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Cognitive Therapy with Children and Families: Treating Internalizing Disorders

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Abstract. Internalizing disorders of childhood and adolescence are common conditions, but until the past decade, had received little scientific scrutiny. This paper overviews the new knowledge that the past decade of research has given us. The early research began by adopting adult models of disorders, and adult-based modes of treatment. This met with moderate success, but the focus now is on testing whether these models are appropriate for younger clients. The good news is that, for adolescents at least, the adult models do seem to be appropriate. The bad news is that, even in well-resourced treatment trials, barely half of all cases remit. In very recent years, there has been a focus on generating developmentally appropriate models of childhood internalizing disorders, and correspondingly, an increasing interest in developing treatment approaches that are appropriate for young people and their families. The paper concludes with our thoughts on the most important questions for research in the next decade.

Keywords: Child, adolescent, CBT, depression, anxiety.

Introduction

Internalizing disorders of childhood and adolescence are serious problems. While conditions such as anxiety and depression were once viewed as benign, transient, or even barely-existent, they are now recognized as common disorders that need identifying and treating promptly. This review will cover some of the most important developments in our understanding of anxiety and depression that have taken place in recent years. Since the study of these disorders in younger populations has tended not to be disorder-specific, most of what we describe is relevant to all types of depression or anxiety. Where research is focused on a specific disorder, this is made clear.

Only since the 1980s (Kovacs, Gatsonis, Paulauskas and Richards, 1989) have these conditions received serious scientific scrutiny, and only very recently have outcome researchers published treatment trials that conform to CONSORT criteria. Much of the emerging research

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is from a cognitive-behavioural perspective, and published NICE guidelines recommend CBT for depression in children and for adult anxiety (there are currently no child anxiety guidelines) (National Institute for Health and Clinical Excellence, 2007; National Institute for Clinical Excellence, 2005). This article will outline what we know about anxiety and depression in children and adolescents, what is becoming understood, and what now needs to be done.

Early research

The first trials of CBT for anxiety emerged in the 1990s, with the pioneering work of Philip Kendall's group. Their first trials used basic CBT techniques that were well-established with adult clients. The programme consisted largely of behavioural elements, particularly exposure and relaxation. The cognitive element consisted mainly of "coping self-talk", wherein the client repeated coping statements during exposure. In these initial trials, no parental component was included. Despite this, results were promising, and subsequent trials have extended these good results by adding components. In particular, over the past decade the cognitive element has been upgraded to include identification and challenging of unhelpful cognitions. A number of creative ways of teaching young clients these techniques have evolved, and trials of CBT for childhood anxiety now have success rates of around 60% (Cartwright-Hatton, Roberts, Chitsabesan, Fothergill and Harrington, 2004). Treatment of depression in children and adolescents has followed a similar pathway, with adult models being used to develop treatments, often simplifying components or focusing on behavioural elements, and adding in parental psycho-educative or co-therapist components (Clarke, Hops, Lewinsohn and Andrews, 1992; Lewinsohn, Clarke, Hops and Andrews, 1990; Wells and Albano, 2005). Earlier treatment trials tended to target adolescents, with later trials including children as young as nine or ten (Asarnow, Scott and Mintz, 2002; Harrington, Whittaker and Shoebridge, 1998; Lewinsohn et al., 1990; Temple, 1997; Treatment for Adolescents With Depression Study (TADS) Team et al., 2004; Wood, Harrington and Moore, 1996).

Before long, outcome researchers recognized that parents had an important role to play in their children's treatment, and it is now unusual for treatment not to include parents in some capacity. However, the role of parents in treatment varies tremendously, and there is controversy about their optimal role (Barmish and Kendall, 2005). It appears that this depends on a complex array of factors, including, in particular, the child's age, and the parents' own mental health (Creswell and Cartwright-Hatton, 2007).

What is happening now?

The treatments that have been used until recently have been derived, almost exclusively, from adult treatment protocols. Little attention was paid to whether these protocols (or the models on which they were based) were applicable to younger populations. In recent years this work has begun and, in addition, some researchers have begun to establish new models that are derived not from adult models, but from novel research with children.

Are adult models and techniques appropriate for children?

