

COGNITIVE BEHAVIOUR THERAPY WITH CHILDREN AND YOUNG PEOPLE: A SELECTIVE REVIEW OF KEY ISSUES

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Abstract. The growing interest in the use of cognitive behaviour therapy with children and young people has been encouraged by emerging evidence suggesting that CBT is effective with a wide range of child disorders. Typically, models and techniques developed for work with adults have been extended downwards and applied to children. This review questions the appropriateness of this approach and selectively identifies a number of key issues that need to be addressed. The absence of developmentally appropriate theoretical models to understand the onset and maintenance of maladaptive cognitive processes in children is highlighted. This lack of a coherent theoretical framework has led to a proliferation of diverse interventions falling under the general umbrella of cognitive behaviour therapy with the predominant emphasis being behavioural, rather than cognitive. Developmental factors, the nature, extent and type of cognitive processes in children and the important role of the parent in the onset and treatment of childhood problems have received comparatively little attention. There is a need to understand more about the cognitive processes of children and young people and to develop robust and testable developmentally appropriate theoretical models. In turn this will begin to address the question of which specific cognitive behaviour therapy programmes are effective for which childhood problems.

Keywords: Cognitive behaviour therapy, children, young people, developmentally appropriate, effectiveness.

Introduction

A number of reviews have suggested that cognitive behaviour therapy is a promising and effective intervention for the treatment of a wide range of child psychological problems (Kaplan, Thompson, & Searson 1995; Kazdin & Weisz, 1998; Kendall & Panichelli-Mindel, 1995; Roth & Fonagy, 1996; Wallace, Crown, Cox, & Berger, 1995). Cognitive behaviour therapy has been found to be effective in treating generalized anxiety disorders (Kendall, 1994; Kendall et al., 1997; Silverman et al., 1999a), depressive disorders (Lewinsohn & Clarke, 1999; Harrington, Whittaker, Shoebridge, & Campbell, 1998), interpersonal problems (Spence & Donovan, 1998; Spence, Donovan, & Brechman-Toussaint, 2000), phobias (Silverman et al., 1999b), school refusal (King et al., 1998), sexual abuse (Cohen &

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Mannarino, 1996, 1998) and in the management of pain (Sanders, Shepherd, Cleghorn, & Woolford, 1994). In addition, cognitive behaviour therapy has been advocated as producing positive effects with a range of other problems including adolescent conduct (Herbert, 1998), eating (Schmidt, 1998), post-traumatic stress (March, Amaya-Jackson, Murray, & Schulte, 1998; Smith, Perrin, & Yule, 1999) and obsessive compulsive disorders (March, 1995; March, Mulle, & Herbel, 1994).

The growing interest in the use of cognitive behaviour therapy with children is reflected in the recent development of the Child and Adolescent Special Interest Group of the British Association for Behavioural and Cognitive Psychotherapies. This enthusiasm is welcomed and will provide a clear focus on children and young people, which will undoubtedly assist the development of a more substantive evidence base. However, in order to focus the research and clinical agenda it would appear timely to assess the current state of cognitive behaviour therapy with children and to select some of the key issues that need urgent clarification.

Are cognitive distortions and deficits associated with child psychological problems?

Cognitive behaviour therapy has been defined by Kendall and Hollon (1979) as seeking to “preserve the efficacy of behavioural techniques but within a less doctrinaire context that takes account of the child’s cognitive interpretations and attributions about events”. Of particular interest are the cognitive deficits and distortions that are assumed to underpin many psychological problems. The development of theoretically determined testable models is a strength of cognitive behaviour therapy providing both the rationale for the intervention, i.e. that affect and behaviour are largely determined by cognitions, and the focus and nature of the intervention, i.e. challenging distortions or rectifying deficiencies (Fennel, 1989). It is therefore important to demonstrate that firstly, deficient or abnormal cognitive processing are associated with psychological problems in children, and that secondly, changes in affect and behaviour arise as a result of alterations in these cognitions (Spence, 1994).

