Disability Services Queensland



Reviewing the More Than Words program: does it empower parents?

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Presentation Outline

- 1. Introduction
 - Disability Services and supports to children with ASD
 - More Than Words: the Hanen Program® for parents of children with ASD
- 2. Evaluation of the program
 - The Pragmatics Profile
- 3. Results
- 4. Discussion



Disability Services

- Disability Services is a funding and service provider
- It provides services to people with a diagnosed disabilities
- Children aged from 0-6 with a significant developmental delay are eligible for support from Family and Early Childhood Services (FECS)
- FECS include support & information, assessment & intervention, advocacy, linking, and strengthening families
- A significant proportion of families accessing the services have a child diagnosed with ASD





Communication Intervention for children with ASD in Disability Services

Disability Services staff have received support, information and training in a number of frameworks of intervention in the past, including:

- AAC unaided and aided, low tech and high tech
- Nutritional supports
- Facilitated Communication Training
- Discrete Trial Training
- Naturalistic (Milieu) training



Slide 4

WW1

Wendy Webster, 28/04/2009



Communication Intervention for children with ASD in Disability Services

More recently there has been a broadening of support to include social-pragmatic interventions:

- More Than Words: The Hanen Program® for parents of children with ASD
- Intensive interaction www.intensiveinteraction.co.uk/
- Relationship Development Intervention (RDI) www.rdiconnect.com
- DIR/Floortime –
 www.icdl.com/dirFloortime/overview/index



Slide 5

WW5

Wendy Webster, 28/04/2009



Aims of this study

To determine if *More Than Words: the Hanen Program*® *for parents of children with ASD* was leading to functional objective and effective communication outcomes for children with ASD, through the assessment of the skills of the children using the Pragmatics Profile (Dewart & Summers 1995).





The More Than Words Program: the Hanen Program® for parents of children with ASD.

- A parent education program from the Hanen Centre
- Specifically tailored to supporting the development of skills in parents of children with ASD
- Created in 1999 by Fern Sussman
- Evidence based content about adult learning, ASD deficits, and intervention
- Group based learning for adults
- Hanen trained SLP presents the course
- www.hanen.org/morethanwords





More Than Words course content

- 8 parent education sessions includes adult learning principles of Prepare, Present, Practice and Personalise
- 3 Home visits includes video recording the parent using their new communication skills with their child
- Continuum for children's skills used Own Agenda, Requester, Early Communicator, and Partner.



More Than Words - Content of sessions

- 1. Get to know more about your child's communication
- 2. Follow your child's lead
- 3. Make the connection with people games and songs
- 4. Help your child understand what you say
- 5. Using visual helpers
- 6. Bring on the books
- 7. Take out the toys
- 8. Let's make friends



More Than Words - home video session

- An important step to support generalisation to the natural home environment
- Takes parents through an increase in understanding of their skills – from <u>pre-awareness</u>, to <u>awareness</u>, analysis, and then <u>action</u>
- Feedback is based on active listening, describing the situation, use of inferences, and questions that are open ended and reflect on emotional reactions
- Aim is to lead parents to meta-awareness of their communication skills



Research on Family Training

Shows a link between parental sensitivity to the attention of their children and the child's subsequent development of communication skills (Siller & Sigman (2002), Mahoney & Perales (2003), Aldred, C., Green J., & Adams, C. (2004) Mahoney & Perales (2005)

Parents using developmental or 'naturalistic' techniques were happier, less stressed and felt they communicated better with their child than parents trained in discrete trial training (Koegel et al., 1996).





