

Anxiety-Related Disorders in Primary-Junior Grades (K-3):
Teacher Perceptions and Knowledge

Gabriella Lancia B.A., B.Ed.

Department of Graduate and Undergraduate
Studies in Education

Submitted in partial fulfillment
of the requirements for the degree of
Master of Education

Faculty of Education, Brock University
St. Catharines, ON

© Gabriella Lancia 2013

Abstract

This study used a descriptive case study design to analyze teachers' experiences of anxiety-related conditions and emotions in the primary-junior grades (K-3). The study sought to examine (a) educators' perceptions of anxiety conditions and how such interpretations influence their teaching practice; (b) teachers' knowledge of the diagnostic processes, symptomology, and emotions related to anxiety disorders; (c) primary teachers' knowledge of and experience with emotional regulation strategies and therapeutic approaches for anxiety; and (d) additional strategies and knowledge that should be available to help students. The study adopted Bronfenbrenner's (1986) Ecological Model to frame participants' experiences and perspectives, as well as the impact of several factors (e.g., school, home) and individuals (e.g. teachers, parents, students) on students' anxiety and the participants' perspectives. Through in-person interviews, participants shared their experiences with and knowledge about students in their teaching practice who had experienced anxiety-related conditions and emotions. Four major themes emerged from the data: symptoms and situational contexts; knowledge of strategies and interventions; understanding and perspectives of students; anxious emotional responses; and challenges. The study contributes to the literature by providing the real-life perspectives and experiences of primary-junior teachers (K-3) related to students experiencing anxiety. The study provides further information for educators, administrators, and research regarding any additional support and knowledge that should be implemented to further assist educators and students in regards to anxiety.

Acknowledgements

I would like to thank my advisor Dr. Vera Woloshyn for her guidance, support, and feedback that has been instrumental in my personal and academic growth as a writer and a researcher. I would also like to extend my thanks to Dr. Ann-Marie DiBiase for serving as the second reader for this project and providing me with invaluable emotional support throughout the MEd program.

I also extend my deepest thanks to Dr. Michael Kompf, Dr. Nicola Simmons, Dr. Coral Mitchell, Dr. Hilary Brown, and Dr. Renee Kuchapaski who have all provided me with their insight, support, and guidance through various stages of my MEd journey. I have been so privileged to have such wonderful mentors while at Brock and I will continue to follow the example you have set for me, professionally and personally. As well, I would like to thank my friend and colleague, Caitlin Munn, for being a great mentor through sharing her vast knowledge of the MEd process and providing me with guidance.

I would also like to acknowledge my friends and family. Their support throughout this process has been absolutely immeasurable and I truly am grateful for everything they have done. A special thanks goes to my parents and my younger brother, Christopher, who have always been my biggest supporters and never lost faith in me, no matter how many times I lose faith in myself.

Anne, Carly, Dana, and Maria: thank you for being part of this project and for sharing your experiences with me. You are all fantastically inspiring individuals and I am privileged to have had the opportunity to talk, share, and listen to your stories.

Table of Contents

	Page
Abstract.....	ii
Acknowledgements	iii
CHAPTER ONE: INTRODUCTION TO THE STUDY	1
Background of the Problem	2
Statement of the Problem.....	3
Purpose of the Study/Research Questions	4
Rationale	5
Limitations	6
Overview of the Study	7
CHAPTER TWO: LITERATURE REVIEW	9
Anxiety.....	9
Risk Factors.....	14
Parental Influences.....	19
Diagnosis.....	21
Theoretical Framework: Bronfenbrenner’s Ecological Model	25
Anxiety Conditions in Middle Childhood (4-6 Years)	27
Characteristics of Childhood Anxiety.....	28
Generalized Anxiety Disorder (GAD).....	31
Social Anxiety Disorder (SAD).....	33
Worry.....	35
Rumination.....	39
Interventions.....	43
Proposed Study	56
Research Questions and Design.....	56
CHAPTER THREE: RESEARCH METHODOLOGY	59
Description of Research Design.....	59
Materials.....	60
Selection of Participants.....	63
Data Collection	64
Participants.....	65
Students’ Confidentiality	66
Interview Procedure	69
Data Analysis	74
Limitations	75
Ethical Considerations	77

