

Chapter 16

Building Life Skills In Children With Intellectual Disabilities

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Children with an intellectual disability are particularly vulnerable to additional emotional and behavioural problems. Social/emotional cognitive skill-building programs that teach children with intellectual disabilities problem solving skills and coping strategies can reduce the risk of psychopathology. However, children and adolescents with an intellectual disability often have difficulty developing problem solving skills and coping strategies, and will therefore need developmentally appropriate interventions that build on their existing abilities. This chapter will discuss appropriate and effective interventions that help individuals with an intellectual disability develop these skills.

Introduction

Intellectual disability is a common developmental problem of childhood occurring in approximately 1.38% of the school aged population in Australia (McCleod & McKinnon, 2007). Furthermore, research has suggested that children with an intellectual disability are particularly vulnerable to additional emotional and behavioural problems such as Attention Deficit Hyperactivity Disorder (ADHD), conduct disorders and anxiety (Emerson, 2003a). In an Australian epidemiological study, Einfeld and Tonge (1996a) found that 41% of children with an intellectual disability aged between 4 and 18 years had a clinically significant emotional or behavioural disorder. However, what was of concern was that the authors reported that fewer than 10% of the children and young people identified had received any specialist mental health services. It has also been suggested that as many as one third of children and adolescents referred to Mental Health services for behaviour problems in school have undiagnosed learning disabilities (Kauffman, 1997).

It therefore appears that the experience of having an intellectual disability has a substantial effect on the psychological development of children and adolescents. This may not always lead to a co morbid psychiatric diagnosis. However, additional problems such as low self-esteem, negative attributions for success and poor social competence should still receive attention from clinicians, as they will further complicate learning, school work, relationships, and if left untreated may lead to future mental health problems.

This suggests that the psychological and social difficulties that are characteristic of children and young people with intellectual disabilities can often be more problematic than the disability itself, as it will set them apart from peers both intellectually and socially. This, therefore, highlights the need for developmentally appropriate treatment services for this at-risk group of children. There are a number of programs that focus on generic social/emotional cognitive skill building as a means of reducing psychopathology. However, this chapter will focus on programs that build resilience through the use of effective coping strategies, and the development of problem-solving skills.

What Types Of Interventions Are Available?

Children and young people with intellectual disabilities need interventions that will build age appropriate life skills and improve their ability to cope with the social demands of everyday life. Skill based approaches, such as social skills training and anger management, are familiar interventions that usually teach children specific skills in a group setting. However, research and clinical opinion highlights the inadequacy of social skills training as the sole intervention for emotional and behaviour difficulties (Bullis, Walker, & Sprague, 2001). That is not to say that the

development of social competence is not important, as research clearly indicates that it is an essential life skill for children to master because of the strong association between poor social skills and psychopathology (Matson, Anderson, & Bamburg, 2000). However, in terms of building psychological resilience and reducing behavioural risk factors, social skills programs should only ever be one component of a multifaceted treatment package. Similarly, anger management programs often fail to target the underlying deficits such as poor emotional regulation, and a lack of age appropriate coping strategies.

In contrast, the skill deficit model is a more developmentally appropriate approach that focuses on, a) assessing what the child is capable of; b) using this assessment to identify what life skills the child needs to develop; and c) teaching these skills in a developmentally appropriate manner by building on the child's existing skill level. This is a more practical approach and is often used in one to one work with an individual where sessions can be tailored accordingly.

Problem Solving

Problem solving is an essential life skill that teaches children how to deal with day to day challenges. To be good at problem-solving, children need to acquire critical and creative thinking skills that will help them think about options and evaluate their possible consequences. When do children acquire these skills? Theories of cognitive development suggest that by the age of eight years, children enter the concrete operational stage that means they are able to think more logically, but still have difficulty with abstract reasoning and considering a range of alternatives (Vernon, 2002). They are also able to recognise and communicate feelings more effectively,

suggesting that this stage has a positive impact on their problem solving abilities. Is this similar for children with an intellectual disability?