There is evidence to suggest that cognitive distortions and deficits are associated with some child psychopathology. In terms of distortions, children with anxiety disorders tend to misperceive ambiguous events as threatening, are overly self-focused and hypercritical and report increased levels of self-talk and negative expectations (Kendall et al., 1992; Kendall & Panichelli-Mindel, 1995). Similarly aggressive children perceive more aggressive intent in ambiguous situations and selectively attend to fewer cues when making decisions about the intent of others’ behaviour (Dodge, 1985). Depressed children have been found to make more negative attributions than non-depressed children, to have distorted perceptions of their own performance, and to selectively attend to negative features (Kendall, Stark, & Adam, 1990; Leitenberg, Yost, & Carroll-Wilson, 1986; Rehm & Carter, 1990).

Deficits in cognitive processes such as an inability to engage in planning or problem solving have been found in children and young people with problems of self control such as Attention Deficit Hyperactivity Disorder (ADHD) and also in children with interpersonal difficulties (Kendall, 1993; Spence & Donovan, 1998). Aggressive children, for example, have been found to possess limited problem solving skills and generate fewer verbal solutions to difficulties. (Lochman, White, & Wayland, 1991; Perry, Perry, & Rasmussen, 1986). Children with social phobia have been found to present with deficits in social skills and

negative anticipatory and evaluative cognitions (Spence, Donovan, & Brechman-Toussaint, 1999).

Whilst there is evidence that cognitive deficits or distortions are associated with some psychopathology in children, their role in the onset and maintenance of these conditions is not well understood. Harrington, Wood and Verduyn (1998), for example, highlight that whilst depressed adolescents have more negative cognitions than non-depressed adolescents, there is little evidence to support their role in causing depressive disorder. Similarly, whilst adolescents with depressive symptoms have been found to report more negative cognitions, dysfunctional assumptions were reported more often by non-depressed adolescents (Hobbs, Bell, & Reynolds, 2000). Further research is required to substantiate these findings although they begin to question whether the predicted relationship described in theoretical models developed for adults between depressive symptoms, negative cognitions and dysfunctional assumptions is applicable to children.

With other childhood problems, such as post traumatic stress or obsessive compulsive disorder, the specific nature of the cognitions that are associated with child psychopathology have yet to be demonstrated. Advances in work with adults highlights the importance of understanding the way the trauma or compulsion is cognitively appraised (Ehlers & Clark, 2000; Salkovskis, 1999). It has been argued that persistent post traumatic stress disorder is associated with distorted cognitive processes that result in the trauma being appraised as a serious current threat (Ehlers & Clark, 2000; Dunmore, Clark, & Ehlers, 2001). Similarly the cognitions underpinning many obsessive-compulsive disorders relate to distorted cognitions and appraisals regarding an inflated responsibility for harm (Salkovskis, 1999). Whether these distortions also apply to children has not yet been determined, although it is clear that further work is required to understand more about the cognitive processes underlying many of the psychological problems and disorders of children.

Developmental considerations

The influence of developmental issues and how they impact upon CBT has received little attention. From the many issues that need to be considered, three have been selected as particularly important, namely developmental variations, normal and abnormal development, and the unique context of the child.

Researchers have typically viewed “children” as a homogenous group, covering wide age bands, with most studies focusing upon children aged 7–14 years (Barrett, 2000). The use of a wide age grouping results in important developmental variations in the manifestation of problems being overlooked. For example, Barrett (2000) highlights that during early childhood anxiety is commonly manifested as a fear of separation or objects. Fears are typically highly specific, concrete and related to immediate threats. By mid-childhood fears tend to be more generalized, socially based concerns emerge with the greater cognitive development of adolescents resulting in more abstract fears such as fear of negative evaluation or the future. As the adolescent becomes physically, socially and cognitively more able the intensity and number of fears decreases (Gullone, 1996). Developmental variations in the manifestation of emotional and behavioural problems need to be considered and integrated into theoretical explanatory models, which in turn will inform the nature and content of the intervention.

