Children's perceptions of school-based cognitive behavioural therapy groups for mild anxiety:

A qualitative investigation

by

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Submitted in partial fulfilment of the requirements
for the degree of Master of Arts in School Psychology

at

Mount Saint Vincent University
Halifax, Nova Scotia
September 2016

TABLE OF CONTENTS

Tables and Figures

Abstract

Anxiety is one of the most common mental health disorders in children. When considering treatment for anxiety, cognitive behavioural therapy (CBT) is one of the most researched interventions. However, a recent Cochrane review suggested that CBT might not be as effective as once thought for treatment of anxiety in children. Given the contrasting results in the literature and the limited qualitative research investigating children's perceptions of their CBT experiences, specific objectives of the current study were to (1) obtain first-hand accounts of participants' experiences with a school based brief CBT group; (2) identify whether cognitive or behavioural components of CBT are most salient to children and (3) to determine which components of CBT were identified as being most useful for reducing anxiety in naturalistic settings. Interviews were completed and analysed using inductive content analysis. Participants' overall experience was captured in the main theme of *Children's Conceptualization of CBT* and four themes, *Self-Regulation*, *Positive Self Talk, Descriptive Conceptualization* and *Combining Techniques*. Clinical and school-based implications are discussed.

CHAPTER 1

LITERATURE REVIEW

Anxiety

Anxiety is one of the most common mental health disorders in children and adolescents, with prevalence rates ranging from 5-19% (Costello, 2004). Anxiety is described as a feeling of worry, distress or unease due to perceived danger or threat. It is the brain's response to danger and typically results in an individual's active avoidance of a feared stimulus (Beesdo, Knappe, & Pine, 2009). Anxiety can be adaptive in many situations and can help protect us from danger; however, anxiety becomes maladaptive when it interferes with daily functioning and causes significant distress for the affected person. The age of onset for symptoms of anxiety or an anxiety disorder is typically in childhood (Beesdo, Knappe, & Pine, 2009), and occurs more frequently in females than males (American Psychiatric Association, 2013).

There are many different types of anxiety disorders outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013). The most common anxiety disorders in children and adolescents are separation anxiety disorder, social anxiety disorder (social phobia), and generalized anxiety disorder (American Psychiatric Association, 2013; Beesdo, Knappe, & Pine, 2009). Separation anxiety disorder is characterized by developmentally inappropriate and excessive fear when separating from a caregiver or other adult with whom the child has an attachment (American Psychiatric Association, 2013). Social anxiety disorder (social phobia) is characterized by marked fear or anxiety about social situations in which the individual is exposed to possible scrutiny of others (American Psychiatric Association, 2013). Generalized anxiety disorder is a disorder in which the affected individual

experiences excessive and uncontrollable worry and anxiety about a variety of topics, events or activities (American Psychiatric Association, 2013).

Childhood anxiety is not typically experienced as an isolated incident and instead tends to be both chronic and recurrent. That is, anxiety persists for extended periods of time and occurs often and repeatedly throughout the individual's lifespan (American Psychiatric Association, 2013; Woodward & Fergusson, 2001). Typically, anxiety disorders are not diagnosed until an individual has experienced symptoms for at least six months. However, when diagnosing anxiety disorders in children, symptoms may exist for a shorter duration of time and still meet full criteria for diagnosis (American Psychiatric Association, 2013).

Effect of Anxiety on Daily Functioning

Anxiety disorders affect an individual's wellbeing and can lead to impairments in social (Langley, Bergman, McCracken, & Piacentini, 2004; Langley et al., 2014), personal (Katzelnick & Greist, 2001; Leon, Portera & Weissman, 1995; Woodward & Fergusson, 2001), and academic functioning (Mychailyszyn, Mendez, & Kendall, 2010), causing significant distress to those with the disorder (Pine et al., 2009). When considering school performance, Mychailyszyn et al. (2010) directly compared youth with and without anxiety disorders on teacher and parent reports of school functioning such as placement in special classes in school, whether the child had repeated a grade, whether the child exhibited any problems in school, the child's work ethic, behaviour, learning, overall happiness, and overall academic performance. Children with anxiety disorders were rated significantly more impaired than youth without anxiety disorders on both parent and teacher ratings of school functioning (Mychailyszyn, et al., 2010). Anxiety disorders have also been linked to decreased attention, concentration, and focus at school (Langley et al. 2004). Furthermore, adolescents with anxiety disorders have been shown to be more likely to

exhibit poor academic performance and to have more frequent school expulsions and general absenteeism (Dweck, 1999; Katzelnick & Greist, 2001). Anxiety can have a significant effect on school functioning, even over short durations. For example, Ialongo, Edelsohn, Werthamer-Larsson, Crockett, and Kellam (1994) found that children who exhibited high levels of anxiety symptoms at the beginning of grade one were eight times more likely than children without anxiety to be performing in the lowest quartile of their class in reading achievement, and two and a half times more likely to be in the lowest quartile of their class in math achievement at the end of the school year.

Anxiety disorders also affect home and social life. In one study conducted by Costello (1989), researchers interviewed 300 children and their parents and found evidence that children and adolescents with mental health disorders are more likely to experience significant family stress. This is particularly true for children with anxiety disorders, who are more likely to run away from home, and avoid family events (Katzelnick & Greist, 2001; Langley et al., 2004; Wood, 2006). Anxiety can also affect one's social life. Langley (2004) noted that children or adolescents with anxiety disorders were more likely to be socially withdrawn and reluctant to initiate friendships. In one study of 38 children aged 6-13 with anxiety disorders, findings indicated that higher levels of anxiety were indicative of lower social functioning scores (Wood, 2006). Furthermore, after a brief intervention for anxiety, both children and parents reported significant improvements in social functioning. These findings are promising, given the negative influence anxiety can have on social functioning as a child develops. In a study conducted by Langley and colleagues (2014), parent reports of anxiety symptoms indicated an age-related effect of anxiety on social functioning, with older youth more likely to experience impairment in social functioning, and younger youth experiencing more difficulty with home life. This is not

surprising, since the focus of social interaction for children tends to move from family to peer interactions as children age (Langley et al. 2014).

Research further supports that adolescents with untreated anxiety are not only affected in the moment but are also at an increased risk for subsequent anxiety, depression, drug dependency, and educational underachievement as adults (Woodward & Fergusson, 2001). The debilitating effects of anxiety on social, personal, and daily functioning continue in adulthood, as those individuals diagnosed with a childhood anxiety disorder are more likely to exhibit work absenteeism, financial disability, and general unemployment or lack of career or educational development (Katzelnick & Greist, 2001; Leon, Portera & Weissman, 1995). It also continues to influence interpersonal relationships, as anxiety negatively affects partner and family relationships into adulthood (Schneier et al., 1994).

Considering both the immediate and long-term consequences of childhood anxiety, the cost of not treating anxiety symptoms can be enormous (Collins, Westra, Dozois, & Burns, 2004). Thus, the need for early intervention for childhood anxiety is essential, both as an aid to the development of more adaptive coping strategies and as prevention for future mental health problems (Bittner, 2007; Kushner, 1990).

Cognitive Behavioural Therapy

When a person makes the decision to seek the help of a mental health professional, there are many treatment options available. One of the most researched treatments for anxiety is cognitive behavioural therapy (CBT). CBT combines two distinct forms of psychotherapy, behaviour therapy and cognitive therapy (Kendall & Holland, 1979). Behaviour therapy as a treatment for mental disorders was first introduced in the 1950s when clinicians investigated maladaptive learned behaviours and how adaptations to the environment can influence these

behaviours (e.g. Wolpe, 1958; Eysenck, 1966). Cognitive therapies emerged a few decades later in the 1970s when researchers realized the influence of cognitive processes on psychological wellbeing (Bandura, 1969). CBT is based on the belief that psychological disorders are maintained by dysfunctional patterns of thoughts and behaviours (Beck et al., 1979). It capitalizes on the demonstrated positive effects of behavioural therapy and incorporates cognitive components to help produce lasting therapeutic benefits (Kendall, 1993).

CBT focuses on the connections between thoughts, feelings, and behaviours and how they relate to the development and maintenance of mental health disorders (Beck, Rush, Shaw, & Emery, 1979). Behavioural components of CBT target autonomic arousal and physiological responses of the body and teach skills that return the body to equilibrium. This involves teaching strategies such as deep belly breathing or muscle relaxation that will reduce the physiological responses the body has to a stressful situation (Albano & Kendall, 2002). These strategies are coupled with cognitive components that focus on identifying maladaptive thoughts and teaching realistic thinking as a way of coping with these thoughts (Albano & Kendall, 2002).

CBT is one of the most extensively researched forms of psychotherapy and has been found to be an efficacious treatment for a variety of mental health disorders. In a recent review of 16 meta-analyses, large effect sizes were found when using CBT to treat unipolar depression, generalized anxiety disorder, panic disorder, social phobia, posttraumatic stress disorder, as well as childhood depression and anxiety disorders (Butler, Chapman, Forman, & Beck, 2006). CBT is short term, skill based, and focused in the present moment. Treatment sessions are highly structured and interactive, with participants expected to play an active role in session activities and complete homework activities between sessions (Kendall, 2012). CBT can be delivered in

individual, group, telephone assisted, internet assisted, and computer assisted formats (British Columbia Ministry of Health, 2007).

Cognitive behavioural therapy for anxiety. Currently, CBT is the most commonly used treatment for anxiety in children and adolescents (James, James, Cowdrey, Soler, & Choke, 2013). Typically, there are four main components of CBT for childhood anxiety: (1) recognizing anxious feelings and bodily or somatic reactions to anxiety; (2) clarifying thoughts or cognitions in anxiety provoking situations (e.g., unrealistic thoughts and expectations); (3) developing coping skills (e.g., changing anxious self-talk into coping self-talk); and (4) behavioural training strategies to manage anxiety (e.g., deep breathing relaxation; James et al., 2013). Typically, treatment will involve both children and their parents (e.g. Barrett, Duffy, Dadds, & Rapee, 2001; Shortt, Barrett, & Fox, 2001; Spence, Donovan, & Brechman-Toussaint, 2000).

CBT sessions are highly structured and formatted, making it easy to manualize. One of the earliest manualized versions of CBT was the Coping Cat program developed by Kendall (1994). The Coping Cat program included sessions on anxiety education, modification of negative cognitions, exposure to feared stimuli, social competence training, coping behaviour, and self evaluation (Kendall, 1994). It was delivered in 16 sessions and in a format designed to be appealing to youth. Since the original Coping Cat program was developed, numerous other manualized CBT programs have also been developed based on similar principles, such as the Cool Kids Program (Lyneham, Abbott, Wignall, & Rapee, 2003), and the Coping Koala Program (Barrett, Dadds & Rapee, 1996).

Research has supported the effectiveness of CBT for anxiety since Kendall (1994) conducted the first published randomized clinical trial demonstrating a reduction in the symptoms of anxiety in anxious children immediately following the intervention and at one year

follow up. More recent research has shown support for the long term effectiveness of CBT for adolescents, with some studies showing a reduction of symptoms at six- and seven-year follow up based on self and parent-reported questionnaire data and structured diagnostic interviews (Barrett, Duffy, Dadds & Rapee, 2001; Kendall, Safford, Flannery-Schroeder & Webb, 2004).

Format of cognitive behavioural therapy. Traditional CBT is typically delivered over 10-20 weekly one-hour sessions to individuals, families or small groups and there is evidence that it is successful in multiple formats (e.g., Butler et al., 2006; James, et al., 2013; McEvoy, Nathan, Rapee, & Campbell, 2012). Conflicting results have emerged when comparing the different formats in which CBT can be delivered. In one study conducted by Flannery-Schroeder and Kendall (2000), children with anxiety disorders were randomly assigned to individual CBT, group CBT or waitlist control. They found that both active treatments produced reductions in the number of children with anxiety compared to the waitlist control; however, only those children in the individual CBT condition self reported a reduction in anxious distress compared to the other two conditions (Flannery-Schroeder & Kendall, 2000). Other research has found no significant difference in the effectiveness of CBT for individual, group or parent/family format (e.g., James, Soler, & Weatherall, 2007; Manassis et al. 2002; Wergeland et al., 2014). In a review of 13 studies with a total of 498 participants, James and colleagues (2007) found no difference in effectiveness between individual, group or parental/family formant of CBT.

When considering the delivery of CBT, group interventions stand out as an excellent opportunity to provide effective mental health services to a large group of children in a very cost effective manner. Manassis and colleagues (2002) directly compared group and individual CBT in a sample of 78 children with anxiety. They found that for both individual and group interventions, children and their parents reported a reduction in symptoms of anxiety and

clinicians reported an improvement in global functioning (Manassis et al. 2002). These findings were replicated by Wergeland and colleagues (2014) who found both individual and group CBT were equally effective for youth with anxiety both directly after and at one year following the intervention. Taken together, these findings indicate that group interventions provide an avenue to provide effective treatment to a greater number of youth. Group interventions also result in more cost effective interventions, as more children can be targeted than would be possible with individual interventions (Morrison, 2001).

Feasibility of traditional cognitive behavioural therapy. Concerns have arisen about the feasibility of providing as many as 20 sessions of CBT in community settings, as well as the cost effectiveness, efficiency, and affordability of this length of treatment (Hazlett-Stevens & Craske, 2002). In response to these concerns, clinicians have adapted more traditional long term CBT and developed brief cognitive behavioural therapy (BCBT) programs. BCBT has been found to be effective when delivered in a group setting (Gallagher, 2004; Hazlett-Stevens & Craske, 2002). It includes the core components of CBT but is delivered in approximately six to ten sessions. It has also been shown effective in as little as three sessions for individuals with social phobia (Gallagher, 2004). A recent meta-analysis of CBT for anxiety determined that the number of sessions did not have a significant effect on the outcome of the treatment, meaning that BCBT could be an effective means of delivering treatment more efficiently to larger groups of people (James et al., 2013). In fact, direct comparisons between BCBT and traditional CBT have found both treatments were effective (Botella & Garcia-Palacrios, 1999; Clark et al., 1999). For example, Clark et al. (1999) compared a five-session BCBT to a 12-15 session traditional CBT for panic disorder and found both treatments were equally effective and superior to a wait list control. The brief delivery for BCBT helps make it more feasible for both clinicians

delivering evidence-based treatment to clients with anxiety and for people with anxiety to access treatment.

