intensive support by directing the play and modeling behavior, not unlike a stage director. As the children gain confidence in their play together, the adult should act more as an interpreter and coach—posing questions, commenting, and offering subtle suggestions using both gestures and visual supports. As the children become fully engaged in reciprocal play, the adult withdraws to the periphery of the group, allowing the children to practice and try out new activities on their own.

Guiding Social Communication

Social-communication guidance involves supporting verbal and nonverbal social communication to elicit attention and to sustain engagement in play. The use of visual cue cards and posters assist children in learning to invite and join peers in play and to maintain and expand on play interactions. Expert players learn to interpret even the subtle, nonverbal cues of novice players as meaningful and purposeful acts. By the same token, novices learn to participate in and understand the play by breaking down the complex social cues of expert players. Eventually, children naturally incorporate these strategies into their repertoires swithout relying on adult guidance or visual cues.

Guiding Play in the Zone of Proximal Development

Guided play encompasses a set of strategies that support novices in play with peers just slightly beyond the present capacity, or ZPD, of a child with autism, even if participation is minimal at first. To nudge the child with autism along a continuum of development, IPGs use an assortment of techniques including orientation, imitation or mirroring, parallel play, joint focus, joint action, role enactment and role playing. While mutually engaged in intrinsically motivating activities and themes, novices might perform actions and roles that they may not yet fully comprehend. As illustrated in the following example, a child who has an affinity for lining up and labeling objects might take on the role of a store clerk

Play Scenario	Nuturing Play Initiations	Scaffolding Play	Guiding Social Communications	Guiding Play in ZPD
The session opens with a ritual greeting and a recap of the last session. The teacher asks the children to think of things they would like to play together. Kaj heads directly to the play grocery store and begins lining up tins on the shelf, reading aloud each package label. Josh and Ute (expert players) gravitate to the grocery store and stand behind the cash register. Mila and Kesha (novice and expert players) say they would like to play dolls	recognize play initiation	intermediate support—verbal and visual cueing		
The teacher suggests that Mila and Kesha go shopping with their babies while Kaj, Ute and Josh work together in the store.	interpret and respond to play initiation	intermediate support—verbal and visual cueing	reinforce cue—what to do—"take turns"	joint action / role enactment

Figure 2. Case illustration of guided participation in IPG (continued on the next page)

Play Scenario	Nuturing Play Initiations	Scaffolding Play	Guiding Social Communications	Guiding Play in ZPD
Pointing to the picture cue, the teacher says, "Kaj and Josh, why don't you take turns stocking the grocery shelves and stamping imaginary price labels on each item."				
Together the boys line up tins, boxes and play food on the shelves. Using a plastic tube, Josh pretends to stamp labels on some of the items, "Okay, 95 cents for cereal, 75 cents for soup, 25 cents for ice cream."		minimum support—standing by		joint action / role enactment
Pointing to a poster with a corresponding cue, the teacher tells Kaj to watch what Josh is doing.		intermediate support—verbal and visual cueing	reinforces cue—what to do—"watch"	
Kaj watches. Josh next hands him a red block and shows him how to "stamp" the rest of the items. Kaj		minimum support—standing by		joint action / role enactment

Figure 2. Case illustration of guided participation in IPG (continued on the next page)

Play Scenario	Nuturing Play Initiations	Scaffolding Play	Guiding Social Communications	Guiding Play in ZPD
takes the block and imitates the action by stamping several new items and saying, "Danon yogurt, 25 cents, Rice-a-roni, 25 cents, Corn chips, 25 cents				
Meanwhile, Mila and Kesha begin loading a shopping cart with grocery items. Ute offers Kaj the role of bag boy while she runs the cash register. Kaj follows Ute and stands beside the cash register. Ute hands Kaj a paper bag and shows him how to hold it open. Kaj waits for further direction.	recognize play initiation	minimum support—standing by		
The teacher steps in and demonstrates each step of the check-out sequence. She suggests that Ute say "take" to Kaj, each time she gives him an item to put in the bag.	interpret and respond to play initiation	maximum support—directing and modeling	reinforce cue—what to do "take"	joint action / role enactment

Figure 2. Case illustration of guided participation in IPG (continued on the next page)

