NSW Speech Pathology
Evidence Based Practice Interest Group

Critically Appraised Paper (CAP)

CLINICAL BOTTOM LINE: This study provides evidence that therapy targeting Joint Attention skills improves expressive language skills in pre-school aged children with autism. The children in this study received daily 30 min therapy sessions over 5-6 weeks which included milieu and DTT teaching techniques while attending an intensive early intervention ABA program. The therapy did not result in significantly greater gains receptive language development. The results of this particular study are only clinically applicable to children who attend intensive ABA programs.

Clinical Question: In Children with Autism, does joint attention (JA) intervention improve social communication skills?

Citation: Kasari, C., Paparella, T., Freeman, S. Jahromi, L. (2008) Language outcome in Autism: Randomised Comparison of Joint Attention and Play Interventions. *Journal of Consulting and Clinical Psychology, 76,* 125-137.

Design/Method:

Intervention: All subjects were enrolled in the same ABA early intervention program which was 30hrs/week over 5-6 weeks in a hospital day treatment facility. Subjects were randomly allocated to one of three groups- Joint attention therapy (JA Rx) group, Symbolic Play therapy (SP Rx) group or the control group. Children in JA and SP Rx groups received 30 mins of therapy daily for 5-6 weeks from trained graduate students focussing on developmentally appropriate JA or SP play skills. Therapy sessions included 5-8 mins of DTT to 'prime' target goal then 15-25 mins on the floor in a child-led session using principles of milieu teaching including talking about what the child was doing and manipulating environment to create opportunities for communicative attempts. Further detailed information on treatment goals and teaching approach reported in Kasari et al (2006).

Measures taken during study

Testers were independent of treatment staff and blind to Rx group allocation. Measures were taken prior to therapy allocation, immediately post intervention, and at 6 and 12 months post Rx and leaving the EIP program. At 6 and 12 months post Rx the following measures were repeated: administration of Reynell Developmental Scales, the Early Communication Scales and the Structured Play Assessment. The mother and child were also videoed interacting with a standard set of toys for 15 mins and coded for JA and SP play behaviours. Parents also completed a questionnaire on background characteristics and history of the child's other interventions at each assessment point. At 12 months post Rx the Mullen Scales of Early Learning were also

Participants:

58 children (CA=3-4 years) with a diagnosis of autism as assessed by ADOS and ADI-R (46 boys, 12 girls) participated in the original 2006 study (Therapy Phase). 43 children had highly educated mothers. In this follow up study (2008), 56 subjects from the original cohort were reviewed at 6 months post intervention review and 53 subjects at the 12 month post intervention review.

Experimental Group:

In the original 2006 study 20 subjects were allocated to the Joint Attention Rx group and 21 subjects to the Symbolic Play (SP Rx) group. At the 6 month follow up 20 subjects from JA Rx group and 19 subjects from SP Rx group were reviewed and at the 12 month follow up 20 subjects from JA Rx group and 17 subjects from SP Rx group were reviewed.

Control Group:

In the original 2006 study 17 subjects allocated to no experimental treatment group (control group) but they still participated in the same intensive early intervention program as the subjects in the treatment groups. At the 6 month follow up17 subjects in control group were reviewed and at 12 month follow up 16 subjects were reviewed.

Results: Both treatment groups showed significant gains in expressive language compared to controls over 12 months but no significant differences in receptive language. Predictors of expressive language growth were high numbers and duration of JA initiations, high levels of symbolic play and higher receptive and expressive language skills at the pre-therapy assessment. Children with low expressive language skills (n=28) showed greater expressive language growth in the JA Rx group. Both Rx groups showed greater change in initiations of JA over time compared to controls but no sig differences in responding to JA over time.

Comments – Strengths/weaknesses of paper

Strengths: Good sample size and retention of subjects over 12 month period. The study also took into account other interventions children received in analysis of results.

Weaknesses: No treatment fidelity measures were reported in this paper. No comments/discussion about the minimal impact of Rx on receptive language.

Level of Evidence (NH&MRC): II

***DISCLAIMER*—THIS CAP WAS COMPLETED by PRACTISING SLPs. YOU ARE STRONGLY ENCOURAGE TO READ THE ARTICLE FOR YOURSELF BEFORE MAKING ANY CLINICAL DECISIONS ASSOCIATED WITH THE CLINICAL QUESTION.**
ALSO—PLEASE NOTE THE DATE WHEN THIS CAP WAS COMPLETED, and the YEAR OF PUBLICATION OF THE ARTICLE. THE CLINICAL BOTTOMLINE MAY HAVE CHANGED IN LIGHT OF MORE RECENT RESEARCH.

Appraised By:
Clinical Group: Autism EBP, Oct 2011

Form based on Worrall & Bennett, Evidence based Practice: Barriers & Facilitators for Speech-Language Pathologists, *Journal of Medical Speech-Language Pathology* 2:9, xi – xvi **Updated February 2006**