Research is beginning to examine whether the premises on which adult CBT is based, and the techniques that it employs, are appropriate for younger clients. For example, in anxiety,

key cognitive behavioural processes, such as attentional biases towards threat, have been demonstrated in children (Hadwin, Garner and Perez-Olivas, 2006). More specifically, key tenets of major adult models, for example OCD (Salkovskis, 1985), Social Phobia (Clark and Wells, 1995), and GAD (Wells, 1995) have been explored in younger populations. For adolescents at least, it seems that the key principles of these models are applicable. For instance, the responsibility and thought-action-fusion components of Salkovskis' OCD model seem to be applicable for adolescents and older children (Libby, Reynolds, Derisley and Clark, 2004; Mather and Cartwright-Hatton, 2004). Key aspects of the social phobia model have also been confirmed, including inappropriately negative evaluations of one's social skills (Cartwright-Hatton, Hodges and Porter, 2003; Cartwright-Hatton et al., 2005), and negative interpretation of ambiguous social situations (Vine and Stopa, 2008). Early evidence suggests that cognitive techniques designed for socially anxious adults are also effective in adolescence (Morgan and Banerjee, 2006; Parr and Cartwright-Hatton, 2008). Finally, aspects of the GAD model, particularly the role of metacognitive beliefs, have been confirmed in adolescence (Cartwright-Hatton et al., 2004). In depressed children, the evidence for the applicability of adult models is sparse but emerging. For instance, there is evidence of a similar over general memory bias to that found in adults (Bennett, Cartwright-Hatton and Stavrinos, 2008; Kuyken, Howell and Dalgleish, 2006), for Beck's negative cognitive triad (Jacobs and Joseph, 1997), for the role of rumination in generating negative mood (Park, Goodyer and Teasdale, 2004), and for the role of cognitive change mediating mood change (Kaufman, Rohde, Seeley, Clarke and Stice, 2005). Needless to say, much of the research has focused on older children and adolescents, and very little is known about these processes in younger children. To our knowledge, there is no published research showing any aspect of an adult model that does not appear to apply to children. However, we must be aware that "negative" results are less likely to be published than "positive" ones.

Developmental and family models of internalizing disorders

Rather belatedly, research is now exploring processes that are not directly derived from adult models of disorders and might be used to inform new, developmentally appropriate treatments. Examples include the work of the University of Reading group, who are exploring intergenerational processes in anxiety disorders. Their early outputs have shown, for example, that socially phobic mothers encourage their infants to interact less with a friendly stranger than mothers with GAD, and this is predictive of the extent to which the child subsequently shows anxiety in the presence of the stranger (de Rosnay, Cooper, Tsigaras and Murray, 2006; Murray, Cooper, Creswell, Schofield and Sack, 2007) and clinical interventions based on these findings are underway. Other examples of pioneering developmentally led work into child anxiety include research by Andy Field, another UK based psychologist, which has produced insights into how children learn to be anxious, in particular by exploring how children use fearful verbal information, or model fearful reactions from others (Field, 2006). Such work has wide-ranging implications for developmentally appropriate interventions and preventative approaches.

Similarly, the role of the family is now receiving increasing attention. In both the anxiety and depression literatures there is evidence that parents of impaired children are more likely to display overcontrolling or overprotective behaviours, and are more likely to display hostile behaviours (Rapee, 1997). However, there is increasing recognition that parenting is a complex

phenomenon, which interacts with many other factors, not least the child's personality. Increasingly, attention is being paid to parents' cognitions, and this is being woven into new models of childhood difficulties (Creswell, Brewin and O'Connor, in press; Creswell, Schniering and Rapee, 2005; Field and Cartwright-Hatton, 2008; Stark, Schmidt and Joiner, 1996). Interventions that take these more sophisticated parenting factors into account are just being explored, and will emerge in the literature in the coming years. There are implications here for both child-focused and adult-focused clinicians, with evidence emerging that treating one family member's difficulties (whether parent or child) can have secondary effects on other family members' difficulties (Bogels and Siqueland, 2006; Verduyn, Barrowclough, Roberts, Tarrier and Harrington, 2003). Research is now examining the effect on the child of treating parental difficulties (with or without treating the child in parallel), although it will be some time before the outcomes of this research are known (Creswell, 2007).

