Chapter 17

Developing Emotion-Based Social Skills In Children With Autism Spectrum Disorder And Intellectual Disability

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Introduction

Autism Spectrum Disorder (ASD) is a pervasive developmental disorder characterised by core difficulties in social and communication skills, as well as restricted and repetitive behaviour. ASD is commonly associated with intellectual disability. Children with intellectual disability have delayed social and emotional skills, generally commensurate with their overall skills. However, children with intellectual disability and co-morbid ASD have deficits in social and emotional skills that are more than expected given their overall abilities. These social and emotional skill deficits in children with ASD may be one of several contributing risk factors to the very high prevalence of mental health issues in this population. Thus, interventions to promote social and emotional skills may provide an avenue to promote the mental health and wellbeing of children with ASD and intellectual disability. This chapter outlines current research and resources in the area of social and emotional skills.

Emotion-Based Social Skills Training (EBBST) (Wong, Lopes, & Heriot, 2004) was developed to enhance the mental health and wellbeing of children with ASD (without intellectual disability) by developing social and emotional skills. EBSST was modified to meet the additional learning needs of children with ASD and co morbid intellectual disability. The implementation of *EBSST for Children with ASD and Mild Intellectual Disability* (Ratcliffe, Grahame, & Wong, 2010) is presented through a case study of ‘Luke’. This case highlights that existing clinical resources can be modified to meet the learning needs of children with intellectual disability. Moreover, the case suggests that child mental health and wellbeing can be promoted by means of clinical development of social and emotional skills.

Autism Spectrum Disorders And Intellectual Disability

Autism Spectrum Disorders (ASDs) fall under the broad umbrella of Pervasive Developmental Disorders. The three Autism Spectrum Disorders include Autistic Disorder, Asperger's Disorder, and Pervasive Developmental Disorder, Not Otherwise Specified (PDDNOS / Atypical Autism). Children with ASDs have difficulties with the quality of their social and communication skills, as well as difficulties with restricted, repetitive, and stereotyped patterns of behaviour, interests, and activities (American Psychiatric Association, 2000). Each of the three core features in the 'triad of impairment' can be represented on a continuum of severity. For example, an individual with a severe level of impairment in social skills will not necessarily have the same level of impairment in communication and/or behaviour skills. This implies there is considerable variability in the presentation of children with ASD.

Current estimates are that ASD occurs in one of 150 children (Matson & Shoemaker, 2009). Approximately 50–70% of all children with ASD have an intellectual disability.[1] Of those children with an intellectual disability, approximately 30% have mild to moderate intellectual disability, and 40% have severe to profound intellectual disability (Fombonne, 2003). In general, research suggests that childhood IQ level is negatively correlated with overall negative adult outcome (Billstedt, Gillberg, & Gillberg, 2005). This suggests that children with ASD and intellectual disability represent a particularly vulnerable and important population to consider in clinical treatment.

[1] Intellectual disability refers to significantly sub-average intellectual functioning, as measured by an IQ score less than 70 on individually administered tests of intelligence as well as concurrent deficits in adaptive behaviour (American Psychiatric Association, 2000).

Typically developing children tend to make progress in their social and emotional skills in an ordered sequence, with simple skills that develop in early life, becoming more elaborated, sophisticated, and established over time. Although there is no universal timetable for the acquisition of social or emotional skills, Table 17.1 and Table 17.2 respectively provide a guideline for the sequence of social and emotional skills in typically developing children.

[Insert Table 17.1 and 17.2 here]

Children with intellectual disability without autism, have delays in social and emotional skills, *commensurate* with other areas of their development and behaviour (Kraijer, 2000). For example, a ten year old child with an intellectual disability who is functioning cognitively at the level of about a six year old child, would be likely to have social and emotional skills also at the level of about a six year old. In contrast, children with ASD have delays in social and emotional skills *more than expected* given their development in other areas (Bolte & Poustka, 2002; Kraijer, 2000). Thus, for example, a ten year old child with ASD and intellectual disability who is functioning cognitively at the level of about a six year old, would be likely to have social and emotional skills at the level of about a two to three year old.