CHAPTER FOUR: RESEARCH FINDINGS.....	79
Theme 1: Symptoms and Situational Contexts	80
Theme 2: Knowledge of Strategies and Interventions	83
Theme 3: Understanding and Perspectives of Students’ Anxious Emotional Responses	88
Theme 4: Challenges.....	93
Summary	98
CHAPTER FIVE: SUMMARY, DISCUSSION, AND IMPLICATIONS.....	99
Summary of the Study.....	99
Overview of Data Analysis Procedure.....	100
Summary of Research Question and Associated Findings	109
Implications for Theory	110
Limitations	111
Implications for Practice/Teacher Education	112
Suggestions for Future Research.....	114
Concluding Thoughts.....	116
References	118
Appendix A: Interview Prompts.....	130
Appendix B: Data Collection Matrix Sample: Themes/Quotes	131

CHAPTER ONE: INTRODUCTION TO THE STUDY

While most children do not experience problematic worries, anxiety disorders are nevertheless the most common mental disorders in childhood. An estimated 6.4% of children have severe enough problems to warrant a diagnosis (Schwartz et al., 2012). Unfortunately, the very nature of anxiety means that many children who suffer from it go unnoticed. These children are often overlooked because they withdraw from classroom activities and isolate themselves; in most cases, they suffer in silence. Their silence causes their difficulties with anxiety to often go undetected for years (Schwartz et al., 2012).

Therefore, this study examined the perceptions and knowledge of primary-junior teachers about anxiety and anxiety-related conditions in primary-grade students (K-3). By looking at the current knowledge and experiences of primary-junior teachers, I sought to expand the resources and knowledge available to assist educators in assisting students experiencing anxiety-related conditions and emotions. Schools are the primary site for services, including referrals to mental health, family, and community services (Greenwood, Oliver, Suddaby, & Sahalin, 2008). Classroom teachers, in particular, can play a critical role in understanding school-based mental health. For instance, teachers are often asked to implement school-based universal interventions, as well as to refer students who may need additional supports (Reinke, Stormont, Herman, Puri, & Goel, 2011, p. 2). Thus, gaining the perspectives of teachers through discussing their experiences with students who may be experiencing anxiety-related conditions is important, not only to gain an understanding of the current knowledge that practitioners have, but also to aid future interventions and programs for children who are experiencing

anxiety-related conditions and symptoms.

A descriptive case study (Creswell 2013; Willis, 2008) was used to examine the experiences of the participants in this study. Within- and between-case analyses were conducted to analyze the data collected through individual interviews so that themes could be determined within and across the participants' interviews. To gain further understanding about the motivations underlying this study, the background and purpose of the study, research questions, rationale, and limitations within the research are outlined in this chapter.

Background of the Problem

Anxiety disorders are usually associated with significant impairments in social and academic functioning and cause substantial distress for patients and their families (Carthy, Horesh, Apter, & Gross, 2010). Without early intervention, anxiety and depressive symptoms may contribute to reduced career choices, increased absenteeism, relationship challenges, and substance use/abuse (Beck & Beck, 2011). Therefore, there is substantial need for treatment and intervention in childhood and throughout adulthood (Rapee & Spence, 2004).

Despite the correlation between anxiety and rumination, the latter has been linked primarily to the manifestation and persistence of depression, while anxiety has been associated with worry (McLaughlin, Borkovec, & Sibrava, 2007). Specifically, worry has been identified as the “defining term” of *Generalized Anxiety Disorder* (GAD), which is often classified as “worry disorder” (Carthy et al., 2010). The cognitive processes associated with anxiety and depression (such as worry and rumination) are classified as the long-term contributors to these disorders, as negative affect is a stable dispositional

characteristic that involves experiencing negative emotional states that may serve as this underlying predisposition to the development of anxiety and mood disorders (Beck & Beck, 2011). Negative affect represents a nonspecific distress factor characteristic of anxiety and depression and is considered to be a predisposing factor to the experience of both disorders (MacLauglin et al., 2007). However, the lack of research about the manifestation of anxiety and its related disorders has contributed to low referral and diagnostic rates with diagnosis often delayed until late adolescence or early adulthood (16-21 years of age). In addition, pharmaceutical and/or therapeutic interventions are typically provided decades after the onset of the disorder, reinforcing the need for early identification of anxiety-related disorders (Lara, Pinto, & Akiskal, 2006).

Statement of the Problem

In the context of the school environment, teachers are the primary source of contact for the identification of emotional or behavioural issues regarding anxiety or other mental health concerns (Herman, Reinke, Parkin, Traylor & Agarwal, 2009; Mian, Wainwright, Briggs-Gowan, & Carter, 2011). Increased knowledge and awareness of anxiety-related conditions and their place in the school environment would likely lead to earlier referrals (Greenwood et al., 2008). Therefore, knowledge of symptoms, behaviours, and educational and psychological practices associated with anxiety and anxiety-related conditions is important, even if teachers do not provide these educational or psychological interventions directly (Stormont, Reinke, & Herman, 2011).