As models of childhood disorders become more sophisticated, this should have an impact on treatment. However, although we may develop intricate models of the cognitive processes that characterize childhood disorders, do we have the techniques to tackle these? This important question has been neglected. Although outcome researchers include many different techniques in their protocols, they rarely have the complex designs or the statistical power to examine their individual efficacy. We now need basic research into the cognitive capabilities of children across developmental stages, and systematic examination of their ability to benefit from different techniques. This research has barely begun. However, early work from the University of East Anglia (Doherr, Reynolds, Wetherly and Evans, 2005; Quakley, Coker, Palmer and Reynolds, 2003; Quakley, Reynolds and Coker, 2004) has begun to unpick the ages at which children can carry out some of the fundamental tasks of CBT. For example, it appears that prepubescent children can often name emotions, generate post-event attributions, and link thoughts, feelings and behaviours. Moreover, these skills may be enhanced when sensitive cueing is used. More of this type of research is now needed. Similarly, although parental cognition is now implicated in the maintenance of internalizing disorders, we have yet to establish that the techniques used to modify adults' cognitive distortions carry over to situations when the index client is not them but their child. It seems likely that this will be the case, but research to establish this empirically is just beginning.

Recent developments in treatment

Prevention

One recent development is work aimed at preventing internalizing disorders. In contrast to the treatment trial data, which are largely very positive, results from prevention trials have been disappointing. Briefly, the results of recent, well-conducted trials of CBT-based prevention programmes for childhood depression (Merry, McDowell, Hetrick, Bir and Muller, 2007; Sheffield et al., 2006; Spence, Sheffield and Donovan, 2005; Spence and Shortt, 2007) and anxiety (Dadds et al., 1999; Dadds, Spence, Holland, Barrett and Laurens, 1997) have not shown substantial benefits when applied in universal settings. The FRIENDS programme for anxiety (Barrett, Farrell, Ollendick and Dadds, 2006) has produced statistically significant changes in symptoms, but effect sizes are often small, and it is unclear whether resources would be better used to treat children who have already developed a disorder.

New format CBT

Several groups are developing new methods of delivering CBT to children and families, which fit with busy lifestyles and short attention spans. In particular, there is evidence that CBT for anxiety can be delivered to children and their families reasonably effectively in "summer camp" compressed form, by telephone, and even without much therapist input at all, for example by computer or bibliotherapy (Cunningham, Rapee and Lyneham, 2006; Ehrenreich and Santucci, 2007; Rapee, Abbott and Lyneham, 2006). Self-help books for depression and anxiety (mainly aimed at parents) are readily available, although the effectiveness of this mode of treatment for depression has not been established.

Third wave interventions

The "third wave" therapies that are at the cutting-edge of CBT for adults are attracting interest from a number of child-focused researchers, particularly with the growing evidence of similar meta-cognitive biases and information-processing in adults and adolescents. The appeal of interventions such as mindfulness and attention-training is that they appear to be deliverable in ways that place modest demands on an immature cognitive system. This assumption is yet untested, but several groups are carrying out small trials of these types of interventions with children or adolescents. More established therapy models such as Dialectical Behaviour Therapy, which utilize mindfulness components, have been shown to have significant effects on suicidal ideation and mood in depressed adolescents (Miller, Rathus and Linehan, 2007), and there is some interesting early evidence about the potential effectiveness of Acceptance and Commitment Therapy approaches with depressed adolescents too (Murrell, Coyne and Wilson, 2005).

What needs to happen next?

Although there is now much attention focused toward treatment outcome research, the evidence suggests that we are a long way from universally effective treatment for children with internalizing disorders. A recent systematic review demonstrated that less than 60% of children receiving CBT for anxiety disorders were recovered at the end of treatment (Cartwright-Hatton et al., 2004). The figures for depression are no better (Watanabe, Munot, Omori, Churchill and Furukawa, 2007; Wood et al., 1996). It is likely that this situation will only improve substantially once child-centred, developmentally appropriate models are built. Furthermore, once clearer models are available, considerable effort will need to go into designing cognitive-behavioural techniques that are appropriate for our young clients and their families.

References

Asarnow, J. R., Scott, C. V. and Mintz, J. (2002). A combined cognitive-behavioral family education intervention for depression in children: a treatment development study. *Cognitive Therapy and Research, 26*, 221–229.