The pronounced difficulties in social and emotional skills in children with ASD can manifest in a variety of ways depending on the individual presentation of the child. Social skill excesses and deficits in ASD have been studied much more extensively in the empirical literature (see for example, Matson & Wilkins, 2007) than emotional skills.

However, in general, empirical research and clinical experience suggests that children with ASD have social and emotional skills that are delayed and disordered, and can often be thought of as being more consistent with the skills of a young child or toddler. For example, in the social domain, children with ASD may tend to:

- Show less awareness of others;
- Engage in solitary or limited play;
- Prefer their own company;
- Appear awkward and unsure;
- Lack motivation to interact socially with others;
- Show interest in younger or older children, but not same-aged peers;
- Experience difficulty understanding social norms; and
- Have poor social problem solving.

Similarly, in the emotional domain, children with ASD may have difficulties with:

- Understanding their own emotions;
- Showing facial expressions congruent to the situation;
- Attending to others' emotional communication;
- Imitating others' emotions;
- Difficulty inferring how another person feels;
- Displaying emotional extremes or flat affect; and
- Managing their emotions

There is a high prevalence of mental health issues in children with intellectual disability. For example, Einfeld and Tonge (1996b) found that 40.7% of Australian 4-18 year olds with intellectual disability have 'emotional or behavioral disorders.' However,

children with ASD experience significantly higher levels of psychopathology than young people with intellectual disability without comorbid ASD (Brereton, Tonge, & Einfeld, 2006; Gillberg & Billstedt, 2000). Studies involving community samples (unselected for psychiatric disorders) of children with ASD have found approximately 72-73% of children have at least one other mental health issue in addition to ASD (see for example, Brereton, Tonge, & Einfeld, 2006; Leyfer et al., 2006).

One challenge in this area of research is that assessment and diagnosis of these comorbid mental health issues in intellectual disability is complex. Despite this, there is evidence that children with ASD experience significantly higher than expected levels of both internalising and externalising disorders than the general population of children with intellectual disability. For example, children with ASD are at risk of internalising disorders including co-morbid anxiety or fears (Bellini, 2003; Brereton, Tonge, & Einfeld, 2006; Leyfer et al., 2006), obsessive compulsive disorder (Leyfer et al., 2006; McDougle, et al., 1995), and mood disorders (Brereton, Tonge, & Einfeld, 2006; Leyfer et al., 2006; Ghaziuddin, Ghaziuddin, & Greden, 2002). Children with ASD are also at risk of externalising disorders including Attention Deficit Hyperactivity Disorder (ADHD) (Brereton, Tonge, & Einfeld, 2006; Goldstein & Schwebach 2004) and challenging behaviour (Murphy, Healy, & Leader, 2009).

Research examining possible reasons for the high levels of co morbid mental health issues in children with ASD is sparse. However, research from typically developing children suggests poor social skills and poor social supports may be a contributing risk factor to the development of mental health issues (Spence, 2003). Thus, it is plausible that social and emotional skills deficits may be one of several risk factors for the development

and maintenance of emotional and behavioural disorders in children with ASD. Interventions to provide social and emotional skills may provide one of several points of intervention to promote mental health and well-being.