Play Scenario	Nuturing Play Initiations	Scaffolding Play	Guiding Social Communications	Guiding Play in ZPD
The children establish a rhythm. Mila and Kesha take turns unloading the shopping cart one item at a time—Ute rings up each item on the cash register and hands the item to Kaj—Kaj puts each item in the grocery bag.		minimum support—standing by		joint action / role enactment
When they finish checking out, Ute tells the shoppers, "Thank you for shopping at Safeway supermarket, have a nice day" The shoppers say, "Thank you, bye-bye."				
The teacher probes, "What should the bag boy say?" Ute tells Kaj to say, "Thank you, bye-bye, have a nice day," which Kaj repeats with a beaming smile.		intermediate support—verbal cueing	introduce cue—what to say—"Thank you …"	role enactment

Figure 2. Case illustration of guided participation in IPG

while his peers pretend to go shopping. Such experiences offer opportunities for children to diversify existing play routines while they are fully immersed in typical play with peers.

Case Illustration of an IPG Session

Figure 2 presents a case illustration focusing on Kaj (age seven years) who participated in an IPG after school with one other novice player and three expert players (ages seven to eight years). His teacher is the play guide. The groups meet twice a week for thirty minutes in the afternoon.

The intervention seeks to develop Kaj's skills in several areas identified in a thorough assessment: representational play (i.e., functional play) by enacting simple scripts based on familiar routines with realistic props; social play by establishing a common focus with peers; social-communicative competence by increasing the rate of spontaneous initiations (using more effective verbal and nonverbal means); and the expansion of play interests by diversifying his repertoire.

Extensions of the IPG Model—Integrated Teen Social Groups

Innovative extensions of IPGs include drama, art, video, dance, and other creative activities attractive to both children and older kids. The common denominator of these programs is joint play valued by the peer culture. One such innovation for adolescents with autism is the Integrated Teen Social Group, which has shown promise for high-quality interactions with peers (Bottema-Beutel 2010; Bottema-Beutel, forthcoming). The general framework of these groups provides a loose structure suitable for many settings and a wide range of participants and themes.

For older children and adolescents, peer play shifts from the toys of childhood to games, sports, social media, and other activities (Larson and Verma 1999). While toys may no longer be a part of these peer experiences, they remain creative, whimsical, and pleasurable, all of which characterizes the play of younger children. Importantly, a key feature of peer interaction among adolescents involves transforming (and sometimes overtly rejecting) adult norms and modes of behavior to create a unique peer culture (Kyratzis 2004). For professionals to provide adolescents with autism access to this process, they must engineer opportunities for peer interaction but allow the peers themselves a role in constructing the activities to maximize peer engagement.

Many of the interventions currently available that target adolescent populations with autism focus on social cognitive skills such as learning to consider the perspectives of others (Stichter et al. 2010). In contrast, this intervention assumes that—even in adolescence, when cognitive abilities are more developed than in early childhood—social competence primarily forms through social experience. That is to say, though understanding social rules may be useful, it is only through shared social experience that it can come to have social meaning. The four goals of teen social groups reflect this focus on interaction: to motivate teens with autism and typical teens to socialize with each other; provide teens with autism an entry into a peer culture; educate typical teens about autism through direct experience; and increase the opportunities for teens with autism to experience positive social interactions with their peers.

Like IPGs, teen social groups have adult facilitators and involve a high ratio among participants of typically developing peers to those with autism. The size of Integrated Teen Social Groups varies, depending on participant preferences but tend to be no larger than six teens. Meetings occur at least weekly and generally last from thirty to ninety minutes. They take place in a range of settings including schools, summer camps, and community centers. The adult facilitators use two sets of strategies: those that prepare the group and setting prior to each meeting, and those that are used during each social group meeting. We next discuss these two strategies.

Preparatory Work

Before a session begins, the facilitator gathers information about the participants, recruits and informs the peers, plans session activities, and collaborates with professionals to incorporate needed support. Facilitators attempt to gather sufficient information about each participant to form appropriate groupings based on shared interests. They accomplish this through a variety of means, including questionnaires, informal interviews with participants, and discussions with school staff and parents. Details about participant interests, their preferred activities, and situations that might make them uncomfortable inform the planning of a session.