Barmish, A. J. and Kendall, P. C. (2005). Should parents be co-clients in cognitive behavioral therapy for anxious youth? *Journal of Clinical Child and Adolescent Psychology, 34*, 569–581.

Barrett, P. M., Farrell, L. J., Ollendick, T. H. and Dadds, M. (2006). Long-term outcomes of an Australian universal prevention trial of anxiety and depression symptoms in children and youth: an evaluation of the Friends Program. *Journal of Clinical Child and Adolescent Psychology, 35*, 403–411.

Bennett, H. E., Cartwright-Hatton, S. and Stavrinos, P. (2008). Autobiographical memory and problem solving in childhood depression. Manuscript submitted for publication.

Bogels, S. M. and Siqueland, L. (2006). Family cognitive behavioral therapy for children and adolescents with clinical anxiety disorders. *Journal of The American Academy of Child and Adolescent Psychiatry, 45*, 134–141.

Cartwright-Hatton, S., Hodges, L. and Porter, J. (2003). Social anxiety in childhood: the relationship with self and observer rated social skills. *Journal of Child Psychology and Psychiatry, 44*, 737–742.

Cartwright-Hatton, S., Roberts, C., Chitsabesan, P., Fothergill, C. and Harrington, R. (2004). Systematic review of the efficacy of cognitive behaviour therapies for childhood and adolescent anxiety disorders. *British Journal of Clinical Psychology, 43*, 421–436.

Cartwright-Hatton, S., Tschernitz, N. and Gomersall, H. (2005). Social anxiety in children: social skills deficit or cognitive distortion? *Behaviour Research and Therapy, 43*, 131–141.

Clark, D. M. and Wells, A. (1995). A cognitive model of social phobia. In R. G. Heimberg and M. R. Liebowitz (Eds.), *Social Phobia: diagnosis, assessment, and treatment.* New York: The Guilford Press.

Clarke, G., Hops, H., Lewinsohn, P. M. and Andrews, J. (1992). Cognitive-behavioral group treatment of adolescent depression: prediction of outcome. *Behavior Therapy, 23*, 341–354.

Creswell, C. (2007). Cartwright-Hatton, S. Ref Type: Personal Communication.

Creswell, C., Brewin, C. R. and O'Connor, T. G. (in press). A longitudinal investigation of maternal and child anxious cognitions.*Cognitive Therapy and Research*.

Creswell, C., Schniering, C. A. and Rapee, R. M. (2005). Threat interpretation in anxious children and their mothers: comparison with nonclinical children and the effects of treatment. *Behaviour Research and Therapy, 43*, 1375–1381.

Creswell, C. and Cartwright-Hatton, S. (2007). Family treatment of child anxiety: outcomes, limitations and future directions. *Clinical Child and Family Psychology Review, 10*, 232–252.

Cunningham, M., Rapee, R. and Lyneham, H. (2006). Feedback to a prototype self-help computer program for anxiety disorders in adolescents. *AeJAMH (Australian e Journal for the Advancement of Mental Health), 5*, 1–9.

Dadds, M. R., Holland, D. E., Laurens, K. R., Mullins, M., Barrett, P. M. and Spence, S. H. (1999). Early intervention and prevention of anxiety disorders in children: results at 2-year follow-up. *Journal of Consulting and Clinical Psychology, 67*, 145–150.

Dadds, M. R., Spence, S. H., Holland, D. E., Barrett, P. M. and Laurens, K. R. (1997). Prevention and early intervention for anxiety disorders: a controlled trial. *Journal of Consulting and Clinical Psychology, 65*, 627–635.

de Rosnay, M., Cooper, P. J., Tsigaras, N. and Murray, L. (2006). Transmission of social anxiety from mother to infant: an experimental study using a social referencing paradigm. *Behaviour Research and Therapy, 44*, 1165–1175.

Doherr, L., Reynolds, S., Wetherly, J. and Evans, E. H. (2005). Young children's ability to engage in cognitive therapy tasks: associations with age and educational experience. *Behavioural and Cognitive Psychotherapy, 33*, 201–215.