Interventions To Promote Social And Emotional Skills

Research And Published Resources

Existing empirical research in the area of interventions to promote social and emotional skills in ASD has focused almost exclusively on social skills (for reviews see Scattone, 2007; Matson, Matson, & Rivet, 2007; McConnell, 2002). In general, these reviews suggest that social skills interventions have been successful in producing positive changes in the social behaviour of children with ASD. However, similar to the developmental disability research, there are significant methodological limitations inherent in the ASD literature. For example, participant samples are often small and heterogeneous in regard to age, gender, co-morbid issues, and level of disability. There is a clear bias to conduct social skills interventions with verbal children without intellectual disability. Studies often fail to demonstrate generalisability of skills to the 'real' world. Moreover, where interventions have been found to be successful, research often isn't published in sufficient detail to replicate key components of the intervention, and treatment manuals are rarely published for dissemination to clinicians in the field (McConnell, 2002). To date, no empirical studies have explicitly examined the impact of social skills intervention on mental health and wellbeing in children with ASD and intellectual disability.

There are several published clinical resources available for clinicians to help promote social and emotional skills in children with ASD. However in general, these

resources often lack the empirical literature to support their use. There are several other problematic issues with the published curricula at this time. For example, current resources tend to be aimed at children with ASD without intellectual disability (i.e., High Functioning Autism and Asperger's Disorder). They tend to incorporate a 'bits and pieces' approach to teaching social and/or emotional skills, rather than being presented in a coherent developmentally oriented framework. Parent and/or teacher training is often not included in resource packages, and if it is included, is often done as a handout only, which suggests a lack of attention to supporting children to further develop and generalise skills in 'untrained' settings.

Despite these limitations, current published resources can be clinically helpful and provide a basis for developing social and/or emotional skills interventions. Table 17.3 provides a sample of published resources to promote the development of social and emotional skills and suggestions for possible clinical applications in children with ASD and intellectual disability. Clinicians must utilise these and other resources critically, considering their appropriateness for individual children. Programs may need to be modified to meet individual learning needs, particularly if children have a co-morbid disability, behavioural or mental health issues.

[Insert Table 17.3 here]

Emotion Based Social Skills

Emotion-Based Social Skills Training (EBSST) (Wong, Lopes, & Heriot, 2004) is one program which aims to bridge the gap between empirical literature and published resources.

EBSST was originally designed to meet the needs of upper primary school aged children with High Functioning Autism and Asperger's Disorder (Wong, Lopes & Heriot, 2004). In particular, this intervention was designed to enhance the mental health and wellbeing of children with ASD and their parents by developing social and emotional skills.

EBSST assumes that emotional skills are embedded in social interactions, thus it is emotions in the context of social situations which are targeted, rather than pragmatic social skills. For example, a typically developing eight year old child would have the ability to perceive emotions, be developing insight into the feelings and thoughts of others, and have some cognitive strategies to regulate their own emotions. The child would use these abilities to regulate their social interactions. However, an eight year old child with ASD may be taught the skills of conversation initiations but lack basic insight into their own emotions, emotions of others, and emotional regulation, and thus lack the ability to engage in appropriate social interactions. Thus, EBSST draws on theories of emotional development, as well as emotional intelligence (Mayer, Salovey, & Caruso, 2000), to offer a specific social skills intervention, that also considers the level of emotional development of the child with ASD. EBSST has been evaluated in a pilot study and is currently in a randomised control trial (Wong & Heriot, 2009). To date, findings are suggestive that EBSST is clinically effective.

Given the high level of comorbid intellectual disability in children with ASD, and the high risk of mental health issues in this population, EBBST was adapted to meet the learning needs of children with ASD and mild intellectual disability. *EBBST for Children with ASD and Mild Intellectual Disability* (Ratcliffe, Grahame, & Wong, 2010) also aimed to enhance mental health and wellbeing in children (and their parents) by developing social

and emotional skills. An overview of the *EBBST for Children with ASD and Mild Intellectual Disability* (Ratcliffe, Grahame, & Wong, 2010) curriculum is outlined in Table 17.4 below. A pilot of the program was conducted in 2008 where groups of up to six children were seen for three modules (each consisting of five sessions), with breaks in between modules. Parent sessions were held concurrently to child sessions.

