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Applying Treatment Outcome Research in Clinical Practice: Techniques for Adapting Interventions to the Real World

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Despite the growing literature on empirically supported therapies, these interventions are rarely used in clinical settings. Although researchers lament the poor transfer of techniques from controlled trials to clinics, little has been written to guide the adaptation of manualised treatments for real-life clinical practice. The goal of this paper is to provide suggestions for the clinical use of research-tested treatments, with specific examples from the treatment of child depressive disorders. Strategies for applying manuals flexibly, adapting treatments to address comorbidity, attending to individual differences, and overcoming training obstacles are highlighted.

Keywords: Empirically supported therapy; cognitive behavioural therapy; depression

Introduction

Despite the growing emphasis on research-based practice guidelines and empirically supported therapies (ESTs), the treatment approaches with the best empirical support are rarely used in typical clinical practice (Kazdin et al., 1990; Weersing, Weisz, & Donenberg, 2002). Although researchers and clinicians share the ultimate goal of improving quality of life for distressed children and families, relations have been strained, with researchers criticising therapists for failing to utilise outcome studies and therapists replying that the data are of little use. Despite calls for researchers to communicate meaningful findings more effectively, limited information is available about implementing efficacious treatments in the real world or adapting interventions for use with difficult clients. The goal of this paper is to address this gap by identifying barriers to real-world implementation of research-supported treatments and discussing techniques for making use of the current data. Others have done an excellent job of critiquing the current research literature, emphasizing the importance of testing therapies in the real world, attending to therapist factors associated with improvement, and understanding mechanisms of change (e.g., Goldfried & Wolfe, 1998; Nathan, Stuart, & Dolan, 2000). Thus, we will not review those topics here.

The following suggestions for applying research findings are based on our experiences supervising the implementation of ESTs for youth depression and anxiety in a community mental health centre study comparing the effectiveness of ESTs to usual care (Weisz et al., 2001). In the process of training more than 60 staff therapists and interns from disciplines including social work, psychology, marriage and family counselling, and art therapy, we have learned many lessons about the challenges of exporting research-supported interventions beyond the lab environment. Although the themes presented in the paper are applicable to most ESTs, examples will focus specifically on treatments for youth depressive disorders. We selected depression as a focus because symptom heterogeneity, high comorbidity rates, and the interplay between biological and environmental causal factors make the treatment of depression particularly complex. Nearly 25% of adolescents will experience an episode of depression by age 18 (Lewinsohn et al., 1993), and 72% of these youth will relapse within 5 years (Kovacs, 1996). Depressive disorders are associated with poor social adjustment, academic difficulties, substance abuse, and suicide, and comborbidity with anxiety disorders and externalising problems may exceed 75% (Compas & Hammen, 1994; Puig-Antich et al., 1993; Rohde, Lewinsohn, & Seeley, 1991).

Is research relevant to clinical practice?

Treatment outcome studies can be broadly considered either efficacy or effectiveness research, although, of course, the two terms are actually endpoints on a continuum. Pure *efficacy* research tests the impact of interventions under optimal conditions. Only participants with symptoms closely matching the target condition are included, and those with comorbid conditions may be excluded. Therapists receive detailed, intervention-specific training and treatment fidelity is assured through intensive supervision. Of course, this level of selection and monitoring is not typical of clinic practice, as clients are likely to have comorbid disorders and to come from families facing such severe financial and

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social stressors that even regular session attendance is difficult. Community clinicians are likely to have limited training in the use of manualised interventions, poor access to technique-specific supervision, and high productivity requirements. Because these factors may reduce the impact of treatments with proven efficacy, researchers are beginning to emphasize *effectiveness,* testing the impact of treatments provided in real-world clinical settings by community therapists. However, effectiveness trials are expensive and time consuming, and most treatment outcome studies have involved more elements of efficacy research than effectiveness research.

Because the research evidence is (and will always be) incomplete, clinicians are faced with a choice – either to use treatments supported by efficacy trials, but relatively untested in clinical practice, or to continue using treatments that have not been tested at all. Despite limitations in the current data, we believe guidance from the research literature is an essential supplement to professional experience. For example, research has found that client satisfaction is not necessarily related to symptom reduction (Lambert, Salzer, & Bickman, 1998). Therapists may receive positive feedback about services that actually failed to improve client functioning, and never realise that treatment goals were unmet. Currently, randomised clinical trials are the gold standard for determining treatment impact. Thus, Persons, a clinician and leading intervention researcher, argues that clinicians have an ethical responsibility to recommend research-supported interventions before implementing untested therapies (see debate in Persons & Silberschatz, 1998). Although ethical guidelines do not explicitly require the use of ESTs, the Code of Conduct, Ethical Principles, and Guidelines directs psychologists to 'value and have respect for scientific evidence… when giving psychological advice' (British Psychological Society, 2000).