The second issue is that of “normal or abnormal” development and the transient nature

of many childhood problems, described by some as “normal development gone awry” (Wenar, 1982). Many children present with emotional or behavioural problems as part of normal development whilst learning the appropriate skills to identify, cope and effectively manage challenging situations. Childhood is characterized by rapid and significant skill acquisition and as such there will be times when, developmentally, children will not have acquired the relevant cognitive skills. Problems may therefore be developmentally appropriate rather than an indication of deficient processing. This in turn raises the interesting question of whether deficits and/or distortions are present in younger children and whether there is a critical stage for the development and activation of more enduring maladaptive cognitive processes. Further research is required to increase our understanding about the development of cognitive processes in children and to clarify how normal development may be arrested and enduring maladaptive processes dominate.

A third developmental issue that needs consideration is the unique context of the child and the important influences that impact upon their cognitive processing. In particular, the possible influences of parents/carers, their peer group, and the wider education system on the development and maintenance of dysfunctional cognitive processes need to be recognized. A recent review highlights the possible role of parental cognitions in the understanding and treatment of children’s behaviour problems (Bugental & Johnston, 2000). To view the child in isolation without considering protective or risk factors provided by important influences is inappropriate. Similarly it is inappropriate to assume that theoretical models developed from work with adults are applicable for children. This issue is well summarised by Barrett (2000) who states that adult derived models “are traditionally ‘downloaded’ on to children with the misleading assumption that children are little adults”. Barrett (2000) goes on to identify some of the key pitfalls of this assumption, particularly the failure to tailor treatment interventions to the child’s level of comprehension and the questionable adoption of intrapsychic intervention models. Viewing the child in isolation without recognizing or involving significant systemic influences, particularly the role of the family and peers would appear inappropriate.

Developmentally appropriate models that include the influence of parental cognitions upon childhood behaviour are beginning to emerge. Rapee (2001), for example, has described a model for generalized anxiety disorder that highlights the role of parental cognitions upon the child. Further work is required to integrate developmental theory, systemic models and cognitive behaviour therapy in order to develop theoretically sound models to explain the development and maintenance of dysfunctional cognitive processing in children.

What are the core components of cognitive behaviour therapy with children?

Cognitive behaviour therapy is grounded on the premise that interventions are based upon testable underlying theoretical models that link problematic behaviour and emotions with cognitive processes. Defining the extent and nature of the cognitive deficits and distortions informs the development and content of appropriate interventions.

The absence of a well-developed theoretical cognitive framework for understanding many childhood problems has resulted in a proliferation of interventions using a variety of combinations of cognitive and behavioural strategies. As highlighted by Graham (1998), cognitive behaviour therapy with children encapsulates a wide and diverse range of techniques

and it is sometimes difficult to identify the core and shared elements of these programmes. This is reflected in the findings of a meta-review of cognitive behaviour therapy with children aged 13 years or younger (Durlak, Fuhrman, & Lampman, 1991). The review identified eight core treatment components of cognitive behaviour therapy programmes, namely task orientated problem solving, social problem solving, self-instructions, role playing, rewards, social cognition training, other cognitive-behavioural therapy elements, and social skills training. These eight components were offered in 42 different combinations in the 64 studies examined.

Cognitive behaviour therapy therefore appears to be an umbrella term for a disparate range of interventions with children. Grouping such diverse programmes under the general umbrella of cognitive behaviour therapy appears questionable. This lack of treatment specificity leads to confusion as to what is cognitive behaviour therapy with children and renders the question of whether cognitive behaviour therapy is effective with this client group meaningless. There is a need to define more precisely what is cognitive behaviour therapy with children in order to determine what “specific cognitive behaviour therapy components offered in which sequence or combination produce what changes in what outcome domains” (Durlak et al., 1991).

CBT or cBT

Whilst the core components of cognitive behaviour therapy programmes vary, there are also substantial differences in the emphasis placed upon cognitive or behavioural interventions and on occasions it can be difficult to identify the cognitive component. Interventions, for example with children and young people with obsessional compulsive disorder, tend to be primarily behavioural in orientation, emphasizing psycho-education, anxiety management, graded exposure and response prevention (March, 1995). The cognitive component tends to be extremely limited and may rely extensively upon one set of cognitive strategies such as positive self-talk or self-instructional training. Similarly, Graham (1998) highlights that interventions with preschool and older children with conduct disorders tend to be predominantly behavioural, with the cognitive component focusing upon helping the parents to understand the rationale of the therapy.