Research on More Than Words



McConachie et al from the Uni of Newcastle

- Joy and Fun Assessment (JAFA) showed parents' use of interaction strategies significantly increased
- Child Change: increased vocabulary
- Parents who participated in intervention had children who did better than the control group

Published in the Journal of Pediatrics 2005;147: 335 -40



Research on More Than Words



The University of Toronto, Department of Speech Language Pathology (Dr. Luigi Girolametto)

Results

- increased gaze to parent face
- Increased initiations
- Increased vocabulary

Published in 2007 Journal of Communication Disorders



Research on More Than Words



McGill University in Montreal (Dr. Eric Fombonne and Dr. Lee Tidmarsh)

- 50 families
- "I see positive preliminary results...this could be the most cost-effective approach. That's why I'm conducting this research."
- Canadian Autism Intervention Research Network (CAIRN) Conference, (March 26th, 2004 in Toronto, Ontario)



Toddlers At-Risk Research on More Than Words

- This is a current research project across Universities from Vanderbilt, Massechusets Boston, & Miami
- Involving Paul Yoder, Wendy Stone, Alice Carter and Daniel Messenger
- Running 17 programmes at 3 sites for 15 21 month olds who have failed two screens for ASD



Method of this study

The More Than Words course was run twice in 2008:

Cohort 1 - April to June at Maroochydore with 7 families

Cohort 2 - April to July at West Brisbane with 5 families

1. A few weeks before the course began, all the families were given the Pragmatics Profile to complete.

2. All families then completed the 11 week course.

3. A few weeks after the completion of the course, all families completed the Pragmatics Profile again.



Cohort Analysis

Cohort 1 characteristics:

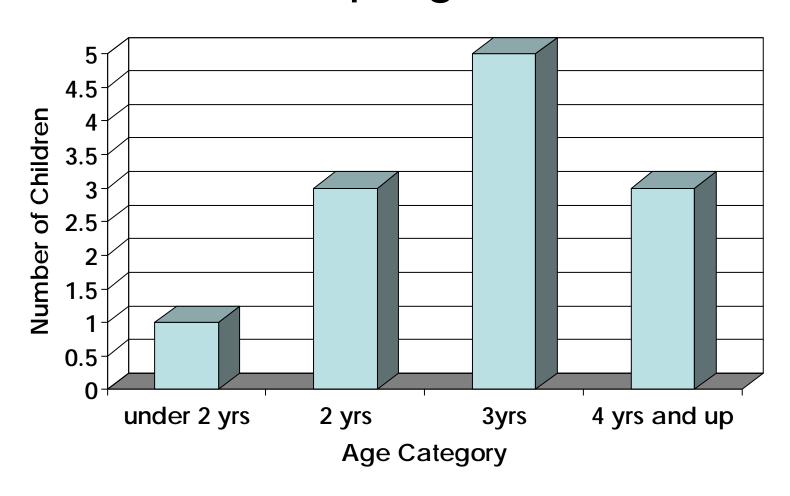


- Located on the Sunshine Coast, 100km north of Brisbane
- Population is largely middle class with low proportions of indigenous and non-Australian born citizens

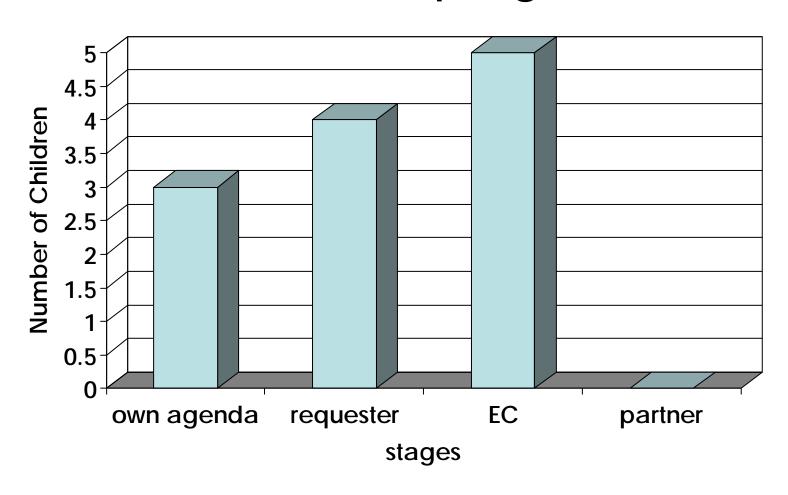
Cohort 2 characteristics

- Outer suburbs of Brisbane, 20km south of city
- Population demographic is as per cohort 1