Contrasting typical clinic treatments and ESTs

Attention to the literature is important, because current evidence suggests that standard clinic treatments for child and adolescent disorders may not diminish emotional and behavioural problems. An examination of 10 clinic effectiveness studies showed that effect sizes ranged from –.40 to .29, with a mean of 0.01, indicating that, on average, treatment had no effect (Weisz & Jensen, 1999). Similarly, outcomes for depressed youth receiving usual care in Los Angeles community mental health centres resembled the outcomes of control group youth in clinical trials, with far less symptom reduction than is typical for depressed youth treated with ESTs (Weersing & Weisz, 2002). Experimental support for these findings comes from a recent study randomly assigning 132 distressed youth to either academic tutoring (control condition) or psychotherapy (Weiss et al., 1999). Although therapy participants attended an average of more than 70 sessions, the overall treatment effect size was –0.08. In other words, participants randomly assigned to therapy fared slightly worse than those in the control group, with no evidence of a 'sleeper effect' at the 2-year follow-up (Weiss, Catron, & Harris, 2000).

In contrast, mean effect sizes from child and adolescent efficacy studies are positive and substantial, exceeding .70 in a series of meta-analyses encompassing over 300 studies (see review by Weisz & Jensen, 1999), and exceeding 1.0 in meta-analyses of structured interventions for depression (Lewinsohn & Clarke, 1999; Reinecke, Ryan, and DuBois, 1998). Several specific factors appear to be associated with the larger effect sizes found in efficacy trials. Compared to typical clinic therapy, treatment outcome research is more likely to be based on behavioural and cognitive-behavioural methods, to rely on focused therapy methods rather than eclectic approaches, and to depend on treatment manuals and fidelity monitoring to ensure a high degree of structure (Weisz et al., 1995). ESTs for depression clearly follow this pattern of differences from traditional clinic therapy. The majority of ESTs for depression are cognitive-behaviourally oriented (e.g., Brent et al., 1997; Clarke et al., 1999; Weisz et al., 1997), although interpersonal therapy has shown promise in predominantly Latino samples (Mufson et al., 1999; Rosselló & Bernal, 1999). ESTs for depression tend to be brief, ranging from about 8–18 sessions, and highly focused, with primary session goals, activities, and homework ideas suggested by treatment manuals (see review by Lewinsohn & Clarke, 1999).

Content of cognitive-behavioural interventions for depression

The Primary and Secondary Control Enhancement Training (PASCET; Weisz et al., 1997) program used in our effectiveness trial is fairly similar to other cognitive-behavioural ESTs for depression. In the first eight sessions, clients learn a variety of skills such as problem solving, relaxation, positive self-presentation, cognitive restructuring, and perseverance. In the remaining three to six session, clients focus on best-fit skills, learning to match appropriate coping skills to controllable and uncontrollable stressors and to transfer therapy skills to everyday life. Throughout treatment, children earn small rewards for completing weekly practice assignments. Although the child is the primary intervention target, therapists increase their understanding of the child's environment by visiting the child's home and school. Parents are encouraged to join their child at the end of each session to hear about the new skills learned and become familiar with the practice assignment for the coming week. Additionally, the therapist schedules three parent sessions to address family issues and discuss case conceptualisation.

Adapting ESTs for clinic use

Despite the promise shown by structured, research-supported interventions, ESTs have not been widely disseminated, in part because clinicians wonder whether the interventions are truly suitable for their clients. Our experiences have shown us that efficacious treatments are appropriate for difficult clients when therapist apply interventions flexibly, emphasize rapport, and tailor activities to specific client needs. Although we believe these basic principles may be applicable to many research-supported, manualised interventions, as a cautionary note, we would like to remind readers that these examples are based primarily on supervision of therapists in our youth depression and anxiety effectiveness trial.