Parental component of cognitive behavioural therapy. Many CBT programs involve a parenting component. This is considered beneficial, as the parent can reinforce the teaching and provide coaching for the newly acquired cognitive skills and involving them in treatment can reduce the parental influence on the maintenance and development of their child's anxiety (Cobham et al., 1998; Cobham et al., 2010). There are mixed findings when investigating the effectiveness of the parent component of CBT (Cobham, Dadds, Spence, & McDermott, 2010; Spence et al. 2000). In one study directly comparing child focused CBT, CBT with parental involvement, and a waitlist control for children aged 7-14 with social phobia, both active treatments were found to significantly reduce symptoms of anxiety (Spence et al. 2000). This reduction of symptoms was maintained at 12-month follow up with no significant difference between the two active treatments, demonstrating that the parental component did not influence the effectiveness of the treatment (Spence et al. 2000). However, other research has suggested that, for some children, the parental component is critical due to the parent's role in the development and maintenance of their child's anxiety (Bögels & Brechman-Toussaint, 2006). In a study conducted by Cobham and colleagues (2010), 60 children and adolescents diagnosed with an anxiety disorder were randomly assigned to either child focused CBT, or child focused CBT plus a parental anxiety management component. They found that significantly fewer children in the CBT plus parent component met diagnostic criteria for an anxiety disorder at the three-year follow up when compared to the children in the child focused CBT only condition (Cobham et al. 2010). However, other research has not supported the suggestion that a parent component is necessary for long-term effectiveness of anxiety interventions. For example,

Barrett et al. (2001) found that treatment was equally effective for CBT and CBT plus family component at six-year follow up. Taken together, more research is needed to clearly elucidate the role of the parenting component of CBT.

Delivery of cognitive behavioural therapy. Given the highly structured sessions and variety in treatment formats characteristic of CBT, research has examined who should deliver CBT (e.g., Beck et al, 1979, Warner et al., 2016). Beck et al. (1979) were the first to suggest that CBT should only be delivered by a qualified health practitioner with training in assessment and treatment of mental health problems and with specific training in CBT. This is important, as the practitioner delivering the services must be able to build a strong collaborative therapeutic alliance with the patient/client, as well as assess for potential risk factors inherent in mental disorders (e.g., suicide for those with depression) for treatment to be effective (British Columbia Ministry of Health, 2007). In more recent years, research has supported having qualified mental health professionals provide training to other professionals or paraprofessionals (e.g., school counsellors) in the delivery of CBT for children with anxiety (e.g., Warner et al., 2016). In one study of 138 youth with social anxiety disorder, participants were randomly assigned to one of three conditions: receiving CBT from a psychologist, receiving CBT from a school counsellor trained by a psychologist in CBT or a control condition. To be trained in CBT, the school counsellor was required to attend a five-hour workshop on the CBT group intervention and co-lead a 12-week training group on the CBT group with a psychologist. In addition to this, the psychologist and counsellor met for weekly consultation for the duration of the study. Both active treatment groups demonstrated a significant reduction in anxiety symptoms compared to the no treatment controls, demonstrating that, with proper training, other professionals can be effective in the delivery of CBT (Warner et al., 2016). Research has also provided further

support for school based therapists' (Ginsburg, Becker, Drazdowski, & Tein, 2012) and social workers' (Kataoka et al., 2003; Stein et al., 2003) ability to deliver CBT after adequate training.

Effectiveness of cognitive behavioural therapy. Although CBT is generally presented as a promising and effective treatment for anxiety (e.g., Butler, et al., 2006; Flannery-Schroeder & Kendall, 2000; Hirshfeld-Becker, 2010; Spence et al. 2000), there is still some debate over the effectiveness of some components of CBT, especially with child and adolescent populations (Stallard, 2002). CBT was initially developed for adults and was later modified for younger children; research has shown mixed results when investigating CBT across age cohorts (Bailey, 2001). Specifically, the developmental appropriateness of CBT has been questioned, largely because it has been suggested that younger children might not have the cognitive capacity to understand the cognitive components of CBT (Stallard, 2002). Whereas some studies have found that younger age was related to fewer positive treatment outcomes, other studies have found positive effects of cognitive interventions in young children, such as one conducted by Hirshfeld-Becker (2010) that found a reduction of anxiety symptoms in a sample of young children who completed a CBT intervention that included a parent component.

Many factors could contribute to the discrepant findings related to CBT effectiveness in younger children and could help explain why some children do not seem to benefit as much as others from CBT. When considering those children who do not respond to CBT, a possible explanation is that cognitive development does not necessarily parallel chronological age, as development does not happen at the same rate for all children and adolescents (Stallard, 2002). Research has suggested that the development of a child's social and emotional abilities can significantly influence his or her response to treatment, especially the cognitive component of CBT (Bailey, 2001). Specifically, the ability to recognize and understand differing opinions is

critical for applying the cognitive components of CBT, and this skill does not typically develop until middle adolescence (Bailey, 2001).

This could be one explanation as to why a recent Cochrane review that included 41 studies with a combined 1806 participants found mixed results with respect to the effectiveness of CBT as compared to other types of interventions, especially with young children and adolescents. Specifically, James et al. (2013) reported that CBT is generally more effective than no intervention for children with anxiety, but is not more effective than other therapies such as psychoeducation, bibliotherapy (i.e., self-help materials) or treatment as usual (i.e., participants follow a natural progression through current available treatment options, which may include being assigned to another treatment program, accessing other treatment services or no treatment at all). Similarly, when investigating 10 clinical trials of CBT for young children, Cartwright-Hatton, Roberts, Chitabesan, Fothergill, and Harrington (2004) found that more than one third of those treated with CBT still met criteria for an anxiety disorder following treatment. As an alternative to traditional CBT, researchers have suggested that behaviourally based treatment may be a more suitable alternative for young children with anxiety (e.g., Swensen, 1980; Bailey, 2001); however, limited empirical research exists supporting this idea. The reason underlying the conflicting results surrounding CBT as a treatment for anxiety in children, as well as whether there are specific components of CBT that are more effective at some ages than others represents a significant gap in the existing literature. More research is needed to specifically identify which components of CBT are most appropriate for treating anxiety in young children effectively.

Treatment Seeking

Even though symptoms of anxiety often first present in childhood and adolescents, and various treatment options exist, the vast majority of individuals with anxiety do not seek

treatment (Ohayon et al., 2000). In fact, Christiana et al. (2000) found that people who experience anxiety wait an average of eight years before seeking mental health services. Surprisingly, a national mental health survey in Canada indicated that only 9.5% of people with mental health disorders seek professional treatment for their disorder, and that teenagers and young adults aged 15-24 are less likely to seek out treatment than older adults (Statistics Canada, 2002).

Barriers to accessing treatment. When accessing mental health services for children, it is often the child's caregiver who refers the child for services, rather than the child seeking services him- or herself. When investigating the low rates of treatment seeking for children with anxiety and their families, it is evident that barriers exist that make it difficult to access mental health services (Christiana et al., 2000; Collins et al., 2004; Tylee, 1996). It is important to consider how these potential barriers could affect the child's and the caregiver's decision to seek mental health services for their child. These barriers exist at the individual, provider, and system levels. Reducing these barriers is imperative (Collins, et al. 2004), as living with mental health disorders can and does have a significant negative effect on one's quality of life.

Individual level. At the individual level, many factors have been shown to influence a person's decision to seek professional treatment for mental health concerns (Collins et al., 2004). These largely stem from one's own awareness of his or her mental health concern and readiness for change. It is widely acknowledged that the individual moves through five clearly defined stages of change when seeking treatment and moving through the treatment process. These stages, proposed by Prochaska and DiClemente (1977), are defined as (1) precontemplation, (2) contemplation, (3) preparation, (4) action, and (5) maintenance. In the precontemplation stage an individual is not aware of his or her problem and has no intention of changing their behaviour

(Norcross, Krebs, & Prochaska, 2011). As a result, even the most promising intervention technique is unlikely to be successful. In the contemplation stage, the person is aware of his or her problem and wishes to overcome it, but has not yet made a commitment to change the problematic behaviour. The preparation phase is characterized by small behavioural changes and the intention to take permanent action to change the behaviour within the next month. In the action phase, the person has made gains in changing an undesirable behaviour for a period of one day to six months. The maintenance phase is the final stage of change; in this stage, the individual works to prevent relapse and consolidate the gains he or she has attained during the action phase (Norcross et al. 2011). In a recent meta-analysis of 39 studies with a total of 8238 participants, it was demonstrated that the stage in which a person enters therapy significantly affects treatment outcomes, with later stages being indicative of better outcomes (Norcross et al. 2011). For example, a person entering therapy in the action phase is much more likely to have positive treatment gains than someone who enters treatment at earlier stages, such as the contemplation or precontemplation stages (Norcross et al. 2011). When working with children, it is important to also consider the caregiver's stage of change, as they often need to be involved in the treatment and are frequently responsible for transporting the child to treatment. Due to children's dependence on their caregivers, the individual barriers that exist when accessing service are often more complicated for children and can involve stages of change for several individuals.

Other factors that can influence a person's readiness for change include a willingness to disclose problems, cultural factors, and fear of stigma and embarrassment (Clement et al., 2015; Collins et al., 2004). In a recent systematic review of stigma, Clement and colleagues (2015) found that ethnic minorities, youth, men, and those in military and health professions were the

most likely to be deterred from treatment seeking by stigma. Furthermore, lack of time for treatment, negative stereotypes of treatment, presence of comorbid medical problems, and geographic and demographic influences were all other factors that influenced treatment seeking behaviour (Christiana et al., 2000; Giel et al., 1990; Hunter & Peterson, 2001).

Research supports that people with mental health concerns are most likely to seek treatment during the first year of onset of symptoms, and treatment seeking declines the longer the symptoms exist (Kessler et al., 1998). This is concerning, given that so many barriers to treatment exist at the early stages of seeking treatment. It is critical to consider and address these barriers when determining the best form of treatment and its implementation. Collins et al. (2004) identified two strategies that could potentially reduce individual barriers to treatment seeking: (1) enhancing public awareness of treatment and (2) implementation of prevention programs. They suggest initiatives such as public education campaigns, national public screening days, and early prevention efforts for identified risk factors and for those at risk of developing an anxiety disorder (e.g., those with parents with an anxiety disorder) as interventions to address these barriers.

Provider level. At the provider level (i.e., detection), the most significant barrier to service is that the public's first point of reference for mental health concerns is usually general practitioners rather than mental health clinicians (Collins et al. 2004). This can be problematic, as general practitioners do not always have specific education on the presentation of mental health disorders that more specialized mental health clinicians (e.g., psychologists) have, leading to under-detection or misdiagnosis of mental health disorders (Tylee, 1996). In considering under-detection, general practitioners may be reluctant to discuss mental health disorders with patients, as they fear damaging their relationship with a patient due to the associated stigma

surrounding mental health (Kendrick, Tylee, and Freeling, 1996). Some research has emerged that demonstrates that general practitioners are improving their mental health knowledge. For example, Cusack, Deane, Wilson, and Ciarrochi (2004) investigated male health seeking behaviour and found that out of a sample of 71 males who had accessed mental health services, 56 percent indicated that a general practitioner had influenced their decision to seek these services. However, recent research has also suggested that although general practitioners' mental health knowledge and comfort with treating some mental health disorders (e.g., Attention Deficit Hyperactivity Disorder; ADHD) is increasing, they still feel they lack adequate knowledge and training for other mental health disorders (e.g., anxiety, depression; Davis et al., 2012). In fact, only 10% of general practitioners felt they were well prepared after their residency to either diagnose or treat behavioural or mental health problems (Davis et al., 2012). Although general practitioners' knowledge of mental health disorders is increasing, continued investment is needed at this provider level to eliminate these barriers. Collins et al. (2004) suggested that improving screening and treatment, as well as ensuring access to evidence-based treatment are the most effective ways to address these barriers. To do this, brief, reliable, and accurate screening measures for general practitioners need to be developed and combined with more education for practitioners on assessment, treatment, and risk factors for mental health disorders. Finally, these authors suggested that more seamless collaboration between mental health and health practitioners could alleviate the burden on general practitioners in terms of making decisions about mental health treatment (Collins et al., 2004; CPA, 2016).

System level. When people with mental health concerns seek treatment from a mental health professional, they often experience significant systemic barriers to receiving timely treatment. One such barrier is wait time to see a qualified mental health professional. Currently,

Nova Scotia's average wait time to access outpatient or community-based mental health services can be up to 70 days (District Health Authority Mental Health Department, 2014). Moreover, this wait time may only be until the client is assigned to a mental health practitioner's or small group intervention waitlist, whereas the time to actually see these professionals can be much greater (District Health Authority Mental Health Department, 2014). To ensure better service delivery to people who struggle with mental health disorders, it is essential to increase availability of and access to effective treatments (Collins et al., 2004). To achieve this, there needs to be improvement in the integration of mental health and health services, improvements to the delivery of brief and effective treatment, greater accountability of professionals to provide empirically supported treatment, and more time spent in identifying the active treatment ingredients (Collins et al., 2004).