Research suggests that adolescents with intellectual disability have difficulty reaching early instrumental thinking milestones (e.g., word recognition, spelling, and computation) that results in poorer problem solving strategies in general (Fidler, Barret, & Most, 2005). Research also indicates that individuals with intellectual disabilities are often slower at retrieving information from long-term memory, and thus acting on that information, suggesting poor verbal reasoning skills (Bjorklund, 2005).

It therefore appears that the language demands of cognitive techniques such as problem-solving can be problematic for young people with intellectual disabilities, especially as verbal instruction is often the predominant approach to teaching these skills. However, problem-solving can be enhanced for these children by providing a choice of possible solutions illustrated using visual cues such as pictures and animations (Bernard-Opitz, Ross, & Tuttas, 2001), and through effective instruction (Swanson, 2001).

It is also important that the specific components and methods used to teach problem solving techniques are appropriate to the developmental level of the child or young person. For example, adolescents are often given social skills programs designed for younger children in an attempt to match their level of cognitive functioning, but this ignores the 'real life' social dilemmas that they face (J. E. Baker, 2003).

The use of group treatment programs to teach problem solving skills rather than individual approaches are more commonly reported in the literature. Two examples of group interventions that could be appropriate and effective for this

population in helping children develop effective problem-solving skills are, i) The *Stop, Think, Do Social Skills Training* program that includes three separate manuals covering the age range 4-15 years; early years (Petersen, 2002), primary school (Petersen & Adderley, 2002), and middle school (Petersen, 2004); and, ii) the use of augmentative and alternative communication (AAC) strategies for developing emotional intelligence and problem solving skills.

Stop, Think, Do Social Skills Training Program

Stop, Think, Do is an Australian social skills program (Petersen, 2002, 2004; Petersen & Adderley, 2002) developed for use in schools with children who have social emotional difficulties. The program aims to develop emotional social intelligence, and social problem-solving skills. The program has been shown to be effective in a special school for secondary schoolchildren with mild to moderate intellectual disability and emotional/social problems (Beck & Horne, 1992). Beck and Horne (1992) reported that students developed a broad range of social skills such as the ability to cope with teasing in a non-aggressive manner, resolving conflict with peers and siblings at home, and thinking before they acted.

The key problem solving steps are taught using traffic light symbols to cue the skills (see Table 16.1). The program has an accompanying book that contains ideas on how to modify the program for students with special learning needs or disabilities titled *Stop and Think Learning: A teacher's guide for motivating children to learn including those with special needs* (Petersen, 1995).

[Insert Table 16.1 here]

Augmentative And Alternative Communication (AAC)

Bloom and Bhargava are Australian speech pathologists (see www.innovativeprogramming.net.au) who have developed AAC strategies for developing emotional intelligence and problem solving skills. Their manual titled *Using AAC to develop emotions and problem solving skills* (Bloom & Bhargava, 2004) utilises a social-cognitive approach to help individuals with communication difficulties and/or additional disabilities (such as individuals with Autism, Asperger's Syndrome, and Down Syndrome) to gain better self-control over their emotions and improve their problem-solving skills. Bloom and Bhargava (2004) break the problem solving process down into sequential steps, using AAC strategies such as social stories, and multimodal teaching methods to help the individual understand what concept is being illustrated at each step. This is outlined in Table 16.2.

[Insert Table 16.2 here]

Struggling Children

Some children will have difficulty with problem solving as it entails a deeper level of cognitive processing, requiring the individual to make a 'best judgement' given the particular situation. Social problem-solving also requires a child to think about how different people see or understand problems differently (perspective-taking) that requires good abstract reasoning abilities (Bloomquist, 2006). If children have difficulty acquiring these skills, a more traditional behavioural approach can be used as an alternative, where the individual is taught specific strategies to be applied in a given situation. The cognitive approach is clearly preferable for teaching problem-solving as this encourages children to develop flexible thinking.