Age distribution of children across MTW programs



Stage distribution of children across MTW programs





Assessment of course outcomes

- 1. Upon completion of the course parents fill in an official More Than Words evaluation form.
 - Good to get immediate feedback
 - Parents good source of information
 - However it is contaminated by euphoria.
- 2. We sought to use an unbiased evaluation of the course by employing an external measure unrelated to the course, yet measuring an important outcome
 - using The Pragmatics Profile



The Pragmatics Profile



- Versions specifically for children (preschool and school aged) and adults - 1995 and 1996
- The profile is a qualitative assessment with functional questions that a carer provides a short answer to
- Designed to be easily and effectively used with people with any type of impairment, of any age, with any skill level, with families of any educational level
- Can be used for planning and/or evaluative purposes
- Helps parents to see that some behaviours are communication, and that communication opportunities are crucial too.





Outline of the structure



Four main domains of pragmatics:

- 1. Communicative functions requesting, greeting, commenting, etc...
- 2. Response to communication understanding requests, responding to 'no', anticipation, etc...
- 3. Interaction and conversation initiating, maintaining, repairing, overhearing, etc...
- 4. Contextual variation person, topic, play, etc...



Our project

- Pre and post course analysis of the program via administration of the Protocol in the family home
- Pre course data was collected 3 weeks before the start of the course
- Post course data was collected 4-8 weeks after the completion of the last session





Validity and reliability

Validity is supported via:

- Consistency of question on each occasion
- Encouraging more than one parent to participate in the interview
- Triangulation multiple sources of information support and confirm each other

Reliability:

- the 2 assessors cross checked one member from each of their group
- It is OK for 2 people to have a different view of the skills of the child as they see different things





The Scoring Reference Form

- Although the qualitative data gives us indications of change over time, a Scoring Reference Form was employed
- This form was developed by Speech Language Pathologists from Queensland Health, and endorsed by Hazel Dewart
- It allocates responses to a 6 point scale
 - 1= does not respond
 - 2= behavioural
 - 3= gestural
 - 4= vocalisation
 - 5= vocalisation and gestural
 - 6= verbal response



The Scoring Reference Form - example

Example: Request for object. If you were in the kitchen and he wanted something that was out of reach, how would he let you know?

- 1= does not respond
- 2= behavioural E.g. crying
- 3= gestural E.g. pull you over to it
- 4= vocalisation E.g. pleading noises
- 5= vocalisation and gestural E.g. pull you over and plead noises
- 6= verbal response E.g. look or point, and request verbally such as "I want it", or labelling item.