School Based Preventative Interventions

One way of providing treatment and reducing the significant barriers to treatment experienced by youth with anxiety and their families is to offer group CBT in schools. School based interventions offer an avenue to provide proactive mental health services, as children with anxiety can be identified early and treated before the symptoms become debilitating (Mychailyszyn et al., 2011). School can often be a place where anxiety based symptoms first emerge and become visible to caregivers (Ginsburg, et al., 2008). Specifically, separation anxiety is often noticed when children start school, as young children are forced to separate from their primary caregiver for extended periods of time (Mychailyszyn et al., 2011). School can also be difficult for those with generalized anxiety disorder, as these children worry about their academic performance and how this may influence their future (Mychailyszyn et al., 2011). Social anxiety disorder can also be exacerbated by the school context, as children are required to

engage in a number of social or performance related tasks in the school context (e.g., answering/asking questions in a classroom setting, presentations, group work) that can cause significant distress (Mychailyszyn et al., 2011). School can be difficult for children with anxiety disorders, as their distress often goes unnoticed due to the incapacitating worry manifesting as being quiet and reserved (Albano, Chorpita, & Barlow, 2003). As a result, they often attract less attention than children who exhibit more externalizing symptoms of disorders such as ADHD (Albano, Chorpita, & Barlow, 2003). This is concerning given the influence anxiety can have on one's quality of life, both immediately and in the long-term. Despite the potential for significant anxiety-related impairment, it is surprising that only 20% of children who need mental health services actually receive these services, demonstrating that more efficient and effective treatment options are needed (Collins et al. 2004). A better detection and treatment method for these students is imperative to ensure that the debilitating effects of anxiety do not continue throughout their lives (Collins et al. 2004).

Kirby and Keon (2004) noted that mental health services for children in general are fragmented and uncoordinated with a variety of agencies (e.g., mental health, child welfare, schools, and special education services) working in isolation rather than collaboratively. They identified the provision of school based mental health services as a way to improve access to treatment for children, as it provides a familiar and easily accessible environment (Kirby & Keon, 2004). It has also been suggested that psychologists are in an ideal position to bridge the gap between education and mental health services to provide better treatment to children with mental health concerns and their families (van den Heuvel, Barozzino, Milligan, Ford-Jones, and Freeman, 2016). This is in line with the ideology of school psychologists, as a survey of 27 Nova Scotia school psychologists identified that they would like to be able to dedicate more time to

consultation as well as provide prevention and interventions services within the school system (Corkum, French, & Dorey, 2007). This also echoes the sentiment of other school professionals (e.g., teachers) who feel psychologists should spend more time consulting and providing direct intervention for mental health concerns (Reader, 2014).

Wait times to access mental health services and the significant barriers people face when accessing mental health interventions make establishing effective interventions for children in the school system of critical importance. The school provides an ideal setting for the implementation of treatment for mental health disorders. Providing school based interventions can help reduce barriers at the individual level, as it is a comfortable space that is easily accessible to children and their families, located directly in their community, and trusted by parents and families (Barrett & Pahl, 2006; Masia-Warner, Nangle, & Hansen, 2006). School based interventions reduce the barriers at the provider and system level, as there is direct access to individuals trained in mental health assessment, diagnosis, and treatment (e.g., school psychologists), and provides an avenue that allows for quicker access to those affected by anxiety (Neil & Christensen, 2009).

School also provides an avenue that can expedite the process of children accessing mental health services. In one study conducted by Mifsud and Rapee (2005), in which they provided a school based anxiety group for children experiencing symptoms of anxiety, only 2% of the children and families had sought help from mental health services prior to completing the group. One obstacle that often impedes a person's decision to seek outside mental health services is the stigma associated with mental health concerns. Providing mental health services in a familiar setting may make seeking and adhering to treatment more likely, as it represents a

setting where they may already be receiving other services for non-mental health concerns (Weist, 1999).

School also provides a unique opportunity to enhance the generalizability of treatment to the context influencing symptoms, as it represents a primary setting in which anxiety-provoking situations exist (e.g., concern with social interactions with peers or worry about academic performance; Ginsburg, Becker, Kingery, & Nichols, 2008). In the school environment there are also opportunities where school personal (e.g., school psychologists, teachers, and counsellors) can observe a student in a naturalistic environment to monitor progress, thus reducing the reliance on parent or self reported evaluations of progress (Storch & Crisp, 2004). Research supports a strong connection between parental anxiety and child anxiety, suggesting that there are possible genetic and behavioural contributions to this behaviour (Craske & Waters, 2005; Hudson & Rapee, 2001; Rapee, 1997). Furthermore, Ginsbury and Schlossberg (2002) found that up to 80% of parents with a child who has an anxiety disorder display significant symptoms of anxiety themselves. Treatment evaluation that place a heavy emphasis on parent reports can be problematic, as research suggests that when parents exhibit anxiety symptoms themselves they are more likely to over-report anxiety symptoms in their children compared to child and teacher reports of anxiety (Briggs-Gowan, Carter, & Schwab-Stone, 1996). School provides an avenue where other adults who are in daily contact with the child can monitor symptoms and help reinforce skills for managing anxiety. Mychailyszyn et al. (2011) point to successful integration of school based CBT in school as a considerable step forward in the delivery of mental health services to youth as it would ensure children who experience anxiety have access to evidence based practices.

The Current Study

It is clear that school provides an ideal space to provide interventions, as there is access to highly trained experts who can provide psychological services (i.e., school psychologists), a trusted and convenient location for parents and their children (Kirby & Keon, 2004), and various professions to monitor and reinforce treatment outcomes (Storch & Crisp, 2004). Given the devastating effects living with anxiety can have on a child's quality of life (Pine et al., 2009), and the difficulty that one encounters when seeking mental health treatment (Collins et al., 2004) determining effective interventions for anxiety is essential.

Research continues to investigate CBT and whether it is effective for children with anxiety, as the developmental appropriateness of the treatment has been questioned (Stallard, 2002), and, more recently, a Cochrane review of CBT for children with anxiety determined that CBT was generally more effective than no intervention, but was not more effective than other therapies such as psychoeducation, bibliotherapy or treatment as usual (James et al., 2013). Determining the most salient components of CBT becomes even more critical, when considering offering CBT groups in schools and other community settings. School based interventions represent a way to increase access to effective evidence-based treatments for mental health disorders, but only if the most effective skills and strategies are targeted (Masia-Warner et al., 2005). If the parenting component of CBT is critical in the application of the cognitive components of CBT, then schools may not be able to deliver effective treatment without some means for involving caregivers in the training (Hirshfeld-Becker, 2010). However, if children report greater reliance on behavioural rather than cognitive components of CBT, and, by extension, less reliance on caregivers' involvement, it is possible school would be an ideal site in which to deliver this treatment, as it reduces many of the significant barriers to accessing

treatment (see Collins et al. 2004; Mychailyszyn et al., 2011). Gaining a better understanding of the salient components of CBT will not only add to the literature on school based interventions, but is imperative for our understanding of CBT in general. Given the mixed findings with respect to the effectiveness of CBT for children, determining the most salient components of CBT is essential to ensure all children have access to effective intervention for the treatment of anxiety.

CHAPTER TWO

CHILDREN'S PERCEPTIONS OF SCHOOL-BASED COGNITIVE BEHAVIOURAL THERAPY GROUPS FOR MILD ANXIETY: A QUALITATIVE INVESTIGATION

Anxiety

Anxiety is one of the most common mental health disorders in children and adolescents, with prevalence rates ranging from 5-19% (Costello, 2004). The debilitating effects of anxiety are well documented, as it affects one's social (Langley, Bergman, McCracken, & Piacentini, 2004; Langley et al., 2014), personal (Katzelnick & Greist, 2001; Leon, Portera & Weissman, 1995; Woodward & Fergusson, 2001), and academic functioning (Mychailyszyn, Mendez, & Kendall, 2010), causing significant distress to those with the disorder (Pine et al., 2009). Anxiety affects an individual not only in the moment but also in the future, as adolescents with untreated anxiety are more likely to experience subsequent anxiety, depression, drug dependency, and educational underachievement as adults (Woodward & Fergusson, 2001). Given the negative effects of anxiety in multiple domains of functioning, the need for early intervention for childhood anxiety is essential, both as an aid in the development of more adaptive coping strategies and as prevention for future mental health problems (Bittner, 2007; Kushner, 1990).

Cognitive Behavioural Therapy

When considering treatment options, cognitive behavioural therapy (CBT) is one of the most commonly researched interventions for anxiety. It combines elements from both cognitive and behavioural therapy and focuses on the connections between thoughts, feelings, and behaviours and how they relate to the development and maintenance of mental health disorders (Beck et al., 1979). Typically there are four main components of CBT for childhood anxiety: (1) recognizing anxious feelings and bodily or somatic reactions to anxiety; (2) clarifying thoughts

or cognitions in anxiety provoking situations (e.g., unrealistic thoughts and expectations); (3) developing coping skills (e.g., changing anxious self-talk into coping self-talk); and (4) behavioural training strategies to manage anxiety (e.g., deep breathing relaxation; James et al., 2013). Research has supported the effectiveness of CBT for anxiety since Kendall (1994) conducted the first published randomized clinical trial demonstrating a reduction in the symptoms of anxiety in anxious children immediately following the intervention and at one year follow up. More recent research has shown support for the long term effectiveness of CBT for adolescents, with some studies showing a reduction of symptoms at six- and seven-year follow up based on self and parent-reported questionnaire data and structured diagnostic interviews (Barrett et al., 2001; Kendall et al., 2004).

Although CBT is generally presented as a promising and effective treatment for anxiety (e.g., Butler et al., 2006; Flannery-Schroeder & Kendall, 2000; Hirshfeld-Becker, 2010; Spence et al. 2000), there is still some debate over the effectiveness of some components of CBT, especially with younger populations (Stallard, 2002). Specifically, the developmental appropriateness of CBT has been questioned, as it has been suggested that younger children may not have the cognitive capacity to understand the cognitive components of CBT (Stallard, 2002). This is especially concerning, given that a recent meta analysis reported that CBT is generally more effective than no intervention for children with anxiety, but is not more effective than other therapies such as psychoeducation, bibliotherapy (i.e., self-help materials) or treatment as usual (James et al., 2013).

Barriers to Accessing Treatment

Even though symptoms of anxiety often first present in childhood and adolescence, and various treatment options exist, the vast majority of individuals with anxiety do not seek

treatment (Ohayon et al., 2000). In fact, Christiana et al. (2000) found that people who experience anxiety wait an average of eight years before seeking mental health services. When investigating the low rates of treatment seeking for children with anxiety, it is evident that barriers exist that makes it difficult to access mental health services (Christiana et al., 2000; Collins et al., 2004; Tylee, 1996). These barriers exist at the individual, provider, and system levels. Reducing these barriers is imperative (Collins, et al. 2004), as living with mental health disorders can and does have a significant negative effect on one's quality of life.

School Based Preventative Interventions

One way of providing treatment and reducing the significant barriers to accessing treatment experienced by youth with anxiety and their families is to offer group CBT in schools. School based interventions offer an avenue to provide proactive mental health services, as children with anxiety can be identified early and treated before the symptoms become debilitating (Mychailyszyn et al., 2011). Kirby and Keon (2004) noted that mental health services for children in general are fragmented and uncoordinated with a variety of agencies (e.g., mental health, child welfare, schools, and special education services) working in isolation rather than collaboratively. School based interventions offer an ideal avenue by which to deliver CBT, as they provide an opportunity to expedite the process of children accessing mental health services (e.g., Mifsud & Rapee, 2005), and enhance the generalizability of treatment to the context influencing symptoms (e.g., concern with social interactions with peers or worry about academic performance; Ginsburg et al., 2008). Additionally, it is a comfortable space that is easily accessible to children and their families, located directly in their community, and trusted by parents and families (Barrett & Pahl, 2006; Masia-Warner et al., 2006).

Mental health interventions offered in school need to be efficient. Given that previous research has questioned the effectiveness of CBT in the treatment of young children's anxiety (e.g., James et al., 2013), one way to determine CBT's effectiveness is to investigate children's perceptions of the individual components of CBT first-hand. This can aid in the understanding of what components are most salient to children, so that school-based interventions can deliver a streamlined service. One way of doing this is by conducting qualitative research.

Qualitative Research on CBT

There is a large body of quantitative research investigating CBT (e.g., Butler et al., 2006; Barrett et al., 2001, Kendall et al., 2004; McEvoy et al., 2012); however, very limited qualitative research exists (e.g., Donnellan, Murray, & Harrison, 2012). This is a shortcoming in the CBT literature, as qualitative research offers a valuable opportunity to describe events as experienced by the participants directly involved with a study (Ritchie & Lewis, 2003). Qualitative methodologies are generally underused in psychology, despite their clear applications to generating ideas and solutions for interventions currently in practice (Rist, 2000). In particular, qualitative information could add to the existing literature on CBT, as it could provide insight into the experiences of individuals participating in CBT through reprocessing the attitudes, beliefs, and behaviour of people after a particular experience (see Ritchie & Lewis, 2003).

One way to gather data is through conducting individual interviews. Individual interviews provide the opportunity to conduct a detailed investigation of the experiences of each person and his or her individual perspectives on the research phenomenon (Ritchie & Lewis, 2003). In one of the few qualitative studies of CBT, Donnellan and colleagues (2012) conducted individual interviews with three female adolescents who had recently completed individual CBT. Four salient themes emerged from this study including engagement, the therapeutic relationship, the

impact of CBT on change, and the manner in which CBT was delivered (Donnellan et al. 2004). By investigating the individual perspective of each participant after the intervention, the authors found that several factors were important to developing the client-therapist relationship and that this, in turn, often determined the effectiveness of CBT. Key factors included the importance of goal setting to specifically determine what each participant wanted to achieve through the treatment, the importance of developing engagement based on the clients' pace (i.e., not based on parent/guardian requests), having an optimal power balance between therapist and client to ensure the intervention is effective, and the pace at which components should be delivered to keep the participant engaged (Donnellan et al. 2004).

The Current Study

The aim of the present study is to extend on the existing research by investigating individual components of CBT and participants' use of these components in a naturalistic setting following the completion of a group CBT intervention. Furthermore, this study investigated these components in a younger population to investigate differences between their recall and use of behavioural and cognitive components of CBT. Briefly, behavioural components of CBT were defined as skills designed to target autonomic arousal and physiological responses of the body and return the body to equilibrium (see Albano & Kendall, 2002). For example, strategies such as belly breathing and progressive muscle relaxation were presented as strategies to reduce the physiological responses the body has to an anxiety-provoking situation. Cognitive strategies were defined as skills that focus on identifying maladaptive thoughts and teaching realistic thinking to cope with these thoughts (see Albano & Kendall, 2002). In the current study, this involved the use of age-appropriate examples, such as defining maladaptive thoughts as "red thoughts" and thinking more realistic thoughts as "flipping a red thought into a green thought".