Flexible application of manualised interventions

Several therapists in our effectiveness trial initially believed they were expected to read session content word for word from the manual, despite their realisation that this was an ineffective means of engaging a child or establishing rapport. The majority began with the assumption that every topic and activity in the manual was mandatory, to be completed during the scheduled week regardless of session time available, their client's capacity to understand, or crises in their client's life. Predictably, these misconceptions led to rushed sessions in which clients failed to grasp even basic session content, and may well have felt misunderstood. Research manuals are not written to be followed word for word, but as roadmaps, indicating core skills and concepts to cover. As it is unlikely that the age, ethnicity, life experiences, and current needs of any client will be a perfect match to all aspects of a specific treatment manual, adaptations to the intervention structure or session content may be necessary.

Adapting intervention structure. On a broad level, it may be important to add treatment components or adapt planned intervention schedules. For example, parent training, multiple family meetings, or collaboration with the school may be needed to change problematic aspects of a child's environment. Extra rapport-building sessions may be needed before introducing intervention content to a highly anxious, withdrawn, or unmotivated child. Although many manuals plan to introduce a new concept each week, it may be important to devote multiple sessions to a topic that is particularly relevant, skip a skill that is beyond a child's developmental level, or cover content out of order to help meet immediate needs. For example, a child approaching final exams may benefit more from relaxation skills than an emphasis on using entertaining activities to control rumination.

Adapting session content. A clinically sophisticated approach does not involve mindless devotion to suggested exercises and assignments, but a skilled plan for presenting the major intervention components in a way that is meaningful to each client. Revising worksheets, activities, role plays, and practice assignments is not only acceptable, but may actually be essential to the success of therapy. For example, one PASCET session targets positive self presentation skills, both because putting one's best foot forward can improve mood, and because the withdrawn, sullen, and irritable behaviours of depressed youth often alienate others. The treatment manual suggests that therapists help clients create a positive self-presentation through attention to body posture, eye contact, facial expressions, tone of voice, and speech content. But cultural sensitivity is essential, as the direct eye contact expected by European-Americans may be culturally inappropriate for an African-American child to use in interactions with adults. Because minority youth are often under-represented in treatment samples, it is particularly important for therapists to use their own knowledge of cultural expectations to modify interventions to fit clients.

Attention to a client's age and maturity level is also important, as the language and activities suggested in a manual may be too simplistic or too sophisticated. Adolescents may be embarrassed by carrying therapy workbooks or dislike workbook drawings designed for younger clients, so transferring assignments into a spiral notebook may make the intervention more appealing. For younger clients, making collages, drawing pictures, doing active role-plays, and using characters from popular television shows to illustrate difficult points will help ensure that explanations of new skills are appealing and comprehensible. Because children and learning disabled clients often perceive written homework assignments as a burden, procedures can be modified, with clients audiotaping homework or calling the therapist between sessions with a brief description of their assignment.

Boundaries to adaptation. Of course, in adapting a manualised intervention, it is extremely important to be sure that key components of the intervention are not lost. Although little research as been done to assess the impact of therapist adherence and flexibility, preliminary evidence does provide some guidance. In tests of a manualised intervention for youth anxiety disorders, flexible implementation of suggested exercises did not have a negative impact on treatment (Kendall & Chu, 2000). However, numerous studies assessing the impact of Multi-Systemic Therapy (MST) with juvenile offenders demonstrate that failure to adhere to core intervention principles leads to less favourable outcomes (Henggeler et al., 1997). Treatment adherence is linked to improved family relations and decreases in delinquent behaviour (Huey et al., 2000). It is clearly premature to draw firm conclusions about the limits to appropriate adaptation of manuals. However, at this point, it appears that specific wording and specific exercises are not likely to be essential, but that adaptations do need to convey the core concepts and skills of the intervention. Changes to the essential nature of the intervention may well undermine treatment impact. Knowing the difference between an appropriate modification and one that eliminates, or even contradicts, a key facet of the program will require a thorough understanding of the underlying principles of the intervention.

Maintaining the therapeutic alliance

The therapeutic alliance is a key to collaborative work with children and families (Shirk & Saiz, 1992) and an important predictor of successful adult outcomes across psychotherapy orientations (Nathan, Stuart, & Dolan, 2000). Many therapists have expressed concerns that manualised interventions downplay the importance of the therapeutic relationship, reducing the clinician's role to that of technician (Addis & Krasnow, 2000). Although variations in outcome due to therapist differences are reduced by treatment manuals (Nathan et al., 2000), empathy and the unique talents of individual therapists can enhance treatment success. As supervisors, we see clear differences in children's responses to treatment based on their therapist's warmth, empathy, responsiveness, clarity of expression, and quality of case conceptualisation. We have also found that once therapists overcome the misconceptions about treatment manuals described above, skilful use of manualised interventions does not disrupt the therapeutic alliance. Our subjective impression is

supported by a community mental health centre finding that ratings of therapeutic alliance were equal for adults treated with either manualised interventions or usual care (Addis, Wade, & Hatgis, 1999).