The interventionist spends time considering how to recruit peers. The precise approach depends on the setting: If the intervention will occur in a setting that typical peers already frequent such as a school, it will likely be easier to advertise the session and invite participation; If the intervention is to occur in a clinical setting, the recruiting process may become more difficult and require

an explanation for extending the invitation in the first place, especially when the participants with autism prefer to have their diagnostic status kept private. Interventionists use flyers, school-wide announcements, and word of mouth to invite interested students. If the group plans to focus on a particular activity, such as reading comic books or playing board games, the recruitment materials can highlight these. Currently, we know of no particular characteristics of peers likely to ensure a successful social-group session, but high sociability and a demonstrated desire to engage with others who are different likely make for promising recruits.

A basic principle of teen social groups calls for equal footing between those with autism and typically developing peers (Bottema-Beutel 2011; Wolfberg, McCracken, and Tuchel 2008), so that participant interactions are not premised on the notion that the typically developing peers are there to "help" those with autism. In light of this, recruiting efforts highlight the cooperative nature of the group, celebrate differences in ability and interests, and avoid language that suggests peers will function as tutors. Facilitators, also importantly, give typical peers information to help them better understand the participants with autism. Typically developing adolescents usually know about autism, but what they know of it is often inaccurate or incomplete. If the participants with autism prefer not to disclose their diagnosis, facilitators can provide the typical peers with more general information about people with different ways of behaving and communicating. Also, some adolescents with autism can articulate their differences to others and may prefer to give their own explanations to the group about their behavior. Facilitators offer a safe and instructive forum for such communication in an initial group meeting.

Unlike IPGs, teen social groups require more extensive advanced planning of specific activities. For young children, the content of their play develops spontaneously with little more than a few toys as props. For adolescents, recreation usually involves more complex and established structure of a kind we often associate with sporting events. Teen group sessions can all be planned around a common theme agreed upon beforehand by the group, such as the board-game or comic-book sessions we mentioned earlier. In some plans, each session may involve something different. Most likely, in the initial sessions, the facilitator will need to suggest and help design activities. As the group begins to develop a character of its own, participants will take over this role and spend the closing minutes of each meeting planning subsequent sessions. The activities they design or adapt should reflect the general interests of the participants

Opening script	**Purpose of the meeting:** Learn how to collaborate with people with different abilities, backgrounds, and interests. **Things to think about during the meeting:** How have life experiences been different for each group member? How have these experiences shaped and been shaped by different abilities and interest?
Group check-in	**Participant-led ice breaker:** Have each individual meet the person on his or her left and introduce the person to the whole group. Have the individual present his or her name, age, and the important information to know about the person.
Main activity: Get to know ya	**Directions:** As a group, participants answer a list of questions involving experiences and personalities of each group member **Materials:** List of questions, pens, paper, clip board **Strengths to identify:** Requires openness, communication, and organizing information about others
Brief activity: Plenty of room at the top	**Directions:** Participants are given a block of wood with a nail in it, and twenty additional large nails. The challenge is to see how many nails they can balance on the head of the nail in the block of wood. **Materials:** Wood block with nail in it, twenty large decking nails **Strengths to Identify:** Visual thinking, manual dexterity, communication, creativity, and perseverance
Closing discussion	Review questions in opening script

Figure 3. Sample session outline of a teen social group

(Koegel et al. 2005) and include a variety of roles so members with different strengths can find meaningful ways to participate (Wolfberg 2009). These activities should offer opportunities for many kinds of engagement (such as verbal interaction, movement, and the coordination of actions with activity materials). Importantly, the activities should be consistent with the cultural expectations of the setting. For example, if a session will occur at summer camp, the activities might include common—if modified— camp games, such as obstacle-course races or team-building activities. Understanding differences and appreciating each other for different contributions to an activity can become a thread running throughout the session. Figure 3 provides an example of a session design within a summer-camp context.

Lastly, the facilitator should use support systems that are already part of the participant's individualized education plan or those deemed necessary for successful participation in the session. These may include visual aids, communication props, and behavior support plans, each integrated into the physical setting and interactive routines of the group. Collaboration with the participants' educational team, including special educators, speech and language pathologists, classroom aides, and other professionals will help determine how these supports can be best adapted and integrated.