In view of the limited emphasis of many programmes upon what could be described as “cognitive” interventions, it is important to verify treatment fidelity and clarify how many children actually receive the “cognitive” component. Feehan and Vostanis (1996), for example, report that in their randomized-controlled trial of cognitive behaviour therapy for depression, almost half of the children did not participate in the sessions focusing upon cognitive restructuring. This raises the issue as to the nature of the intervention provided and whether it was more a behavioural than a cognitive intervention.

Graham (1998) suggests that the common factor underpinning this diverse collection of interventions is their reliance upon changing behaviour through the mediation of cognitive processes and questions whether this provides a satisfactory definition of cognitive behaviour therapy. Clearly such a loose definition is not sufficient and highlights the need for further work to establish testable, developmentally appropriate theoretical models of childhood problems that informs both the focus and content of interventions.

Can cognitive behaviour therapy be adapted for use with younger children?

The filtration of adult derived models to children has resulted in developmentally appropriate theoretical cognitive models to explain emotional and behavioural problems in children and young people being comparatively underdeveloped. Whether the models for children are similar or fundamentally different from those with adults is unclear. If the theoretical models are similar then the clinical application of cognitive behaviour therapy with children will need to consider developmental issues, the role of the family and wider systemic factors that impact upon the child.

Specific cognitive behaviour therapy programmes for use with children of 7 years and older have been developed, i.e. ‘‘Coping Cat’’ (Kendall, 1994), ‘‘Coping Koala’’ (Barrett, Dadds, & Rapee, 1996) and ‘‘How I ran OCD off my land’’ (March et al., 1994). The modification of cognitive behaviour therapy for use by young children has, however, rarely been reported. Where this has been addressed, positive outcomes have been reported in single case studies with children as young as 5 years of age (Ronen, 1992, 1993; Jackson & King, 1981). This raises the question as to what age children are able to engage in cognitive behaviour therapy and whether it is effective with the younger age group. Whilst cognitive therapy can be sophisticated and complex, many of the tasks require an ability to effectively reason about concrete matters and issues rather than abstract conceptual thinking (Harrington et al., 1998). The concrete operational stage of cognitive development typically acquired during the middle years (7–12 years of age) is sufficient for many of the basic tasks of cognitive behaviour therapy (Verduyn, 2000). With regard to effectiveness, Durlak et al. (1991) suggest that although cognitive behaviour therapy is effective with children aged 5–11, it is more effective with children aged 11 or more. The results of their meta-analysis were not, however, consistent and a predicted linear relationship between cognitive functioning (as determined solely by age) and outcome was not found. It is therefore possible that the effectiveness of cognitive therapy with younger children may rely more upon presenting concepts and strategies at an appropriate developmental level than assumed cognitive limitations of the child.

More concrete techniques with clear and simple instructions are useful for most younger children, whereas adolescents can usually engage in more sophisticated processes such as identifying dysfunctional assumptions and cognitive restructuring. The challenge for working with younger children is how to translate abstract concepts into simple, concrete, understandable examples and metaphors from the child’s everyday life. Cognitive behaviour therapy should be fun, interesting and engaging with materials and concepts presented at an age appropriate level (Young & Brown, 1996). There is therefore a need to develop suitable therapeutic materials, which have a greater visual emphasis and use simple understandable language. Thought bubbles, cartoons, imagery and metaphors based upon the child’s everyday life need to be developed. Alternative methods of conveying the concepts of cognitive behaviour therapy through, for example, play and puppetry, could be explored for use with younger children.

What is the role of the parent/carer?

