ORIGINAL ARTICLE



Process Factors Associated with Improved Outcomes in CBT for Anxious Youth: Therapeutic Content, Alliance, and Therapist Actions

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Abstract Cognitive behavioral therapy (CBT) has been established as an empirically supported treatment for anxiety in youth. Recent efforts have been underway to elucidate the evidence- based process factors that are associated with successful outcomes. These factors have included both therapy content (homework; exposure tasks) and therapy process (therapeutic alliance; therapist actions). Although exposure tasks have been identified as a key component of CBT, they are not always implemented with the greatest efficacy, in session or at home. Successful implementation of exposure tasks may rely, in part, on a strong therapeutic alliance. Furthermore, therapist actions influence the alliance and client motivation and participation in homework and exposure tasks. A review of the relevant literature indicates that additional research is needed to elucidate the interaction between therapeutic process factors, such as alliance and therapist actions, and therapeutic content, including exposure tasks.

Keywords Homework \cdot Exposure tasks \cdot Alliance \cdot Therapist actions \cdot Anxious youth

Introduction

Anxiety has been identified as one of the most common mental health problems among children and adolescents,

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affecting more than 10% of youth (e.g., Copeland et al. 2014; Costello et al. 2005). Untreated, youth with anxiety disorders are likely to experience problems later in life, including impairments in social, academic, family, and occupational functioning, and reduced life satisfaction (e.g., Swan and Kendall 2016). Fortunately, therapeutic interventions have been developed that have been shown to reduce symptoms of anxiety and mitigate the risk of developing subsequent problems later in life (e.g., Wolk et al. 2015; Swan and Kendall 2016). In particular, cognitive behavioral therapy (CBT) is an evidence-based treatment that has demonstrated efficacy for youth anxiety disorders (e.g., Hollon and Beck 2013; Ollendick and King 2012).

Recent research efforts have focused on examining which aspects of CBT show the greatest relationship to improved outcomes for reducing anxiety symptoms. The factors that have demonstrated associations include specific treatment components (i.e., therapeutic content) as well as process variables (e.g., therapeutic relationship). Following a brief overview of CBT for anxious youth, the present review examines these factors and their influences on each other within the context of CBT for youth anxiety. First, components of CBT that are thought to be important (i.e., homework; exposure tasks) will be examined. Second, process variables, including the therapeutic alliance and therapist actions, will be explored, as well as how these factors may influence specific treatment components. Finally, we consider future directions for the study of how therapeutic process variables and treatment components interact to lead to successful outcomes for anxious youth.

Overview of CBT for Youth Anxiety

Methodologically sound studies have found CBT to be an empirically-supported treatment for youth anxiety (e.g., Kendall et al. 2008; Walkup et al. 2008). In CBT, youth typically participate in two phases of treatment: psychoeducation and exposure tasks. Throughout the intervention, therapists assist youth with learning and implementing new coping strategies. CBT for anxiety disorders typically begins with several sessions dedicated to anxiety management strategies. These strategies aim to help youth recognize the physical symptoms of anxiety, change maladaptive self-talk (e.g., Kendall 2012), and learn coping strategies, such as relaxation and problem-solving, to help them tolerate anxious arousal in exposure tasks (Manassis et al. 2010). The exposure phase of treatment involves having youth apply the skills they learned during the psychoeducation phase of treatment in increasingly challenging anxietyprovoking situations. Exposure tasks allow youth to face previously avoided situations, learn that they can cope in these situations, and discover that the feared consequences are not as likely as predicted (Hudson and Kendall 2002).

A recent study (Peris et al. 2015) found that (a) changing self-talk and (b) completing exposure tasks were associated with significant improvements in the trajectory of change in anxiety symptoms. Furthermore, a change in perceived self-efficacy (coping ability) was found to be a mediator of therapeutic change (Kendall et al. 2016). As such, the process of a youth developing a sense of mastery may be an important aspect for successful outcomes. Practicing the coping skills in situations both inside and outside of the therapy room provides ample opportunity to generalize skills learned in CBT (Swan et al. 2015). Out-of-session tasks (i.e., homework) are designed to solidify skills learned in therapy and give youth the opportunity to practice in real life.