Alliance alone is not likely to produce positive outcomes, as many existing treatment programs and strategies have shown high consumer satisfaction but poor outcomes (Pekarik & Guidry, 1999; Scott, 2002). Although alliance and consumer satisfaction may be essential to engage clients, these factors may not lead to change without the inclusion of specific intervention content. A primary challenge for therapists new to manualised interventions is balancing the structure provided by the treatment protocol with the needs of the client. Overly strict adherence to the manual may lead therapists to ignore or short-change the problems children bring to sessions. Alternatively, therapists may make the opposite mistake of immediately abandoning the structured intervention to spend the entire session discussing events from the past week. Skilful implementation of a manualised intervention involves both empathetic attention to stressful events, and encouraging clients to see ways in which intervention concepts and skills can facilitate coping. Indeed, the events and problems arising between sessions offer therapists a way to bring key concepts and skills to life by connecting them to issues of genuine personal relevance. Of course, major life events, such as parental divorce or disclosure of abuse, may require emergency sessions outside the framework of the structured intervention. Wilson (1998) provides an excellent discussion of this topic.

Addressing severe disorders and comorbidity

Although individuals with serious or comorbid conditions can be difficult to treat regardless of intervention modality, empirically supported interventions can be used in difficult-to-treat populations. Comorbidity does not necessarily diminish the impact of structured interventions for child and adult depression (e.g., Clarke et al., 1992; Persons, Bostrom, & Bertagnolli, 1999; Rohde et al., 2001), and mounting evidence suggests that effects of manualised treatments for specific disorders may generalise to other problems (Addis et al., 1999; Kendall, 1994). Generalisation isn't particularly surprising, as many research supported interventions rely on similar skills. For example, problem solving, relaxation, and cognitive restructuring are taught in interventions targeting depression (Clarke et al., 1999; Weisz et al., 1997), anxiety (Kendall, 1994), and anger management (Lochman et al., 1984).

Selecting a problem to target first. Clearly, problems such as suicidality, highly aggressive behaviour, or serious substance use must be managed before addressing co-occurring problems. But treatment priorities are often less clear cut, leaving clinicians with several options. If one condition seems to underlie others, it makes sense to target that core problem first. For example, a child could become depressed because intense symptoms of anxiety interfere with friendships and prevent school success. In other cases, the therapist may need to prioritise treatment of problems clients find most disturbing, problems producing the most functional impairment, or problems that seem likely to respond most quickly to therapy.

Treating multiple problems concurrently. Fortunately, simultaneous treatment of comorbid problems is often possible due to overlap in the core skills covered by ESTs for internalising and externalising problems. Rather than focusing on just one problem, session time devoted to each core topic can be expanded as necessary to cover examples and exercises relevant to each intervention target. Deep breathing exercises can be used either to control temper or reduce test anxiety, cognitive restructuring can target unrealistic thoughts making a child feel sad, worried, or angry, and problem solving can be applied to resolve situations leading to anger or despair. Unique components of interventions for comorbid conditions can be added after the intervention for the primary problem has been completed. For example, although many of the skills in the Coping Cat anxiety intervention are common to depression interventions, the program also has a unique focus on exposure to feared situations (Kendall et al., 1989). Thus, after covering skills common to both depression and anxiety interventions, additional exposure sessions can be conducted to treat comorbid anxiety.

Case conceptualisation

We have discovered that therapists new to ESTs often worry that manualised interventions will not permit adequate attention to case conceptualisation and the unique nature of each client's problems. Our view is that ESTs, like all theory-guided interventions, require attention to a client's life experiences, personality, family dynamics, and culture. Although cognitive-behavioural interventions for depression include core coping skills designed to be helpful to most children, tailoring the intervention to a client's unique needs requires an understanding of underlying environmental, historical, and biological factors serving to generate and maintain depression. For example, one lonely child's withdrawn behaviour, rejection sensitivity, and hopelessness may be based a core belief arising from an early history of loss and rejection that she is unlovable. In another child, a hot temper, poor social skills, and the resulting peer rejection may be the best explanation of these symptoms. Although the surface problems are similar, the first child may benefit primarily from learning to recognise and challenge unrealistically negative thoughts, and the second from developing more successful methods for interacting with others. Both approaches could fit within a cognitive-behavioural treatment program.