My interest in anxiety-related conditions and emotions in the primary grades (K-3) is multifaceted and stems from my experiences as a student and a teacher candidate. I was diagnosed with an anxiety-related condition in the primary-junior grades (K-3) and

continued to struggle with this condition throughout my childhood and adolescent years. Many years later while completing the teacher education program, I found that there was a lack of information provided to teacher candidates on recognizing the symptoms and emotions of anxious students. When examining the current body of research, few studies have examined teachers' knowledge of evidence-based interventions and programs specifically for children with anxiety-related conditions or symptoms (Stormont et al., 2011). Teachers' knowledge of school-based resources for monitoring and servicing the needs of children with mental, emotional, and behavioural needs has also not been explored (Stormont et al., 2011). Therefore, this study aimed to fill this gap in the research by exploring teachers' perceptions and knowledge of anxiety-related conditions and symptoms. Additionally, this study serves as a means of personal and professional reflection on my own experiences, as well as those of my participants, with respect to working with students who may be experiencing anxiety.

Purpose of the Study/Research Questions

The purpose of this study was to examine teacher perceptions of anxiety-related disorders in the primary grades (K-3), with a focus on exploring how teachers' experiences and perceptions influence their current awareness, knowledge and understanding. The study was guided by the following questions:

1. What are educators' perceptions of anxiety-related disorders and how do these interpretations influence their teaching practice?
2. What knowledge/experience do primary teachers (K-3) have regarding the diagnostic processes of anxiety-related disorders, their symptomology, and emotions relating to their manifestation?

3. What knowledge/experience do primary teachers (K-3) have about emotional regulation strategies/therapeutic approaches that available when working with students who may experience anxiety-related disorders?
4. What strategies/knowledge do primary teachers believe should be available to help them work with students experiencing anxiety-related disorders in the primary grades?

Rationale

Although current literature has investigated the prevalence and criteria for diagnosis of anxiety-related disorders, such as GAD and SAD in the *DSM-IV* (Beck & Beck, 2011; Layne, Bernat, Victor, & Bernstein, 2009), there is little research about educators' perspectives and knowledge of anxiety-related conditions in primary-aged children (Herman et al., 2009; Weeks, Coplan, & Kingsbury, 2009). Researchers argue that this lack of awareness is a combination of nonexistent resources (e.g., professional development), detailing the symptoms of anxiety related conditions and the signs teachers need to look for (Herman et al., 2009; Stormont, Reinke & Herman, 2011). Others argue that the absence of anxiety-provoking situations in the classroom (e.g., instead occurring at recess or after school where teachers are not present), as well as an effort from students to hide their anxious feelings for fear of negative judgment from teachers (Layne et al., 2009). Therefore, this study has implications for teachers and primary-aged children alike who experience anxiety-related conditions and emotions. For instance, the results of this study may provide important insights about teachers' knowledge of warning signs associated with anxiety and anxiety-related conditions and thus potentially facilitating early intervention.

Recommendations for teacher education and practice and knowledge may also be derived from exploring participants' experiences and reflections working with students who may be experiencing anxiety-related conditions and emotions. The majority of teachers perceive that their primary responsibility is implementing classroom-based behavioural interventions, reporting a general lack of experience and training for supporting children's mental health needs such as anxiety and depression (Reinke et al., 2011). Even though teachers are often identified as "key implementers" in referring and providing assistance to children with anxiety-related conditions or emotions (Greenwood et al., 2008), often they are not aware of the symptomology associated with these conditions (Beck & Beck, 2011; Layne et al., 2009) or associated school-based resources and supports. As a result, teachers are often unable to provide appropriate assistance or refer these students to the appropriate professionals—for example, a school psychologist or counsellor (Greenburg et al., 2008; Stormont et al., 2011). This study will provide perspectives and opinions of a group of selected teachers with respect to the nature of anxiety-related conditions. This information, in turn, may help to bridge the research-to-practice gap in school-based mental health practices (Reinke et al., 2011).

Limitations

The study had certain limitations that made it difficult to gather perspectives that would represent all educators. Insights gathered from this study are also limited in terms of the participants, who were female and employed within a contained geographical area and acquaintances of the researcher. In addition, four of the five participants had only worked in their school board of choice for less than 3 years. Finally, data analysis consisted of only a series of relatively brief discussions with participants versus a

longitudinal study of their daily experiences. Thus, the findings of this study need to be interpreted with caution, acknowledging the restrictions in participant variability.

