Managing Emotional and Behavioural Problems in Children with Autism Spectrum Disorders: Programs with School Trials

Associate Professor Kate Sofronoff
School of Psychology
University of Queensland
Acknowledgements
What has an Evidence-Base?

- **Behaviour therapy**
  - Applied Behaviour Analysis (Lovaas)

- **Use of visual supports**
  - Social Stories, Comic Strip Conversations (Gray)

- **Use of environmental supports**
  - Quiet spaces

- **Cognitive Behavioural Interventions**
  - Anxiety, anger management, friendship, social-emotional skills
What do Parents and Teachers Typically Report as Difficult?

- Managing challenging behaviours
  - Head banging, self harm, screaming

- Managing emotional problems
  - Anxiety, social problems, anger, depression

- Increasing independence
  - What can the child do for themselves?

- Skill building
  - Self care, tolerance, social skills

- Nurturance traps
  - It’s the disorder, he/she doesn’t understand
High Rates of Multiple Problem Areas

- Recent UK study – children in mainstream schools
- Anxiety, fears and phobias (N=188; 43.3%)
- Behavioural problems (N=201; 46.3%)
- Eating problems (N=241; 55.5%)
- Sensory Issues (N=221; 50.9%)

Evidence-Based Programs

- Programs that have been subjected to rigorous evaluation
- Programs that follow best practice guidelines for working with autism spectrum disorders
- Some of these are now taking a transdiagnostic approach
  - Taking account of other likely diagnoses or problems that will interfere with a child’s capacity to learn new skills
  - Behavioural problems in relation to new situations
  - Anxiety in relation to social interaction
  - Anger in relation to social interaction
Parents and teachers often ask for social skills

Child needs to be able to regulate emotions
  - To cope with frustration
  - To cope being told ‘not your turn’ and ‘wait’

To behave appropriately in different situations

Often working with parents first is likely to produce better results
Parenting Programs

- Aim to work collaboratively with parents to establish goals that parents want to achieve
- Acknowledge the parent as expert
- Allow parent to select strategies that will work for their family and circumstances
- Aim to empower parents
- What does this have to do with schools???
Stepping Stones Triple P

- Developed specifically for parents with a child with a developmental disability
- Targets creating a positive parent-child relationship
- Creating a positive learning environment
  - How to teach new skills
- Using assertive discipline
  - Encouraging child to learn emotion management strategies
Evidence Base


Currently

- This program is being offered **FREE** across Queensland and Victoria – many facilitators are teachers
- In NSW the *My Say* survey is currently underway
- Training of professionals will begin towards the end of this year in NSW
- Programs (levels 2 and 3) will be available via these professionals in 2015
Are you the parent or caregiver of a child with a disability?

Have your say!

Parenting a child with a disability comes with exceptional challenges. How do you know what’s best and what works? We can provide specially-tailored parenting support but we need your help.

This is your chance to tell us about your child’s experiences as well as your own. Let us know whether you’re getting enough parenting support and share with us the types of support you would like to receive.

We’ll use your views to deliver a parenting program in ways that suit families across Queensland, Victoria and New South Wales.

If you have a child with a disability, aged 2–10, go to the My Say website and help us improve parenting services for your family.

To have your say and to find out more about the program, visit www.mysay.org.au

This program is funded by the National Health and Medical Research Council, Australia.
Have your say!

If you work with kids with a disability you know, first hand, the parenting challenges families face. That’s why you and the families you work with need the best in evidence-based parenting support. Stepping Stones Triple P can provide that support but we need your help.

We’re asking professionals, like you, to tell us about the work you do, the support you need, and how we can help the families you work with.

Your views will help us deliver Stepping Stones Triple P in ways that suit the needs of professionals and parents across Queensland, Victoria and New South Wales.

Stepping Stones Triple P training is also being offered free of charge. Register your interest on the My Say website.

To have your say and to find out more about the program, visit www.mysay.org.au

This program is funded by the National Health and Medical Research Council, Australia.
Pam,

Mother of Riley, 7 years
Cognitive Behaviour Therapy for Children with ASD

Anxiety
Can CBT be used?

- Moree & Davis (2010)
  - Modification trends

- Rotheram-Fuller & MacMullen (2011)
  - Adaptations for use in schools

- Scarpa & Reyes (2011)
  - Emotion regulation strategies

- Reaven, Blakeley-Smith, Culhane-Shelburne, & Hepburn (2012)
  - Group CBT for anxiety

- Attwood & Sofronoff (2013)
  - CBT for anxiety

- Beaumont & Sofronoff (2013)
  - Social-emotional skills

- Sofronoff, Beaumont & Weiss (in press)
  - Transdiagnostic processes in ASD interventions
CBT for Anxiety

- Program developed by Tony Attwood
  - Exploring Feelings

- Multiple Randomised Controlled Trials
  - Trial in Newcastle, UK (McConachie et al in press)

- Six 2 hour sessions – 3 children with 2 therapists

- Original trial evaluated 3 conditions
  - Child only
  - Child + Parent
  - Waitlist

- Child + Parent condition showed best results
  - Parents also preferred to be involved
Results

- Significant improvement reported by parents on measures of anxiety
- Child + Parent group superior to Child Only group and both intervention groups superior to Treatment as Usual
- Significant increase in knowledge of how to manage anxiety by child report
- Qualitative information from parents very useful
- Some generalisation to school reported by parents
Social Worries

main effect for Time
$F_{2,78} = 13.82, p < .0001$

no main effect for Group

Time x Group Interaction
$F_{4,158} = 14.15, p < .0001$

Post hoc tests
Intervention groups showed significantly lower parent ratings between $T_1$ and $T_3$