Case conceptualisation may also play an important role in choosing among ESTs. Preliminary evidence supports both interpersonal and cognitive-behavioural interventions for depression, and no studies have yet investigated the optimal match between intervention type and factors such as problem etiology or core depressive symptoms. Using the example above, it may be that interpersonal therapy would be a better fit for the first child, cognitive-behavioural for the second.

Learning to use empirically supported treatments

Limitations on therapist's time are a major practical barrier to the dissemination of ESTs. Due to the growing emphasis on efficiency and cost-containment, most clinicians are already overworked and under increasing

pressure to meet productivity standards. Because time spent obtaining training and supervision in a new technique is rarely considered 'productivity', clinicians are actually penalised for learning something new. Although this is clearly a difficulty that must be addressed at a system-wide level, becoming familiar with multiple ESTs is not as onerous as it may initially appear. Learning one manualised intervention makes it easier to learn the second, both because content is likely to overlap and because basic skills such as balancing structure and flexibility, setting specific treatment goals, and taking an active role in teaching material to clients will transfer across interventions (Addis et al., 1999).

Identifying ESTs

Keeping abreast of research developments does not require scanning every journal that publishes treatment outcome research, because broad reviews of research-supported interventions are published frequently (e.g., Burns, Hoagwood, & Mrazek, 1999; Weisz & Jensen, 1999), along with reviews focused on specific topics, such as parent training (Scott, 2001), or child depression (Lewinsohn & Clarke, 1999). Additionally, several websites summarise research findings, list training resources, or provide information about purchasing treatment manuals, including the Centre for Evidence Based Mental Health site, at *cebmh.com*, the Society for a Science of Clinical Psychology site, at *www.wpic.pitt.edu/research/sscp,* and the American Psychological Association Society of Clinical Psychology, at *www.apa.org/divisions/div12/rev_est/index.shtml.* Although some treatment manuals must be purchased, most are inexpensive or free. For example, a free copy of the Adolescent Coping with Depression Course (Clarke et al., 1999) is available at *www.kpchr.org/info/newACWD.html*.

Finding training resources

For therapists interested in learning an EST, the primary barrier may be finding appropriate training and consultation/supervision. Although large cities may have ongoing clinical trials and numerous therapists specialising in particular interventions, smaller communities are unlikely to have these resources. Fortunately, an increasing number of continuing professional development courses teach ESTs. Using coursework in ESTs to develop a new treatment specialty may help make the time and money invested in ongoing education truly worthwhile. If training in a specific EST is not available, the next best alternative may be continuing education courses or university classes focusing on the general theory underlying the intervention, because a solid theoretical understanding of cognitive-behavioural or interpersonal theory may facilitate manual implementation and adaptation. Finally, the authors of interventions themselves may be willing to discuss aspects of the treatment that have been tricky to adapt for difficult clients. Thoughtful feedback from community clinicians in our effectiveness trial has helped transform an efficacious intervention for depression into one that is feasible in clinical practice. Hopefully, the growing emphasis on ESTs will lead to increased interaction between researchers and clinicians and greater availability of training and supervision opportunities. Widespread use of ESTs will never occur without opportunities for therapists to develop competency in new models, and feedback from clinicians to treatment developers will be important in improving interventions (Weisz et al., 2001; Weisz et al., 2000).

Becoming comfortable with a new intervention

Because ESTs are almost always manualised, the transition from an unstructured mode of therapy to a highly structured intervention can be uncomfortable. In our study, even therapists with over a decade of experience have reported feeling awkward and unskilled during their first use of a treatment manual. However, we have also found that even novice therapists feel comfortable implementing the manualised intervention after seeing two or three cases. Many of our project therapists have actually reported that the manualised intervention is easier to employ than their usual form of treatment and have begun using it with cases outside the effectiveness trial. While learning a new intervention, one option is to begin by integrating just one or two of the core components into ongoing therapeutic work. Although implementation of isolated program segments is not likely to have the same impact as the full intervention, becoming comfortable with one element at a time may reduce the training burden.