Therapeutic Content in CBT: Homework and Exposure

Homework

Homework assignments align with and are part of both phases of anxiety treatment: psychoeducation and exposure. In the psychoeducation phase, homework typically focuses on developing and practicing coping strategies out of session (e.g., at home; in school). Specifically, homework assignments often focus on journaling and self-monitoring anxious feelings and thoughts, practicing relaxation skills, learning the process of problem solving, and challenging anxious self-talk (Arendt et al. 2016; Kendall and Barmish 2007; Hudson and Kendall 2002). During the

exposure phase, homework requires the youth to engage in anxiety-provoking activities between sessions. For example, a homework assignment for a youth with social anxiety might involve calling a classmate to ask a question (Arendt et al. 2016; Hudson and Kendall 2002).

Of course, an assigned homework task is of little use if a youth does not complete it, suggesting that homework is an important area for investigation. Several factors are associated with increased homework compliance. For example, therapists can increase compliance by referring to homework tasks by a different name. In the Coping Cat program (Hudson and Kendall 2002), the term "homework task" is replaced with "Show-That-I-Can (STIC) task" to not only reduce concerns about perfectionism or negative evaluation tied to the term "homework," but also to communicate a sense of accomplishment. The process of compliance is also increased by having youth begin with simple tasks and providing both positive and social reinforcement (e.g., prizes; verbal praise) when children complete them, even if the task is only partially completed (Hudson and Kendall 2002; Houlding et al. 2010). Research further suggests that homework compliance increases when therapists align the rationale for the homework with the client's therapy goals (Houlding et al. 2010) and when parents provide reminders and support (Puleo and Kendall 2011).

The utility of homework as a part of psychological therapy has primarily been examined in the adult literature, although there is some research on the efficacy of homework for youth. Generally, adults in treatment programs that include homework have significantly better outcomes compared to individuals in treatment programs that do not include homework (Kazantzis et al. 2010). Similarly, adults who complete homework assignments have better treatment outcomes than those who do not complete the assignments (Kazantzis et al. 2000; Rees et al. 2005; Mausbach et al. 2010). Although the findings in adults support the utility of homework for improved outcomes, the findings in therapy for anxious youth have not been as straightforward. On one hand, one study did not find homework completion to be a significant predictor of outcome at post-treatment or 1 year follow-up for anxious youth (Hughes and Kendall 2007). Similarly, the amount of time spent completing homework has not been found to significantly predict child- or clinician-reported outcomes for anxious youth at post-treatment or 3-month follow-up (Arendt et al. 2016). On the other hand, according to parent-report in the same study, more time spent completing homework significantly predicted decreased anxiety at 3-month follow-up (Arendt et al. 2016). One study (Tiwari et al. 2013) also found that treatment responders were more likely to have been assigned exposure homework between sessions and to have received rewards for their homework efforts in session. The efficacy of homework in youth therapy has also been

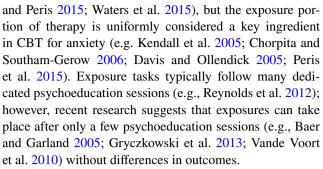


supported by findings for youth with obsessive–compulsive disorder (OCD) and for youth with autism spectrum disorder (ASD). In a study examining 30 youth with primary OCD, Park et al. (2014) found that increased homework completion and better homework quality predicted a decline in OCD severity. Similarly, a study examining 50 youth with comorbid ASD and anxiety found that family CBT was more effective than individual CBT, largely due to the increased number of at-home exposures completed by youth in family CBT (Puleo and Kendall 2011).