Given that existing follow-up studies of CBT outcomes typically use self- and parent- reports as outcome measures, the current study focused on obtaining qualitative feedback about the specific aspects of CBT that children found most helpful and were likely to use in their daily lives. Information gathered from these interviews will add to the existing literature about CBT and will provide preliminary indicators about whether the behavioural or cognitive treatment components are more salient to young children. This, in turn, may assist in improving delivery of group-based interventions for children with anxiety.

Based on the recent Cochrane review (James et al., 2013) suggesting that CBT may not result in lasting effects for children with anxiety, along with limited research focused on obtaining qualitative feedback from participants who have completed CBT, the main objectives for this study were to (1) gain first-hand accounts of participants' experiences with a school based brief CBT group intervention; (2) to determine whether cognitive or behavioural strategies included in the CBT program were most salient to group participants; and (3) to identify whether the cognitive or behavioural components of the CBT group would be identified as most useful in a naturalistic setting for reducing anxiety in children who attended the group. Interviews were conducted at two time points; two-three months post intervention and six-seven months post intervention. These two time points were chosen to investigate both the short term recall and use of CBT components and the recall and use of CBT strategies after a break from attending school (i.e., after the summer holidays).

Method

Participants

This study included 11 students between the ages of 8 and 10 years (i.e., grades 3 and 4), with a mean age of 9.54 (SD = 0.52) at Rockingstone Heights School in Halifax, Nova Scotia.

Participants were selected following their completion of a six-week school-based CBT group intervention called *Working through Worry with Wembley the Worry Fish*. The inclusion criteria for the group were (1) presence of mild to moderate anxiety and (2) no major behavioural challenges that would prevent the child from participating in a group.

Thirteen students in total completed the *Working through Worry with Wembley the Worry Fish* CBT group. Eleven participants (5 boys, 6 girls) completed interviews at Time 1 and eight (4 boys, 4 girls) completed interviews at Time 2. Of the three original participants who did not complete a second interview, one was not able to participate due to an inability to contact a parent to obtain consent and two had moved out of the school area.

Measures

Demographic Questionnaire. As part of their children's participation in the CBT group, parents/guardians had provided basic demographic information about their child (i.e., name, age, sex, grade, date of birth) to the supervising psychologist. As part of the consent process for their children to take part in the interview study, all parents were asked to provide updated consent for this demographic information to be used as part of the study.

Semi Structured Interview Guide. A semi-structured interview guide was developed for the purpose of this study (Appendix A). As noted previously, interviews were conducted at two time points. Both interviews were identical and included questions pertaining to six keys concepts discussed during group: (1) belly breathing; (2) muscle relaxation; (3) yoga; (4) recognition of how the body feels; (5) red thoughts/green thoughts and flipping thoughts; and (6) how thoughts affect our feelings and actions. Belly breathing, muscle relaxation, and yoga reflect the behavioural components included in the CBT group. Recognition of how the body feels, red thoughts/green thoughts and flipping thoughts, and how thoughts affect our feelings and actions

represent the cognitive components included in the CBT group. The interview consisted of free recall and cued recall questions and assessed the participants' overall perception of the effectiveness of the intervention. Minor changes to question wording were made and prompts were used based on participants' responses but the content remained consistent across interviews.

Procedure

Ethics. Prior to beginning data collection, ethical clearance was obtained from the MSVU University Research Ethics Board, and the Halifax Regional School Board (HRSB) Research Ethics Committee.

Recruitment. Parents/legal guardians of the students who participated in the CBT group were contacted by telephone by either the primary investigator or the school's guidance counsellor, who explained the study and asked parents/guardians if they were interested in having their children participate in the study. If parents/guardians indicated that they were interested, a consent form was sent home with the child and parents/guardians were asked to sign and return the form to the guidance counsellor (Appendix B). Alternatively, the parents/guardians were given the option to provide verbal consent over the phone once the details of the study had been explained. Verbal consent was provided as an option to parents with limited literacy skills; providing a verbal description and obtaining verbal consent was deemed to be a more appropriate method of ensuring that parents understood the nature of the study and what their children would be required to so. If verbal consent was used, a detailed note, including the date of the conversation, was written on the consent form.

Data Collection. After informed consent was obtained, children were contacted two to three months after completion of the CBT group and then again six to seven months after completion of the CBT group to determine a time when the researcher could interview them about

their experiences in the group. To make participation in the study convenient and accessible to all participants, the researcher travelled to the school to conduct the interviews. All interviews were conducted in a private room to ensure confidentiality and all children were asked to provide verbal assent prior to beginning the interview (See Appendix C). Informed consent and assent were re-established prior to completing the second interview.

Interviews. The interviews ranged in time from 4 minutes 24 seconds to 12 minutes 50 seconds. They were audio recorded and transcribed with all identifying information removed from the transcripts. All transcripts and audio recordings were transferred to a designated password-protected laptop. Transcribed interview data were encrypted and saved on the same password protected laptop.

Results

Interview Responses

To address the objectives of the current study, inductive content analysis was used to examine responses to interview questions. Content analysis is used as a method to investigate written, verbal or visual communication (Cole, 1988). The purpose of this analysis is to provide knowledge, new insights, facts or a guide for action based on inferences from the data to its context (Krippendorf, 1980). This form of analysis involves transforming the data into condensed categories that describe the phenomenon that, in turn, helps provide supporting evidence for a model, theory, categories or conceptual system (Elo & Kyngas, 2007). Inductive content analysis works from the specific to the general, as individual interviews are investigated in isolation and then combined into a larger general statement about the entire data set (Chinn & Kramer 1999).

Inductive content analysis involves three main phases: preparation, organization, and

reporting of results (Elo & Kyngas, 2007). The present study followed the protocol for inductive analysis outlined by Elo and Kyngas (2007). The preparation phase involves selecting a unit analysis and becoming immersed in the data through repeated readings. For the present study, the unit of analysis was individual interviews that were listened to, then transcribed and reread numerous times to become completely familiar with the content. The next step was to organize the data through open coding, creating categories, and abstraction as described by Elo and Kyngas (2007). This involved first adding notes and codes to the written data when reading it, applying as many codes as necessary to break the data into its individual categories. Following this, codes were grouped together under higher order headings to collapse related categories under one heading.

Finally, abstraction involved creating a general description of the topic through the generated categories. This phase included subcategories that were grouped together to form more generic categories that, in turn, fell under a main category. Each category was named with content characteristic words. As described by Elo and Kyngas (2007), the number of main categories, generic categories, and subcategories varies and depends on the interpretation of the data. The themes generated from the present inductive content analysis are presented in Figure 1 and Figure 2. Reporting results with inductive content analysis involves describing the meaning of these categories (Elo & Kyngas, 2007). Four major themes emerged from the data: (1) Self Regulation; (2) Positive Self Talk; (3) Descriptive Interpretation; and (4) Combining Techniques. Evidence for all four themes was evident in time one. At time two, there was evidence of Self Regulation, Positive Self Talk, and Descriptive Interpretation, but no evidence of Combining Techniques. Relevant quotations and excerpts from participant interviews will be used describe the findings and add support to the development of the themes. All participants were given

pseudonyms to ensure anonymity.

Reason for Participating in CBT Group

Overall, when asked about their participation in group at Time 1, 45.5% (n = 5) of participants stated that they did not know why they were chosen to be part of group and 54.5% (n = 6) of participants indicated they were included for various reasons including excessive worry (27.2%; n = 3), to help control feelings (e.g., anger; 18.1%; n = 2), and 9.1% (n = 1) indicated that they were included because they were fun. At Time 2, 75% (n = 6) of participants indicated that they did not know why they were included in the group, 12.5% (n = 1) indicating that they were included because of excessive worry, and 12.5% (n = 1) because of excessive anger. Overall, when asked about their experience with the CBT group all participants could remember at least one element of CBT at both time periods. When investigating their use of the components of CBT, out of 11 participants 81.8% (n = 9) at Time 1 had used at least one CBT strategy outside of group. At Time 2, 62.5% (n = 5) participants had used at least one CBT strategy outside of group.

Behavioural Components

Belly breathing.

Time 1. Out of 11 participants, 72.7% (n = 8) freely recalled belly breathing and 27.2% (n = 3) recalled belly breathing after being cued. Of those who remembered belly breathing, 81.8% (n = 9) indicated that they had used belly breathing since group had ended.

Theme 1: self-regulation. When examining participant responses about their memory of and use of belly breathing, the dominant theme among these responses was self-regulation. Several participants indicated that this strategy had helped them regulate their emotions in various contexts and helped them feel more at ease.

Theme 1 subtheme 1: personal distress. Several participants reported using belly breathing as a method to regulate personal feelings of distress. For example, Cassandra (age 9) discussed using belly breathing outside of group saying, "*I did belly breathing when I went to the hospital…it makes you feel calm*" and George (age 10) stated that belly breathing *"…is a good thing to use when you are worried. You just lay back breathe in and then breathe out".* George then recounted a personal example of using belly breathing when he had difficulty relaxing and falling asleep at night, reporting, *"...so I just did some belly breathing and fell right to sleep".*

Theme 1 subtheme 2: interpersonal relationship distress. Belly breathing was also reported to be a useful strategy for reducing conflict in interpersonal relationships. This was beneficial for a variety of participants across a number of interpersonal situations including relationships with peers, siblings, and parents. For example, Jackie (age 10) stated, "*I got in trouble and was mad at my mom for getting me in trouble so yeah I used [belly breathing] to calm down*". Ian (age 10) discussed how a friend had reminded him of this strategy when he was in a conflict with a peer, stating, *"...once I got in a fight with someone and I couldn't hold my temper and Carter told me to take a deep belly breath and when I did it stopped me from getting mad".*

Time 2. Out of eight participants, 25% (n = 2) freely recalled belly breathing, 50% (n = 4) recalled belly breathing after being cued, and 25% (n = 2) participants did not remember belly breathing at all. Of those who remembered belly breathing, 83.3% (n = 5) indicated using belly breathing since group had ended.

Theme 1: self-regulation. Using belly breathing as an emotion regulation strategy for personal distress continued to be a dominant theme at Time 2. Belly breathing as a method of reducing interpersonal relationship distress did not emerge as a salient theme at Time 2.

Theme 1 subtheme 1: personal distress. At Time 2, participants continued to use belly breathing as a means of reducing personal distress. For example, Cassandra (age 9) discussed a recent trip to the hospital in which the strategy was used saying, "*I had to go to the hospital and I used belly breathing to calm me down. And when I did, it didn't even hurt when I got [stitches]*".

Yoga.

Time 1. Out of 11 participants, 72.7% (n = 8) freely recalled yoga and 27.2% (n = 3) recalled yoga after being cued. Of those who remembered yoga, 27.2% (n = 3) indicated using this strategy since group had ended. Based on researcher error one participant was not asked about this component of the CBT group.

Theme 1. Self-regulation. When examining participant responses about their memory of and use of yoga, self-regulation emerged as a salient theme. Several participants indicated that this strategy had helped them regulate their emotions in various contexts and helped them feel more at ease.

Theme 1 subtheme 1: personal distress. Several participants indicated using yoga as means to reduce personal distress. For example, Cassandra (age 9) described using yoga recently saying, *"…it was over March break, I was doing yoga because my mom was in the hospital because she had to get surgery and I did yoga to calm myself down and I called my mom and she was okay"* and Kyle (age 10) stated, *"…if you are worried do [yoga] because it helps you calm down".*

Theme 2: descriptive interpretation. Despite all participants either freely recalling yoga or remembering it after being cued, the majority of participants (72%; n = 8) did not report using this behavioural strategy outside of group. In fact, some participants even reported this as their

least favorite part of group. For example, when Denise (age 9) was asked what she would tell another child about yoga, she said, "*That I didn't like yoga, and I don't like yoga".*

Time 2. Out of eight participants, 50% (n = 4) freely recalled yoga and 50% (n = 4) recalled yoga after being cued. Of those who remembered yoga, 37.5% (n = 3) indicated using yoga since group had ended.

Theme 1. self-regulation. Participants continued to identify yoga as a strategy to regulate their emotions at Time 2.

Theme 1 subtheme 1: personal distress. At Time 2, participants continued to use yoga as a means of reducing personal distress. For example, George (age 10) indicated, *"It calmed me down a lot"* and Billy (age 10) stated, *"...we did poses to calm yourself down."* It is important to note that the statements were less rich with respect to content compared to statements provided at Time 1.

Theme 2: descriptive interpretation. Again, despite all participants either freely recalling the descriptive elements of yoga or recalling them after being cued at Time 2, the majority of respondents (62.5%; n = 5) indicated not using yoga as a strategy outside of group. Further, one participant who did indicate using yoga outside of group stated that she did not use it for anxiety reduction, but rather for exercise, stating, "*I do it when I'm bored and when if like me and my friends want to like dance or something, we have to stretch before we do it so we do that.*"

Muscle relaxation.

Time 1. None of the 11 participants freely recalled muscle relaxation; however, 63.6% (n = 7) recalled muscle relaxation after being cued. Of those participants who remembered muscle relaxation, 57.1% (n = 4) indicated that they had used it in a situation since group had ended.

Theme 1: self-regulation. When examining participant responses about memory of and use of muscle relaxation, self-regulation emerged as a dominant theme. Several participants indicated that this strategy had helped them regulate their emotions in various contexts and helped them feel more at ease.

Theme 1 subtheme 1: personal distress. Participants identified using muscle relaxation as a means to reduce personal distress. For example, Billy (age 10) indicated, "*I was really frustrated at something so I did [muscle relaxation]… it just calms you down.*" Furthermore, George (age 10) indicated, *"…when I got a little upset I (demonstrated tightening fists) and let it go*", and then described using muscle relaxation before a talent show saying, "*…when I was worried about the talent show that day I was, I was tense and then I just relaxed*".