Another useful approach to learning involves applying the core principles of the program to one's own life. Taking several weeks to practise problem-solving skills, progressive muscle relaxation, and cognitive restructuring may combat any lingering scepticism about the intervention and lead to a better understanding of the challenges clients will face. One therapist in our program reported that she thought relaxation exercises were silly until she tried them and her headache disappeared. Several therapists at a clinic undergoing major administrative changes noted that they were not fully aware of the value of cognitive restructuring until they realised that much of the stress created by clinic changes was grounded in unrealistically negative thoughts about their job security. Our experience as supervisors has persuaded us that clients are more likely to follow treatment recommendations when their therapist clearly believes in the intervention plan, and are more capable of doing so when they have been prepared for possible difficulties.

Case example

Because treatment outcome research provides information about average client response and treatment manuals discuss program application in general terms, it is not always clear how to translate findings into work with a specific client (Persons & Silberschatz, 1998; Weisz & Hawley, 2002). To illustrate how an EST may be tailored to an individual case, we conclude by describing the treatment of a representative client from our effectiveness trial, with details changed to protect confidentiality.

Kevin, a 14-year-old ninth grader, entered treatment with diagnoses of major depression, dysthymia, oppositional defiant disorder, and generalised anxiety disorder. He reported feeling sad, hopeless, disinterested in everything, and angry because he was frequently

teased about being short and skinny. His parents described him as tearful, anxious, and disobedient. Teachers reported that he was extremely isolated at school and disliked both by peers and adults because he consistently defied classroom expectations, made rude remarks to teachers, and picked fights with classmates. He was overly sensitive to peer teasing and adult feedback and burst into tears in the classroom several times each week. These episodes often ended with him lying on the floor sobbing until an adult escorted him to the infirmary. Although teachers believed him to be a bright student, his grades were near failing because he rarely completed homework or studied for tests.

Kevin faced multiple stressors at home, including extreme financial pressure and parental conflict. Screaming arguments occurred daily, and his parents were considering divorce. Arguments frequently revolved around the expense of food and clothes for Kevin, and cramped living arrangements ensured he overheard every angry word. Kevin's mother was depressed and anxious, and would become highly distressed when Kevin wanted to engage in age appropriate activities like playing outside with neighbourhood kids. She tended to set overly restrictive rules, whereas Kevin's father was minimally involved in parenting, rarely interacting with Kevin even to discipline him.

To address comorbidity, Kevin's therapist used skills taught as part of the standard intervention for depression to address anxiety and defiant behaviour. For example, problem solving was applied to events that made him sad or angry, relaxation was used to target anxiety and anger, and cognitive restructuring was used to address sad, worried, and angry thoughts. In early sessions, Kevin showed an impressive intellectual grasp of skills such as problem solving, but his sense of helplessness and hopelessness was so pervasive that he consistently concluded coping strategies were useless before actually trying them. Thus, his therapist heavily emphasised use of the skills within the therapy sessions, asking Kevin to rate his mood before and after trying each new skill. To increase motivation in early sessions she added small in-session rewards, such as the opportunity to watch a video or buy a soda. Unfortunately, in-session rewards and changes to the reward system for completing weekly practice assignments did not lead to skill-practice between sessions. Thus, the therapist added two family sessions to the treatment program to focus on increasing family motivation, establishing specific plans for parental supervision of Kevin's school and therapy homework, and implementing an at-home reward system for homework completion.

Because Kevin was highly sensitive to perceived criticism, his therapist also frequently modified the presentation of core therapy skills. For example, when the positive self-presentation skills were first introduced, Kevin had a strong negative reaction, stating that he wasn't interested in learning 'how to be a phoney' or being friends with people that didn't like him just the way he was. Kevin's therapist was unwilling to simply skip the topic because she felt that social isolation caused by poor social skills was a major factor maintaining his depression. Concerns included his limited awareness of the impact of his behaviour on others, crying spells during which he made no attempt to wipe tears or mucus from his face, his tendency to shower irregularly and wear dirty clothes for several days running, and his propensity to be extremely cynical, sarcastic, and critical in conversations with peers and adults. However, the therapist recognised that social interactions were a particularly sensitive issue for Kevin, and that the planned activities of making and discussing sample video tapes of positive and negative self-presentation styles would be far too stressful. Thus, after using examples from television shows to introduce the idea that the way we present ourselves can affect how we feel and how others react to us, she spent the remainder of the session helping Kevin to apply old skills to current problems. However, she also indirectly maintained a focus on self-presentation skills, by making an extra effort to thank Kevin for appropriate comments and session participation and to notice and encourage eye contact and smiling. She continued reinforcing positive behaviours and ignoring negative behaviours throughout all remaining therapy sessions. Within a few sessions, Kevin stopped sobbing about minor events during therapy sessions. Toward the end of therapy, after Kevin identified making friends at school as his main goal, she returned to the topic of self-presentation and completed the exercises omitted earlier.