The role of the family and particularly the child’s main caregivers in the cognitive behaviour therapy programme has received little attention. There is evidence to suggest that involving

parents in cognitive behaviour therapy with children may produce additional short and medium term benefits although the longer term gains are unclear (Barrett et al., 1996; Barrett, Duffy, Dadds, & Rapee, 2001; Mendlowitz et al., 1999). However, the specific role of parents has varied and includes those of facilitator, co-therapist and client (Barrett et al., 1996; Kendall, 1994; Toren et al., 2000). The facilitator has a limited role in the intervention programme, with their primary role being that of aiding the transfer of skills from clinical sessions to the home environment. The predominant focus is upon individual therapy with the child, with parents receiving one or two educational sessions designed to encourage their co-operation with treatment (Kendall, 1994). The co-therapist has more of an active role in which the parent might prompt, monitor and review their child's use of cognitive skills (Mendlowitz et al., 1999; Toren et al., 2000). Parents are more extensively involved in therapy sessions and are encouraged to reinforce and work with their child in planning and addressing their problems outside the clinic. With the facilitator and co-therapist models, the child continues to remain the focus of the intervention, with the parents working towards reducing their child's psychological distress.

Parents can also be involved as clients in their own right, learning new skills (e.g. behaviour management) or how to cope with their own problems (e.g. managing anxiety) (Barrett, 1998; Cobham, Dadds, & Spence, 1998). Barrett (1998), who describes the use of a systemic model to empower parents and their children to form an "expert team", has advocated the more active involvement of parents. Therapy sessions involve parents and children, the open sharing of information is promoted, the content and process of therapy jointly determined with emphasis placed upon identifying and reinforcing existing skills of family members. The programme aims to provide parents with training in behaviour management and in communication and problem solving skills. Finally Cobham et al. (1998) describe an intervention that incorporates both child-focused CBT to treat child anxiety and a programme designed to reduce parental anxiety. Children received 10 therapy sessions, whilst their parents received four specifically designed to help them recognize the effect of their own behaviour on the development and maintenance of their child's problems and how to address their own anxiety.

The focus, content and nature of these interventions is different and further research is required in order to determine the most effective role of parents in cognitive behaviour therapy with children. In turn, this will draw attention towards a further issue, namely whether the child or their parent is seen as the primary client. This can be a source of tension since children may identify different goals and targets from their parents raising the question of whose agenda should be addressed? Pursuing the parent's or adult's agenda raises ethical issues as to whether their goals are designed to secure conformity or concerned with furthering the best interests of the child (Royal College of Psychiatry, 1997).

Does cognitive behaviour therapy result in cognitive changes?

To date, evaluative studies have primarily focused upon changes in diagnostic status or overall measures of emotional and behavioural change with assumed changes in cognitive processes rarely being assessed. This position is well summarized by Reinecke, Ryan and DuBois (1998) in their review and meta-analysis of the use of cognitive behaviour therapy in the treatment of adolescent depression. The authors highlight that researchers have paid scant attention to assessing the very cognitive factors that are postulated to underpin the

disorder and to mediate improvement. “Such factors as attributional style, problem-solving, dysfunctional attitudes, expectations and assumptions, ruminative style, self-focused attention, cognitive distortions, social skills, and sociotropy-autonomy are worthy of consideration in this regard”.

A review of the relationship between cognitive processes and behaviour change was undertaken by Durlak et al. (1991). The authors failed to find evidence to support the theoretical premise that treatment resulted in modification of the child’s cognitions and cognitive processes, which in turn was related to behaviour change. However, this result needs to be viewed with caution since it is unclear whether appropriate cognitive changes were assessed in the studies reviewed or whether specific cognitive changes were masked by more global insensitive measures.

Randomized controlled treatment trials of cognitive behaviour therapy have reported some limited assessment of cognitive factors, particularly use of self-control and coping strategies. Significant posttreatment clinical improvement in recurrent abdominal pain was associated with the use of the coping technique of positive self-talk (Sanders et al., 1994). Similarly, Ronen, Rahav and Wozner (1995) found a significant relationship between self-control and enuresis. In terms of generalized anxiety, significant posttreatment changes have been reported in the frequency of self statements associated with negative affect as determined by the children’s Negative Affectivity Self-Statement Questionnaire (NASSQ – Ronan, Kendall, & Rowe, 1994) (Kendall, 1994; Kendall et al., 1997).