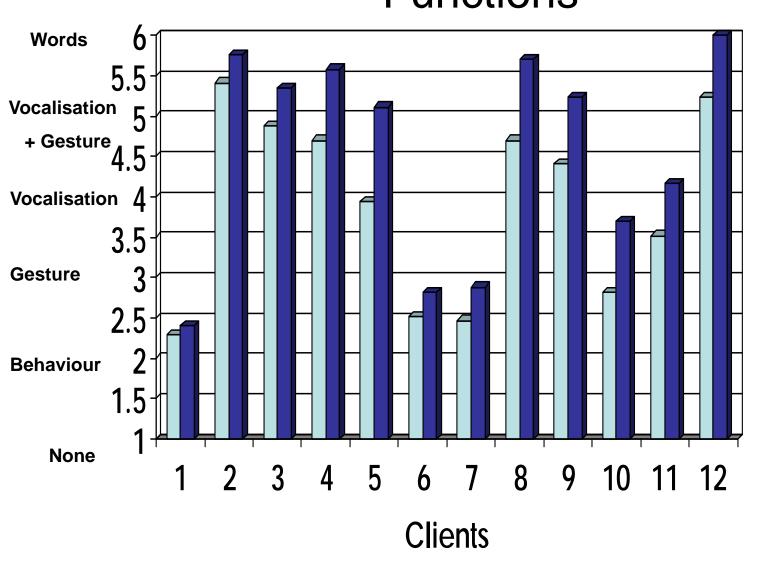




Results

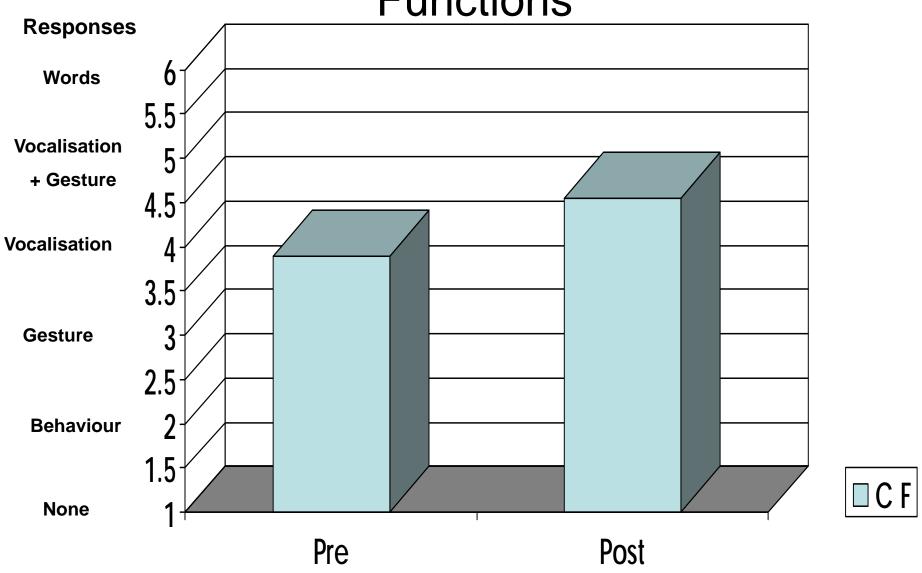
Client No.	Cohort 1 scores			Cohort 2 scores		
	Pre	post	change	Pre	Post	change
1	3.3	5.0	1.7	2.6	2.6	0
2	4.0	5.3	1.3	4.6	4.9	0.3
3	2.5	2.9	0.4	3.8	4.6	0.8
4	2.7	3.7	1.0	4.4	5.0	0.6
5	4.2	5.3	1.1	3.5	4.4	0.9
6	2.3	2.6	0.3			
7	4.8	5.5	0.7			
average			0.93			0.5