Theme 1 subtheme 2: interpersonal relationship distress. Several participants indicated using muscle relaxation as a means to improve interpersonal relationship distress by reducing conflict with peers and siblings. For example when describing a conflict with a friend, Cassandra (age 9) indicated, "*I used muscle relaxation so that I wouldn't fight with her or argue with her anymore and then I just went home and said I wasn't going to argue anymore*". Kyle (age 10) employed this strategy as a means to reduce anger when involved in a sibling conflict stating, "*Only do it when you are angry because that when it really works*".

Time 2. Out of eight participants, 12.5% (n = 1) freely recalled muscle relaxation, 25% (n = 2) recalled muscle relaxation after being cued, and 62.5% (n = 5) of participants did not recall muscle relaxation at all. Of those participants who remembered muscle relaxation, none had used it in a situation since group had ended.

Theme 1: descriptive interpretation. At Time 2, participants were able to provide good descriptions of muscle relaxation, but none had actually used the strategy since completing the

group. However, it was clear that those participants who recalled muscle relaxation understood the concept. For example, Billy (age 10) demonstrated to the interviewer the clenching and releasing of fists. However, this was not a strategy that was readily used to reduce stress or anxiety in a situation outside of group, as no participants indicated using muscle relaxation since group had ended. It is also important to note that the statements at Time 2 were less rich with respect to content compared to Time 1.

Cognitive Components

Recognition of how the body feels.

Time 1. Out of 11 participants, 9.1% (n = 1) freely recalled recognition of how your body feels and 9.1% (n = 1) recalled it after being cued. Of the two participants who remembered recognition of how your body feels, one had used it in a situation since group had ended.

Theme 1: descriptive interpretation. When examining participants' responses about their memory of and use of recognizing how the body feels, the responses were primarily descriptive, with minimal use of this strategy outside of the group environment. The participants who remembered this strategy, however, were able to identify the physiological sensations associated with anxiety. For example, Denise (age 9) indicated that when people get worried or upset, they feel bodily sensations such as shakiness, clammy hands, and butterflies in the stomach, but she indicated that she had never thought about how she would use this strategy in a situation outside of group.

Time 2. Out of eight participants, none freely recalled recognition of how the body feels and 25% (n = 2) recalled it after being cued. Of those who remembered recognition of how the body feels, both (100%) had used it in a situation since group had ended.

Theme 1: self-regulation. When examining participant responses about memory of and use of recognizing how the body feels, self-regulation emerged as a dominant theme. Both participants who recalled this strategy indicated that it had helped them regulate their emotions in various contexts.

Theme 1 subtheme 1: personal distress. Both participants indicated using this strategy to help reduce personal distress. For example, Billy (age 10) was able to identify that "*...sweaty palms and butterflies in your stomach*" can occur in one's body when worried and identified a time when this strategy was used stating, "*I was right mad and I noticed that my hands got sweaty because I was like this (demonstrates fists)*". Furthermore, when George (age 10) was asked about recognizing how one's body feels, he said,

> *When you are scared or worried you will tense up and you will have butterflies in your stomach, and you'll have clammy hands, and sore, and wouldn't be able to do what you want to do, but if you do what they teach ya you wont worry as much.*

Although few participants recalled this strategy, those that did reported that they were able to effectively use it to reduce feelings of worry.

Identification and modification of maladaptive thoughts.

Time 1. Out of 11 participants, 27.2% (n = 3) freely recalled identification and modification of maladaptive thoughts (referred to as "red thoughts, green thoughts, and flipping your thoughts" in the group sessions) and 63.6% (n = 7) recalled it after being cued. Of those who remembered this strategy, 50% (n = 5) had used the strategy in a situation since group had ended. Due to interviewer error, one participant was not asked whether she had used this strategy since group had ended.

Theme 1: self-regulation. When examining participant responses about memory of and use of identification and modification of maladaptive thoughts, self-regulation emerged as a salient theme. Participants who recalled this strategy indicated that it had helped them regulate their emotions in various contexts.

Theme 1 subtheme 1: interpersonal relationship distress. Participants indicated using this strategy to ease conflict in sibling and peer contexts. For example, when asked about his use of the strategy, Ian (age 10) stated, "*...one of my friends didn't want to play with me because they were playing with someone else and I got mad because I thought, because he told me he was going to play with me but he lied so I got mad, but I let it go*." When asked to elaborate further on this, Ian (age 10) said, "*I said I could just play with him another day*." Similarly, Jackie (age 10) described using this strategy when faced with a conflict with a sibling, stating:

> *When my sister was, when me and her got in a fight she made me really mad and I was thinking red thoughts and then my mom said you can go outside and play. So I went outside and I flipped my red thoughts into green thoughts. And then when I came back inside, I wasn't mad at her.*

Theme 2: positive self-talk. When investigating the participants' memory and use of this strategy it was noted that participants generated examples of positive self-talk that helped them in a variety of contexts. Generally, they spoke of this strategy as a way to overcome negative feelings. For example, Eve stated, "*Like, the red one makes you stop and don't do what you want, like if you are scared, but the green one makes you try it.*" Participants also indicated that they were able to apply this positive self-talk to naturalistic settings outside of group. For example, Cassandra (age 9) spoke about how this strategy was used to help her cope with not making the track and field team saying, "*...so I had a red thought I'm like I'm not going to make*

it in, and I didn't make it in, but still I flipped my green thought and I felt good for everyone who made it in." George (age 10) also indicated using this strategy: "*Well one time I was worried about trying a new food and I was just like, I'm not going to like it, and then I was like, I'm just going to try it. And I tried it and it was good.*"

Theme 3: combining techniques. Interestingly, identification and modification of maladaptive thoughts was frequently discussed along with a behavioural strategy. Specifically, participants referenced combining this strategy with belly breathing. For example, Jackie (age 10) stated, "*...belly breathing helps you flip your red thoughts into green thoughts.*" When Holly (age 9) indicated that red thoughts were bad thoughts and was asked what to do when you have a bad thought, she indicated, "*you could do a belly breath*".

Time 2. Out of eight participants, none freely recalled identification and modification of maladaptive thoughts and 62.5% (n = 5) recalled it after being cued. Of those who remembered this strategy 80% (n = 4) reported that they had used it in a situation since group had ended.

Theme 1: self-regulation. When examining participant responses about memory of and use of identification and modification of maladaptive thoughts at Time 2, self-regulation emerged as a minor theme, as only one participant recalled using this strategy to regulate her emotions.

Theme 1 subtheme 1: interpersonal relationship distress. Although not a dominant theme at Time 2, it is important to note that one participant used this strategy to reduce conflict with a peer. Cassandra (age 9) discussed the use of the strategy in a setting outside of group indicating:

> *One time I was fighting with my friend and I had a red thought saying I'm going to beat them up, but then I flipped my thought and said I'm not going to fight because that is just going to get me into trouble.*

Theme 2: positive self-talk. Positive self-talk continued to be a salient theme at Time 2 for identification and modification of maladaptive thoughts. When describing this strategy, Kyle (age 10) said, "*If you have a bad thought try to make the best of it, try to flip it over into a green thought*" and Cassandra (age 9) stated:

> *A red thought is thinking about something bad like, I'm going to fail on my test and stuff, and a green thought is like if you have a test you can say I'm going to try but if I don't get it right it's okay because there is always another time.*

George (age 10) also recalled the example taught in group, stating:

> *I would tell them that when I was in that group they taught me that say you got a new dog and you didn't have him yet and you thought maybe it might bite me and wouldn't like me, and then they said they flipped it and said maybe it won't bite me and maybe it will love me.*

Billy (age 10) also discussed using this strategy in a setting outside of group indicating, "*I was thinking about something that made me mad but then I thought of something that would make me happy.*"

Connection between feelings and actions.

Time 1. None of the 11 participants freely recalled the connection between feelings and actions (referred to in the group sessions as "how thoughts affect feelings and actions"), but 27.2% (n = 3) recalled it after being cued. Of those participants who remembered the connection between feelings and actions, 33.3% (n = 1) had used it in a situation since group had ended.

Theme 1: descriptive interpretation. When examining participants' responses about their memory of and use of recognizing the connection between feelings and actions, the responses were primarily descriptive, with minimal use of this strategy outside of the group environment.

For example, Faith (age 9) responded, "*Umm, so if you are thinking about ummm why the, the kid hit you…then it would make you feel mad and angry and you would just get all mad and maybe you might hit them back or tell a teacher.*" and Billy (age 10) said, "*Umm, it's umm not bad, it's about like, say you're thinking that you're going to fail a test and then you actually do because you thought that you were going to and then it actually happened.*"

Time 2. None of the eight participants freely recalled the connection between feelings and actions, but 12.5% (n = 1) recalled it after being cued. No participants reported using this strategy in a situation since group had ended.

Since only one participant correctly recalled the cognitive strategy at Time 2, it was not appropriate to code the response as a theme. When asked about the connection between feelings and actions, Billy (age 10) responded, "*It was fun because like we learned about how if you think you can't do it, you actually won't do it like but if you think that you can do it you will do it.*"

Discussion

The purpose of the present study was to add to the existing literature on CBT by qualitatively investigating children's perceptions of a of a school-based brief CBT group intervention for mild anxiety. The main objectives were: (1) to obtain first-hand accounts of participants' experiences with a school based CBT group; (2) to determine whether cognitive or behavioural components of the CBT group would be most memorable and salient to group participants; and (3) to identify whether the cognitive or behavioural components of the CBT group would be identified as having been useful in a naturalistic setting (i.e., outside of the group sessions) for reducing their anxiety. Group participants were interviewed about their group experience at two time points. Eleven children participated in interviews at Time 1, which

occurred one to two months post-intervention, and eight children were re-interviewed at Time 2, which occurred six to seven months post-intervention.

Inductive content analysis identified one overall theme labelled *Children's Conceptualization of CBT* that described how children understood and used the CBT skills that were taught during the group intervention. Four themes emerged from the data and these were labelled as follows: *Self-Regulation, Positive Self Talk, Descriptive Conceptualization* and *Combining Techniques*. All four themes contributed to the participants' understanding and use of CBT. All four themes were identified at Time 1 interviews, and three of the four themes, *Self-Regulation, Positive Self Talk* and *Descriptive Conceptualization* persisted at Time 2.

Theme Description

Self-Regulation referred to participants' use of CBT strategies to help them regulate their emotions in various contexts to alleviate or reduce feelings of distress. Self-Regulation was comprised of two sub categories, *Personal Distress* and *Interpersonal Relationship Distress*. *Personal Distress* referred to moments in which the participants characterized CBT elements as a way to regulate their own feelings of distress, enabling them to remain calm when dealing with an unpleasant or distressing event. *Interpersonal Relationship Distress* described situations in which the participants had used CBT strategies to regulate their emotions in an unpleasant situation that involved another person, such as a peer or family member.

Typically, children described using the CBT strategies taught during group for self-regulation in a wide variety of contexts. Participants in the *Working through Worry with Wembley the Worry Fish* CBT group were selected due to teacher and parent reports of mild anxiety; therefore, the goal of inviting them to participate was to teach them strategies that they could continue to use after they had completed the group. It was encouraging to find that the

CBT strategies participants learned during group sessions were not limited to use just in situations in which they experienced anxiety. Instead, participant's described using these CBT strategies in a variety of situations in which there was broad emotional dysregulation, such as when they were feeling angry or frustrated, even though these emotions were not directly targeted by the intervention. Previous research has demonstrated that in comparison to children without a diagnosis of anxiety, children with anxiety experience both anger and worry more intensely and perceive themselves as less able to cope with these feelings (Suveg & Zeman, 2004). Given that the present study found that participants were using CBT strategies for broad dysregulation, this can have important implications for children's general wellbeing. This adds to the existing research, as previous studies have demonstrated that the effects of CBT do not generalize to other emotions, specifically sadness and anger (Suveg, Sood, Comer & Kendall, 2008). As previous research has relied primarily on quantitative data analysis that involved questionnaire data, it may be that gaining first-hand knowledge qualitatively from the children who participated in the CBT group is the critical step in understanding how they generalize the use of CBT to broad dysregulation.

Positive Self Talk referred to participants' use of positive affirmations in the application of CBT skills. In general, participants spoke of this strategy as a way to overcome negative feelings. For example, when Cassandra (age 9) did not make the track team she was able to use the strategies learned during group and reported that she was happy for the people who were successful, rather than dwelling on the fact that she was not. This is interesting, as children with anxiety typically view negative outcomes as attributes of their own doing rather than being able recognize the overall situation in which it occurred (Mellins & Alden, 2000). This bias to attend to negative self-related information typically would lead to negative social judgments and

recalling more negative information after the scenario (Mellins & Alden, 2000). Since this does not occur in the above example, it lends tentative support for the positive extensions of CBT strategies for a broader range of difficulties than just worry, and the underlying change in participants' perspective of the self. Furthermore, in contrast to Suveg et al. (2009) this demonstrated more support for the generalizability of CBT strategies to regulation of emotions other than worry. For example, Billy (age 10) reported using these strategies when he was angry, stating, "*I was thinking about something that made me mad but then I thought of something that would make me happy.*" This is important given that previous research found that children with anxiety felt less able to cope with feelings of dysregulation when compared to non-anxious children (Suveg & Zeman, 2004). Dysregulation in and of itself has an influence on wellbeing, especially socially, as one study by Hubband and Coie (1994) demonstrated that youth with emotional dysregulation might be perceived as socially incompetent. This new insight gives support for the generalizability of CBT, and amplifies the usefulness of this intervention, especially in a school setting, where being able to regulate one's emotions has such an immense impact on school functioning.

