Different, not less: The problem with defining "normal" social play of children with autism spectrum disorder

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I knew I had a problem when the chanting "dig, dig, dig, dig!" reached its crescendo. It was hard to ignore the red-faced, neck-vein pulsing enthusiasm of the participants in my social competence intervention. Observing social behaviour during play has become a significant part of my research and this intervention was no exception. The adolescents with autism spectrum disorder (ASD) in my social skills program were playing Minecraft™ software where they worked together with adult facilitators and a typically developing peer to develop and build collaborative projects (e.g., giant chicken, platform high in the clouds, art gallery). Using a power-sharing model that necessitated cooperation, they decided which project to complete and develop blueprints together. The intervention was designed to utilize their interest in the software and to provide a safe environment to initiate social bids, sustain social engagement, and develop social competence (MacCormack & Freeman, 2019).

The fact that the youth with ASD were chanting "dig, dig!" while they were playing should not have surprised me. After all, repetitive and restrictive behaviours are part of the diagnostic criteria of ASD (APA, 2013) and are included as subcategories of ASD screening tools (e.g., SRS-2, Constantino & Gruber, 2012). Behaviours like chanting a particular phrase during play can obstruct efforts to socialize and work together. Indeed, I expected behaviour like this to typify play behaviours of youth with ASD. What surprised me was that it was not only the youth with ASD who were chanting during play. The typically developing peer who joined the group also chanted the phrase, as well as the adults who I hired to facilitate the sessions. How should I code this type of behaviour? By all measures of prosocial play, the chanting was deleterious to effective social interactions and yet the cacophony seemed to bring the players a sense of collective joy. Surely this behaviour, absent of any prosocial benefits, was evidence of the kind of social deficits that youth with ASD experience. On the other hand, seeing the typically developing peers and adults chanting as well suggested that our definitions of "normal" socializing may be too conservative.

When we imagine normal social play, we may think of polite children taking turns and encouraging playmates to be their best selves. It can be tempting to think of social play as ordered and predictable, but that is not the case. Let me share with you what play researchers and new parents already know: play behaviours of children can be quite bizarre. Far from the model of polite turn-taking, the play of children, irrespective of diagnoses, is often inscrutable to adults because it includes silly noises, cultural references, and aggressiveness (Conn, 2014). Without an understanding of the full breadth of social behaviours, it can be tempting to problematize the play behaviours of youth with ASD as evidence of their social deficits.

Considering that *persistent deficits in social communication and social interaction across multiple contexts* is one of the diagnostic criteria for ASD (APA, 2013), it should be no surprise that tremendous effort and resources have been marshalled to help people with ASD learn to socialize. Dire descriptions of the social prognoses of young people with ASD can be found in the opening paragraphs of nearly every research article on intervention approaches. Sobering descriptions of

lonely childhoods (Bauminger, Shulman, & Agam, 2003; Locke, Shih, Kretzmann, & Kasari, 2015), poor academic skills (Ledford & Wehby, 2015), and missed employment opportunities (Hendricks & Wehman, 2009) are included in intervention literature to emphasize how much these individuals need social programs. As a result, the widely held perception is that, compared to typically developing peers who are perceived to live effortlessly social and happy lives, children and adolescents with ASD are at great risk of living sad, solitary, and unfulfilled social lives.

So, what was the problem I knew I had when I was listening to the participants chant "dig, dig"? Seeing the diversity of play behaviours reminded me that interventions like mine that are designed to support youth with ASD do not always help. I am not the only one who has faced this realization. Indeed, it has been widely acknowledged throughout the literature that social intervention programs do not always work well (Dunst, Trivette, & Hamby, 2012; Koegel & Koegel, 2012; Ozonoff, Goodlin-Jones, & Solomon, 2005; Reichow & Volkmar, 2010; White, Keonig, & Scahill, 2007). Even when youth with ASD make gains on the variables that have been chosen as proxies for social competence, it is not often that they make subsequent improvements in their abilities to initiate and sustain meaningful relationships (Bellini, Peters, Benner, & Hopf, 2007).