Pragmatics Profile – Communicative Functions

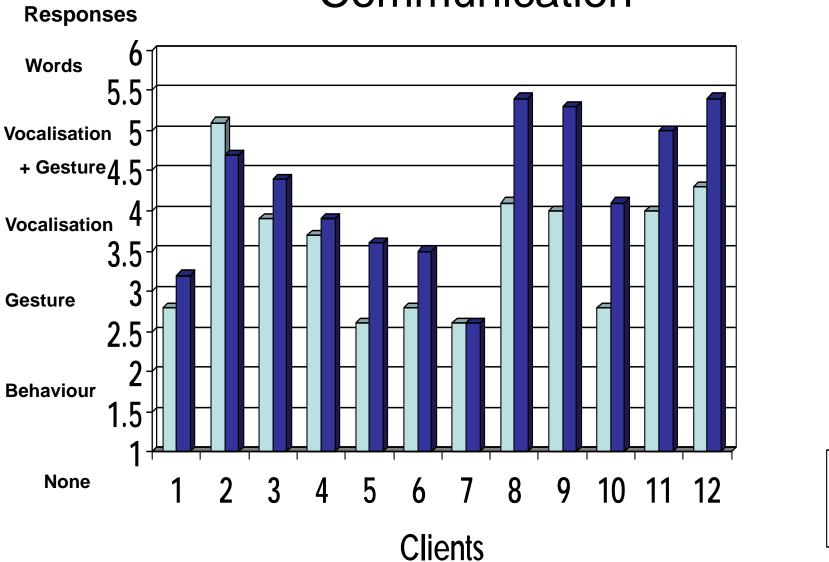




Pragmatics Profile – Communicative Functions

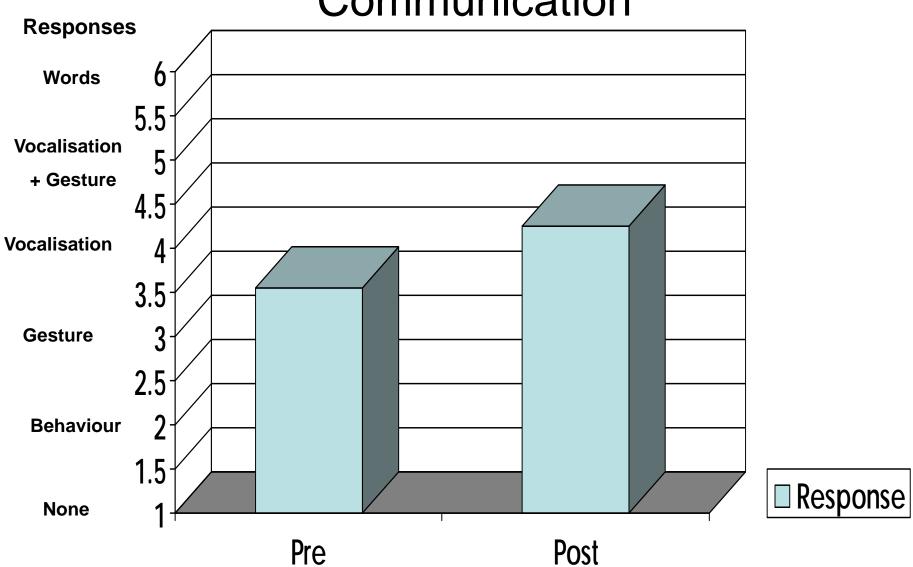


Pragmatics Profile – Response to Communication



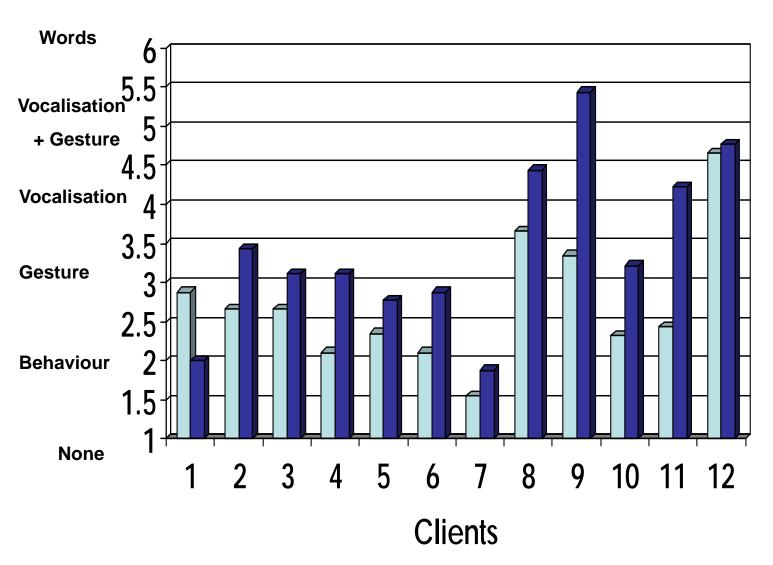


Pragmatics Profile – Response to Communication



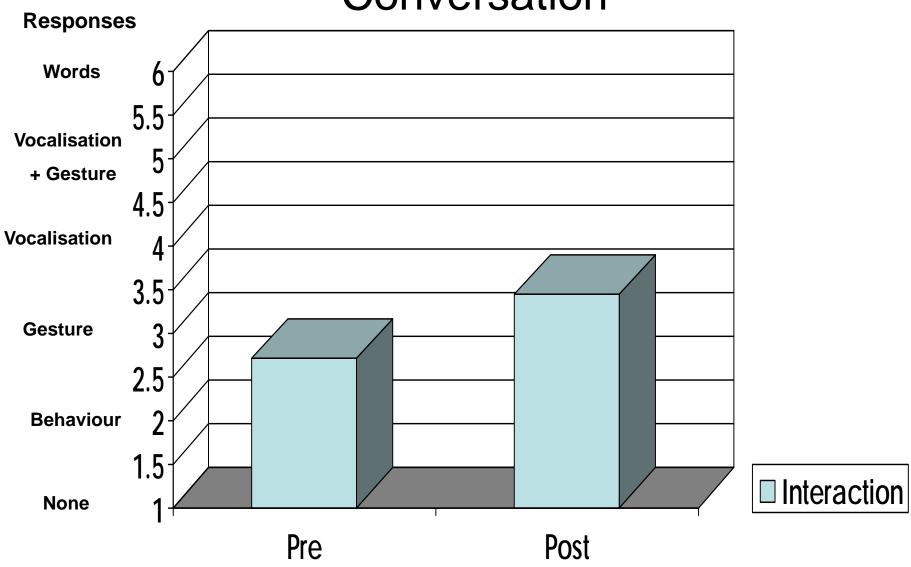
Pragmatics Profile – Interaction & Conversation