Session Facilitation

Once the social group session begins, the facilitator's main job becomes maximizing interaction by framing the role of the adult, securing buy-in to the activities, interpreting participant behavior, and scaffolding participant interaction. Importantly, the facilitator should clearly outline the role he or she will play in the session. Interactions among younger children are regularly supervised at least to some degree by adults, but adolescents are beginning interactions that do not include adults. Thus, the adult facilitator will need to explain his or her presence in peer interactions. The adult can emphasize that they are necessary to secure the space, to provide materials, to guide the learning of a skill if the intervention focuses building a skill (such as, say, knitting), and to ensure that participants enjoy themselves. Please notice that any overt policing of behavior is absent from this list. While the facilitator will certainly ensure that the participants remain safe and respect one another, a slight loosening of conventions and rules allows the participants to construct their own youth culture, one that may look different from the idealized version promoted in more structured school contexts.

Securing buy-in from each group member requires that participants find the session meaningful and a worthwhile way to spend their time. The facilitator should take cues from both typically developing peers and teens with autism to determine if they are buying into the session. If this appears not to be the case, the facilitator may ask the group how it would better like to spend its time. Encouraging participants to bring a friend and providing food during the session may increase buy-in.

Adolescents are very aware of peer cultural norms and know when they are violated, which can make it difficult for adolescents with autism to fit in. To help mitigate this challenge, the facilitator should actively interpret, reframe, and explain behavior to promote understanding and foster a culture of inclusion (Wolfberg, McCracken, and Tuchel 2008; Wolfberg 2009). This includes both the idiosyncratic behavior often characteristic of individuals with autism and unconventional peer behavior. It is not necessary to bring attention to behavior that may be idiosyncratic but goes generally unnoticed. Rather, the idea is to avoid situations where misunderstood behavior becomes the "the elephant in the room" (or otherwise stigmatizing) and hampers interaction.

One of the most important roles of the facilitator for teen groups is scaffolding in conversation and play. This can mean posing leading questions to participants who appear left out of the interaction, pointing to shared interests and commonalities among participants, and validating any attempts at interaction not recognized by other group members. As the group members become more comfortable and manage successful interacting on their own, the adult should reduce his or her involvement and allow interactions to unfold naturally.

Summary and Discussion

Children on the autism spectrum present unique challenges in social and imaginary play. Without intervention, these children are at high risk for being excluded by their peer group. Compounding their social isolation, they are further deprived of experiences vital to social growth and the development of the communicative and symbolic skills that goes with it. The transactional nature of such experiences shapes the extent to which children with autism gain entrée into peer culture and reap the benefits of play. Thus, we need effective and culturally relevant interventions that specifically support the play needs of children with autism in social settings with typical peers.

Responding to this need, IPGs aim to address core challenges in children with autism by maximizing their development—their motivations to play, socialize, and form meaningful relationships with peers. Equally important, we need to help typical peers understand, empathize, and respond to children with autism and the unique ways they play and relate to others. Facilitated by a skilled adult, IPGs afford opportunities for small groups of children with autism and typical peers to play together in natural settings. Based on sensitive assessments, guided participation fosters socialization, communication, play, and imagination by nurturing initiations, scaffolding play, guiding social communication, and promoting play within the child's zone of proximal development.

Originally developed for children in early and middle childhood, IPGs are currently being adapted for older age groups. Integrated Teen Social Groups are designed to support small groups of teens with autism and typical peers within the context of diverse play sanctioned by the peer culture. Our underlying premise suggests that social competence develops from authentic social experiences. These groups aim to improve the experience of teens with autism by engaging them in social groups, by educating typical teens about autism, by providing children with autism an entryway into peer culture, and by increasing their positive social interactions. Planning in advance, adult facilitators guide sessions by framing the role of the adult, securing participant buy-in, interpreting participant behavior, and scaffolding participant interaction.