There are also a number of social skills programs that teach social problem-solving as a small component of the program. These include the *Talkabout* series by Kelly (1996), that is a social communication skills package specifically designed for children and young people with learning disabilities. There is also the *Space Travellers – An Interactive Program for Developing Social Understanding, Social Competence and Social Skills* (Carter & Santomauro, 2004) that is an interactive social skills program. It was developed for students with Autism Spectrum Disorder (ASD) and other social cognitive challenges and takes students on a journey into space, where they learn major social skills. The skills taught include, understanding emotions, feelings and thinking patterns, reflective problem solving, stress release, dealing with bullying, goal setting, and self-regulation. There is also a version of the program designed for preschool children titled, *Pirates: An Early-Years Group Program for Developing Social Understanding and Social Competence for Children with Autism Spectrum Disorders and Related Challenges* (Carter & Santomauro, 2007) which covers similar topics.

Coping Strategies

As part of the problem solving process children need to be able to think of possible answers to their identified problem (e.g., ‘what can I do about it?’). As discussed earlier, this is quite a complex cognitive process. It requires children to, a) generate alternative solutions; and, b) evaluate the potential appropriateness (consequences) of each solution, given the initial problem. However, more practically, children also need to have real experience of what is a possible helpful/unhelpful solution (coping strategy). Children will often learn different coping strategies (*what works when*) through their experiences. This is supported by research that has suggested that the

pathway to healthy coping behaviour requires children to have opportunities to overcome manageable levels of distress (i.e., opportunities to learn) (Cole, Michel, & Teti, 1994; Stifter, Spinrad, & Braungart-Reiker, 1999).

It has been suggested that challenging behaviour in children with intellectual disabilities is associated with whether or not the child has effective coping skills rather than high levels of frustration (Jahromi, Gulrud, & Kasari, 2008). For example, research has suggested that children with Down syndrome may have insufficient experience of practicing coping strategies that help overcome negative arousal (i.e., learning how to manage emotions such as frustration). It is hypothesised that the reasons for this are that some mothers compensate for their infants' lower levels of arousal by intervening earlier in response to low intensity signals, thereby resulting in the child not learning how to cope with the situation by themselves (Sorce & Emde, 1982). Furthermore, it has been suggested that children with high levels of frustration would have better social and behavioural outcomes if they were able to develop emotion regulation skills (Eisenberg et al., 1995).

Therefore, in promoting psychological wellbeing, it is important to help children learn how to deal realistically with what they can and cannot change in their lives. These skills can be developed through the use of Cognitive Behaviour Therapy (CBT) that helps children understand the connection between thoughts, feelings and behaviours. A review of the literature on CBT for children and young people indicates that task-orientated problem solving and social problem solving is often a core component of many CBT programs (Christie & Wilson, 2005).

There is also the *PATHS program* (Promoting Alternative Thinking Strategies) (Greenberg & Kusche, 1998), which is an American intervention that targets children's development of effective coping strategies. It has been shown to be

appropriate and effective for children with developmental disabilities. The PATHS curriculum is a comprehensive program for promoting emotional and social competencies and reducing aggression and behaviour problems in primary school-aged children.

The curriculum consists of developmentally-based lessons designed to be used by teachers and school counsellors, but also includes information and activities for use at home with parents to improve generalisation of skills taught. The program has been evaluated with a variety of special needs students (i.e., children who are deaf or hearing-impaired, have mild intellectual disability, language delay and learning disabilities) and has shown promising results (Greenberg, Kusche, Cook, & Quamma, 1995; Greenberg & Kusche, 1998). These studies indicated that following intervention, the special needs group of children had significantly improved their social problem solving skills and emotional understanding, and that they were significantly less likely to provide aggressive solutions and more likely to provide positive social solutions to interpersonal conflicts. These results were maintained at the one year and two year follow-up assessments.

In reviewing these programs it appears that there is a trend towards early intervention and prevention through the school system. Many of the programs are being run in classrooms by teachers, and delivered to all children in an attempt to build resilience and prevent the development of emotional and behavioural problems.

Attention

Attention Deficit Hyperactivity Disorder (ADHD) is the psychiatric disorder most frequently diagnosed in association with learning/intellectual disabilities (Emerson, 2003a). The presence of ADHD has been found to further impair education and

school adjustment as well as compromise social interaction and family life for these children (Loveland & Tunali-Kotoski, 1997). Do these children therefore need a different type of intervention program?