[Insert Table 17.4 here]

To modify EBSST (Wong, Lopes, & Heriot, 2004), the individual learning needs of upper primary school aged children with ASD and comorbid mild intellectual disability were considered. In terms of teaching content, developmentally appropriate emotional skills were targeted, with greater emphasis placed on targeting and consolidating early to middle childhood emotional skills. Teaching methods were also tailored to support children's cognitive and language abilities. Thus, modelling and visual supports or augmentative and alternative communication systems (such as pictures/line drawings, video social stories, and video story movies) were used to supplement verbal language wherever possible.

The pace of information delivery was slowed to allow for children's processing capacity. Information was also kept concrete and repetition of key learning points was provided through presentation of the same information using a variety of teaching methods (rather than the same information presented repetitively in the same way). Further detail regarding the teaching methods employed in this program is outlined in the case study below. Also in keeping with a developmentally oriented intervention, structured breaks, and games were utilised to increase children's motivation and concentration.

Case Study

Luke was a 10 year old boy with a confirmed diagnosis of Autistic Disorder using the Autism Diagnostic Observation Schedule (ADOS) (Lord, Rutter, DiLavore, & Risi, 1999) and Autism Diagnostic Interview – Revised (ADI-R) (Rutter, LeCouteur, & Lord, 2003). Luke also had a mild intellectual disability confirmed using the Wechsler Intelligence Scale for Children – Fourth Edition (WISC-IV) (Wechsler, 2003) and the Adaptive Behaviour Assessment System – Second Edition (ABAS-II) (Harrison & Oakland, 2003). Luke was currently enrolled in an 'IM' class (for students for mild intellectual disability) in a NSW Department of Education primary school. Luke lived at home with both of his parents, and his 7 year old brother. His mother was concerned that Luke was a 'worrier' and didn't cope well with change. Luke also had difficulty 'reading' social situations and his mother felt that he was often socially inappropriate. Luke's teacher reported that he was a 'loner' at school, preferring his own company.

Luke was enrolled in a pilot study in 2008 for the *EBSST for Children with ASD and Mild Intellectual Disability* (Ratcliffe, Grahame, & Wong, 2010) in an outpatient setting, along with five other children with similar presenting issues. His mother attended concurrent parent sessions. Pre-intervention assessment of social skills using the Social Responsiveness Scale (SRS—formerly known as the Social *Reciprocity* Scale; Constantino, 2002) indicated an overall moderate impairment in social skills as indicated in parent and teacher reports. The parent and teacher reports also noted that Luke presented with significantly elevated emotional and behavioural issues, as measured by the Developmental Behaviour Checklist (DBC) (Einfeld & Tonge, 1992).

EBSST for Children with ASD and Mild Intellectual Disability (Ratcliffe, Grahame, & Wong, 2010) employs a uniform teaching framework for each session within modules that includes four key teaching elements. The key teaching elements and some samples of Luke's work in a session on feeling 'worried' from Module 1 (understanding own emotions) is outlined below.

Key Teaching Element 1: Provide A Visual Worksheet To Support Skills Development

Module 1 of the training focused on teaching children to understand the four primary emotions: happy, sad, worried, and angry. Children were taught to link social situations with the different feelings that they might have in these situations. They were also taught to rate the intensity of their feelings. Each feeling was the focus of one session within the module. A 'feelings strength bar' visual worksheet was developed for each of the four feelings. Note that the 'feeling worried strength bar' worksheet in Figure 17.1 below was clear and concrete, incorporating pictures as well as words and colour coding to support the learning needs of a child with intellectual disability.

[Insert Figure 17.1 here]

Key Teaching Element 2: Teach The Skill Using Visual Supports

The feeling 'worried' and the 'feeling worried strength bar' were introduced using a DVD social story with the following script,

> *There are lots of different things that make me feel worried. Sometimes I feel okay. Other times I feel a little worried. Sometimes I feel worried. Other times I feel very*

> *worried. We can use a strength bar to describe how strong our feelings are in different situations. Let's practice using the Feeling Worried Strength Bar in different situations* (Ratcliffe, Grahame, & Wong, 2010; Youth work, Module 1, p. 18).

