Teaching Social-Emotional Skills to Children with Autism Spectrum Disorder, with and without Intellectual Disability

Presented by:
Belinda Ratcliffe (Clinical Psychologist) &
Tom Butterworth (Clinical Psychologist)
Presentation Overview

1. Background information (Tom)
2. Teaching social-emotional skills (Belinda)
   - EBSST for ASD without ID
   - EBSST for ASD with Mild ID
3. Research as example of collaboration (Belinda)
   - “EBSST in schools”
4. Future directions (Tom)
Typically Developing Children

– Social-emotional skill deficits are risk factors for emotional and behavioural disorders of childhood and adolescence (Spence, 2003).

– Children with better social skills, have better friendships
  • better friendships are protective and lead to better emotional outcomes!
Mental Health in TD Children
ASD With and Without ID

**Autism Spectrum Disorder (ASD)**
- Social-communication difficulties
- Restricted/repetitive behaviour

**Intellectual Disability (ID)**
- Cognitive impairment
- Deficits in adaptive Behaviour
- Mild ID = IQ 50-55/70

Up to 70% of DSM-IV diagnosis of ‘Autistic Disorder’ have comorbid ID.
Social-Emotional Skills in ASD


- Poor social functioning
- Less aware of others
- Solitary or limited play
- Inappropriate social behaviour
- Poor joint attention
- Poor imitation
- Difficulty understanding social norms
- Poor social problem solving
- Facial expression incongruent to the situation
- Emotional extremes or flat affect
- Difficulties with emotion perception
- Difficulties with affective sharing
- Theory of mind deficits
Social–emotional skills in ID

- Difficulties with social judgement;
- Difficulties with self-management of behavioural, emotions and/or interpersonal relationships;
- Difficulties in accurately perceiving peers’ social cues;
- Immature social communication and conversation;
- Language more concrete and immature;
- Difficulties regulating emotion and behaviour in age-appropriate fashion;
- Limited understanding of risk in social situations;
- Social judgement may be immature for age, and the person is at risk of being manipulated by others (gullibility).
Mental Health

• Very high prevalence!

**ASD**
  – **Up to 70%** have ASD + a co-occurring mental health disorder

**ID**
  – **About 40%** aged 4-18 years have emotional or behavioural disorders *(Einfeld & Tonge, 1996)*

• Most common:
  – Attention-deficit/hyperactivity disorder; depressive and bipolar disorders; anxiety disorders; stereotypic motor disorder and impulse-control disorders.
Social skills & Mental Health

- Established association in typically developing children.
- Limited research for ASD/ID
  - Strong association between overall social skills and social reciprocity skills and mental health in children aged 6-13 years with ASD (with and without ID) Ratcliffe (2013)
Social & Emotional Deficits and Mental Health in ASD

Social & Behavioural Disturbance

- Emotional skills
- Social skills
- Social support

Mental Health

- Social skills
- Social reciprocity

Ratcliffe et al., 2013
Alongi, 2005; Hops, 2007
# Social-Emotional Programs

<table>
<thead>
<tr>
<th></th>
<th>Secret Agent Society</th>
<th>Stop Think Do</th>
<th>PEERS</th>
<th>Social Decision Making</th>
<th>EBSST</th>
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<tbody>
<tr>
<td>Children with ASD without ID</td>
<td>✓</td>
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<td>Children with ASD and ID</td>
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<td>Evidence-based strategies</td>
<td>✓</td>
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<tr>
<td>Based on theoretical model</td>
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<tr>
<td>Evaluated in controlled studies</td>
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Emotion-Based Social Skills Training (EBSST)

• Group based intervention aims to enhance mental health and wellbeing in kids with ASD, with and without ID, by teaching social-emotion skills

• 2 versions of EBSST for ASD:
  – No ID
  – Mild ID (world first!)
# EBSST Curriculum

<table>
<thead>
<tr>
<th>Module</th>
<th>Children</th>
<th>Parents &amp; Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identifying emotions</td>
<td>Psychoeducation Emotion coaching Emotionally attuned parenting</td>
</tr>
<tr>
<td>2</td>
<td>Emotions problem solving Understanding others’ emotions</td>
<td>Emotional problem solving Promoting theory of mind</td>
</tr>
<tr>
<td>3</td>
<td>Managing emotions</td>
<td>Managing emotions</td>
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</tbody>
</table>

