



VOICES FROM THE FIELD - Intervention in Children with Autism Spectrum Disorder

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Service perspective

Clinicians working with young children with autism rely on the outcomes of intervention research in order to develop best practices in their work. We should be encouraged by research efforts to identify treatments across professional fields that are effective for this population. However, clinicians from all professional disciplines continue to struggle with matching interventions to individual children and families. Making clinical recommendations as to the type, content and intensity of each intervention for each unique child is an ongoing problem. Papers appearing in the online encyclopedia of the Centre of Excellence for Early Childhood Development¹⁻³ review the effects of varied interventions for young children with autism, including social/emotional development, which is of particular interest to front-line clinicians.

An examination of the research cited by Harris¹ and by Bruinsma, Koegel and Kern Koegel² reveals that the field of applied behaviour analysis has contributed the majority of the intervention research in autism. However, the field may be somewhat remiss in the apparent lesser focus on efforts to address improving social competence. More importantly, the method of discrete teaching of social skills, typically with extrinsic motivation, suggests a possible mismatch between method of instruction and desired outcome. A different type of motivation may be needed for some children to participate in **social relationships**; methods to induce this motivation are still elusive. The challenge of measuring social competence is certainly a contributing factor. Both researchers and clinicians need a structured assessment tool to evaluate social competence that is sensitive enough to capture qualitative changes in children's social behaviour. Otherwise, we run the risk of being limited to teaching only elements that are easily measurable. The field of speech-language pathology will need to contribute to intervention research more vigorously, especially in the domain of social skills development. Often, the first clinicians to recognize the signs of autism spectrum disorders and begin intervention are speech-language pathologists, the logical agents for teaching social communication skills. Positive outcomes from studies enlisting peers as agents in intervention are promising, but these techniques have yet to materialize in most integrated settings.

Harris¹ also highlights research on intervention for social/emotional impairments in autism, undoubtedly one of the more complex symptoms of this disorder. Her review documents the challenges involved in measuring social functioning or social competence

as a discrete outcome. The complexity of this behaviour has likely led to the need to break down skills that contribute to social competence and subsequently teach these skills individually. Operationalizing “social skills” may be a necessary exercise in order to develop goals and measure change. However, teaching social skills **as one component** of a program for a child with autism may be contributing to the limited generalization and disappointing long-term benefits of discrete social skills teaching. Instead, social competence may be the observable unification of competent communication, imitation and play skills in young children, and not a subset of skills to be addressed separately in an intervention program. Teaching fundamental skills such as communication, imitation and play **within** the context of social interaction may contribute more to improved social competence and decrease the amount of time required to “teach” generalization. For example, gross motor imitation, if taught in the social context of copying an action in a familiar song, may be more likely to reoccur naturalistically in the child’s settings (an integrated setting or with parents and other family members). Consequently, the skill is elicited naturalistically because the *social contexts* within which these skills are taught are likely to reoccur in the child’s daily settings. Certainly, clinicians agree that there is some need to teach skills in more contrived social contexts, particularly to allow for adequate exposure and practice. When social skills are targeted, then social skills can improve. When communication skills are targeted, these too improve. If, however, communication skills are targeted within the context of social relationships, then children may improve their *social competence*.

Another body of research reviewed by Harris¹ focused on identifying factors that have a positive impact on the social behaviour of children with autism and strategies that facilitate social interaction and elicit appropriate behaviours in small group or integrated settings.⁴ Facilitative strategies such as time delay, environmental arrangement and teaching peers (and others) to persist in their efforts to initiate communication with a child with autism are common clinical strategies used by speech-language pathologists and early interventionists to elicit appropriate social behaviours. Unfortunately, it does not appear that such environmental supports and facilitative strategies are being implemented in the field in a systematic way. It may be necessary to provide more training for front-line workers so that they may use these techniques in their clinical and educational settings and measure their effectiveness.

Of particular note is a strategy described in several research studies suggesting the use of naturally occurring reinforcement to support the development of social competence. These studies reviewed by Hwang and Hughes⁵ begin to address the crucial element of **intrinsic** motivation to socialize. As autism was defined years ago, it may have been necessary to teach social skills using external reinforcers. However, in our current environment it may be beneficial, as the age at time of diagnosis continues to decrease, to strive to teach skills in a social context that is in and of itself reinforcing for the child or becomes so, as relevant associations are fostered. Clinicians may now have a unique opportunity to influence the early development of social communication in children with autism differently than they have in the past.

Parent characteristics that have been identified as enhancing the impact of early intervention primarily include education and optimism.² Knowing this positive impact,

the resource network has a responsibility to promote parent competence in interacting with their child with autism and encourage hopefulness for their child's future. Parents are compelled to gather information about autism very early following a diagnosis. Unfortunately, parents often need to wait for access to services and typically end up forging ahead with their own research, usually on the Internet, which often leads to discouragement, thereby undermining our professional efforts to encourage parents to feel optimistic.

There is a relative dearth of autism intervention research from the field of speech-language pathology. Given that many hallmark features of autism are chiefly within this profession's scope of practice, the presence of speech-language pathologists in the field of autism intervention research needs to be amplified, taking the lead from respected contributors such as Prizant, Wetherby, Schuler and others.

Szatmari³ comments that it will only be possible to properly evaluate treatment effects with randomized controlled trials. There is a clear need to gather a large data pool that includes information on child and parent characteristics, effective and facilitative environmental supports, direct teaching methods and the most effective level of intensity of these interventions in order to begin to prescribe appropriate management. The outcomes from these studies will ultimately drive resource designation and impact clinical work. The value of systematic qualitative research, however, will need to be acknowledged as contributory in the area of early intervention in autism until our data pool is large enough to develop hypotheses to drive the trials. This will allow us to make more definitive statements about best practices in the field of autism intervention.

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