Children then watched a video story movie showing an actor 'Adam' in different situations that made him feel different intensities of worried. For example,

- Adam feels OK when his friend is running late;
- Adam feels a little worried when he got stuck on his homework;
- Adam feels worried when he spilt something on his shirt; and
- Adam feels very worried when he thinks about meeting new people.

Following each scene, the children watched Adam while he modelled labelling his feeling, and the intensity of his feeling on the feeling worried strength bar. DVD video social stories, story movies, and modelling were use extensively throughout the intervention to introduce and teach emotion-based social skills. Luke frequently reported that the 'best thing' about the group was watching the Adam DVDs.

Key Teaching Element 3: Practice The Skill And Using The Visual Worksheet In The Clinic Setting

Following each of the video clips showing 'Adam' in situations that made him feel different intensities of worried, children were invited to show how worried they would feel in that situation by standing next to the number on a floor sized 'feeling worried strength bar'. Later in the session, children were asked to 'draw, write or stick a picture of something that made them feel worried', and then 'draw an arrow to how worried it makes

you on the feeling worried strength bar'. In this activity, Luke felt *worried*, a number two on the 'feeling worried strength bar', when he was 'all alone at school'.

Key Teaching Element 4: Practice The Skill And Using The Visual Worksheet In The 'Real World' Via A Take Away Task

Children were asked to complete a take away task, which involved completing a visual worksheet for a 'real life' situation during the week when they felt worried, and rate the intensity of the worried feelings on the strength bar. As shown in Figure 17.2 below, Luke felt very worried, a number three on the feeling worried strength bar when 'mum left her keys in the car and I was very late to school'.

[Insert Figure 17.2 here]

Each of these four key teaching elements was incorporated into the sessions in Module 1 (identifying emotions). Each teaching element was also incorporated into Module 2 (emotional problem solving and understanding others' emotions) and Module 3 (managing emotions).

Outcomes

Following completion of the fifteen sessions and at six month follow-up, Luke was found to have made and maintained clinically significant improvements in his social and emotional skills. Post-intervention, Luke's social skills (as rated on the Social Reciprocity Scale through parent and teacher report), were found to fall just within the normal range

expected for his age. Luke's emotional and behaviour issues had also improved, with particular clinically significant improvement reported in the anxiety domain (as measured using the Developmental Behaviour Checklist).

Qualitatively, Luke's mother reported that 'Luke has always had difficulties with language, however for the first time, he now has a language to talk to others about his feelings – because the skills were taught in a visual way'. At home, Luke's mother felt she was 'a lot better off as I know what to do to help Luke understand and manage his feelings'. She further reported that the intervention had 'rubbed off' on the family 'everyone can use the skills – we will use these skills throughout Luke's life'. At school Luke's teacher reported that Luke 'is better able to deal with other children's behaviour [and] comfort other children when they are upset'. Taken together, these findings suggest that Luke made clinically significant improvements in his emotion-based social skills that appeared to have generalised from the clinic into the home and school settings. In addition, Luke's mental health and well-being also appeared to have been enhanced.

Conclusion

Difficulties in social and emotional skills may be an important risk factor for the development of mental health issues in children with ASD and intellectual disability. Interventions to promote social and emotional skills may be an important avenue to promote the mental health and wellbeing of this population. However, there is limited empirical literature available to guide clinicians on intervention approaches and how to practically promote the social and emotional skills in children with ASD and intellectual disability that they are working with. Published resources are available; however, they often

lack an evidence base and therefore need to be used critically. *EBSST for Children with ASD and Mild Intellectual Disability* (Ratcliffe, Grahame, & Wong, 2010) is a program designed to enhance mental health and wellbeing by developing social and emotional skills. The case of 'Luke' was presented to highlight the key teaching elements of this program and the adaptations that are needed to meet the needs of children with intellectual disability. Clinicians in the field are encouraged to utilise evidence-based resources where possible, and adapt existing resources to meet the individual learning needs of children with ASD and intellectual disability to develop social and emotional skills. It is anticipated that over time, there will be great empirical evidence for the utility of social-emotional interventions in the promotion of mental health and well being in children with ASD and intellectual disability.