Despite some inconsistencies, it seems that homework in youth CBT is likely an important factor for successful outcomes. Arendt et al. (2016) posit that the inconsistencies in findings on homework for children and adolescents compared to the adult literature might be due to (a) an inherent unreliability in measurement of homework completion in youth, (b) different methodological approaches (i.e., continuous assessment in youth and retrospective assessment in adults), and (c) a highly motivated sample (i.e., perhaps no youth in the studies completed so little homework that it affected their treatment outcome). It may be the case that for youth, it is not enough to simply assume that completing homework leads to better outcomes; it may be important to discern between the quantity and the quality of the completed homework in youth therapy (Arendt et al. 2016). If it is truly the quality of the homework that matters, then a measure other than the time spent on completing homework should be used to assess homework completion. Indeed, it seems that a focus on homework quality may provide a more accurate rating and address a more important element of homework completion that is not captured by merely examining whether the assignment was or was not completed (Park et al. 2014). It is also yet to be determined whether homework completion is equally important across the phases of treatment (i.e., psychoeducation and exposure). Given the findings from youth OCD treatment, which places a greater emphasis on exposure homework than anxiety treatment does (e.g., Franklin et al. 2003; March et al. 2004), it is possible that homework assigned in the exposure phase of treatment may be the element predicting improved treatment outcomes. This would suggest that effects of homework on treatment outcome may be different depending on the phase of treatment a youth is in (i.e., psychoeducation vs. exposure tasks).

Exposure Tasks

There is a wealth of evidence supporting the utility of exposure tasks in the improvement of anxiety symptoms. There have been varying theoretical underpinnings that have been proposed as the active mechanism within exposure (e.g., habituation theory: Foa and Kozak 1986; Benito and Walther 2015; inhibitory learning theory; Kircanski



Support for the use of exposure tasks is strong, yet there are process-relevant factors that may increase or decrease the effectiveness of the exposures. These factors include how the exposure tasks are implemented, as well as the processes that influence therapist and client buy-in to the implementation and effectiveness of them. Exposure tasks demonstrate maximum benefit when they successfully evoke anxiety by providing opportunities to demonstrate mastery and to process the experience as evidence of mastery. This requires both activating some fear in the client and discouraging avoidance during the exposure task. Two studies (Kircanski and Peris 2015; Waters et al. 2015) found that greater variability in distress during exposure tasks predicted better outcomes, as did the use of exposures that incorporated stimuli targeting more than one anxiety symptom. As found with adults (e.g., Lang and Craske 2000), emotional variability during exposure tasks and the use of multiple stimuli are helpful in building a youth's confidence and the ability to tolerate various feared stimuli.

The process of discouraging avoidance supplements engagement with exposure. Research among youth with OCD suggests that interventions in which the therapist holds high expectations for the youth and encourages them to confront feared stimuli result in greater reductions in avoidance and better long-term gains (Chu et al. 2015; Benito et al. 2012). Hedtke et al. (2009) found that youth safety-seeking behaviors (i.e., behaviors that promote avoidance and/or escape) during exposure tasks predicted poorer outcomes. Similarly, Chu et al. (2015) found that youth avoidance (a treatment interfering behavior) was associated with higher anxiety, whereas coping behaviors (e.g., challenging anxious thoughts, problem solving) were associated with lower anxiety during treatment.

Evidence suggests that how the youth processes the exposure task—what happens before and after an exposure—impacts its efficacy. Tiwari et al. (2013) examined behaviors that occurred immediately before and after exposure tasks used in treatment for anxious youth. The results indicated that how the youth processed the experience was related to treatment outcomes. Interestingly, it was post-exposure processing, but not pre-exposure processing, that significantly predicted improvement. Apparently, completing an exposure has merit, but how the experience is "made



sense of' by the youth/therapist also contributes to the benefit. The authors (Tiwari et al. 2013) suggest that the postevent processing is important to solidify evidence against distorted thinking that occurred prior to the exposure. In other words, the exposure task (behavioral experiment) disconfirms the youth's faulty thinking that preceded the exposure experience.

Exposure tasks are also assigned as homework (e.g., in Coping Cat: "Show-That-I-Can" [STIC] task for children; Kendall and Hedtke 2006; "take home project" for teens; Kendall et al. 2002), thus, the process by which exposure tasks are engaged with outside of session merits consideration. However, studies have yet to directly examine youth and/or parent engagement with exposures at home. Initially, youth may be reluctant to engage with exposures given that doing so requires approaching previously avoided situations and/or stimuli. Parent involvement may be needed to encourage effective youth engagement. As an illustration of this, an experimental study of parental modeling compared outcomes for two types of parenting behavior prior to children taking a spelling test (Burstein and Ginsburg 2010). Parents were either trained to act (a) anxiously or (b) relaxed and confident prior to the child's spelling test. Results indicated that parents who acted anxiously prior to the test had children who were more likely to feel anxious and avoid the spelling test than parents who modeled feeling relaxed and confident before the test (Burstein and Ginsburg 2010). It is wise for therapists to work with parents ahead of their child's homework exposure task so that the therapist can guide parents in how to process the experience with their child. Relatedly, it can be helpful for therapists and parents to check in and review a youth's exposure homework completion and reward them appropriately (e.g., Houlding et al. 2010).