Difference between intervention groups at $T_3$ approached significance

Both interventions different from wait-list at $T_3$
 Separation Anxiety

- main effect for Time
  - $F_{2,78}=13.69$, $p<.0001$
- main effect for Group
  - $F_{2,78}=5.24$, $p<.01$
- Time x Group Interaction
  - $F_{4,158}=10.65$, $p<.0001$
- Post hoc tests
  - Intervention groups reported significantly lower parent ratings at $T_3$
  - Difference between intervention groups at $T_3$ significant
Main effect for Time $F_{2,78} = 16.69, p < .0001$

No main effect for Group

Time x Group Interaction $F_{4,156} = 10.13, p < .0001$

Post hoc tests of simple interaction effects

Both intervention groups significantly lower at T₂ and T₃ compared with T₁

Intervention groups reported significantly lower parent ratings compared with WL at T₃

No difference between intervention group 1 and control at T₂
James and the Maths Test

- **main effect for Time**
  \[ F_{2,78} = 104.76, \ p < .0001 \]

- **main effect for Group**
  \[ F_{2,78} = 38.19, \ p < .0001 \]

- **Time x Group Interaction** \[ F_{4,158} = 28.31, \ p < .0001 \]

- **Post hoc tests**
  - Both intervention groups significantly higher at \( T_2 \) and \( T_3 \) compared with \( T_1 \)
  - Intervention groups significantly different from waitlist at \( T_2 \) and \( T_3 \)
  - Intervention groups significantly different from each other at \( T_2 \) and \( T_3 \)
Conclusions

- Intervention effective in changing some behaviours for some children
- Parents very positive about the groups
- Many children made friends
- Many parents formed support groups
- Greater parent involvement led to better child outcomes
- Many changes not captured by standard measures
- Population likely to benefit from ongoing contact
- About 55% reported change in the school setting as well as at home
Anger Management


- **Randomised controlled trial**
- **52 children aged 10-14 years (mean age 10.79)**
  - 2 children did not meet criteria
  - 5 families withdrew after assignment to wait-list
  - 45 participated
- **Boys in Intervention 23, girls 1 (wait-List 20 boys, 1 girl)**
- **All children diagnosed ASD by paediatrician**
  - Diagnosis checked by semi-structured interview with parents
  - Childhood Asperger Syndrome Test (CAST; Scott, Baron-Cohen et al.)
- **No children excluded on basis of co-morbid disorder**
  - ADHD 11 (46%) in Intervention and 9 (43%) in wait-list
Parent Reports of Anger

Intervention vs. Wait-list

- **Pre**: Yellow
- **Post**: Blue
- **Follow-up**: Red

- **Intervention**: Pre > Post > Follow-up
- **Wait-list**: Pre > Post > Follow-up
Frustration

Intervention
Wait-list

pre
post
follow-up
Parent Monitoring of Anger

Intervention
Wait-list

pre
post
follow-up
Dylan is Being Teased

![Graph showing intervention and wait-list pre, post, and follow-up comparisons.]

- **Intervention**
  - Pre: Higher value
  - Post: Lower value
  - Follow-up: Lower value

- **Wait-list**
  - Pre: Moderate value
  - Post: Lower value
  - Follow-up: Lower value
Qualitative Teacher Reports

18 teachers were able to be contacted by phone for a brief interview and were asked a series of questions.

Firstly they were asked if they knew that the child had completed the program and if so who told them about this.
- All had heard from the child’s mother.

In response to ‘have you noticed any change in the child’s ability to manage anger since completing the program?’ 16 (88%) responded “YES” and 2 (12%) said “NO”.

3 themes emerged from the YES responders:
- All were aware of the child trying to use strategies to manage anger at least sometimes.
- 19% (3) said the child would ask to withdraw when feeling angry.
- 56% (9) said the child now had a language with which to talk about anger and this helped reduce the number of outbursts.
Parents and Teachers often ask for Social Skills

- Can we teach social interaction skills in the context of anxiety issues and emotion regulation issues?
- Is there a logical progression of programs?
  - Parenting
  - Emotion recognition
  - Anxiety/emotion regulation (anger, affection)
  - Social interaction
  - Depression
CBT for Social Emotional Skills


- Tailored to specific needs of children with HFASD
- Evidence base
- Fun and engaging
  - Computer game
  - Board game
  - Foam darts game
  - Walkie talkie game
  - Card games
- Visual supports
Computer Game

- Emotion regulation and social skills
  - Anger management
  - Anxiety management
  - Apologizing
  - Bullying and teasing
  - Coping with mistakes
  - Meeting new people
  - Playing with others
  - Talking to others
  - Team work
  - Trying new things
  - Winning and losing
Conclusions and Future Research

- Program appeared to be effective in improving children’s emotion regulation and social skills in original RCT.

Completed Trials
- Autism Spectrum Australia (Renae Beaumont tomorrow)
- Mainstream schools trial (paper in press)
- Parent delivered (current trial)

Future Trials
- Whole classroom program (CRC)
- Adolescent program – school-based (CRC)
- Adult program (CRC)
QUESTIONS?

kate@psy.uq.edu.au