Descriptive Conceptualization referred to participants' use of primarily descriptive language in their memory of CBT components, rather than clear examples of being able to benefit from the use of these strategies in a naturalistic setting outside of group. When this theme was applied, the participants in the study could recall the strategy and how it might be used in a hypothetical situation, but could not identify a time when they had used it themselves. For example, Faith (age 9) responded, "*Umm, so if you are thinking about ummm why the, the kid hit you…then it would make you feel mad and angry and you would just get all mad and maybe you might hit them back or tell a teacher.*" Faith could describe generally the connection between her

feelings and actions, but this response took longer to generate, was more fragmented than her description of other strategies and only related to hypothetical, rather than real examples. It is also interesting to note that participants could remember the basis of CBT components but made the decision of whether or not to use each strategy in a real life situation. For example, if another child asked Denise (age 9) about yoga she stated that she would tell them, "*That I didn't like yoga, and I don't like yoga".* Clearly children are able to make the active choice of what strategies are most beneficial to them. Of importance then is to then determine what contributes to a child's decision to use each strategy and how to teach the strategies in a way that makes it most useful to them.

Combining Techniques refers to the children's tendency to combine a cognitive strategy with a behavioural strategy in their recall. In this study, combining primarily occurred when children described identification and modification of maladaptive thoughts and combined this strategy with belly breathing. This occurred twice during the interviews at time one, but did not occur at Time 2. Typically, children reported using belly breathing first to regulate their emotions before using the cognitive strategy to modify their thoughts. For example, Jackie (age 10) stated, *"...belly breathing helps you flip your red thoughts into green thoughts."* Thus, some participants appeared to recognize the connection between feeling relaxed and being able to use a cognitive strategy, in so far as felling relaxed helped them to be better able to use a cognitive strategy. This is an area that warrants further investigation, as it is possible that reducing the bodily sensations that occur as a result of anxiety (e.g. rapid heartbeat, clammy hands) through the use of a behavioural coping strategy could be a pre-requisite for being able to use cognitive strategies for some children at this age.

This study adds to the existing literature by providing deeper insight into the post intervention experiences of CBT group participants through individual interviews. Following the Cochrane review completed by James et al. (2013), it was suggested that future research should focus on determining the active components of CBT and explore how the components of CBT work. Given the focus on quantitative methodologies that currently exists in the CBT literature, these results provide new information about children's experiences with CBT and provide valuable insight into their perceptions of the intervention and their ability to use skills in the longer-term. With much of the current research relying on standard questionnaire responses and group data based on parent and teacher reports rather than children's own reports, there is quantitative knowledge of CBT's effectiveness in decreasing anxiety but little understanding about the actual learning experience of children and their use of CBT strategies in post intervention life situations.

Salient Components of CBT

Our research findings indicate that children do remember and use components of CBT groups directly after group and at six to seven month follow up. There was variability in participants' recall of specific strategies, especially when comparing behavioural and cognitive components. Despite this variability, every participant could recall at least one CBT strategy at each time point, indicating that every child took away some information from the group. At Time 1 and Time 2, recall was strongest for the behavioural components involving belly breathing strategies and yoga strategies. Recall was weakest for the abstract cognitive components involving recognition of how the body feels and the connection between feelings and actions. It is important to note that there was decay in the participants' memory of all CBT components except yoga in the months between Time 1 and Time 2. However, when investigating which

components were recalled overall, the two most salient components were behavioural and the two least salient components were cognitive at both Time 1 and Time 2.

Recall and use of cognitive components. Consistent with previous research suggesting that children may not have the cognitive capacities to understand the cognitive components of CBT (e.g. Stallard, 2002), the present study demonstrates that generally children spontaneously recalled and used behavioural components of CBT more frequently than cognitive components, especially those cognitive components that are more abstract. Previous research has supported that for young children the cognitive components of CBT need to involve more concrete techniques with clear and simple instructions in order to be remembered (Stallard, 2002). This stems from the developmental literature, which emphasizes that the concrete operational stage of cognitive development is necessary to understand most cognitive components and this is not typically acquired until 7-12 years of age (Verduyn, 2000). It has been suggested that it is critical for CBT components to have a greater visual emphasis (e.g. cartoons, age appropriate imagery, and metaphors) and use simple understandable language to be most effective for young children (Stallard, 2002). In investigating the presentation of the cognitive components in the *Working through Worry with Wembley the Worry Fish* CBT group, there were differences in the ability to provide visuals and developmentally appropriate language within the cognitive strategies. Specifically, in delivering the identification and modification of maladaptive thoughts component, the facilitator was able to draw more concretely on real life comparisons (e.g. red/green stoplights; red means stop, green means go) and use visuals, which was a more tangible demonstration than was possible with the other cognitive components. When recalling cognitive strategies, there were also differences in children's memory and use across strategies. Specifically, those strategies that were more abstract were more likely to involve a more

descriptive memory of the component rather than positive applications of the strategy. It was only the cognitive strategy of identification and modification of maladaptive thoughts that was reported by children as useful for self-regulation and positive self-talk.

Recall and use of behavioural components. Overall, the present study demonstrated that behavioural components of CBT were more likely to be recalled than the cognitive components. In fact, at Time 1, all participants recalled either belly breathing or yoga, and the majority of participants recalled muscle relaxation after being cued. At Time 2, this trend was maintained, with all participants recalling yoga and the majority of participants recalling belly breathing after being cued. Muscle relaxation was the least likely behavioural component to be recalled, and was actually recalled less frequently than the cognitive strategy of identification and modification of maladaptive thoughts at both Time 1 and Time 2. This is in line with the research of Stallard (2002) that suggests concrete demonstration of CBT components is necessary for CBT to be effective for young children. When presenting the concepts of identification and modification of maladaptive thoughts, group facilitators were able to use visuals and relate the material to real life situations, positively influencing their recall, which may have contributed to it being recalled more frequently than muscle relaxation.

Overall, the behavioural components of CBT were also reported to be used more frequently by participants than the cognitive components at both Time 1 and Time 2. Specifically, the most commonly used behavioural strategy was belly breathing (See Table 2 and Table 3). In investigating participants' use of these behavioural strategies, children indicated using these strategies to regulate their feelings of personal and interpersonal distress. This is important, as children were able to not only understand the behavioural components as they were

taught in the group setting, but were able to apply them in a variety of contexts with differing emotions outside of the actual demonstrations.

Not only were the behavioural components of CBT more likely to be recalled generally, but participants were also more likely to freely recall these strategies without the use of a prompt. This finding is critical, as children are expected to use these strategies in anxiety-provoking situations in which they may be experiencing considerable distress. This increased distress increases the likelihood of using avoidance to reduce these feelings (Beesdo et al., 2009). It follows, then, that strategies that can be generated automatically are much more likely to be useful in these settings, thereby allowing the anxious child to manage intense feelings and effectively regulate his or her behaviour.

Taken together, these findings add to the existing literature examining the utility of CBT interventions in child populations. Specifically, this study provides preliminary support for the premise that behaviourally-focused interventions may be a more suitable alternative for young children with anxiety (e.g. Swensen, 1980; Bailey, 2001). As indicated by James et al. (2013), it is imperative to determine the salient components of CBT. This becomes especially important given the emergence and use of BCBT for treatment of anxiety, where intervention is time limited and the most salient components of CBT need to be highlighted. Furthermore, the predominant use and recall of behaviourally based strategies by participants in this study, adds support to Stallard (2002) who questioned the current research literature on CBT and whether there is equal presentation of cognitive and behavioural components in current interventions. Considering the contrasting results within CBT literature, Stallard (2002) had suggested that the umbrella term of CBT could be misleading, as there is often more behavioural than cognitive skills presented during CBT and there are currently no guidelines with respect to the proportion

of each type of strategy that should be included in an intervention. Clearly more research is needed to fully understand the importance of behavioural versus cognitive components of CBT. However, the findings from the present study add further support to the argument that positive research outcomes of CBT might be more strongly related to learning behavioural management strategies rather to contributions from both the behavioural and cognitive components.

Overall, the findings demonstrate support for specific components of CBT that are primarily behavioural. Behavioural strategies were clearly most memorable, salient and likely to be used by participants. Cognitive components will continue to play an important role in the delivery of CBT, especially those that are more concrete in nature, but children who participated in this study were more clearly focused on strategies that help them manage symptoms behaviourally.

Participants' Application of Strategies Learned through CBT

This study provides first-hand accounts of children's use of CBT strategies in naturalistic settings at two time points after completion of the intervention. The limited qualitative research on participants' perspective of CBT is a critical gap in the existing literature. A great deal of quantitative research demonstrates a reduction in symptoms of anxiety based on questionnaire data (e.g. Hirshfeld- Becker et al. 2010; Spence et al. 2000) from CBT group participants but minimal qualitative information exists about the specific components of CBT that are typically used by participants. Increasing knowledge about which components of the CBT group are most frequently used is important, especially given the recent research that has questioned the effectiveness of CBT in comparison to other therapies for young children with anxiety (e.g., James et al. 2013). Overall, results of the current study demonstrated that children were using

these strategies in settings outside of group with the majority of participants using at least one CBT strategy outside of group at time one and time two.

Broad dysregulation. Interestingly, the children in the present study did not limit these strategies to just situations in which they experience worry, but used them when feeling broad dysregulation, such as when they were feeling angry or frustrated from both personal and interpersonal distress. For example, Jackie had discussed using belly breathing when coping with feelings of anger saying, "*I got in trouble and was mad at my mom for getting me in trouble so yeah I used that [belly breathing] to calm down*". This also occurred in their use of cognitive strategies when Bill noted "*I was right mad and I noticed that my hands got sweaty because I was like this [demonstrates fists]".* Interestingly, these are finding that would not have been identified without the use of an interview. Given that anxiety was the focus of the CBT program, participants were asked if they had used the strategy with the implicit assumption that it would have been for a situation in which they were feeling anxiety. It was only when specific examples were probed requiring participants to describe the context where the strategy was used that it became clear that strategies were being used across a variety of emotions and distressing situations.

Implications for School Based Interventions

These preliminary results show that students' recall and use strategies even when delivered in a brief format without the use of a parent group. Children taught CBT in the *Working through Worry with Wembley the Worry Fish* school based group program both recalled and had used those strategies when interviewed two to three months post intervention and again at six to seven months post intervention. Furthermore, the CBT group for the present study was delivered without a parenting component. Information gathered from the interviews clearly

indicates that these children were able to use the CBT strategies taught in settings outside of group without the need for parent reinforcement. Moreover, there was evidence that strategies were used in a variety of contexts and situations that went beyond the single target emotion (anxiety) focused on within the group intervention. Other research has suggested that parent participation is a critical component of CBT due to the family's role in the development and maintenance of childhood anxiety (Bögels & Brechman-Toussaint, 2006). This study demonstrates promising results that children are able to apply these skills independently and can recall specific techniques without adult cueing.

Given the inherent barriers youth face when accessing traditional mental health services (e.g., Collins et al. 2004), the finding that school based interventions are successful in helping children remember and use CBT skills outside the context of the group is important. This has implications for the future delivery of mental health services in non-traditional settings that are easier for youth to access. Furthermore, this study provides promising support for the efficacy of using CBT as an intervention that can be implemented in schools for children who experience general behavioural dysregulation. These results, coupled with the knowledge that school-based interventions can provide treatment to children more quickly than the traditional mental health system (e.g., Mifsud & Rapee, 2005) and in an environment that is comfortable to them (e.g., Barrett & Pahl, 2006), lend support to the sentiments expressed in earlier research that stated, that the delivery of school based CBT would be a considerable step forward in the delivery of mental health services to youth (Mychailyszyn et al., 2011).

General Implications

These results have implications for clinical work with youth in treatment. In particular, they suggest that delivering the best intervention to children with anxiety may require clinicians

to modify their current understanding of CBT and shape interventions based on what is most salient and useful for the child with anxiety. This is the first known qualitative research that has investigated what components of CBT young children are most likely to remember and use. As indicated by Rist (2000), qualitative analysis is generally under used in psychology research and is not often recognized as being valuable. This area of psychology is no exception. First hand testimony that is generated through qualitative research, such as semi-structured interviews, allows researchers rich testimony from which inferences can be drawn. Qualitative research is valued for the actionable and practical knowledge that it generates (Sandelowski, 2004). The present study demonstrates these qualities by giving the participants of CBT a voice. Extrapolating to the delivery of CBT, clinicians would benefit from the insights gathered in this form of investigation to better inform their own practice to recognize those components that are most memorable and useful for their clients across the lifespan.

These kinds of insights would be beneficial in many areas of clinical and applied psychology and not just within the application of CBT. Psychological research needs to be more accountable for the usefulness of their research in the development and maintenance of effective interventions for children with mental health concerns. Far too often psychological research is primarily comprised of quantitative studies due to their perception of superior statistical rigor and ability to generalize to the larger population (Sandelowski, 1997). These statistical studies serve an important research function but may not have the same clinical significance. Future research needs to look past traditional analysis based on group data and probabilities, and focus instead on generating practical knowledge rather than solely statistical significance (Sandelowski, 2004).

Extrapolating to clinical applications, the information gained from the present study has important implications for the delivery of CBT moving forward. By determining the components of CBT that are most salient and likely to be used by children, clinicians are better able to provide services to their clients in a timely and effective manor. Given the significant wait times children face in the mental health system and the impairment experienced by children with anxiety, the findings that children reported minimal use of the abstract cognitive components of CBT is concerning. Further investigation into children's comprehension of cognitive components is warranted, as focusing on these components may be an inefficient use of clinician's time. Clinicians need to be aware of the relative influence of the components of CBT and determine what is most likely to be beneficial to the client. The current study provide valuable exploratory findings, but also points to the need for further investigation to elucidate the salient components of CBT, ultimately helping with our overall provision of mental health services.

Strengths and Limitations

This foremost strength of this study is that it investigated a novel feature of CBT by analyzing data qualitatively. Although there is a large body of quantitative research investigating the utility of CBT for anxiety in children, there are conflicting results in the literature. There has been remarkably little research that has focused primarily on children's first-hand accounts of their experience with CBT making this research unique in the field. Furthermore, there was also no time constraint on the interviews, providing participants ample time to reflect and revisit different topics, as needed. Second, the researcher travelled to the children's school for the intervention and conducted the interviews in person allowing the participants to be more at ease in a comfortable and familiar environment. Third, this research offers insight into a population in which we have limited prior research and significant controversy over the effectiveness of CBT.