**Theory driven:**
Emotional Competence, Emotional Development, Emotional Intelligence
Session Format

<table>
<thead>
<tr>
<th>Mod 1</th>
<th>Child: 5 sessions</th>
<th>Parent: 2 sessions</th>
<th>Educators &amp; Support Workers: 2 sessions</th>
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</thead>
<tbody>
<tr>
<td>Mod 2</td>
<td>Child: 5 sessions</td>
<td>Parent: 2 sessions</td>
<td>Educators &amp; Support Workers: 2 sessions</td>
</tr>
<tr>
<td>Mod 3</td>
<td>Child: 5 sessions</td>
<td>Parent: 2 sessions</td>
<td>Educators &amp; Support Workers: 2 sessions</td>
</tr>
<tr>
<td>Booster</td>
<td>Child: 1 session</td>
<td>Parent: 1 session</td>
<td>Educators &amp; Support Workers: 1 session</td>
</tr>
</tbody>
</table>

Facilitator: 2 days

Training: supplementary
Curriculum Considerations

Information Processing

- Visual cues
- Video modeling
- Written and video social stories
- Comic strip conversations
- Live modeling
- Repetition of key points using varied teaching methods
- Structured breaks and games
- Modify pace

Generalisation

- Practice through home-based tasks
- Parent and teacher programs, handouts, and visual cues
- Promote parent and teacher self-evaluation and monitoring
- Use of rewards to motivate
- Practice through role plays
- Breaks between modules
Session Schedule

- Take Away Task
- Social Story
- Watch Video
- Workbook
- Break
- Game
- Take Away Task
- Reward Chart
<table>
<thead>
<tr>
<th>Behavior</th>
<th>Rewards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speak in a medium voice</td>
<td></td>
</tr>
<tr>
<td>Keep Hands and feet to yourself</td>
<td></td>
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<tr>
<td>One person talking at a time</td>
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</table>

Name: Jack
Module 1: Identifying Emotions

The Feeling Sad Strength Bar

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</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Very Sad</td>
<td>Sad</td>
<td>OK</td>
<td>Happy</td>
<td>Very Happy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FEELING SAD

- 3: very sad
- 2: sad
- 1: a little sad
- 0: okay
Identifying Emotions

Feeling sad strength bar

The Feeling Sad Strength Bar

- 3 - very sad
- 2 - sad
- 1 - a little sad
- 0 - okay
Identifying Emotions

The Feeling Sad Strength Bar

3 very sad
2 sad
1 a little sad
0 okay
Session 4: Take Away Task
Draw or write or stick a picture of a situation that made you feel worried during the week. Draw an arrow to the number on the strength bar.

The Feeling Worried Strength Bar

<table>
<thead>
<tr>
<th>3</th>
<th>very worried</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>worried</td>
</tr>
<tr>
<td>1</td>
<td>a little worried</td>
</tr>
<tr>
<td>0</td>
<td>okay</td>
</tr>
</tbody>
</table>

Waiting for Jack's bus. Can't go home. Says mum can't take Meto guides.
Module 2: Others’ Feelings

Nutella and vegemite
Module 2: Others’ Feelings

What happened? (write or draw it)

Feeling for: Vicky
Happy  Sad  Worried  Angry  OK

What body sign shows us the feeling? (circle it)
Face  Body  Voice

Why do they feel this way?

Vicky doesn’t like Vegemite

Feeling for: Donna
Happy  Sad  Worried  Angry  OK

What body sign shows us the feeling? (circle it)
Face  Body  Voice

Why do they feel this way?

Donna played a trick that was funny
Module 2: Problem Solving worksheet
Module 2: Problem Solving worksheet
Module 3: Managing Emotions

This week I felt angry when: _______________________

I thought:

I FELT ANGRY

How angry did I feel on the strength bar?

Did I use the “DANGER ZONE” steps to help myself calm down? YES / NO

1. Take 3 deep breaths
2. Count to 10
3. Think calm thoughts

Did the steps work to help me calm down? YES / NO

What other ideas from my “FEELINGS CONTROL KIT” did I use to make myself feel better?