Exposures may be less effective when the process of engagement is weak. For example, a child's refusal to engage in a challenging exposure, or engagement in other behaviors that promote avoidance, can detract from the anticipated gains. In adult anxiety treatment, client resistance has predicted poor therapist adherence to a CBT model within a treatment protocol (Zickgraf et al. 2016). This finding is concerning given that youth clients are likely to resist exposures when they find them challenging and emotionally demanding (Bouchard et al. 2004; Chiu et al. 2009; Kendall and Ollendick 2004; McLeod et al. 2014). Indeed, adolescents displaying resistance in therapy have poorer outcomes in CBT for depression (Jungbluth and Shirk 2009). As the onus is on therapists to ensure that exposure tasks are challenging for the youth while also preventing avoidance, they must be careful to walk the line between firmly encouraging youth to engage in a task and unwittingly contributing to resistance. A related and frequently cited concern with regard to exposures is difficulty with generating motivation and buy-in to participate in the tasks, and this can be on the part of the client or the therapist. It has been reported that many clinicians have negative beliefs about exposure (e.g., Deacon et al. 2013a, b), and these negative beliefs are associated with suboptimal delivery of exposure tasks. In contrast to what the literature suggests, many therapists believe that exposures will lead to attrition, ruptures in alliance, and damage to clients (e.g., Gola et al. 2016).

For child clients in particular, parent buy-in is often needed for youth to complete exposure tasks at home. Consistent with concerns often noted by therapists (Deacon, Lickel et al. 2013a, b; Gola et al. 2016), barriers to parent buy-in may include logistical and time limitations, parental anxiety, parental distress about seeing their child in distress, and a lack of understanding of the rationale for exposures (e.g., Deacon, Farrell et al. 2013a). Youth clients may require support to handle anxiety-provoking situations, as approaching feared situations may initially seem counterintuitive to them. Thus, parents' support in the completion of exposures is often critical, and barriers to parent buyin should be addressed. Consistent with this point, *children* who have lower treatment expectancies (i.e., do not expect exposures to be helpful) are less likely to engage in exposures at home (Lewin et al. 2011). Importantly, families should be informed that exposures have been found to be safe, tolerable, and minimally risky (Gola et al. 2016; Richard and Gloster 2007; Olatunji et al. 2009), and therapists should be aware that exposure tasks are not detrimental to the therapeutic alliance (Kendall et al. 2009), nor do they lead to greater attrition (Gryczkowski et al. 2013).

Several process-related ideas have been proposed for improving buy-in to exposure tasks. Although research to date indicates that it may not be necessary to begin with anxiety management strategies (e.g., Vande Voort et al. 2010), there are several advantages to including them, which may be more salient in some cases than others. For example, the incorporation of anxiety management strategies may increase the acceptability of exposure tasks among clients, minimize therapist anxiety, and provide more skills for clients to handle future anxiety. Gryczkowski and colleagues (2013) noted that these strategies are intended to reduce symptoms and increase engagement in treatment, though their study findings did not support the need for these anxiety management strategies prior to the introduction of exposures. In their study, treatment outcome data indicated similarly large effect sizes as traditional anxiety interventions despite the fewer number of sessions dedicated to anxiety management strategies.