The ineffectiveness of social interventions to make meaningful change in the lives of youth with ASD is a contentious issue in the field. In recognizing the problems, researchers have suggested multiple ways to improve social programs, such as increase parental involvement (Brookman-Frazee, 2004), use interests (Koegel, Bradshaw, Ashbaugh, & Koegel, 2013), include evidence-based practices (Ratcliffe, Wong, Dossetor, & Hayes, 2014), and incorporate small group instruction (Ledford & Wehby, 2015). They have debated which doses, settings, and modes of delivery might improve intervention programs (Hume, Bellini, & Pratt, 2005). My own research was designed to highlight perceived problems with intervention studies (community-based programs do not include enough purposeful application of evidence-based strategies, MacCormack, Matheson, & Hutchinson, 2015; parental involvement and socially valid features are ignored by program designers, MacCormack, 2017).

Yet another explanation might better explain some of the ineffectiveness of intervention programs. Perhaps part of the reason why social programs fail to make meaningful changes in the lives of youth with ASD is the programs are designed to accomplish the *wrong goals*. Social programs are designed to fix the social capacity of youth with ASD because program design decisions are based on the assumption that the socializing of typically developing peers is better than that of individuals with ASD. Despite how pervasive is the idea that normal is "better" in the intervention literature, it may not always be true.

What is often overlooked by the social intervention literature, especially in reviews of the literature, is that, while the social lives of children and adolescents with ASD are different than those of their typically developing peers, their social lives are not always failures. While they tend to socialize less often, and with fewer people, than do typically developing peers (Kasari, Locke, Gulsrud, & Rotheram-Fuller, 2011), those differences do not necessarily mean that youth with ASD cannot and do not socialize. Despite the perception of young people with ASD as isolates, most of them are able to establish social connections with peers in school and community settings (Boutot & Bryant, 2005; Chamberlain, Kasari, & Rotheram-Fuller, 2007). While they tend to be further from the centre of their social networks than are typically developing peers, youth with ASD are recognized

participants in their social networks (Kasari et al., 2010). Many children and adolescents with ASD have at least one good friend (Locke, Ishijma, Kasari, & London, 2010) and tend to be thereby protected from the worst effects of loneliness and peer victimization (Waldrip, Malcolm, & Jensen-Campbell, 2008). A seminal study on social networks of youth with ASD by Bauminger, Shulman, and Agam (2003) showed that, even though they participate in fewer interactions than do typically developing classmates, the proportion of positive to negative social behaviours was identical for both groups. In short, although the friendships of youth with ASD tend *not to be the same* as those held by typically developing peers, those youth are social and capable of having social ties.

Therefore, the first step is to acknowledge that, much like the magnificently strange behaviour ("dig, dig!") exhibited during my intervention, social behaviours are idiosyncratic and diverse. The second step to improving social programs for young people with ASD may be to understand that, while their socializing tends to be different from that of typically developing peers, those social exchanges can still be fulfilling and meaningful for them. The third step to improving programs may be to acknowledge that social programs often fail to improve the youths' social skills and that, even when some gains can be made, the association between social competence and improved social cohesion is tenuous (Bauminger et al., 2003). Perhaps what researchers and educators need to do is to stop designing programs to try to make the social lives of youth with ASD *normal*, and start designing programs that will make their lives *better*. Researchers and educators have been so dedicated to outcome goals that they have failed to answer the most important question: What do youth with ASD *actually* need to live socially successful and integrated lives?

Much of the social intervention literature is based somewhat on the assumption that children and adolescents with ASD would be happier and better if they could socialize more like their typically developing peers, a position that may be less persuasive in light of what is currently known about their socializing. Instead of designing programs to normalize their socializing, children and adolescents with ASD may benefit from the development of social contexts where they can *thrive*. The study of thriving moves beyond the deficit-based goal of fixing problems and looks to determine what is necessary for holistic and genuine wellbeing. In the case of socializing, interventions should recognize that differences of socializing do not necessarily mean deficits of socializing and that, when in contexts that promote thriving, all young people can live healthful and happy lives. When engaged in my play-based interventions, participants tended to take part in rich socializing that, over the span of the sessions, emphasized teamwork and the perspectives of others over their individual and personal preferences. Considering how widely social behaviours differ, future research should focus on identifying the program features that best support the development and social wellbeing of children and adolescents with ASD, without falling into the trap of assuming that normal socializing is best.

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