Early Social Communication and Play Skills in Children with Autism

- Early social communication skills including the use of eye gaze, facial expression, and pointing (joint attention), as well as imitation and social turn taking are thought to be pivotal skills for social and language development
  
  (Charman et al., 2003; Kwisthout, Vogt, Raadslager, & Dijkstra, 2008; Murray et al., 2008; Whalen, Schindler, & Ingersoll, 2006)

- Deficits in these skills are possible early indicators of an Autism Spectrum Disorder (ASD)
  
  (Corness, Dobkins, Akshoomoff, McClancy, & Conner, 2012)

Joint attention, imitation and object play have also been found to be strongly associated with:
- Language ability at three-five years of age in children with ASD
  
  (Thurm, Lerd, Lee & Newschaffer, 2007; Toth, Merzon, Melzoff & Dawson, 2006)

- Intellectual functioning at three-seven years of age
  

Parent-Mediated Programs

“Although parents appeared to have an instinctive grasp of how to mediate learning for their children they needed guidance on the meaning and importance of joint attention for future language and social development”

Schartz & Odom, 2007, p. 1572

What is the Early Play Program?

- PMP’s can allow intervention to begin early, involve consistent handling and ensures that the intervention is enhancing the child’s earliest social relationships - their care givers
  
  (Degville, McCornachie, & Randile, 2003)

- PMP’s have been found to have a positive improvement on parent emotional wellbeing
  
  (Brookman-Frazee, 2004; Solomon et al., 2014).

The Early Play Program is an 8 session home-based family program focussing on developing early social communication and play skills in children with autism.
**What are the focus areas?**

1. Understanding a child's interests
2. Encouraging imitation
3. Encouraging joint attention
4. Encouraging communication in play through people games
5. Encouraging communication in play through visual supports
6. Encouraging functional play skills
7. Teaching turn-taking
8. Early pretend play

**What does each focus area involve?**

Each intervention focus area has a session plan including…
- Discussion points
- Teaching strategies
- Activity sheet
- Video exercises
- Recommended homework
- Information sheet for preschool/childcare

**How do sessions run?**

- Review homework and past sessions
- Introduce new focus area
- Model strategies
- Ask parents to practice in session (video if possible)
- Write all strategies in manual for parents to remember and practice

**Early Play Program Research Questions**

Does participation in the Building Blocks Early Play program lead to;
- An increase in the child's social-emotional development?
- An increase in the child's early social communication and play skills (joint attention, imitation, behavioural requesting, turn-taking and functional play)?
- An increase in parenting involvement, confidence, and emotional wellbeing?

Are parents satisfied with the Building Blocks Early Play program?

**Research Pilot: Participants**

- 7 children; 6 males, 1 female (aged 24-53 months)
- Formal diagnosis of Autism Spectrum Disorder
- Met at least 3 of the following criteria:
  - Prefer to play on their own and may become upset or move away when others try to play with them
  - Rarely bring toys to show others for shared enjoyment
  - Rarely point out things to others of interest e.g. plane in the sky
  - Have difficulty imitating another person's actions
  - Avoid eye contact when others attempt to play with them

**Research Pilot: Assessments**

**Child Measures**
- Early Social Communication Scales (ESCS, Mundy et al., 2003)
- Greenspan Social Emotional Growth Chart (SEGc, Greenspan, 2004)
- Early Social Communication Skills - Parent Report (developed by researchers based on ESCS, Mundy et al., 2003)

**Parent Measures**
- Parenting Relationship Questionnaire – Preschool (PRQ, Kamphaus & Reynolds, 2006)
- Family Quality of Life Survey (FQOL, Hoffman, Marquis, Poston, Summers, & Turnbull., 2006)
- Parent Satisfaction Questionnaire (PSQ, developed by researchers)
Research Pilot: Procedure

- **Pre-Assessment**
  Conducted at Aspect schools and offices ESCS, SEGC, PRQ, FQOL

- **Early Play Program Intervention**
  8 x fortnightly intervention sessions conducted within family homes

- **Post-Assessment**
  Conducted at Aspect schools and offices ESCS, SEGC, ESCS (Parent report), PRQ, FQOL

- **6 month Follow-up**
  Conducted at Aspect schools and offices ESCS, SEGC, PRQ, FQOL

Research Results

- **Significant changes in children’s social emotional development** (Greenspan’s Social Emotional Growth Chart)
- **Significant improvements in response to joint attention and social interaction** (Early Social Communication Scales)
- **Significant improvements in parenting involvement and parent emotional wellbeing** (Parenting Relationship Questionnaire and Family Quality of Life Survey)

Parent Feedback

- “The best part was I came to know how to make my child enjoy the game”
- “Learning how to get my child to do things he normally would not do e.g. eye contact, playing with toys, group activity”
- “Learning to take simple opportunities of a few minutes to engage with my child in play and follow his lead rather than feel like I had to have ½ hour plus to devote each time”
- One of the best parts is that it was “home-based”

Limitations

- **Small sample size** (low statistical power for repeated measures)
- Lack of assessment at pre-intervention of ASD severity rating and general developmental delay.
- Lack of control of other services children may be accessing and their potential impact on research outcomes.
- Difficulties with testing environment and standardisation for the Early Social Communication Scales.
Future studies

- Larger sample size
- Longer intervention period (by parent feedback)
- Conduct pre-assessment of autism severity and developmental profile e.g. using Autism Symptom Rating Scale and Developmental Profile 3
- Collecting data on type and hours spent in other early intervention program
- Use video time sampling throughout the intervention period to measure early social communication skills in the natural environment

Conclusion

Based on the initial data indicating improvements for both children and families as well as high levels of parent satisfaction, the Early Play Program shows promise as an effective and feasible intervention for young children with autism.

Thank You