AEIOU: NAVIGATING THE MAZE OF AUTISM INTERVENTIONS. JUNE 2014

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Conceptual Swings

Genes, attachment and the autism phenotype; The Geek syndrome

Mental illness – developmental disability

Medical - educational

Behaviourism – relationship focus

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Echolalia

• **60’s psychoanalysis**: hostile, and failure of ego development (Bettelheim, 1967)
• Echolalia=conversational turn taking (Fay, 67)
• **70s behaviourists**: self stimulatory behaviour (Griffith & Ritvo, 1967), interfering with learning to be extinguished before learning could start (Lovaas, et al., 1974).
• **80s pragmatics**: echolalia has several potential functions (Prizant & Rydell, 1984)
• **90s echolalia** = language development strategy (Roberts, 1998)
• **00s mirror neuron theory** (Williams et al., 2001) (imitative disturbance difficulties both in copying actions and in inhibiting more stereotyped mimicking.)
Interventions, treatment and management for autism: “fad magnets for off the wall treatments” (Matson, 2007)
Navigating the maze

“One of the things I have found difficult to deal with is that so many well-meaning people have their pet theories on what will ‘cure’ or help your ASD child. Of course they are only trying to offer you something that might help, and it is nice to receive support and advice, as opposed to straight out criticism. But as a parent you feel obliged to investigate and evaluate every option. And how as lay people are we meant to evaluate these therapies? There’s diet, there’s ABA, RDI, there is (or was) the Dore program, there's sensory integration, speech, I remember investigating some outfit in Queensland that promised fantastic results with some sort of concoction, all you had to do was send away a stool sample of all things! (Imagine the postal regulations on that!) Investigating all these things can totally wear you out. It takes so much time and energy, not to mention money! …”

Positive partnerships: A parent’s view, 2008
Autism Spectrum Disorders - continuum of characteristics

COMMUNICATION
- nonverbal
- highly verbal

SOCIAL IMPAIRMENT
- aloof
- passive
- active/odd

REPETITIVE BEHAVIOURS/RESTRICTED INTERESTS
- marked
- mild

COGNITIVE SKILLS
- Severe
- moderate
- mild
- gifted

SENSORY
- hypersensitive
- hyposensitive
What Type of Intervention?

- Biologically based (medications)
- Complimentary and Alternative Medicines (CAMS)
- Psychodynamic Interventions
- Educational (learning based)
Psychodynamic

- Emotionally frigid parents – refrigerator mother (Bettleheim)
- Failure to attach, historically psychoanalysis treatment of choice
- ‘Parent-ectomies’
- Example - Holding therapy
Educational Programs (based on learning)

Significant debate about relative merits of different theoretical approaches

- Primarily Behavioural (based on learning theory)
- Contemporary ABA
- Integrative/Combined
- Developmentally Based/Naturalistic/SP-D, TDAs
- Therapy based
- Family based
- Other
ABA Intervention practices

<table>
<thead>
<tr>
<th>Practice/strategy</th>
<th>Communication</th>
<th>Socialisation</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>0-6</td>
<td>6-11</td>
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<tr>
<td>Differential Reinforcement</td>
<td>x</td>
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<td>Discrete Trial Training</td>
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<td>Prompting</td>
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<td>Reinforcement</td>
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<td>Task Analysis</td>
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<td>Time Delay</td>
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Adapted from Odom, Hume, Boyd, & Stabel (2012).
Pivotal Response Training

Key techniques involve:

• reinforcers that are directly related to the child’s response
• incorporating child choice into the teaching episodes
• interspersing previously acquired skills with new skills
• reinforcing child attempts
• using activities and materials that are highly motivating to the child
• sharing control of the interactions with children
• taking turns with the child, to share control and also to model new behaviours
Developmental Social-Pragmatic Model (DSP)

- Emphasis on communication spontaneity, initiation.
- Follow the child’s focus of attention and motivations.
- Build on the child’s current communicative repertoire, (even if unconventional)
- Uses natural activities/events as contexts to support the development of the child’s communicative abilities (Wetherby & Prizant, 2000)
The DSP approach characterised by:

- Enhancing spontaneous social communication; flexible, varied, motivating activities.
- Develop multimodal communicative repertoires (e.g. speech, song, gestures) provide range of expressive strategies.
- Shared control, turn taking, reciprocity.
- Relate communicative behaviour to context.
- Acknowledge unconventional means or behaviours as communication.
The SCERTS™ model is:

• **Child-centred:** Each child's individual patterns of strength and needs guide program planning, including selection of goals and strategies.