Table 17.1

Guideline For The Development Of Social Skills In Typically Developing Children

Age (years)	Social Skills
2	▪ Social awareness is limited ▪ Play tends to be solitary ▪ Toddlers will closely observe and copy adults and other children
3	▪ Parallel play develops: children play alongside one another, with some interaction ▪ Beginning to learn to share and take turns ▪ Beginning to learn to manage physical aggression
4-5	▪ Can approach others and ask to join in ▪ Cooperative play develops ▪ Beginning to learn to play fairly and abide by rules ▪ Start to play group games, which are more complex and organised ▪ 'Special' friendships begin to form ▪ Beginning to learn to be assertive and to ask others to stop if they are being annoying
6-8	▪ Beginning to learn to be a 'good winner' and a 'good loser' ▪ Can empathise with others in distress and offer appropriate support ▪ Conversation skills develop: listening and turn taking ▪ Negotiation skills develop: including others in decision-making, learning to decide together and make suggestions rather than boss others around

	▪ Asks an adult for support when needed ▪ Able to say 'no' to peers when appropriate
9-12	▪ Beginning to learn to speak confidently in front of a group ▪ Beginning to learn to respect the opinions of others

(Adapted from McGrath & Francey, 1991)

Table 17.2

Guideline For The Development Of Emotional Skills In Typically Developing Children

Developmental sequence	**Progression**
1. Children's emotions *emerge*	▪ The four key emotions are: - SAD (sad, blue, gloomy); - MAD (angry, irritable, furious); - BAD (guilty, anxious, fearful); - GLAD (happy, joyous, peaceful, content).
2. Children develop *emotional self-awareness*	▪ Simple declarations of emotions (e.g., 'I'm sad'). ▪ Develop more complex reasoning and greater understanding. ▪ By 5-6 years: Can hold more than one feeling at a time but in same 'emotional cluster' (e.g., happy and excited; not happy and nervous). At this point children believe opposing feelings are directed towards different things. ▪ By 8-11 years: Children understand that multiple and contrasting feelings towards the same event are feasible, but not at the same time (e.g., they can be happy and sad about the same event, but not at the same time). ▪ By 10-12 years: Children can hold two or more very different feelings towards the same object or situation simultaneously.
3. Children	▪ By 2-5 years: Identify others' positive and negative emotions

	recognise others' emotions	based on obvious physical/body cues (e.g., facial expressions), focusing on only one emotion at a time. ▪ By middle childhood: Identify others' emotions based on more subtle contextual cues (e.g., take into account situational cues). ▪ Older childhood: Identity shades of meaning and combinations of feelings, and ability to assess another person's probable mental state. ▪ Develop awareness that the same events do not always lead to the same outcomes.
4.	Children learn to *regulate* what they are feeling	▪ Children gradually learn to manage their emotions so that are not totally overwhelmed by them and so they can interact with others more effectively. ▪ Rather than a 'progression', children tend to develop strategies to regulate emotions, which expand along with the development of verbal, physical, and intellectual abilities (e.g., suppressing the expression of certain emotions; soothing one's self; seeking comfort; avoiding or ignoring certain emotionally arousing events; changing goals that have been thwarted; interpreting emotionally arousing events in alternative ways).

