

The Role of Supported Experience in the Social Communication of Teens with Autism Spectrum Disorders (ASD) and Their Typical Peers: A Qualitative Study in Urban California

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Background

For the past fifteen years, the prevalence of autism spectrum disorders (ASD) has increased steadily in California, and rates of diagnosis in this state continue to exceed the national average (Hertz-Picciotto & Delwiche, 2009). This trend makes it especially important that Californians deepen their understanding of the social communication differences found in ASD. Individuals with ASD are often unable to form meaningful friendships, leaving few opportunities to experience peer interactions, develop social and communicative competence, and participate in the culture of their peer groups. The impoverished social lives of individuals with ASD become especially pronounced in the adolescent years, when accepted forms of interaction become more complex and rigid. There is evidence that individuals with ASD develop increased social and communicative competence when they participate in mutually engaging interactions with their typically developing peers (Wolfberg, 2003). This study is an exploratory analysis of a small-group program where teens with ASD and their peers participate in activities of their own design, with the guidance of an adult facilitator. This study attempts to show how California teens affected by ASD can co-construct social relationships with their peers while relying on unique linguistic resources.

Guiding Questions

- What qualities does social communication have during group sessions, and how do these qualities change over time?
- What socialization processes are at play during Integrated Social Group meetings?

Integrated Teen Social Group Principles

- Social **experience** is how we learn to be social, not by learning discrete skills
- Integration with typically developing teens gives teens with ASD access to their peer culture
- Typical teens scaffold social interaction
- Authentic social experience arises organically from the participants
- Social group participants co-construct group norms and expectations
- Adult facilitator plays a peripheral role as ‘context engineer’

Methods

Data Collection	Analysis	Participants
<ul style="list-style-type: none"> • Participant observation: Eight 90 minute sessions were videotaped and transcribed • Interviews: Semi-structured with each participant with ASD • Document analysis: Intake and data collection documents from community center 	<ul style="list-style-type: none"> • Codes included: language functions defined by Ochs (2002; see table 1), general context, interaction descriptors, and behavior • Sub-codes were developed inductively and deductively • Documents and interviews helped create a case history for each participant 	<ul style="list-style-type: none"> • Celia: 16 year old Caucasian female diagnosed with PDD-NOS. • Anna: 13 year old Latina female diagnosed with autism. • Kara: 16 year old Filipina female, typically developing • Diane: 16 year old Chinese female, typically developing

Table 1: Definitions of Language Functions
(Adapted from Ochs, 2002; Ochs, Kremer-Sadlik, Sirota, & Solomon, 2004)

Function	Stance		Indexical Forms		Repairs	
	Affective Stance	Epistemic Stance	Activity	Socio-Cultural Index	Repetition with Little or No Variation	Repetition with Variation
Definition	Moods, attitudes, feeling, or disposition as well as emotional intensity	A person’s knowledge or belief, including sources of knowledge and degrees of commitment to truth	Refers to larger social activity, indexed by language referring to smaller units of action	Language that refers to a wider socio-cultural meaning shared by a social group	An attempt to clarify a previous statement by repeating a similar statement	An attempt to clarify a previous statement by describing it in another way
Example	“This movie is really creepy.”	“I’m not sure how to do this.”	“First you dip the fabric in the glue.” Indexes the activity of a craft activity	“Who is the guy from Hogwarts?” Indexes the movie Harry Potter.	“It’s Santa. He’s Santa.”	“I want my nails to be silver. I’m going to paint my nails a different color.”

Findings

Interaction profiles varied across participants and across contexts

- Celia’s Interaction Profile: Could coordinate several topics, stances, socio-cultural indexes, and strands of knowledge simultaneously. However, Celia sometimes had difficulty matching specific questions with an appropriate answer and reading social cues of other group members. Validation of both the activity at hand and Celia’s status as a member appeared important to Celia’s social-communicative competence.
- Anna’s Interaction Profile: Anna’s language differences made it difficult for her to produce or understand narratives that centered on events outside the group context. Balanced conversations emerged once the group developed shared knowledge based on activities done together or consistently discussed interests. Anna was more likely to index an immediate activity than larger socio-cultural events.

‘Bottom-up’ social processes

- Participants co-constructed new norms not based on larger socio-cultural norms. Utterances that were once seen as idiosyncratic and isolating became a means for interaction over time (See table 2).
- Facilitator support in validating and interpreting unconventional utterances was important. Indirectly addressing the repeated utterance and relating it to other group members was successful in eliciting interaction. This did not interrupt the flow of the conversation by pointing out ‘errors’ in conversation, but instead led to authentic interaction and meaning making.

‘Top-down’ social processes

- Behavior of typical peers participants appeared to reflect larger socio-cultural perceptions of individuals with disabilities. In some instances, typical teens excluded teens with ASD, despite apparent communicative competence of the teen with ASD. These situations usually involved “taboo” subjects such as trouble at school, boyfriends, etc. Other instances occurred when a repair was not solicited from a teen with ASD, even when significant knowledge was displayed.
- These episodes appeared to play into ASD symptoms; repetitive utterances usually described as an ‘executive dysfunction’ occurred more frequently after exclusion by peers.
- Instances of exclusion by typical peers reflected larger socio-cultural conceptions and the perceived deficits in individuals with ASD.

Table 2: Conventionalization of Idiosyncratic Utterances

Repeated Utterance	Facilitator Moves	Target Teen Response	Resulting Peer Interaction
“Excuse me. ‘Scuse me, you don’t snatch it away from people like that, it’s not nice.”	None	Not Applicable	None
“ You did it!”	None—not in the room	Not Applicable	None
“You better back up!” [Giggles after repeating phrase]	Direct question about behavior: “Tell us what’s funny Anna, so we can laugh about it too”	Response to Facilitator: “Sometimes I think about funny things in school”	Dawn responds with: “Sometimes that happens to me too, where I laugh and people say ‘why are you laughing?’”
	Encourages Celia to ask Anna what she is saying	Response unrelated to question	Celia does not follow up question any further
“Can you give me a ride across the river?”	Directly addressed behavior: “Did you go across a river?”	Unclear response	None
	Indirectly addresses behavior by Relating the phrase to another participant’s narrative	Anna provides explanation of why she has been repeating the phrase and its meaning to her	Triadic interaction around utterance topic

Discussion

- Teens with ASD can gain an experiential understanding of how to attune with others and understand the context that informs social interaction, which is a more fluid marker of social success than previously used markers , i.e. passing the ‘false-belief’ task (Klin, Jones, Schultz, & Volkmar, 2003).
- The variability in communicative competence as context changes suggests that an ability to interact with others might not rest in a static representational knowledge of other minds, but is instead dependent upon dynamic mechanisms informed by shared experience , and the effects of larger social structures and group norms (Gallagher, 2004; Ochs, Kremer-Sadlik, Sirota, & Solomon, 2004; Thelen & Smith, 1994).
- Social membership is an important part of social communication development, and integrated teen groups appear to supply this context in beneficial ways. Having the status as a member allows for participation in constructing new group norms.
- Framing linguistic differences as a form of natural diversity might help typical peers include teens with ASD (Wolfberg, McCracken, & Tuchel, 2009).