Based on the results of empirical research carried out over the past two decades, IPGs have become recognized as an established practice for children on the autism spectrum (Lantz, Nelson, and Loftin 2004; Mikaelin 2003; O'Connor 1999; Richard and Goupil 2005; Wolfberg 1988, 1994, 2009; Wolfberg et al. 2012; Wolfberg and Schuler 1992, 1993; Yang et al. 2003; Zercher et al. 2001). Our research has consistently revealed more spontaneous, diverse, and complex forms of social and representational play among children with autism over the course of their participation in the IPG intervention. In addition, we have observed generalized gains among different play partners and across various settings. The research also documents the social validation by parents and caregivers, professionals, and the children themselves, who reported both quantitative and qualitative changes in play.

Initial studies of Integrated Teen Social Groups reported similar successes. After participating in a social group each day for one week at a summer camp, teens with autism showed increases in the quality of interaction with their peers measured by researcher ratings of video-recorded interactions (Bottema-Beu-

tel, under review). Qualitative examinations of social groups have shown that within such groups, those with autism participate in structuring activities and interactions and construct positive identities in collaboration with their peers (Bottema-Beutel 2011; Bottema-Beutel and Smith, forthcoming).

Most encouragingly, our continued research and practice show that individuals with autism can improve in those areas in which they are classically affected when supported in authentic and inclusive social play. Guided participation in IPGs and Integrated Teen Social Groups offers support that nurtures development across social and symbolic domains. Although the form and content of play may vary across age groups, immersion in jointly constructed activities with more competent peers allows those with autism to fine tune skills and helps contextualize idiosyncratic behavior that peers might otherwise perceive as deviant (Wolfberg and Schuler 2006). IPGs help counteract fundamental problems of imagination and symbolic thinking while breaking the cycle of social isolation. As Jordan (2003) suggested: "The possibility that social play can be both a result of, and a means towards, imaginative play suggests the ontology of autism involves a transactional relationship between social and cognitive difficulties rather than a single primary root" (356).

Continued IPG research, training, and program development address core challenges in socialization, communication, and imagination while supporting children on the autism spectrum in play with their peers. Since one in eighty-eight children today is diagnosed with autism, we need to raise awareness and educate children and youth about autism while creating opportunities for social engagement in meaningful play. Such efforts will serve to broaden and deepen our understanding of how children and adolescents with and without autism can transform their peer-play cultures to include children with diverse ways of relating, communicating, and playing.

References

American Psychiatric Association. 2012. "A 05 Autism Spectrum Disorder." In *DSM-5 Development*, Proposed Revisions http://www.dsm5.org/proposedrevision/pages/proposedrevision.aspx?rid=94#.

American Speech-Language-Hearing Association. 2006. "Guidelines for Speech-Language Pathologists in Diagnosis, Assessment, and Treatment of Autism Spectrum Disorders Across the Life Span." http://www.asha.org/policy/GL2006-00049.htm.

Attwood, Anthony, Uta Frith, and Beate Hermelin. 1988. "The Understanding and Use of Interpersonal Gestures by Autistic and Down's Syndrome Children." *Journal of Autism and Developmental Disorders* 18:241–57.

Baron-Cohen, Simon. 1987. "Autism and Symbolic Play." *British Journal of Developmental Psychology* 5:139–48.

Bauminger, Nirit, and Connie Kasari. 2000. "Loneliness and Friendship in High-Functioning Children with Autism." *Child Development* 71:447–56.

Bauminger, Nirit, Majorie Solomon, Anat Aviezer, Kelly Heung, John Brown, and Sally J. Rogers. 2008. "Friendship in High-Functioning Children with Autism Spectrum Disorder: Mixed and Non-mixed Dyads." *Journal of Autism and Developmental Disorders* 38:1211–29.

Bauminger, Nirit, Majorie Solomon, Anat Aviezer, Kelly Heung, Lilach Gazit, John Brown, and Sally J. Rogers. 2008. "Children with Autism and Their Friends: A Multidimensional Study of Friendship in High-Functioning Autism Spectrum Disorder." *Journal of Abnormal Child Psychology* 36:135–50.

Bottema-Beutel, Kristen. 2011. "The Negotiation of Footing and Participation Structure in a Social Group of Teens with and without Autism Spectrum Disorder." *Journal of Interactional Research in Communication Disorders* 2:61–83.

