

week over 6 months for an approximate total dosage of 72 sessions.

Tools used to measure changes were valid for the outcomes being measured. Outcome measures included the ESCS-Abridged (Early Social Communication Scale), an unstructured free-play session with the examiner, a measure of turn-taking and parent-child free play. Results gathered from this study indicate that PECS had a large effect in increasing requests compared to children receiving RPMT only if children exhibited very little initiating joint attention during pre-intervention assessment.

The researchers took many measures to ensure the validity of the reported results. Both treatment procedures described were designed to be as similar as possible on multiple dimensions to minimize effects of external factors on the results. The researchers also accounted for additional therapy participants may have received outside of the experiment through parent report. There was a high level of treatment fidelity in both treatments. Furthermore, the outcomes were ecologically valid measures of communication, assessed over various contexts. One weakness of the study was that examiners conducting the pre- and post-assessments were also the primary data-coders, and therefore, were not blinded to the children's treatment group. However, high interobserver reliability scores were reported. Overall, the results reported are highly suggestive that PECS may facilitate more generalized requests when compared to RPMT treatment in children exhibiting little initiation of joint attention prior to intervention.

Discussion

In reviewing the five articles selected for this review, taken together, these studies provide suggestive evidence that PECS training may increase requests in preschool children diagnosed with ASD. Furthermore, results from some of these studies suggest that children with very little joint attention skills or increased imitation skills prior to treatment may be of most benefit to PECS training.

Factors such as participant selection, randomization to groups and study design were inherent weaknesses in some studies and must be also be considered, as these factors reduce the strength of the evidence reported. In general, many of the studies included in this review reported relatively small sample sizes. The inclusion criteria were specific across some studies and may have contributed to exclusion of many screened participants. However, results from

studies with small sample sizes may be valuable in that data obtained may be analyzed independently, per child. Children with ASD are an inherently heterogeneous group, and therefore individual analysis of results may yield data that is more representative of the ASD population.

Clinical Implications

PECS is popularly used as AAC strategy for children with ASD to learn how to initiate requests. The studies reviewed yielded suggestive evidence supporting this notion; therefore, S-LPs working with this population should consider using PECS as a method for increasing communicative acts (including requests) in therapy. Furthermore, a follow-up study has shown the maintenance of PECS training for up to 12-months post-intervention.

When considering the use of PECS in therapy, it is also important to consider the individual characteristics of each child with ASD. Additionally, one should also consider whether other interventions (such as RPMT) or a combination of interventions may be more beneficial. It is imperative that clinicians working in this population understand the heterogeneity of ASD, and therefore a single treatment may not be the solution.

Future Recommendations

To date, there is limited literature specifically focusing on the role of S-LPs in the care of children with ASD and specifically, PECS. As S-LPs become increasingly involved in the care of individuals with ASD, the need for higher level, evidence-based research also increases. As such, it is imperative to conduct more high-level research in this area with larger sample sizes in order for S-LPs to make evidence-based decisions in treatment for this population.

References

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