• **Family-centred:** Family members are included as collaborators and partners in all efforts, and plans are developed to support families.

• **Developmentally grounded:** The model and its curriculum is based on extensive research on the development of children with and without disabilities.

• **Activity-based:** Everyday activities and routines are the primary contexts in which children learn, and in which progress is measured.

• **Relationship-based:** The development of trusting and secure relationships with adult partners and other children provides the foundation for enhancing social communication and emotional regulation capacities.
Parent implemented interventions.

- Hanen (MTW)
- Early Bird
- RDI
Hanen MTW: For children with ASD and related social communication difficulties

- Family-focused early language intervention for young children with ASD and related social communication difficulties.
- Goal to enable parents to become their child’s primary language facilitator.
- Goal to build positive interactions between parent and child, reducing frustration for both and increasing the child’s opportunities to learn to communicate in real life situations.
Theoretical basis for autism focus

• *More Than Words* also recognizes the unique needs of children with autism spectrum disorder
• Focus on highlighting the importance of affect, predictability, structure and the use of visual supports to enhance learning in children with ASD
• Also helps parents understand their child’s sensory preferences and sensitivities so these can be accommodated during everyday interactions.
Program philosophy

Your child will learn to communicate when he or she:
- Pays attention to you
- Finds enjoyment in two-way communication
- Copies the things you do and say
- Understands what others say
- Interacts with other people
- Has fun!
- Practices what he or she learns often
- Has structure, repetition and predictability in his or her life
What differentiates programs based on learning from each other?

- skill versus relationship development focus
- adult directed versus child centered
- emphasis on child initiation or child response
- naturalness/social context of learning context,
- generalisation to other environments,
- utilisation of child strengths,
- treatment of challenging behaviour,
- culture of autism versus cure/recovery
Discrete Trial Procedure

Instructions include eliciting eye contact from the child in response to his name:

*Sit in a chair across from the child. State the child’s name and simultaneously prompt eye contact by bringing an edible reinforcer or small tangible reinforcer to your eye level. When the child makes eye contact with you for 1 second, immediately give reinforcer to the child. Over sessions, say the child’s name and delay your prompt.... Throughout teaching sessions, provide positive reinforcement if child looks at you spontaneously.... Repeat procedure but sustain eye contact for 5 seconds. (Maurice et al, 1996, p.74)*
If she’s playing with a ball, hold the ball in your mouth so she’ll have to take it from you. Make a funny noise as she grabs it, then open your mouth and gesture for her to put it back. Make another funny noise when she puts it back in. Make “ball in, ball out” a funny cooperative game... If she is mushing food and putting it in her mouth, put some of the mushed food on your face. Smile and laugh and call her name, then encourage her to take the food from your face as well as from the table. (Greenspan & Wieder, 1998, p142)
Strongly behavioural

DT-TB, e.g. Lovaas/CARD

Contemporary ABA, e.g. NLP, ILT, PRT, enhanced milieu, PBS

Combined TEACCH LEAP

Combined Hanen MTW, SCERTS, Early Bird,

Entirely relationship

SP-D, e.g. Floortime/Theraplay,

RDI
Strongly behavioural

DT-TB, e.g. Lovaas/CARD

Entirely relationship

Contemporary ABA, e.g. NLP, ILT, PRT, enhanced milieu, PBS

Combined RDI, Hanen, Combined Theraplay, TEACCH, LEAP

Sonrise

Sonrise
Treatment reviews

A review of the research to identify the most effective models of practice in early intervention for children with autism spectrum disorders (2006)
Jacqueline Roberts Ph.D.  University Of Sydney
Margot Prior Ph.D.  FAPS University Of Melbourne

Plus update, recently submitted to FaHCSIA:
Good practice principles: How

- Individualised Assessment for Intervention Planning (Knowledge of ASD)
- Individualised programming based on strengths and needs
- Individual Plan (IP)
- Functional life span approach
- Review, evaluation and adjustment of program (Data based decision making)
- Family centred practice/child centred, child voice
- Collaboration with other professionals
Autism Specific good practice……What?