Ehrenreich, J. T. and Santucci, L. C. (2007). *Development and Preliminary Evaluation of a One-week Summer Treatment Program for Separation Anxiety Disorder*. Paper presented at the World Congress of Behavioural and Cognitive Psychotherapies Conference, Barcelona: WCBCT.

Field, A. P. (2006). Is conditioning a useful framework for understanding the development and treatment of phobias? *Clinical Psychology Review, 26*, 857–875.

Field, A. P. and Cartwright-Hatton, S. (2008). Parental anxiety: cognitive-behavioural processes in the intergenerational transmission of fear to children. Manuscript submitted for publication.

Hadwin, J. A., Garner, M. and Perez-Olivas, G. (2006). The development of information processing biases in childhood anxiety: a review and exploration of its origins in parenting. *Clinical Psychology Review, 26*, 876–894.

Harrington, R., Whittaker, J. and Shoebridge, P. (1998). Psychological treatment of depression in children and adolescents: a review of treatment research. *British Journal of Psychiatry, 173*: 291–298.

Jacobs, L. and Joseph, S. (1997). Cognitive triad inventory and its association with symptoms of depression and anxiety in adolescents. *Personality and Individual Differences, 22*, 769–770.

Kaufman, N. K., Rohde, P., Seeley, J. R., Clarke, G. N. and Stice, E. (2005). Potential mediators of cognitive-behavioral therapy for adolescents with comorbid major depression and conduct disorder. *Journal of Consulting and Clinical Psychology*, *73*, 38–46.

Kovacs, M., Gatsonis, C., Paulauskas, S. and Richards, C. (1989). Depressive disorders in childhood IV: a longitudinal study of comorbidity with and risk for anxiety disorders. *Archives of General Psychiatry, 46*, 776–782.

Kuyken, W., Howell, R. and Dalgleish, T. (2006). Overgeneral autobiographical memory in depressed adolescents with, versus without, a reported history of trauma. *Journal of Abnormal Psychology, 115*, 387–396.

Lewinsohn, P. M., Clarke, G. N., Hops, H. and Andrews, J. A. (1990). Cognitive behavioral treatment for depressed adolescents. *Behavior Therapy, 21*, 385–401.

Libby, S., Reynolds, S., Derisley, J. and Clark, S. (2004). Cognitive appraisals in young people with obsessive-compulsive disorder. *Journal of Child Psychology and Psychiatry, 45*, 1076–1084.

Mather, A. and Cartwright-Hatton, S. (2004). Cognitive predictors of obsessive-compulsive symptoms in adolescence: a preliminary investigation. *Journal of Clinical Child and Adolescent Psychology, 33*, 743–749.

Merry, S., McDowell, H., Hetrick, S., Bir, J. and Muller, N. (2007). Psychological and/or educational interventions for the prevention of depression in children and adolescents. *Cochrane Database of Systematic Reviews, 2007*.

Miller, A. L., Rathus, J. H. and Linehan, M. M. (2007). *Dialectical Behavior Therapy with Suicidal Adolescents*. New York: Guilford Press.

Morgan, J. and Banerjee, R. (2006). Social anxiety and self-evaluation of social performance in a nonclinical sample of children. *Journal of Clinical Child and Adolescent Psychology, 35*, 292–301.

Murray, L., Cooper, P., Creswell, C., Schofield, E. and Sack, C. (2007). The effects of maternal social phobia on mother-infant interactions and infant social responsiveness. *Journal of Child Psychology and Psychiatry, 48*, 45–52.

Murrell, A. R., Coyne, L. W. and Wilson, K. G. (2005). ACT with children, adolescents, and their parents. In S. C. Hayes and K. D. Strosahl (Eds.), *A Practical Guide to Acceptance and Commitment Therapy* (pp. 249–273). New York: Springer Science + Business Media.

National Institute for Health and Clinical Excellence (2007). *Anxiety (Amended): management of anxiety (panic disorder, with or without agoraphobia, and generalised anxiety disorder) in adults in primary, secondary and community care*. London: NICE.

National Institute for Clinical Excellence (2005). *Depression in Children and Young People: identification and management in primary, community and secondary care* London: NICE.