Client engagement with exposure tasks also may be increased through other strategies implemented during the exposure phase of treatment. For instance, a youth's confidence in his or her ability to engage in anxiety-provoking



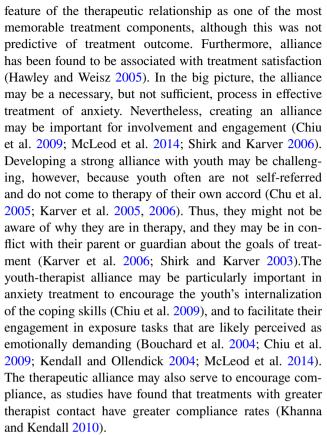
tasks may be reinforced by using a graduated exposure hierarchy so that the youth has the perception of mastery (Bouchard et al. 2004; Rapee et al. 2000). Other strategies for implementing exposures with anxious youth may be useful, such as integrating games into exposures, obtaining Subjective Units of Distress (SUDS: Wolpe 1969) ratings, and gradually approaching more difficult exposures (Peterman et al. 2015; Kendall et al. 2005; Bouchard et al. 2004). For example, Peterman et al. (2015) suggest that creating a scavenger hunt that requires engagement in anxiety provoking situations (e.g., talking to new people, separating from parents) may increase child engagement in exposure tasks. Strategies to facilitate the engagement process merit empirical study.

Therapeutic Processes

There are treatment manuals (e.g., Kendall and Hedtke 2006) and journal articles (Friedberg and Wilt 2010; Kendall et al. 2005; Peterman et al. 2015) to guide therapists in learning and implementing CBT with youth. Similarly, there are materials for guiding the implementation of homework. An aspect of engagement is not only the content that is delivered, but also *how* the content is delivered. Two processes that influence how therapeutic procedures are delivered and received include the therapeutic alliance and a therapist's approach to the client in therapy. These processes together serve as a vehicle to accomplish meaningful exposure tasks and therapy homework.

Therapeutic Alliance

Although an exact and universally accepted definition of alliance remains elusive in youth therapy, the commonly used definition of alliance is that of Bordin (1979), which states that alliance consists of (a) the affective bond between client and therapist, (b) agreement on treatment goals (e.g., overall and intermediate goals), and (c) agreement upon and involvement in therapy tasks to achieve those goals. The alliance is considered important to successful youth anxiety treatment. In general, mental health providers view alliance as important for change to occur (Knepley et al. in press). In a survey of over 1000 child mental health practitioners, 90% of the practitioners reported that they believed the relationship between the therapist and the child to be "very much" or "extremely" related to change in therapy (Kazdin et al. 1990), a far greater percentage than those who saw logistical features of the treatment to be important for change (Digiuseppe et al. 1996; Kazdin et al. 1990). When Kendall and Southam-Gerow (1996) assessed the 3-year follow-up effects of a therapy for youth anxiety, the youth commonly recalled a



Research has generally supported an association between alliance and outcome in youth anxiety treatment (e.g., Chiu et al. 2009; Hawley and Weisz 2005; Hudson et al. 2014; Marker et al. 2013; McLeod and Weisz 2005; Liber et al. 2010; Rapee et al. 2009), although the magnitude of the association has been modest. Another concern is that the direction of the relationship between alliance and outcome has not been established (Rapee et al. 2009). Creed and Kendall (2005) suggest that treatment gains may be associated with changes in the strength of the alliance and other studies have failed to find a significant association between alliance and outcome in youth anxiety treatment (Kendall 1994; Kendall et al. 1997; Liber et al. 2010). It is worth noting, however, that a uniformly high alliance reduces the range of scores and, thereby, reduces the ability for alliance to be differentially associated with outcome. The restricted range of scores on alliance may be a factor that detracts from the magnitude of the reported findings. These variations in the relationship between alliance and outcome can also vary due to differences in methodology (e.g., observer, parent, child-rated alliance), as well as differences in the operational definition of alliance.

Development plays a role in alliance: there are important age-related concerns for therapists to consider. As a youth's developmental level influences the way in which a youth engages in therapy, the role of alliance changes over the course of development (Digiuseppe et al. 1996;



McLeod et al. 2014) and different components of alliance may vary in their importance depending on the youth's age. As a result, different strategies may be needed to foster the relationship and engagement in therapy for children compared to adolescents. For instance, the affective bond may be the most important aspect of alliance in therapy with a young child, whereas agreement on goals may be most important for alliance in adolescence (Digiuseppe et al. 1996). Young children may benefit from having different play components, special interests, and activities incorporated into their sessions. They may also need more parental involvement to stay engaged with therapy; however, adolescents may desire less involvement from their parents (Knepley et al. in press) and parental involvement may even be related to worse outcomes (Karver et al. 2006; Kendall and Choudhury 2003). Regardless of developmental age, different strategies and concepts can be collaboratively employed to keep children and adolescents engaged in the therapeutic process (e.g., metaphors for therapeutic tasks; Friedberg and Wilt 2010).