Throughout treatment, Kevin's therapist also intervened in the family and school environments to establish a consistent response to problematic behaviours. Both at home and at school, sad and angry outbursts were inadvertently rewarded with extra adult attention, time out of class, or even the chance to go home from school. After a school meeting, teachers agreed that sending Kevin home would be replaced with a 5-minute break to wash his face and blow his nose before returning to class. Kevin's mother decided she would ignore him when he yelled abusive statements, but that she would also make time daily for a fun activity to reinforce his positive behaviours and strengthen their relationship. Parent sessions were used to identify the impact that parental conflict, maternal anxiety, and paternal lack of engagement were having on Kevin. His parents began developing strategies for resolving disagreements without exposing Kevin to frightening arguments and making changes in household rules that combined consistent responses to Kevin's inappropriate behaviour with increased freedom to engage in age appropriate events (e.g., attending school dances, riding public transportation alone). To facilitate progress in these areas, Kevin's therapist referred them to a parenting group and couple's therapy. Additionally, to provide additional structure for Kevin, the therapist worked with the school counsellor to arrange for an adult mentor to monitor his homework completion, help him set timelines for tests and projects, and provide advice about resolving problems with teachers and peers.

During the individualising phase of treatment, it was clear that Kevin would have difficulty implementing coping skills on his own and that family problems were a primary stressor. Although the standard manual procedure was to continue individual work, Kevin's therapist wondered whether family sessions might be more beneficial. Research support for family-based

depression interventions is mixed (see review by Asarnow, Jaycox, & Tompson, 2001), but evidence linking parental depression, family conflict, and disengaged parenting to increased rates of child depression is clear (see review by Beardslee, Versage, & Gladstone, 1998). Family work was integrated into the framework of the intervention by having Kevin teach his parents the skills he had learned for coping with upsetting events and by shifting to family based homework assignments. Thus, sessions focused on the use of problem solving to resolve sources of conflict, and weekly homework assignments consisted of family meetings to discuss the implementation of solutions.

By the end of 20 treatment sessions, both Kevin and his family had made substantial gains. Kevin's grades had improved to above average, he no longer cried during class or ate alone at lunch, and he had attended a school dance and joined a school sports team. Although he remained pessimistic, he no longer reported feeling hopeless and was less anxious about trying new activities. Kevin's parents indicated that he was less defiant, that arguments at home had decreased, and that they once again enjoyed his company.

This case example illustrates several important techniques for adapting a manualised EST to fit a client. The core skills central to the treatment protocol were all included, but the therapist showed flexible use of the intervention by adding family work, encouraging parents to participate in couple's therapy and parenting groups, and delaying overly challenging sessions. Modifications within sessions included an increased focus on *in vivo* skill use to help Kevin realise the benefits of new strategies, and a heavy emphasis on ignoring inappropriate behaviours and providing social and tangible rewards for session participation. Comorbid anxiety and disruptive behaviours were addressed by helping Kevin to apply each core intervention skill to cope with sad, angry, and anxious feelings. In addition, his therapist facilitated changes in his home and school environments to guarantee Kevin would be rewarded for interacting positively, controlling his anger, or trying something new despite his fears. Collaboration with teachers and parents helped ensure that adults wouldn't inadvertently reward crying or yelling with extra attention. Case conceptualisation also played an important role, guiding the therapist to focus on family work to decrease stressors in Kevin's life and on social skill development to decrease his sense of isolation and loneliness.

Final thoughts

Despite important differences between the clients and conditions of randomised clinical trials on the one hand, and typical clinic practice on the other, we believe it is possible to adapt efficacious interventions for use in the real world. We have offered a few thoughts about how to do so based on our experiences supervising community clinic therapists in their use of laboratory-tested interventions with difficult clients. Our hope is that this paper will stimulate discussion of obstacles to empirically based practice, making it more likely that the time and money devoted to clinical research is ultimately of practical benefit to children and families seeking help.

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