Instead, the findings described here can be interpreted as a starting point in studying the experiences of teachers who work with students experiencing anxiety-related conditions or emotions.

Overview of the Study

In this study, teacher perceptions about students experiencing anxiety-related conditions was examined to determine their knowledge about anxiety-related conditions and emotions in the primary grades as well as their knowledge and understanding of associated teaching and intervention strategies. The remaining four chapters within this document provide a foundation for understanding the area of study, literature addressing this topic, and implications associated with the study findings

Chapter 2 provides an overview of the literature related to the biological composition of anxiety, including fear and panic. An overview of the risk factors (biological and environmental) that contribute to anxiety (e.g., genetics, temperament, family) are provided and Bronfenbrenner's (1986) Ecological Model is discussed within the context of anxiety-related conditions. In addition, the specific characteristics and diagnostic procedures for identifying anxiety in middle childhood (4-6 years) are provided, as well as definitions and descriptions of associated emotions (worry and rumination). Lastly, a comparison between school-based and psychological-based interventions is provided to demonstrate the current knowledge corresponding to treatment for anxiety-related conditions and emotions in the primary grades. The chapter

concludes with a brief summary of the proposed study to introduce the methodology outlined in chapter 3.

Chapter 3 outlines the research methodology and questions that were used to collect and analyze data. The methodology and research design are explained in detail, including recruitment, and data collection and analysis procedures. The chapter presents an outline of the participants and students involved in the study as well as the study's limitations and ethical considerations, and concludes with a restatement of the purpose of the study.

Chapter 4 presents the findings of this study by identifying and discussing major themes and subthemes found within the data. The chapter concludes with a brief summary of the data analyzed and provides an outline for chapter 5.

Chapter 5 provides an overall summary of the research study and restates the purpose and research questions. It then provides responses to the research questions outlined at the beginning of the study referring to findings outlined in chapter 4. The chapter concludes with an outline of the implications that this research has for current research, as well as teaching practice and teacher education.

CHAPTER TWO: LITERATURE REVIEW

This literature review examines the theoretical and empirical evidence regarding anxiety-related conditions and emotions, specifically GAD and SAD, in middle childhood (4-8 years). It includes an overview of the current definitions of fear and anxiety in the literature, information about the manifestation of GAD and SAD in middle childhood, and their respective connections to negative thought processes such as worry and rumination and their subsequent connections to problem solving. In addition, the chapter examines current intervention methods used to treat anxiety in middle childhood including, Cognitive behavioural therapy (CBT) and medication trials. Finally, it also examines the connection between anxiety-related conditions and emotions and the school environment, and identifies potential gaps in the literature and applications to the classroom. Consideration is given to Bronfenbrenner's (1986) Ecological Model as the theoretical framework to explain the connection between these processes. Thus, the overarching goal of this literature review is to provide an in-depth perspective of these affective states, as well as potential educational applications for primary-grade aged children with anxiety-related conditions and emotions.

Anxiety

Anxiety is defined by Barlow (2002) as “a part of the basic fear-response behaviour system that prepares the individual for escape from a dangerous or frightening situation” (p. 154). Anxiety conditions are among the most frequently occurring childhood psychiatric conditions with prevalence estimates approaching 10% among preschool children (Egger & Angold, 2006). Advances in early childhood assessment, albeit still largely dependent on parental reports, now make it feasible to study anxiety

symptoms in young children (Carter, Briggs-Gowan, & Davis, 2004; Carter et al., 2010). This section will describe the connection between fear and anxiety, and provide a definition of anxiety in the context of human behavior and of an irregular and poorly modulated emotional response to fear. The expression of anxiety in a non-significant or threatening situation is described as emotional dysregulation (ED) or any emotional responses that do not fall within the conventionally acceptable range of emotional responses, such as panic, which contributes to the further dysregulation of anxious reactions or emotions in young children (Beauchaine, 2007).

Fear and Anxiety

In general, measures of childhood anxiety conditions tend to focus on items related to cognitive features (such as worry or evaluation), physical symptoms, and fears of specific objects or situations (Coplan & Rapee, 2010). Fear is a primitive response to present or perceived danger, typically characterized by arousal and action tendencies. In contrast, anxiety is better characterized as a future-oriented emotion, characterized by perceptions of uncontrollable and unpredictable behaviour in reaction to potentially aversive events and a rapid shift in attention to dangerous or threatening situations (Barlow, 2002). However, even though the classification of anxiety and fear differs as a function of their biological manifestations, they are similar in the sense that they respond to anticipation of events in the future, rather than the past or present.