———. Under review. "A Mixed Methods Analysis of a Social Group Intervention for Adolescents with Social Disabilities and Their Typically Developing Peers." *American Journal on Intellectual and Developmental Disabilities.*

Bottema-Beutel, Kristen, and Nevin. Smith. Forthcoming. "The Interactional Construction of Identity: An Adolescent with Autism in Interaction with Peers." *Linguistics and Education*.

Boucher, Jill, and Pamela J. Wolfberg. 2003. "Editorial." *Autism: The International Journal of Research and Practice* 7:339–46.

Chamberlain Brandt, Connie Kasari, and Erin Rotheram-Fuller. 2007. "Involvement or Isolation? The Social Networks of Children with Autism in Regular Classrooms." *Journal of Autism and Developmental Disorders* 37:230–42.

Charman, Tony, and Simon Baron-Cohen. 1997. "Brief Report: Prompted Pretend Play in Autism." *Journal of Autism and Developmental Disorders* 27:325–32.

Corsaro, William A. 1992. "Interpretive Reproduction in Children's Peer Cultures." *Social Psychology Quarterly* 55:160–77.

Corsaro, William A., and Thomas A. Rizzo. 1988. "Discussion and Friendship: Socialization Processes in the Peer Culture of Italian Nursery School Children." *American Sociological Review* 53:879–94.

Darling-Hammond, Linda, and Joan Bransford, eds. 2005. *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do*.

DiSalvo, Carla, and Donald Oswald. 2002. "Peer-Mediated Interventions to Increase the Social Interaction of Children with Autism: Consideration of Peer Expectancies." *Focus on Autism and Other Developmental Disabilities* 17:198–207.

Dissanayake, Cheryl, Marian Sigman, and Connie Kasari. 1996. "Long-term Stability of Individual Differences in the Emotional Responsiveness of Children with Autism."

Journal of Child Psychology and Psychiatry 37:461–67.
Dominguez, Anna, Jenny Ziviani, and Sylvia Rodger. 2006. "Play Behaviours and Play Object Preferences of Young Children with Autistic Disorder in a Clinical Play Environment." *Autism* 10:53–69.
Elkind, David. 2007. *The Power of Play: How Spontaneous, Imaginative Activities Lead to Happier, Healthier Children*.
Ghaziuddin, Mohammad, Neera Ghaziuddin, and John Greden. 2002. "Depression in Persons with Autism: Implications for Research and Clinical Care." *Journal of Autism and Developmental Disorders* 32:299–306.
Harris, Paul. 1993. "Pretending and Planning." In *Understanding Other Minds: Perspectives From Autism*, edited by Simon Baron-Cohen, Helen Tager-Flusberg, and Donald J. Cohen, 228–46.
Hauck, Margaret, Deborah Fein, Lynn Waterhouse, and Carl Feinstein. 1995 "Social Initiations by Autistic Children to Adults and Other Children." *Journal of Autism and Developmental Disorders* 25:579–95.
Iovannone, Rose, Glen Dunlap, Heather Huber, and Don Kincaid. 2003. "Effective Educational Practices for Students with Autism Spectrum Disorders." *Focus on Autism and Other Developmental Disabilities* 18:150–165.
Jarrold, Christopher. 2003. "A Review of Research into Pretend Play in Autism." *Autism: The International Journal of Research and Practice* 7:379–90.
Jarrold, Christopher, Jill Boucher, and Peter K. Smith. 1996. "Generativity Deficits in Pretend Play in Autism." *British Journal of Developmental Psychology* 14:275–300.
Jordan, Rita. 2003. "Social Play and Autistic Spectrum Disorders: A Perspective on Theory, Implications, and Educational Approaches." *Autism: The International Journal of Research and Practice* 7:347–60.
Koegel, Robert L., Grace A. Werner, Laurie. A. Vismara, and Lynn Kern Koegel. 2005. "The Effectiveness of Contextually Supported Play Date Interactions between Children with Autism and Typically Developing Peers." *Research and Practice for Persons with Severe Disabilities* 30:93–102.
Kyratzis, Amy 2004. "Talk and Interaction among Children and the Co-construction of Peer Groups and Peer Culture." *Annual Review of Anthropology* 33:625–49.
Lantz, Johanna F., Jason M. Nelson, and Rachel L. Loftin. 2004. "Guiding Children with Autism in Play: Applying the Integrated Play Group Model in School Settings." *Teaching Exceptional Children* 37:8–14.
Larson, Reed W., and Suman Verma. 1999. "How Children and Adolescents Spend Time across the World: Work, Play, and Developmental Opportunities." *Psychological Bulletin* 125:701–36.
Lewis, Vicky, and Jill Boucher. 1988. "Spontaneous, Instructed, and Elicited Play in Relatively Able Autistic Children." *British Journal of Developmental Psychology* 6:325–39.
Libby, Sarah, Stuart Powell, David Messer, and Rita Jordan. 1998. "Spontaneous Play in Children with Autism: A Reappraisal." *Journal of Autism and Developmental Disorders* 28:487–97.
Mayes, Susan, Susan Calhoun, Michael Murray, and Jahanara Zahid. 2011. "Variables