In general, the assessment of cognitive change as an indicator of outcome has received comparatively little attention. This led Durlak et al. (1991) to conclude that “it would be disconcerting to find that cognitive variables which are emphasized in cognitive behaviour therapy programmes are not in some way related to outcomes”. The challenge for researchers is to identify the significant and relevant cognitive processes and to develop appropriate and methodologically robust ways of assessing them. This will increase understanding of the deficits and/or distortions that are assumed to underlie the psychological problems of children and will allow the premise that cognitive behaviour therapy results in changes in cognitive processes to be tested.

Is cognitive behaviour therapy with children and young people effective?

Comparatively few well-designed treatment trials with children have yet been reported. A number of early studies demonstrating the effectiveness of cognitive behaviour therapy have been conducted on volunteers who may not be as severely impaired as clinic attenders (Weisz, Donenberg, Han, & Weiss, 1995). Comparatively little evaluation has been undertaken with clinical populations who may also present with multiple co-morbid conditions (Kazdin & Weisz, 1998). Relatively few randomized controlled trials have been undertaken (Harrington et al., 1998; Kazdin & Weisz, 1998), and evidence demonstrating the medium and long-term effectiveness of cognitive behaviour therapy is lacking (Graham, 1998).

In terms of randomized controlled treatment trials the results are not always clear. King et al. (1998) found cognitive behaviour therapy to be superior to a waiting list control in the treatment of school refusal whereas Last, Hansen and Franco (1998) found no difference in cognitive behaviour therapy over a control group in treating school phobia. Vostanis, Feehan, Grattan and Bickerton (1996) found no difference in posttreatment recovery rates between cognitive behaviour therapy and a non-focused intervention in the treatment of

depression. Using a similar intervention package Wood, Harrington and Moore (1996) found cognitive behaviour therapy to be superior to relaxation training posttreatment, although differences between the groups reduced by follow-up. In terms of phobias, Silverman et al. (1996b) found contingency management and self-control (cognitive intervention) to be equally effective. Cognitive behaviour therapy and standard paediatric care both resulted in significant improvements in the frequency and intensity of recurrent abdominal pain (Sanders et al., 1994; Sanders, Cleghorn, Shepherd, & Patrick, 1996). Finally, in terms of sexual abuse (post-traumatic stress disorder), Cohen and Mannarino (1998) found cognitive behaviour therapy to be more effective than non-directive supportive therapy whilst Berliner & Saunders (1996) found cognitive behaviour therapy and traditional treatment to be equally effective.

The strongest evidence supporting the efficacy of cognitive behaviour therapy comes from studies exploring the treatment of anxiety disorders where cognitive behaviour therapy has consistently been found to be more effective than waiting list control groups (Barrett et al., 1996; Barrett, 1998; Kendall, 1994; Kendall et al., 1997; Silverman et al., 1999a). Research in this area has been identified as a model of good practice embracing a number of key methodological issues (Kazdin & Weisz, 1998). The research has focused upon clinically significant disorders, provided long-term follow-up, included assessments of the clinical significance of change, with similar interventions and results being reported by different research groups.

In conclusion, the results of randomized controlled treatment trials typically suggest that cognitive behaviour therapy is more effective than no intervention (i.e. waiting list control groups) although the superiority of cognitive behaviour therapy over other psychotherapeutic interventions has yet to be consistently demonstrated. Further methodologically sound research is required to substantiate cognitive behaviour therapy as a first line treatment of choice for many childhood problems.

Conclusion

This review has selectively focused upon some of the key issues that need to be addressed in order to further the understanding and application of cognitive behaviour therapy with children and young people. The issues identified underpin the very nature of cognitive behaviour therapy, described by Beck, Rush, Shaw and Emery (1979) as “based upon an underlying theoretical rationale that an individual’s affect and behaviour are largely determined by the way in which he structures the world”. Clinicians and researchers working with children and young people need to understand more about their cognitive processes and to develop robust and testable developmentally appropriate theoretical models. These will inform the content and focus of cognitive behaviour therapy programmes that need to be delivered in a way that considers the developmental status of the child and the important role of their parents and other systemic influence. In turn, this will help to clarify whether cognitive behaviour therapy is the treatment of choice for which problems.

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