Research indicates children and young people with ADHD (e.g., problems of self-control) often have deficits in cognitive processes that impact upon their ability to engage in planning or problem solving (Kendall 1993; Spence & Donovan, 1998). For example, aggressive children have been found to possess limited problem solving skills and generate fewer verbal solutions to difficulties (Lochman, White, & Wayland, 1991). It therefore appears that children with intellectual disabilities and ADHD would benefit from being taught problem solving skills, but do they need to be taught in a different way?

Soo and Bailey (2006) reviewed attentional functioning in children with ADHD and learning/intellectual disabilities. They found that few studies had qualitatively investigated the similarities and differences in the attentional profiles of children with learning/intellectual disabilities, children with the inattentive form of ADHD, and children with the combined symptoms of inattention and hyperactivity-impulsivity. However, they argued that what was known about the attentional profiles of these children so far, suggested that interventions need to consider the possible differences in attentional profile, and that this would allow for greater specificity in interventions. Researchers further argued that improving attentional functioning would have positive knock on effects for many other abilities and skills that are reliant on age appropriate attentional skills. This would lead to secondary gains in the children's school based learning, behavioural problems, organisational, and social skills.

However, there are currently very few specific programs for children with an intellectual disability and ADHD. The closest is the *Alert Program™ for self-regulation: How Does Your Engine Run?* (Williams & Shellenberger, 1994) that was originally designed to support children with attention and learning difficulties (ages 8-12 years), but has been adapted for preschool children through to adults. The program does not target social/emotional cognitive skill building, but may be an essential prerequisite for children with severe attention problems who have difficulty maintaining concentration within a group setting.

The *Alert Program™* aims to help teachers, parents, and therapists work with the child to choose appropriate strategies to change or maintain states of alertness (i.e., develop self control skills). The development of self-control skills will help a child participate more effectively within a group situation, as they will be able to listen and follow directions, as well as control internal feelings.

Involving Parents

Research has indicated that caring for a child with a learning/intellectual disability with additional emotional and behavioural problems was often associated with an increased risk of parents suffering mental health problems and stress (B. L. Baker et al., 2003). This suggests that effective management of emotional and behavioural disorders in children with intellectual disability should include parent education, as well as support and management of any parental mental health problems. Therefore it is not surprising that the above studies showed a trend towards involving parents in the intervention. The inclusion of parents in these programs has a number of additional benefits such as increasing how techniques are generalised, and providing parents and children with a common language to discuss problems.

Conclusion

It appears that there are a number of programs available that focus on social/emotional cognitive skill building (i.e., problem solving techniques and coping strategies) as a means to reduce psychopathology. There is also a trend towards early intervention and prevention by involving parents and teachers in the intervention.

However, not all programs are appropriate and effective for children and young people with intellectual disabilities. Therefore, in selecting a program, it is essential to examine whether there is any research literature supporting the program for the intended client group. It is also important to remember that group treatment programs should only ever be one component of a multifaceted treatment package, especially when working with children who display high levels of emotional and behavioural problems.

Table 16.1***Problem Solving Steps From ‘Stop, Think, Do Social Skills Training’***

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- **STOP** (red light) ‘*You feel...because (problem)*’. The aim is to develop perceptual, self-control and communications skills.
 - **THINK** (yellow light) ‘*What could we do?’* ‘*What might happen then?’* This aims to develop cognitive, consequential thinking skills.
 - **DO** (green light) ‘*Do it!*’ this aims to develop verbal and non verbal behavioural skills.

(Adapted from Petersen, 2002, 2004; Petersen & Adderley, 2002)

Table 16.2***Steps In Developing Emotions And Problem Solving Skills***

STEP 1: Defining the problem by identifying the relevant information. *For example:*

What is the problem?

STEP 2: Identify the goal of the problem. *For example: What will happen if the*

problem disappears? What will happen if the problem is fixed?

STEP 3: Analyse the problem *i.e. break it down into smaller parts*

STEP 4: Exploring possible solutions to achieve the goal.

STEP 5: Determining a solution that results in a win-win situation for everybody

involved by considering their feelings.

STEP 6: Implementing the best solution and evaluating the results

(Adapted from Bloom & Bhargava, 2004)