The knowledge gained from first hand experiences gathered in this study aids clinicians understanding of how this age conceptualizes, recalls and uses the CBT intervention.

This research is not without limitations. First, the participants in this study were from a similar population, all attending the same school and from the same small community. Clearly, this limits the generalizability of the findings and future research would benefit from using a more diverse sample. Second, the interviews were relatively short in duration due to the fact that this was an exploratory study. The focus of the interviews was to determine what memory the children would generate independently with minimal prompts. Although the current interviews were informative, future research should include more in-depth interviews that could provide greater insight into children's experiences with CBT in this setting. This could include insight into why they decided to use a specific component (e.g. belly breathing instead of identification and modification of maladaptive thoughts) in a particular moment and/or their impressions of the usefulness of the strategy retrospectively. This would be important, as participants in the present study were asked for one example of the use of each CBT strategy; however, it would be equally important to examine which strategy a participant would indicate using repeatedly in various situations and why this strategy is frequently used. Third, this study would benefit from independent analysis by a second trained rater to ensure reliability in coding. This lack of reliability from a second coder limits the scope of the findings, as it is unclear if an unbiased rater would find similar findings. However, the principal investigator closely followed the guidelines set out by Elo and Kyngas (2007) regarding inductive content analysis, meaning that the primary investigators are confident in the current categorization of the data. Finally, another important limitation of the present study was that the participants' level of anxiety was not evaluated prior to the CBT intervention. This made it impossible to determine if there was a

reduction in the clinical symptoms of anxiety after the CBT intervention. Although this would be an important component for future research, for the present study it was not imperative, as with school based interventions the focus is generally more on improved school functioning rather than clinical reduction of symptoms. The importance for this study was the usability of these strategies in a school context, for example when Eve and Ian discussed using belly breathing in a social context to reduce conflict with peers, rather than comparing quantitative levels of anxiety prior to and after the CBT intervention.

Future Directions

The present study investigated many components of CBT that have not been well researched in the past, namely young children's memory and use of CBT components. As this was an exploratory study, valuable evidence was uncovered that suggests that the cognitive components of CBT may not be as memorable and useful as behavioural components, for young children. The results of the present study clearly demonstrate the benefit of qualitative research, and the need for further research to help elucidate why behavioural strategies were recalled and used more frequently and consistently than cognitive strategies in this population. Further exploratory research may help in our understanding as to why there was such a discrepancy in recall and use within the different cognitive strategies. As suggested by James et al. (2013) future research needs to dissect the active components of CBT. This could focus on factors that may influence the effectiveness of CBT such as, whether children would report greater or equal benefits from a strictly behavioural based group, what specific baseline cognitive skills children need before participating in a CBT group, and whether delivering the cognitive strategies in more action oriented way would increase their saliency. The current study added first-hand

accounts to the existing research literature from participants who completed CBT and highlights that future qualitative research is instrumental to our comprehension of CBT for young children.

Conclusion

The current study provides new insights into our understanding of children's conceptualization of CBT. It extends on previous work, as it is the first known study to qualitatively investigate children's first-hand accounts of their experience with and use of CBT strategies. Moreover, the group intervention was delivered in a school setting adding to the literature investigating the delivery of traditionally mental health services within school settings.

These results add to the existing literature that questions whether CBT is developmentally appropriate for all children. Furthermore, it adds to the clinical literature by giving mental health professionals first-hand accounts of how children conceptualize and use CBT. This information can help clinicians better understand their clients in future CBT sessions and significantly improve our delivery of CBT. This is especially important as the use of BCBT is increasing and the effectiveness of the brief intervention can be improved by focusing on the content most beneficial to children. Having a better understanding of CBT will advance the provision of mental health services for children overall and will result in clinicians' having a better understanding of their clients, ultimately improving CBT treatment.

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Table 1

Age and Involvement of Participants at Both Time Points

Name	Time 1	Time 2	Age at time of CBT intervention
Adam	Completed	Completed	9
Billy	Completed	Completed	10
Cassandra	Completed	Completed	9
Denise	Completed	Not Completed	9
Eve	Completed	Completed	10
Faith	Completed	Completed	9
George	Completed	Completed	10
Holly	Completed	Not Completed	9
Ian	Completed	Not Completed	10
Jackie	Completed	Completed	10
Kyle	Completed	Completed	10

Table 2

Recall and Use of CBT Components at Time 1 (N = 11)

CBT Component	Freely Recalled	Cued Recall	Not Remembered	Used
Belly Breathing	8	3	0	9
Yoga	8	3	0	3
Muscle Relaxation	0	7	4	4
Recognition of how our body feels	1	1	9	1
Identification and Modification of Maladaptive Thoughts	3	7	1	5
Connection between Feelings and Actions	0	3	8	1

Table 3

Recall and Use of CBT Components at Time 2 (N = 8)

CBT Component	Freely Recalled	Cued Recall	Not Remembered	Used
Belly Breathing	2	4	2	5
Yoga	4	4	0	3
Muscle Relaxation	1	2	5	0
Recognition of how our body feels	0	2	6	2
Identification and Modification of Maladaptive Thoughts	0	5	3	4
Connection between Feelings and Actions	0	1	7	0

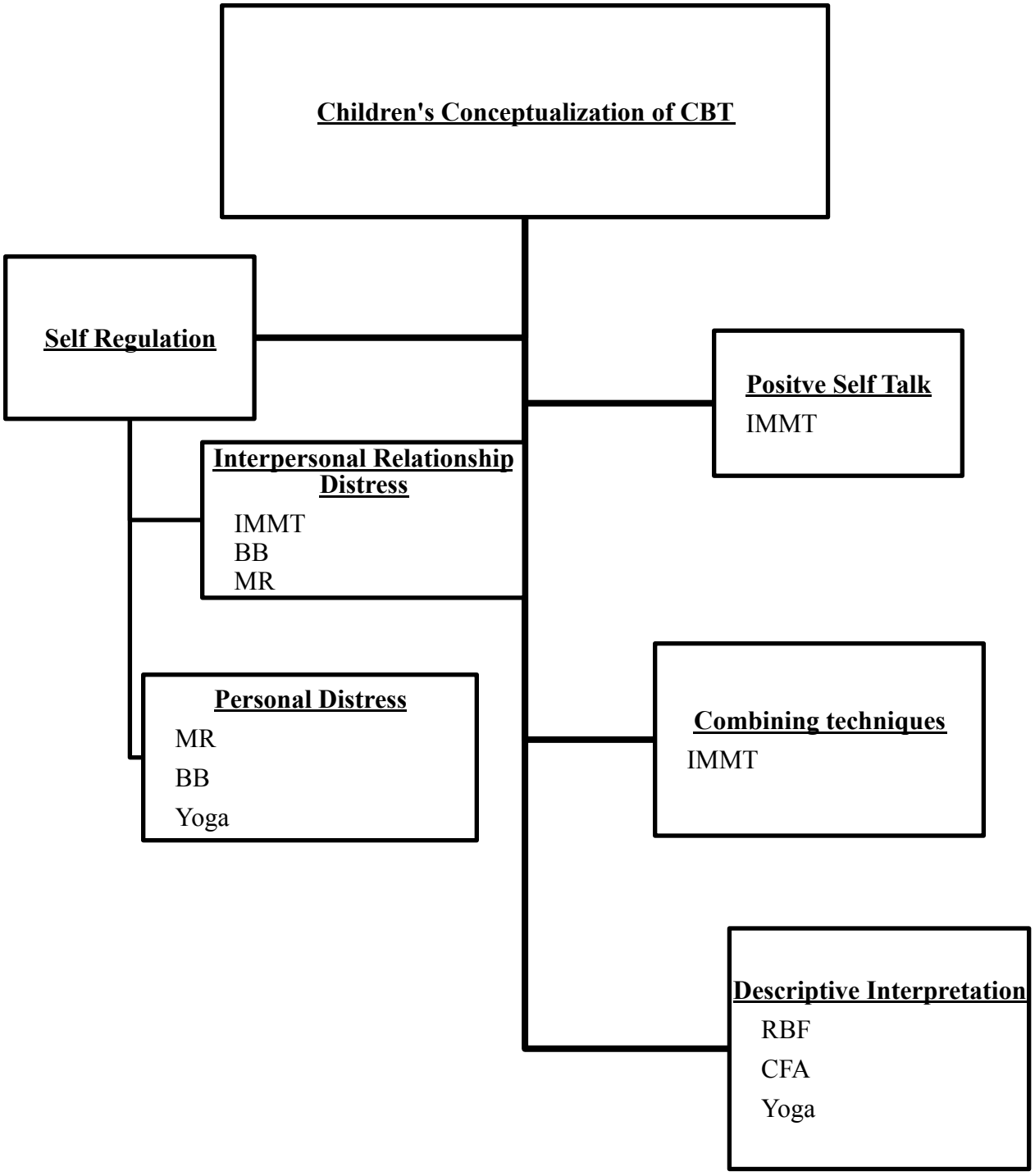

Figure 1. Themes and subthemes based on participant recall of CBT group at Time 1. Note: BB: Belly Breathing; MR: Muscle Relaxation; IMMT: Identification and Modification of Maladaptive Thoughts; CFA: Connection between Feelings and Actions; RBF: Recognition of how the Body Feels.

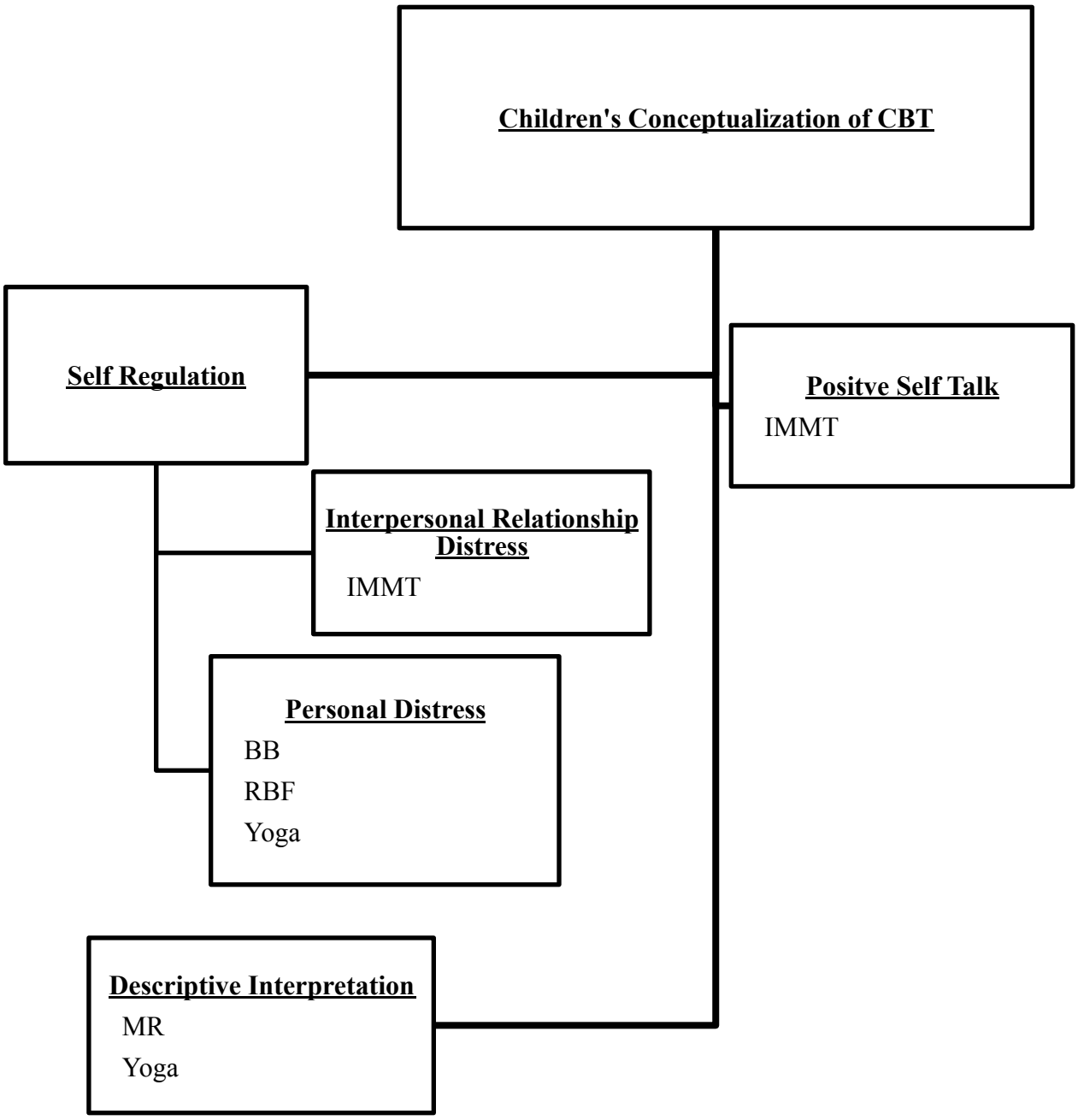

Figure 2. Themes and subthemes based on participant recall of CBT group at Time 2. Note: BB: Belly Breathing; MR: Muscle Relaxation; IMMT: Identification and Modification of Maladaptive Thoughts; RBF: Recognition of how the Body Feels.

Appendix A

Interview Guide

Target Words (check off all that apply)

☐ Belly Breathing

☐ Yoga

☐ Muscle Relaxation

☐ Recognition of how Body Feels

☐ Red Thoughts/Green Thoughts & Flipping Thoughts

☐ How Thoughts affect our Feelings and Actions

In the following sections we will be asking children what they remember about the Wembley the Worry Fish group. We are interested in whether they remember specific aspects that were taught during group, and have listed these aspects as our target words above.