It is worth noting that the alliance is not static, but it fluctuates throughout therapy. Some evidence indicates that alliance between a youth and therapist improves throughout treatment. Shirk and Karver (2003) posited that this finding may reflect two separate, rather than mutually exclusive, possibilities. On one hand, alliance may be perceived as improving as symptom improvement occurs. On the other hand, youth may require more time to develop a positive alliance with their therapist. However, the association between alliance and outcome is neither established nor simplistic. Findings have differed depending on when alliance is assessed (Chiu et al. 2009; Hudson et al. 2014) and it may be that the trajectory of alliance is a better predictor of outcome than alliance measured at one time (Chiu et al. 2009; Hudson et al. 2014). Several studies found that having a strong alliance early in treatment is beneficial to therapy, and having a stronger alliance early in treatment has predicted greater improvement in anxiety symptoms at mid-treatment, (Chiu et al. 2009) and at post-treatment (Hudson et al. 2014). However, alliance measured in later sessions has not been associated with treatment outcome (Hudson et al. 2014). Liber and colleagues (2010) found that the effect size between alliance and post-treatment outcome is greater for early treatment alliance than for late alliance and it has been suggested that a strong alliance may encourage a youth's involvement in treatment (McLeod et al. 2014) which may set up youth to maximize the benefits of exposure tasks.

Therapist Actions

Alliance, and the associated therapeutic participation, may be influenced by actions taken by the therapist. For

instance, therapist "style" has been found to be associated with a favorable treatment response in youth with anxiety. A supervisor-rated collaborative "coach" style predicted greater treatment response for youth with anxiety than a "teachy" style (Podell et al. 2013). Consistent with the Bordin (1979) model, the coach style can be defined as the therapist acting as an ally of the youth working toward a collaborative goal while also showing flexibility, warmth, and empathy (Ackerman and Hilsenroth 2003; Diamond et al. 1999; Kendall 2012; Podell et al. 2013). Creed and Kendall (2005) found that observer-rated collaboration was a characteristic related to stronger child-rated alliance with the therapist. The collaborative style promotes a positive therapeutic alliance, and collaboration has been found to predict favorable outcomes (Kazdin et al. 2005; Shirk and Karver 2003). The cooperative process enhances youth involvement in the development and completion of homework tasks (Houlding et al. 2010). By aligning homework tasks with the youth's treatment goals, therapists encourage their client's participation outside of the session and this process may lead youth to develop a more vested interest in homework completion. Our experience would argue that the addition of cooperative tasks in therapy increases alliance—allowing the youth to work with the therapist as a "coach" rather than being taught.

Alternatively, therapists may, unwittingly, engage in behavior that may hurt the therapeutic alliance and/or interfere with the youth's engagement in therapeutic tasks. Descriptively, such a style has been portrayed as a therapist who displays rigidity and relies on didactics to teach skills rather than imparting knowledge through self-discovery (Podell et al. 2013). Other therapist behaviors that have been associated with poor alliance in youth are described as "lapses" (e.g., Karver et al. 2008). These lapses include criticizing the youth, not understanding the youth, and not responding to the child's emotions in session (Shirk and Karver 2006; Karver et al. 2008). In a study of therapists working with anxious youth, Creed and Kendall (2005) reported that "pushing the child to talk about anxiety too soon," was associated with a weaker alliance. Other negative interpersonal behaviors (e.g., rigidity, being critical, tense, and distracted) that therapists sometimes display have also been associated with negative outcomes (Ackerman and Hilsenroth 2001; Crawford et al. under review). Such behaviors may discourage youth participation in session, preventing youth from engaging with exposure tasks in session and at home, and lead to less improvement.