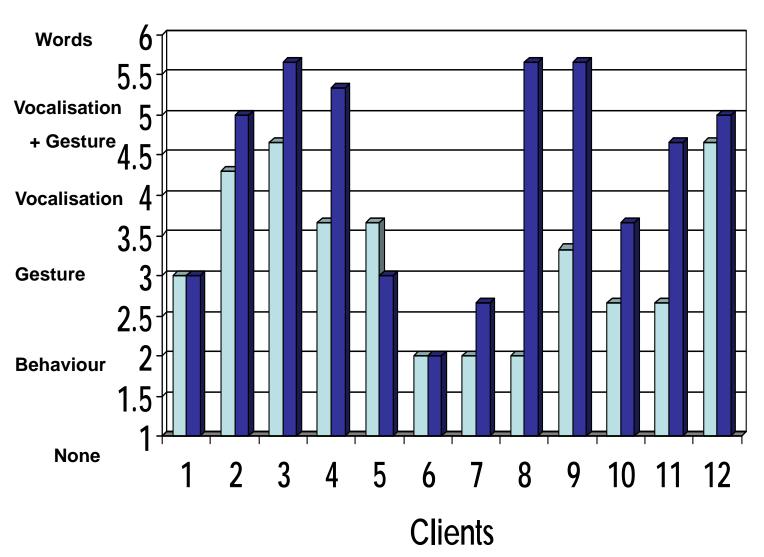


Pragmatics Profile – Interaction & Conversation



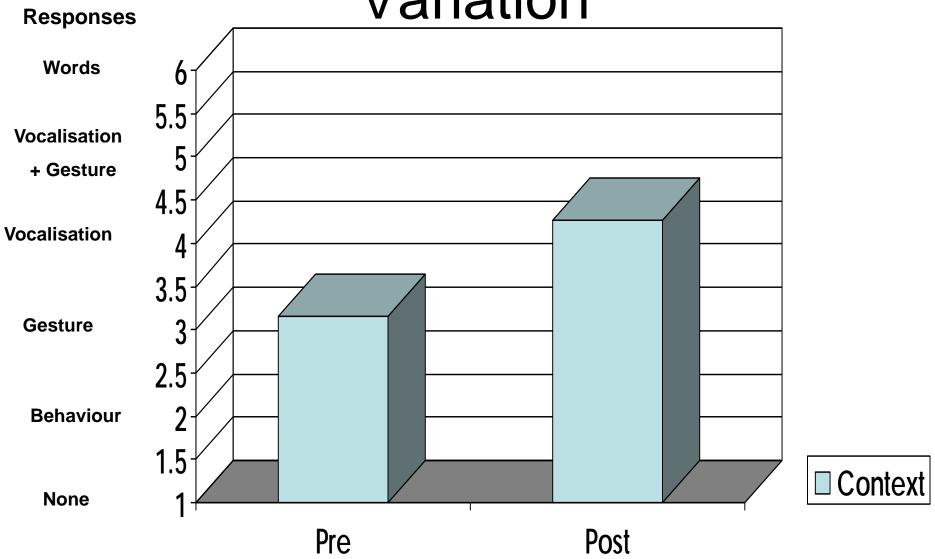
Pragmatics Profile – Contextual Variation