Associated with Anxiety and Depression in Children with Autism." *Journal of Developmental & Physical Disabilities* 23:325–37.

Miller, Edward, and Joan Almon. 2009. *Crisis in the Kindergarten: Why Children Need to Play in School*.

Mouritsen, Flemming. 1998. *Play Culture: Essays on Child Culture, Play and Narratives.*

Mundy, Peter, Marian Sigman, Judy Ungerer, and Tracy Sherman. 1987. "Nonverbal Communication and Play Correlates of Language Development in Autistic Children." *Journal of Autism and Developmental Disorders* 17:349–64.

National Autism Center. 2009. *National Autism Center's National Standards Project: Findings and Conclusions: Addressing the Need for Evidence-based Practice Guidelines for Autism Spectrum Disorders*.

Prendeville, Jo-Anne, Patricia A. Prelock, Gregory Unwin. 2006. "Peer Play Interventions to Support the Social Competence of Children with Autism Spectrum Disorders." *Seminars in Speech and Language* 27: 32–46.

Richard, Véronique, and Georgette Goupil. 2005. "Application des Groupes de Jeux Intégrés Auprès d'Élèves Ayant un Trouble Envahissant du Développrment = Implementation of Integrated Play Groups with PDD Students." *Revue Québécoise de Psychologie* 26:79–103.

Rogoff, Barbara. 1990. *Apprenticeship in Thinking: Cognitive Development in Social Context*.

Rutherford, Mel D., Gregory S. Young, Susan Hepburn, and Sally J. Rogers. 2007. A Longitudinal Study of Pretend Play in Autism." *Journal of Autism and Developmental Disorders* 37:1024–39.

Schuler, Adriana L. 2003. Beyond Echoplaylia: Promoting Language in Children with Autism." *Autism: International Journal of Research and Practice* 7:455–69.

Schuler, Adriana L., and E. Cheryl Fletcher. 2002. "Making Communication Meaningful: Cracking the Language Interaction Code." In *Autism: From Research to Individualized Practice*, edited by Robin L. Gabriels and Dina E. Hill, 127–54.

Selmer-Olsen, Ivar. 1993. "Children's Culture and Adult Presentation of this Culture." *International Play Journal* 1:191–202.

Sigman, Marian, and Ellen Ruskin. 1999. "Continuity and Change in the Social Competence of Children with Autism, Down Syndrome, and Developmental Delays." *Monographs of the Society for Research in Child Development* 64:1–114.

Sigman, Marian, and Judy A. Ungerer. 1984. "Cognitive and Language Skills in Autistic, Mentally Retarded, and Normal Children." *Developmental Psychology* 20:293–302.

Sterzing, Paul R., Paul T. Shattuck, Sarah C. Narendorf, Mary Wagner, and Benjamin P. Cooper. Forthcoming. "Prevalence and Correlates of Bullying Involvement among Adolescents with an Autism Spectrum Disorder." *Journal of Youth and Adolescence*.

Stichter, Janine P., Melissa J. Herzog, Karen Visovsky, Carla Schmidt, Jena Randolph, Tia Schultz, and Nicholas Gage. 2010. "Social Competence Intervention for Youth with Asperger Syndrome and High-Functioning Autism: An Initial Investigation." *Journal of Autism and Developmental Disorders* 40:1067–79.