Therapists actions are in part dependent on the characteristics of the youth in therapy, and a skilled therapist makes appropriate adjustments (Friedberg and Gorman 2007; Karver et al. 2005). As youth clients often enter therapy at the behest of a caregiver, youth clients may be resistant to or ambivalent about therapy. Additionally, in the

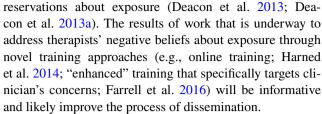


treatment of anxious youth, therapists may encounter resistance when encouraging approach behavior during exposure tasks. In these probable scenarios, a therapist may need to exhibit more than just a collaborative approach with the youth; a therapist will also need to manage the resistance and ambivalence to promote treatment gains.

Motivation interviewing (MI) offers an approach to address these treatment interfering behaviors, as therapists are encouraged to "roll with the resistance" and evoke client change talk when clients appear ambivalent about the goals/tasks of therapy (Miller and Rollnick 2002). Research has incorporated aspects of MI in CBT for anxious adults and a recent meta-analysis of CBT of this work found that the incorporation of MI, typically at the beginning of CBT, was associated with better treatment engagement and improved outcomes over CBT alone (Randall and McNeil 2016). Therapists who took a supportive stance in the face of client resistance in the treatment of GAD, had clients who were less resistant in later sessions and showed greater reductions in worry (Aviram et al. 2016). Two studies have examined MI in youth CBT for anxiety. In a study of anxious or depressed adolescents receiving group CBT (Dean et al. 2016), those adolescents who received a single, pretreatment session of MI attended more therapy sessions, and had greater treatment initiation and readiness than those who received an active control (i.e., befriending). Merlo and colleagues (2010) compared outcomes for 16 youth (ages 6-17) with OCD in CBT (with exposure and response prevention) in combination with MI or extra psychoeducation sessions. Results were promising as youth in the CBT+MI group required three fewer sessions than the CBT + psychoeducation group to achieve similar outcomes.

Suggested Research Directions

Questions remain regarding how best to implement exposure tasks in session and at home, and how best to help the youth process the experience. Similarly, research is needed to determine what actions can be taken to improve the therapeutic alliance and enhance engagement during these therapy tasks. Despite the evidence for the therapeutic value of exposure tasks, they are underused in non-research settings (e.g., Whiteside et al. 2016a, b). Even among clinicians who describe their theoretical orientation as cognitivebehavioral, the use of exposures is inconsistent (e.g., Valderhaug et al. 2004), and these providers often rely more on relaxation and cognitive restructuring instead (Freiheit et al. 2004). Research is needed to examine different therapist training methods to ensure the use of the effective components of treatment for improved outcomes. Additionally, we need research on how to maximize child and parent buy-in for exposures, and how to minimize therapist



Future research should examine how exposure tasks are completed at home. It is not necessarily the case that youth are correctly completing at-home exposures, even if they believe that they are. The field would benefit from a brief measure examining adherence to exposure techniques. Research should also examine whether of the number and/ or difficulty of at-home exposure tasks completed between sessions relates to treatment outcome. For example, it remains unknown whether treatment outcome is equally enhanced for youth who complete one exposure between sessions as it is for youth who complete 20 exposures between sessions. Given that research on homework completion in youth may implicate exposure-based homework as predictive of outcomes, future studies should examine whether or not psychoeducational homework assignments have any impact or benefit for anxious youth. Finally, the field would benefit from the development and use of measures examining both quantity and quality of homework completion. The results of the aforementioned studies, and the impact of treatment processes on these important contents, will allow the field to more effectively implement empirically supported strategies.

Although therapists can learn to implement homework and exposures, it is important for therapists to convey the importance of these efforts to parents so that they can continue to engage with the exposure tasks in session and at home. Little research has examined how to best help parents effectively engage with exposures at home. Moreover, there is relatively little research that has examined specific actions that can be taken to improve the therapeutic alliance with parents, which may be a key feature of youth CBT to help with exposure engagement. An area that has been relatively neglected in the literature are the specific actions that therapists can take to improve the alliance with parents of anxious youth.

Finally, youth resistance or ambivalence about the tasks or goals of treatment may hinder a youth's engagement with homework and exposure tasks. MI is a promising approach to address these concerns, but research thus far has primarily been conducted in adult anxiety disorders (see Randall and McNeil 2016for review). Additionally, studies of MI in youth populations have primarily examined adolescents or the parents of children (e.g., Gayes and Steele 2014; Jensen et al. 2011). Research is needed to establish whether MI is a developmentally appropriate approach for younger children and to establish whether MI strategies encourage



youth participation in therapeutic tasks, such as exposures, both in session and at home.