Responses

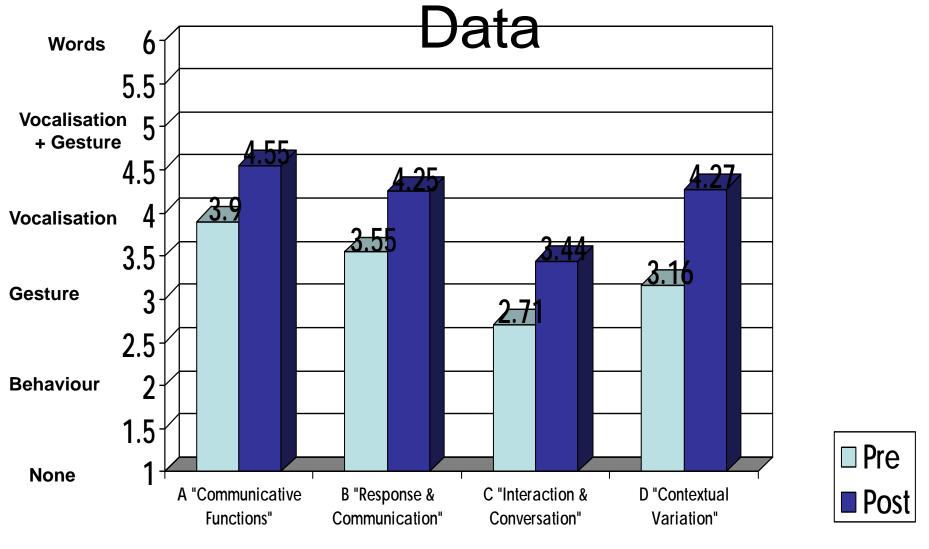




Pragmatics Profile – Contextual
Variation



Pragmatics Profile – Group



Section



Results - formal

With Pragmatics Profile data:

- Average improvements were nearly 1 point for cohort one, and 0.5 for cohort two, with an overall group average of 0.76
- Using accumulated ANOVA, the pre and post course data difference was statistically significant at level of p<0.001





Results - informal



Through feedback and course evaluation form:

- Parents report back feeling like they are supported, and know more about Autism, and can see changes in their child
- "I have learnt so much about Autism, met some great parents, and my child is starting to talk to me"
- "I feel so much more confident with my child now"
- "I am now patient, talk slower, and use simpler language"





Discussion



Benefits:

Children's social communication skills increased

Parent interactive skills increased

Parents learnt more about ASD

Variability of scores:

Parents were personally interviewed in cohort 1
Children always at various different stages of learning



Disability Services Queensland

Future opportunities for project

- 1. Larger cohort numbers
- 2. Joining further cohorts for greater numbers
- 3. Use of a control group or other treatment type group
- 4. Multiple data points
- 5. Strengthening criteria on Scoring Reference Form





Conclusion

That *More Than Words: the Hanen Program® for parents of children with ASD* is an effective program to empower parents to change the way they communicate so they assist the development of functional communication skills in their child.





References:

- Aldred, C., Green J., & Adams, C. (2004) Journal of Child Psychology and Psychiatry, 40 1-11.
- Dewart & Summers (1995). The Pragmatics Profile of Everyday Communication Skills in Children. Available for free at: http://www.edit.wmin.ac.uk/psychology/pp/index.htm
- Girolametto, L., Sussman, F. & Weitzman, E. (2007). Using case study methods to investigate the effects of interactive intervention for children with autism spectrum disorder. Journal of Communication Disorders, 40, 470-492.
- Koegel, R. L., Bimbela, A., & Schreibman, L. (1996). Collateral effects of parent training on family interactions. *Journal of Autism and Developmental Disorders*, 26(3), 347-359.
- McConachie, H., Randle, V., Hammel, D. & Le Couteur, A. (2005). A controlled trial of a training course for parents of children suspected with autism spectrum disorder. *J Pediatrics*, 147: 335-340.
- Mahoney & Perales (2003) Topics in Early Childhood Special Education, 23(2), 77 89.
- Mahoney & Perales (2005) Developmental Pediatrics, 26 (2) 77-85
- Siller & Sigman (2002) Journal of Autism and Developmental Disorders, 32(2) 77 -89