☐ Using my words
☐ Using my imagination
☐ Looking in my “HAPPY BAG”
☐ Doing an activity I enjoy
☐ Thinking about things I am good at, or doing something I am good at
☐ Doing the PEACE CAR exercise
☐ Doing my relaxation exercise
☐ Changing my unhelpful thoughts to helpful thoughts
Module 3: Managing Emotions

My Feelings Control Kit

- Happy Bag
- Slow breathing
- Do something I enjoy
- Problem solving
- Talk to someone about how I feel
- Use my words
Module 3: Managing Emotions

Happy Bag – example
# EBSST Research Development

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<td><strong>Pilot Study</strong>&lt;br&gt;HFASD&amp;AS outpatients</td>
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<td><strong>RCT</strong>&lt;br&gt;HFASD&amp;AS outpatients</td>
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<td><strong>Pilot Study</strong>&lt;br&gt;ASD&amp;Mild ID outpatients</td>
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<td><strong>Controlled Trial</strong>&lt;br&gt;HFASD&amp;AS schools</td>
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<tr>
<td><strong>Pilot Study</strong>&lt;br&gt;EDBD whole school</td>
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AIM

To evaluate in a controlled study the effectiveness of school counsellors delivering EBSST in schools to children with Autism with and without ID, their teachers and parents, when comparing a treatment to a delayed treatment group.
## Participants

<table>
<thead>
<tr>
<th></th>
<th>ASD without ID</th>
<th>ASD with ID</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Children (8-12 yrs)</strong></td>
<td>217</td>
<td>114</td>
<td>331</td>
</tr>
<tr>
<td><strong>Parents &amp; Teachers</strong></td>
<td>217</td>
<td>114</td>
<td>331</td>
</tr>
<tr>
<td><strong>School Counsellors</strong></td>
<td>41</td>
<td>14</td>
<td>55</td>
</tr>
<tr>
<td><strong>Group allocation</strong></td>
<td>Treatment: 106</td>
<td>Treatment: 55</td>
<td>Treatment: 161</td>
</tr>
<tr>
<td></td>
<td>Delayed treatment: 111</td>
<td>Delayed treatment: 59</td>
<td>Delayed treatment: 170</td>
</tr>
</tbody>
</table>
Measures

• **Emotions Competence**
  – Emotions Development Questionnaire; Wong, Lopes & Heriot, 2009

• **Social Skills**
  – Social Skills Improvement System, Gresham & Elliott, 2008

• **Mental Health**
  – Developmental Behaviour Checklist, Einfeld & Tonge, 1992; Strengths & Difficulties Questionnaire, Goodman, 1997)

• Parent and teacher reports for each measure
Emotional Competence

PARENT

ASD with ID

ASD without ID

TEACHER

High scores = Better skills

\[ \eta^2 = .11 \]

\[ \eta^2 = .18 \]

\[ \eta^2 = .51 \]
Social Skills

PARENT

ASD with ID

ASD without ID

High scores = Better skills

TEACHER

Significant difference between groups if control for pre-treatment mental health
Mental Health

PARENT

ASD with ID

ASD without ID

TEACHER

Clinically significant improvement – clinical to non-clinical range

Low scores = Better mental health
RESULTS - Qualitative

- enjoyable
- friends for the first time
- thorough training
- best program ever done
- results exceeded expectations
- unique
- evidence based
- multimedia
- excellent
- whole school
Discussion & Conclusions

ASD without ID

Journal publication:

- Statistically significant improvements in teacher reported emotional competence. Gains maintained 6-months post-intervention. Large effect sizes.
- Clinically significant improvements in teacher-reported mental health.
- Controlling for mental health, significant improvements in teacher-reported social skills.
Discussion & Conclusions

ASD and Mild ID

1. First controlled study of a theoretically-based intervention developing emotion skills in children with ASD & ID.

2. Statistically significant improvements in teacher reported emotional competence, large effect size.

3. Positive trends
   - emotional competence (parent report)
   - social skills (parent & teacher report)
   - mental health (parent & teacher report)
Discussion & Conclusions

Research Limitations

• Non-randomised
• Measurement sensitivity
• Intervention fidelity in real world settings
• Differences between teachers and parents?
  – Generalisability, peer modelling, intensity of training, different contexts.
Vision

Our vision is to make EBSST available to every child with ASD/ID in Australia!
Future Directions

• Digitilisation:
  – App
  – Interactive whiteboard
  – In-person vs. online facilitator training

• Wide-scale publication and distribution
  – Stay tuned in 2015/2016!!

• EDQ as an outcome measure

• Collate App for data collection
Clinical Implementation

-Settings – school, hospital outpatient, private practice, NGO.
-Modes of delivery – groups, family groups, individual.
-Collaborate whenever possible!
Emotion-based Social Skills Training

www.ebsst.com.au

belinda.ratcliffe@health.nsw.gov.au

thomas.butterworth@health.nsw.gov.au