Conclusions

Based on the cumulative result of research evaluations, CBT has been deemed an empirically supported treatment for youth with anxiety disorders. Recent efforts have focused on the empirically based process factors that are associated with the beneficial outcomes found in CBT. In youth anxiety disorders, exposures tasks have been identified as one of the components of treatment related to the greatest reduction in symptoms. Homework tasks are used to solidify skills learned in therapy and to help with generalization in a variety of real world situations that produce anxiety. In the adult literature, homework differentiates between responders and non-responders, but this relationship is not yet clear in the youth literature. In children and adolescents, homework compliance and the processes involved in maximizing compliance are understudied, though they are improved through the use of positive reinforcement and the alignment of homework tasks with mutually agreed upon treatment goals between the client/ parent and therapist. Some findings indicate that the quality of the homework completion and/or the "dose" of exposure tasks completed between sessions may be influencing the relationship between homework and outcomes; however, this area is relatively understudied.

Exposures are a key component in effective anxiety treatment for youth. Although there are questions about when exposures should be started, spending sessions on psychoeducation and anxiety management techniques may improve the process of client buy-in and motivation to complete exposure tasks. It may be that the psychoeducation phase provides time for the therapeutic relationship/ alliance to be more firmly established before beginning exposure tasks. Indeed, findings indicate that the therapeutic relationship is particularly important early in treatment (before exposures are begun). When exposure tasks are implemented, effective engagement with them is important, which is achieved by inducing appropriate levels of anxiety during the task, reducing avoidance, and limiting safetyseeking behaviors. After an exposure task is completed, it is important to reflect on the experience to ensure the client has processed the experience effectively. These principals carry over to the exposure tasks that are completed as a part of homework.

Concerns about the use of exposure tasks have been raised by families and therapists alike. Youth and their parents may not fully understand the rationale for exposure tasks or may be hesitant to engage in them. It is important to consider the process by which exposure tasks and the associated homework are delivered and implemented. Addressing parental involvement, including modeling, may be required to ensure successful implementation. The alliance is one process factor that has been associated with successful outcomes, whether directly or indirectly through increasing client participation. A strong alliance may be particularly important for youth entering therapy as they are not usually selfreferred and may disagree with the goals and tasks of therapy. As anxiety treatment involves entering situations that are distressing (i.e., exposures), the affective bond between client and therapist as well as agreement on goals may be the vehicle to help with youth engagement in therapy. However, the alliance may operate differently between children and adolescents, so therapists need to be aware of and work with their client in a way that is developmentally appropriate.

Therapist actions can influence the alliance and participation with the tasks of therapy. A collaborative coach style has been found to be helpful in encouraging client participation as youth feel more involved in the therapeutic process. When helping clients engage with exposure tasks, it may be beneficial to start with low-anxiety tasks and work up to more difficult ones so youth cultivate a sense of mastery in their abilities. Additionally, exposure tasks in session and at home can be made interesting and fun to help with engagement. However, given the potential youth resistance to the tasks of therapy, therapists are best when they know how to manage these client reactions.

Given the central role of key treatment content, a next phase in the study of effective anxiety treatment for youth looks toward establishing the evidence base for the process factors that are associated with successful CBT implementation. This work includes examining how exposure tasks are communicated to youth and to parents to facilitate engagement with therapy. Similarly, more work is needed in examining how exposure tasks are completed as a part of homework with regard to the dose, and implementation. We continue to be interested in learning the specific actions therapists can take to improve/ensure a strong therapeutic alliance and to collaboratively increase client engagement in the process of effective treatment.

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Compliance with Ethical Standards

Conflict of Interest Philip C. Kendall receives royalties from the sales of materials related to the treatment of anxiety in youth, and some of these materials are mentioned in the literature reviewed.

Ethical Approval This article does not contain any studies with human participants or animals performed by any of the authors.



Informed Consent Informed consent was obtained from all individual participants included in the study.

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