In section 1 we will be asking free recall questions to gather information on what the children voluntarily recall. In section 2 we will be asking specific questions about the target phrases to see if the children have any memory of these aspects when cued.

Introduction

Earlier this month you were a part of the Wembley the Worry Fish group that (group leaders names) ran. Before you started group Mrs. Doell and maybe your parents talked to you about being a part of the group. At the beginning of group we also talked about how we would be doing activities that help us learn new and positive ways of dealing with our feelings. We are curious about why you think you were part of this group.

Section 1

1. *You said you remember (insert answer from why child felt they were a part of the group) about why you were a part of group. If another kid was thinking about joining group what would you tell them was your favorite part?*

   If answer given:

   Can you tell me about that?

   Why did you like that best?

   If no answer, or no favorite part: Move to next question

2. *If another kid was thinking about joining group what would you tell them is your least favorite part?*

   If answer given:

   Can you tell me about that?

   Why did you not like that part?

   If no answer: Move to next question

If answer given for Question 1:

3. *You said you liked (insert answer to Q1). Have you have used this activity outside of group?*

   If yes

   Can you tell me about that?

   If no: Move to next question

4. *So we talked about (insert skills/activities the child has mentioned). There are other parts we haven't talked about yet, is there anything else about group you remember or something you learned that you have used outside of group?*

   If yes

   Can you tell me about that?

If no, or did not indicate remembering any part: Move to next section

Section 2

If target words not mentioned probe here.

1. *So now I'm going to go through different parts of group we haven't talked about yet to see what you thought about them.*

   *Another thing we learned about in the group was **belly breathing.** If another kid asked you about belly breathing what would you say?*

   If answer given

   *Have you ever used **belly breathing** outside of group?*

   Can you tell me about this?

   If no answer given or does not remember: Move to next question

2. *Another thing we learned about in the group was **yoga.** If another kid asked you about yoga would you say?*

   If answer given

   *Have you ever used **yoga** outside of group?*

   Can you tell me about this?

   If no answer given or does not remember: Move to next question

3. *Another thing we learned about in the group was **muscle relaxation.** If another kid asked you about muscle relaxation what would you say?*

   If answer given

   *Have you ever used **muscle relaxation** outside of group?*

   Can you tell me about this?

   If no answer given or does not remember: Move to next question

4. *Another thing we talked about in the group was **recognizing how our body feels.** If another kid asked you about this what would you say?*

   If answer given

   Have you stopped to recognize how your body feels in a situation outside of group?

   Can you tell me about this?

   If no answer given or does not remember: Move to next question

5. *Another thing we learned about in the group was **red thoughts/green thoughts, and flipping our thoughts.** If another kid asked you about red thoughts and green thoughts, and how to flip thoughts what would you say?*

   If answer given

   Have you ever flipped red thoughts into green thoughts outside of group?

   Can you tell me about this?

   If no answer given or does not remember: Move to next question

6. *Another thing we talked about in group was **how our thoughts affect our feelings and actions.** If another kid asked you about how our thoughts affect our feelings, and actions, what would you say?*

   If answer given

   Have you ever had a situation outside of group where you noticed that how you thought about a situation affected your feelings and actions?

   Can you tell me about this?

   If no answer given or does not remember: Move to next question

7. *Is there anything else you would like to tell me about group?*

Appendix B

Informed Consent Form for Parents

Information and Consent Form for Parents

Study Title: Evaluating the Wembley the Worry Fish Intervention Group

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Introduction

You and your child are being invited to take part in the research study named above. This form gives you information about the study. Before you and your child decide if you want to take part, it is important that you understand why we are doing this study, the risks and benefits, and what you and your child will be asked to do. You do not have to take part in this study. Taking part in the study is completely voluntary (your choice/your child's choice). Informed consent starts with the initial contact about the study and continues until the end of the study. If you have any questions that are not answered on this form, the researchers will be happy to give you more information. You and your child may decide not to take part or may choose to withdraw at any time. This will not affect your child's grades or placement at school and will not affect your child's access to school services such as guidance, counseling or other academic supports in the future.

Why Are We Doing This Research?

Researchers from Mount Saint Vincent University are working on this study to find out more about the kinds of programs that are most helpful to children in schools such as this one. We are interested in finding out what aspects children enjoy, do not enjoy, remember and use from their participation in the "Working Through Worry with Wembley the Worry Fish" group. This information will help us to better understand what components of the group were suited best for children, and may lead to better developed group interventions in the future.

How Will The Researchers Do the Study?

If you and your child decide to take part in this study, your child will be assigned a time during lunch to complete a short interview with the research assistant at two time points. The first interview will take place approximately two weeks after finishing the group, and the second interview will take place approximately six months after finishing the group. Both interviews will be the same, and take about 15-20 minutes. **We will be audio recording the interview to make sure we remember everything your child says.** The only people who will listen to the tape are the researcher (Sara King), and research assistant (Katlyn Gerrior). These recordings will be destroyed after the researcher and research assistant have checked over their interview notes to make sure they did not miss anything that was said during the interview.

What Will You and Your Child Be Asked to Do?

Your child will take part in an interview with the research assistant at two different times to talk about their experience in the "Working Through Worry with Wembley the Worry Fish" group they were a part of this term. This interview will take about 15-20 minutes, and will ask you child about what part(s) of the group they enjoyed, did not enjoy, remember, and use. The interviews will happen two weeks and six months after their last session of group.

Additionally, as part of your child's participation in the "Working Through Worry with Wembley the Worry Fish" group you gave your consent to have Rockingstone Heights provide the researchers with information on your child's name, age, sex, grade and date of birth (demographic information). We also ask your permission to access this information for this study.

What Are The Risks of Participating

There are minimal risks associated with your child being part of the study. However, it is possible that your child may feel worried or upset when reflecting on their experiences of anxiety during participation in the group. You should know that all discussion is voluntary and your child will never be forced to discuss uncomfortable topics.

The researcher in charge of running the group is a registered clinical psychologist with several years of experience. The research assistant is a graduate student in school psychology with

training working with students your child's age. Should your child experience any difficulties when participating in the interview, the people in charge will make sure that he or she has access to appropriate support and given the opportunity to leave the interview.

What Are The Benefits of Participating?

While taking part in this study may be of no help to you and/or your child personally, what we learn may help us design groups in the future that help children who have trouble managing worry at school.

Does My Child Have to Participate?

Before deciding about whether your child will take part in this study, you should know that your child *does not* have to participate. Choosing to not participate will not affect how you or your child are treated by school staff and will not affect your child's marks or access to services at school.

Can I/my Child Withdraw from the Study

Yes. Either you or your child can choose to withdraw from the study at anytime. Any information we got from your child's interview will be destroyed if your child withdraws. If your child chooses to withdraw or you withdraw your child this will not affect how you or your child are treated by school staff and will not affect your child's marks or access to services at school.

If the study is changed in any way that could affect your decision to continue you child's participation, you will be told about the changes and you may be asked to sign a new consent form.

Will the Study Cost me Anything?

No. It will not cost you or your child anything to take part in this study.

Will Anyone Know that I/My Child Participated in the Study?

Any information that we learn about your child from the interview will be kept private. Your child will be given an ID number and a fake name so that he or she cannot be identified based on answers to questions. Only people directly involved with the study will have access to this information and only the researcher (Dr. King) will be able to link you child's ID number with his or her real name. All of this information will be kept secure so that no one else will be able to link your child's name and ID number.

Since your child participated in a group, and we are asking each group member to take part in this study, group members will know the identity of other group members. During group we discussed that children cannot talk about group with anyone who is not in the group and your child will be reminded about this before the interview.

Sometimes it is necessary to show study records to the University Research Ethics Board to ensure that proper procedures are being followed. If this is the case, your child's privacy will be protected as much as possible. If we publish or present the results of the study, only group data will be reported; that is, your child will never be identified.

Please note that, in the rare event that we should learn anything during the course of your child's participation in this group that would cause us to believe that he or she is in danger of harming him or herself, or others, Dr. King would follow up with you directly. Further, in accordance with provincial laws, in the rare event that we learn anything during the course of your child's participation in the group that would lead us to believe that your child was being harmed, we would be required to report this. If any issues arise as a result of your child's participation in the group, you should contact Dr. King at (902) 457-6552.

All of the information we collect from your child will be kept in a locked filing cabinet in Dr. King's office at Mount Saint Vincent University. Records will be kept for 10 years after your child turns 18 and then be destroyed.

What if I Have Questions About the Study?

You can ask questions at any time. If you have a question, you can call the researcher, Dr. Sara King at (902) 457-6552 between 8:30 am and 5:00 pm, Monday through Friday. Dr. King's voicemail is confidential, so if you need to leave a message, you can do so. If you would like to email Dr. King, you can do so by using the following address: sara.king@msvu.ca. You should know that privacy cannot be guaranteed over email, so if you wish to keep your information private, you should contact Dr. King by telephone.

What Are My Research Rights?

Your signature will show that you have understood to your satisfaction the information about participating in this research study and that you and your child agree to participate.

By signing this document you are not waiving any of your legal rights, nor are you releasing the investigators or the institutions from their legal and professional responsibilities. You or your child are free to withdraw your child at any time without affecting your child's education or access to services at school.

If you have any questions about how this study is being conducted and wish to speak with someone not involved in the study, you may contact the Chair of the University Research Ethics Board (UREB) c/o MSVU Research Office, at (902) 457-6350 or via email at research@msvu.ca.

Can I Find Out About the Results of The Study?

Yes, you will have the chance to find out about the study when it is finished. You may choose to receive a written report about the overall experience of all children who participated in the study.

If you would like to receive a copy of this report, please list your address on the signature page in the space provided.

Who Else Will Find Out About The Study?

The researchers plan on submitting the results of this study to an academic journal for publication and may also present the findings at a research conference. We will also prepare a report and present results in-person to staff and administration at Rockingstone Heights School. At no time will you or your child be identified as being a participant in the group.

Signature Page

Study title: Cognitive Behavioural Therapy and Anxiety: A Qualitative Investigation

Participant ID:
Participant INITIALS:

Parent/Guardian Consent
I have read or had read to me this information and consent form and have had the chance to ask questions which have been answered to my satisfaction before signing my name. I understand the nature of the study and I understand the potential risks. I understand that I have the right to withdraw my child from the study at any time without affecting his or her education or access to services in any way. I have received a copy of the Information and Consent Form for future reference. I freely agree to my child's participation in this research study.

☐ I consent to my child being audio recorded (check box for YES)

☐ I consent to the principal investigator accessing demographic information for my child (e.g., name, sex, date of birth) from their participation in "Working Through Worry with Wembley the Worry Fish" group (check box for YES)

_____
Name of Child (Print)

_____ _____
Name of Parent/Guardian (Print) Signature of Parent/Guardian

Date: _____ Time: _____

STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY
I have explained the nature and demands of the research study and judge that the Parent/Guardian named above understand the nature and demands of the study.

Name (Print): _____ Position: _____
Signature: _____ Date: _____

STATEMENT BY PERSON OBTAINING CONSENT
I have explained the nature of the consent process to the Parent/Guardian and judge that her or she understands the participation is voluntary and that he or she may withdraw his or her child at any time from participating.

Name (Print): _____ Position: _____
Signature: _____ Date: _____

Appendix C

Assent Form for Students

Assent Form for Students

Title of Study: Evaluating the Wembley the Worry Fish Intervention Group

Researchers: The primary researcher is Dr. Sara King, a psychologist who works with kids and teenagers. The research assistant is Ms. Katlyn Gerrior, a School Psychology student.

Why are We Doing This Study?

We are doing this study to find out what types of programs are most helpful to children your age. We are interested in finding out what parts children enjoy, do not enjoy, remember, and use based on your participation in the "Working Through Worry with Wembley the Worry Fish" group.

What Will Happen During the Study?

If you decide to participate you will do a short interview with a university student. The student will ask you about being in the "Working Through Worry with Wembley the Worry Fish" group.

We are going to be recording what happens in the interview with an audio recorder. This is so the researchers can remember what you told her in the interview.

Are There Any Good or Bad Things About Being in this Study?

The good thing about taking part in this study is that what we learn may help us make groups better for students who join them after you.

The bad thing about being in this study is that you might get upset or worried when talking about what happened and was discussed in the group. That's okay. You will be never be forced to talk about anything you don't want to talk about. If you want to talk about any of the things we talk about in the interview, you can talk to the researchers or Ms. Doell. Just let us know if you want to talk about anything that has made you upset or worried.

Who Will Know About What I did In This Study?

The researchers will know what you did in the study. We are asking all the students who were part of your group to take part in the study, so the other students may know you are doing the study but not what you say. No one else will know about what you did in this study unless you want to tell them.

Sometimes, researchers have to tell the people in charge of giving permission for research about how their studies are going. If this happens, we'll try our hardest not to share your name with them.

The only time we can't keep your information private is if you tell someone that you are going to hurt yourself or someone else is hurting you. If any of these things happen, the researchers might have to tell someone.

Do I have To Be In This Study?

You do not have to be in this study. No one will be mad at you and it will not affect your grades or how your teachers think about you. If you don't want to be in this study, just tell us. Even if you say yes now, you can change your mind later. Being in this study is totally up to you.

What If I Have Any Questions?

You can ask questions about the study at any time, now or later. You can talk to your parents or to your guidance counselor about things in the study you don't understand. You can also ask the researchers. You or your parents can call Dr. King at (902) 457-6552.

Confirmation of Assent

I understand the reasons the researchers are doing the study and I want to be in the study. I also agree to have my voice recorded when I'm participating in the study.

☐ Child has given verbal assent

_____
Name of Child (Print)

Date: _____ Time: _____

STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY
I have explained the nature and demands of the research study and judge that the child named above understands the nature and demands of the study.

Name (Print): _____ Position: _____

Signature: _____ Date: _____

STATEMENT BY PERSON OBTAINING ASSENT
I have explained the nature of the consent process to the child and judge that he or she understands that participation is voluntary and that he or she may withdrawal at any time from participating.

Name (Print): _____ Position: _____

Signature: _____ Date: _____