(Adapted from Kostelnik, Whiren, Soderman & Gregory, 2006)

Table 17.3

Sample Of Published Resources For Development Of Social And Emotional Skills And Possible Clinical Applications

Name of Program	Brief Description	Clinical applications
PALS Social Skills Program – Playing and Learning to Socialise, 3rd Edition (Cooper, Goodfellow, Muhlheim Paske & Pearson, 2007)	A social skills program for children aged 3-6 years, consisting of ten 20-30 minute lessons on the following topics: greeting, turn-taking: talking and listening; turn taking: play; sharing, asking for help, identifying feelings; empathy; overcoming fear and anxiety; managing frustration; calming down and speaking up.	▪ This program has been used in childcare settings for children with internalising and externalising problems (many of whom did have associated developmental delay in one or more areas) rather than specifically for children with intellectual disability. However, use of concrete, visual teaching materials such as role play with puppets, videotape vignettes and songs with actions suggest this resource could be easily adapted for children with intellectual disability. ▪ Teacher and parent handouts are included to promote generalisation of the 'skill of the week'.
Social Skills Activities	A program to develop social skills in primary	▪ This program is designed to be used by teachers in

For Special Children (Mannix, 1993)	school aged children. It provides 'ready-to-use' lessons with 142 reproducible activity sheets, which are split into the following different areas: 1. Accepting rules and authority at school; 2. Relating to peers; and 3. Developing positive social skills.	the classroom. However, it could be easily adapted for individual and/or group intervention. ▪ This program is probably most appropriate for children with intellectual disability who have skills in basic reading and writing (prerequisite to complete worksheets). ▪ Letters to parents outlining key teaching points are provided to promote generalisation of skills at home.
Promoting Social Success: A Curriculum for Children with Special Needs (Siperstein & Rickards, 2004)	A curriculum designed to improve social skills of students with mild intellectual disability (and other learning difficulties). Arranged into five units (between 5 -22 lessons; 30-45 minute lessons per unit) each of which builds on the last: ▪ *Unit 1* Introductory lessons;	▪ Designed for 'self-contained and inclusive classrooms'. However, the authors note that it could be adapted for use in small groups outside the classroom. ▪ Provides suggestions for activities to promote generalisation. ▪ Uses a range of visual strategies to reduce verbal load

	▪ *Unit 2* Understand feelings and actions: Emotional and behavioural regulation; ▪ *Unit 3* Using social information: Noticing and interpreting cues; ▪ *Unit 4* Planning what to do: Problem solving; ▪ *Unit 5* Making and keeping friends: Social Knowledge.	and make lessons concrete (e.g., using foot prints on ground as visual aid for commencing role play).
Social Skills Training for Adolescents with General Moderate Learning Difficulties (Cornish & Ross, 2003)	A 10 session social skills program aimed at 13-17 year old students with moderate intellectual disability. Aims to develop the following skills: listening and paying attention; monitoring spoken language; monitoring body language; recognising strengths; assertiveness; recognising feelings; confidence; conflict resolution; and empathy.	▪ Concrete with reduced literacy demands. ▪ Letters to parents and weekly homework tasks for the adolescents to promote generalisation. ▪ Provides guides on multi-source/modal assessment of social skills.

The Transporters (Golan, Humphrey, Chapman, Gómez de la Cuesta, Peabody, Weiner, et al., 2006)	An interactive DVD format involving fifteen 5 minute episodes about fifteen different emotions involving imaginary toy vehicle characters that have emotional experiences and adventures. 'Easy' and 'hard' quizzes follow each episode. This program aims to help children enhance their understanding of the causes of emotions and of emotional expressions.	▪ The series was created especially for children with Autism Spectrum Disorder (ASD) who find it hard to recognise causes of emotion and facial expressions of emotion. However, would also be appropriate for young children with intellectual disability. It could be adapted for individual or small groups.
My Book Full of Feelings: How to Control and React to the Size of your Emotions (Jaffe & Gardner, 2006)	An interactive workbook that aims to teach primary school aged children to identify, assess the intensity of and respond appropriately to their emotions.	▪ Originally designed to be used individually for children with ASD. ▪ This program could be adapted for children with intellectual disability who have skills in basic reading and writing (prerequisite to complete workbook). ▪ Could be adapted for small groups.