Tilton, James R., and Donald R. Ottinger. 1964. "Comparison of the Toy Play Behavior

of Autistic, Retarded, and Normal Children." *Psychological Reports* 15:967–75.

Ungerer, Judy A., and Marian Sigman. 1981. "Symbolic Play and Language Comprehension in Autistic Children." *Journal of the American Academy of Child Psychiatry* 20:318–37.

Volkmar, Fred R. 1987. "Social Development. In *Handbook of Autism and Pervasive Developmental Disorders*, edited by Donald J. Cohen, Anne M. Donnellan, and Rhea Paul, 41–60.

Vygotsky, Lev. 1966. "Play and its Role in the Mental Development of the Child." *Soviet Psychology* 12:6–18.

———. 1978. *Mind in Society: The Development of Higher Psychological Processes*.

Williams, Emma. 2003. A Comparative Review of Early Forms of Object-Directed Play and Parent-Infant Play in Typical Infants and Young Children with Autism." *Autism: The International Journal of Research and Practice* 7:361–74.

Williams, Emma, Alan Costall, Vasudevi Reddy. 1999. "Children with Autism Experience Problems with Both Objects and People." *Journal of Autism and Developmental Disorders* 29:367–78.

Williams, Emma, Vasudevi Reddy, and Alan Costall. 2001. "Taking a Closer Look at Functional Play in Children with Autism." *Journal of Autism and Developmental Disorders* 31:67–77.

Wolfberg, Pamela J.. 1994. "Case Illustrations of Emerging Social Relations and Symbolic Activity in Children with Autism through Supported Peer Play." PhD diss., University of California at Berkeley with San Francisco State University.

———. 2003. *Peer Play and the Autism Spectrum: The Art of Guiding Children's Socialization and Imagination*: *Integrated Play Groups Field Manual*.

———. 2009. *Play and Imagination in Children with Autism*. First published 1999.

Wolfberg, Pamela J., Heather McCracken, and Tara Tuchel. 2008. "Fostering Peer Play and Friendships: Creating a Culture of Inclusion." In *Learners on the Autism Spectrum: Preparing Highly Qualified Educators*, edited by Kari Dunn Buron and Pamela J. Wolfberg, 183–207.

Wolfberg, Pamela J., and Adriana L. Schuler. 1992. "Integrated Play Groups Project: Final Evaluation Report." Department of Education, Office of Special Education and Rehabilitative Services.

———. 1993. "Integrated Play Groups: A Model for Promoting the Social and Cognitive Dimensions of Play in Children with Autism." *Journal of Autism and Developmental Disorders* 23:467–89.

———. 2006. "Promoting Social Reciprocity and Symbolic Representation in Children with Autism Spectrum Disorders: Designing Quality Peer Play Interventions." In *Social and Communication Development in Autism Spectrum Disorders: Early Identification, Diagnosis, and Intervention,* edited by Tony Charman and Wendy Stone, 180–218.

Wolfberg, Pamela J., Eliot Turiel, Mila DeWitt, Kristen Bottema-Beutel, Gregory Young, and Thanh Nguyen. 2012. "Integrated Play Groups: Promoting Symbolic Play, Social Engagement and Communication in Children with Autism Across Settings

with Typical Peers." Final Report, Autism Speaks Treatment Award for Clinical Research.

Wolfberg, Pamela J., Craig Zercher, Joan Lieber, Karen Capell, Sonya G. Matias, Marci Hanson, and Samuel Odom. 1999. "'Can I Play with You?' Peer Culture in Inclusive Preschool Programs." *Journal of the Association for Persons with Severe Handicaps* 24:69–84.

Yang, Tsung-Ren, Pamela J. Wolfberg, Shu-Chin Wu, and Pey-Yun Hwu. 2003. "Supporting Children on the Autism Spectrum in Peer Play at Home and School: Piloting the Integrated Play Groups Model in Taiwan." *Autism: The International Journal of Research and Practice* 7:437–53.

Zercher, Craig, Pam Hunt, Adriana L. Schuler, and Janice Webster. 2001. "Increasing Joint Attention, Play, and Language Through Peer Supported Play." *Autism: The International Journal of Research and Practice* 5:374–98.