Park, R. J., Goodyer, I. M. and Teasdale, J. D. (2004). Effects of induced rumination and distraction on mood and overgeneral autobiographical memory in adolescent major depressive disorder and controls. *Journal of Child Psychology and Psychiatry, 45*, 996–1006.

Parr, C. and Cartwright-Hatton, S. (2008). Social anxiety in adolescents: the effect of video feedback on anxiety and the self-evaluation of performance. Manuscript submitted for publication.

Quakley, S., Coker, S., Palmer, K. and Reynolds, S. (2003). Can children distinguish between thoughts and behaviours? *Behavioural and Cognitive Psychotherapy, 31*, 159–167.

Quakley, S., Reynolds, S. and Coker, S. (2004). The effect of cues on young children's abilities to discriminate among thoughts, feelings and behaviours. *Behaviour Research and Therapy, 42*, 343–356.

Rapee, R. M. (1997). Potential role of childrearing practices in the development of anxiety and depression. *Clinical Psychology Review, 17*, 47–67.

Rapee, R. M., Abbott, M. J. and Lyneham, H. J. (2006). Bibliotherapy for children with anxiety disorders using written materials for parents: a randomized controlled trial. *Journal of Consulting and Clinical Psychology, 74*, 436–444.

Salkovskis, P. M. (1985). Obsessional-compulsive problems: a cognitive-behavioural analysis. *Behaviour Research and Therapy, 23*, 571–583.

Sheffield, J. K., Spence, S. H., Rapee, R. M., Kowalenko, N., Wignall, A., Davis, A. and McLoone, J. (2006). Evaluation of universal, indicated, and combined cognitive behavioral approaches to the prevention of depression among adolescents. *Journal of Consulting and Clinical Psychology, 74*, 66–79.

Spence, S. H., Sheffield, J. K. and Donovan, C. L. (2005). Long-term outcome of school-based, universal approach to prevention of depression in adolescents. *Journal of Consulting and Clinical Psychology, 73*, 160–167.

Spence, S. H. and Shortt, A. L. (2007). Can we justify the widespread dissemination of universal, school-based interventions for the prevention of depression among children and adolescents? *Journal of Child Psychology and Psychiatry, 48*, 526–542.

Stark, K. D., Schmidt, K. L. and Joiner, T. E. Jr. (1996). Cognitive triad: relationship to depressive symptoms, parents' cognitive triad, and perceived parental messages. *Journal of Abnormal Child Psychology, 24*, 615–631.

Temple, S. (1997). *Brief Therapy for Adolescent Depression*. Sarasota, FL: Professional Resource Press/Professional Resource Exchange, Inc.

Treatment for Adolescents With Depression Study (TADS) Team, John March, Susan Silva, Stephen Petrycki, John Curry, Karen Wells et al. (2004). Fluoxetine, cognitive-behavioral therapy, and their combination for adolescents with depression: treatment for adolescents with depression study (TADS) randomized controlled trial. *Journal of the American Medical Association, 292*, 807–820.

Verduyn, C., Barrowclough, C., Roberts, J., Tarrier, T. and Harrington, R. (2003). Maternal depression and child behaviour problems. Randomised placebo-controlled trial of a cognitive-behavioural group intervention. *British Journal of Psychiatry, 183*, 342–348.

Vine, J. and Stopa, L. (2008). Interpretative biases in social anxiety: does social anxiety influence the way that adolescents interpret ambiguous and mildly negative social events? Manuscript in preparation.

Watanabe, N., Munot, V., Omori, I., Churchill, R. and Furukawa, T. (2007). Psychotherapy for depression among children and adolescents: a systematic review. *Acta Psychiatrica Scandinavica, 116*, 84–95.

Wells, A. (1995). Meta-cognition and worry: a cognitive model of generalized anxiety disorder. *Behavioural and Cognitive Psychotherapy, 23*, 301–320.

Wells, K. C. and Albano, A. M. (2005). Parent Involvement in CBT treatment of adolescent depression: experiences in the treatment for adolescents with depression study (TADS). *Cognitive and Behavioral Practice, 12*, 209–220.

Wood, A., Harrington, R. and Moore, A. (1996). Controlled trial of a brief cognitive behavioural intervention in adolescent patients with depressive disorders. *Journal of Child Psychology and Psychiatry, 37*, 737–746.