		▪ This book has laminated pages for use with a non-permanent marker allowing for the pages to be wiped and re-used.
The Way to A: Empowering Children with Autism Spectrum and Other Neurological Disorders to Monitor and Replace Aggression and Tantrum Behaviour (Manasco, 2006)	An interactive workbook aimed at understanding and managing a particular emotion: Anger.	▪ Originally designed to be used individually for children with ASD. ▪ This program could be adapted for children with intellectual disability who have skills in basic reading and writing (prerequisite to complete workbook). ▪ Could be adapted for small groups. ▪ This book has laminated pages for use with a non-permanent marker allowing for the pages to be wiped and re-used.

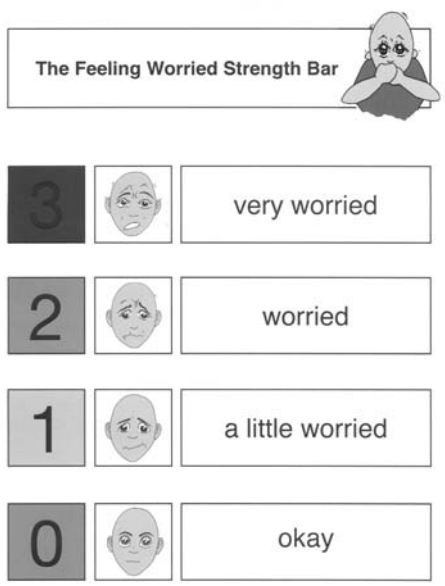
Table 17.4

Curriculum For EBBST For Children With ASD And Mild Intellectual Disability (Ratcliffe, Grahame, & Wong, 2010)

Modules	**Child curriculum**	**Parent curriculum**
		Promote generalisation and maintenance of child skills via:
One 5 x 90 minute weekly sessions	Identifying emotions	Psychoeducation
Break - 2 weeks		
Two 5 x 90 minute weekly sessions	A. Emotional problem solving B. Understanding others' emotions	Parent Cognitive Behaviour Therapy (CBT)
Break - 2 weeks		
Three 5 x 90 minute weekly sessions	Managing emotions	Training parents as 'Emotion Coaches'
Break - 2 weeks		
Booster Session 1 x 90 minute sessions	Skills consolidation	Training in self-monitoring and evaluation

Figure 17.1

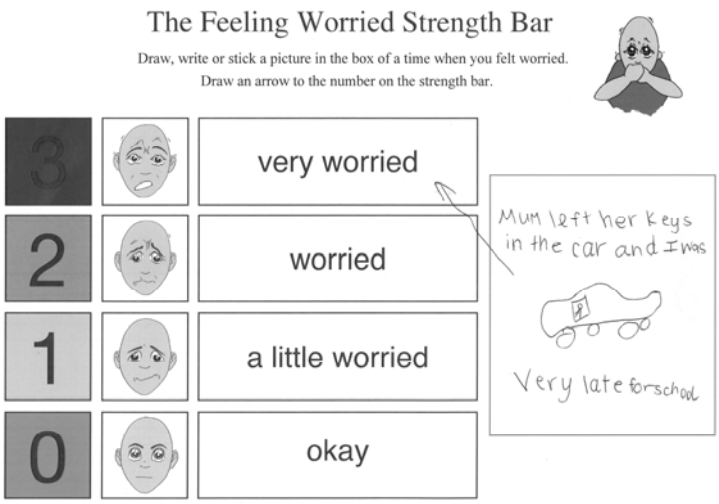
'Feeling Worried Strength Bar' From Module 1



Source: Ratcliffe, Grahame, and Wong (2010)

Figure 17.2

Luke's 'Feeling Worried Strength Bar' Take Away Task



Source: Ratcliffe, Grahame, and Wong (2008)