Key effective elements:

• Relevant autism specific program content
• Highly supportive teaching environment
• Systematic instruction
• Generalisation strategies
• Predictability and routine
• Functional approach to problem behaviour
• Curriculum/hidden curriculum adaptations and adjustment
• Transition support
• Family support
• Environmental management

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And

• Use of visual supports
• Across domains: Holistic multidisciplinary collaborative approach
• Plus some recommend:
  - Inclusion of typically developing peers
  - Promotion of independent functioning
  - Incorporation of obsessions and rituals
Evidence Based Practice - EPB

Outcomes for child, family and community

Research into effectiveness of intervention: Empirical Evidence

Knowledge of good practice
Knowledge of ASD
Data based decision making

Context
Characteristics: Individual
family and community

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Not all evidence is equal

Cochrane review

Systematic review

Randomised controlled trial

Single study design, case studies

Expert opinion

Anecdotes, internet chat room stories, tabloid TV
Evaluating the evidence

Be cautious if evidence relies heavily on anecdotal information or testimonials.
Making Informed decisions - tips

• check facts and figures
• popularity ≠ evidence
• who were the subjects?
Evaluating the evidence

Be cautious if:

• research was conducted by the people who have designed the treatment approach or those that stand to profit from its success

• approaches claim they can cure autism

• research does not provide long-term follow-up
Questions to ask

1. Do no harm
   - Does the intervention compromise the individual’s physical/emotional/social behavioural status?

2. Costs
   - What are the financial, social and emotional costs to the family?
   - Costs of lost opportunities?

3. Benefits
   - Is there evidence of the benefit?
   - Anecdotal or measurable?
   - Do benefits outweigh costs/risks?

4. Duration
   - Is this change/intervention required for a short period or forever?

5. Plausibility
   - Is there a rational basis for the treatment?

6. Practicality
   - Is there a protocol?
   - Can the change/intervention be implemented and sustained?

7. Content
   - Are you aware of what changes are being made?
   - Do you know what is in the product or what the course of intervention entails?
In summary...

Evidence

Type 1 evidence, directly evaluating the intervention

Evidence

Type 2 evidence, ensuring the elements of the intervention are supported by evidence

Evidence

Good practice and key effective elements
THE AUTISM CENTRE OF EXCELLENCE PRESENTS:

EMPOWERING PARENTS TO GUIDE THEIR CHILD’S EDUCATION

Two Day Workshop –
Monday & Tuesday, 14 & 15 July 2014,
9.00am-3.00pm
Working with schools to get the best outcome for your child with ASD

• Develop a vision for your child for the next 3-5 years
• Assess your child’s strengths, interests, and needs
• Establish priorities and goals for your child
• Select and engage with educators to access educational programs/strategies that have an evidence-base for individuals with ASD
• Evaluate the progress of your child and the effectiveness of programs.
• Negotiate with school professionals and other service providers to progress an overall plan for your child as they grow and develop.
• Advocate for your child and promote self-determination of your child in school and community settings.

Who should attend: This workshop is primarily for parents with children with ASD, but would also be of interest to people supporting children in school, early childhood, or community settings.

Where: Griffith University Logan Campus (University Drive, Meadowbrook)
Cost: Parent / students $195 / Professional $295 (Prices include GST, catering & resources for both days)
RSVP: Registrations close 9 July 2014
Contact: Email: ace@griffith.edu.au / Phone: 3735 5640
CRC trajectory study: contact j.roberts@griffith.edu.au