The anticipation or fear of physical symptoms in response to anxiety (i.e., shaking, nausea, panic) is central to the development of anxiety-related conditions and emotions in children and adults. When these fears reach a culminating point, they surface in a visible physical reaction to stress, which often occurs when there is no obvious

danger, thus resulting in a panic attack. Though panic is considered a normal bodily response to fear, it becomes abnormal or disordered in a neutral environment or situation where there is no danger (Barlow & Craske, 2007). Thus, it is anxiety about these fearful events that triggers the onset of a panic attack, consequently creating fear around specific events or situations, often resulting in an anxious response.

Anxiety has an important functional role in normal human behaviour, as it functions to warn the individual of danger, initiating the fight or flight response (Cannon, 1929). The response is characterized by an overwhelming urge to escape, often expressed as “I’ve got to get out of here.” The associated behavioural response is instantaneous, as one’s survival depends on the ability to respond to the threat by escaping or physically removing oneself from the threat (Barlow, 2002). Anxiety thus has an important functional role in normal human behaviour, as it acts as an internal warning system to anticipate danger and prevent physical or emotional harm (Weems, 2008).

However, it is when individuals’ reaction to fear is counterproductive that it starts to affect their efficiency to self-regulate their emotional responses, thus causing anxiety. The basic feature of maladaptive anxious emotion is dysregulation of the normative anxiety response system (Barlow, 2002). Dysregulation may involve intense disabling worry that does not aid in the anticipation of true future danger or intense fear reactions (Weems, 2008). Individuals display such worry when they respond to anxiety in an irrational or counterproductive manner that interferes with their daily functioning and causes them to avoid situations that provoke this response.

According to Weems (2008), situation selection determines whether the emotional situation is avoided or selected (e.g., reading in class at recess time to avoid social

threatening interactions). In contrast, situation modification involves active attempts to modify the stimuli/situation in order to alter its emotional impact. Problem solving (e.g., checking the source of a noise in one's house in the middle of the night) is one modification strategy (Weems, 2008). It has been suggested that the frequent use of avoidance is an important factor in the development of anxiety conditions. It is the rigid use of avoidant emotional regulation strategies that increases the risk for anxiety conditions (Olatinji, Cisler, & Tolin, 2007).

Combinations of anxiety, the emotions that compose its response (i.e., anger, sadness, shock, embarrassment), as well as its role in identifying fear, make it difficult to pinpoint the precise emotional responses that lead to anxiety. According to Izard's (1977) differential-emotional theory, the development of anxious emotions results from the interaction of learning with basic emotions, resulting in affective-cognitive interactions. One of these cognitive interactions includes panic, which is a cognitive-behavioural response to anxiety. Symptoms of panic following anxiety were developed through the clinical diagnosis of anxiety-related conditions and emotions and different individuals may exhibit different combinations of symptoms (Izard, 1977). Thus, panic symptoms can be expressed differently depending on the disorder, as well as the individual.

Panic and Anxiety

Panic is classified as the clinical manifestation or cognitive response to fear, as the clinical manifestation of anxiety is clarified as behavioural interruptions. Although panic could be classified as a behavioural interruption in the form of a panic attack, its manifestation is a result of fear, and is essential in determining the etiology of anxiety conditions (Barlow, 2002). Panic attacks refer to an abrupt rush of fear or discomfort,

which is accompanied by a number of physical and cognitive symptoms. Persistent anxiety about the reoccurrence of panic attacks and their consequences result as an outcome the attacks (Barlow & Craske, 2007).

Panic is routed in basic emotions, including novelty seeking (anger), harm avoidance (fear), reward dependence (attachment), and persistence (ambition). These are normally distributed dimensions that can occur in any combination, as they are independently inherited (Lara, Lorenzi, Borba, Silveira, & Reppold, 2008). Individuals experiencing a specific fear response on the other hand, or a panic attack, report very similar subjective experiences, including symptomology, similar behavioural responses to escape from feared situations and seem to experience similar underlying neurobiological processes. Although fear is largely connected to panic, there are little differences between the reactions of individuals with severe phobias confronting a feared object/situation and panic attacks as experienced by individuals with anxiety (Barlow, 2002).

A panic attack is defined in the *Diagnostic and Statistical Manual of Mental Conditions* (DSM-IV) as

exposure to the feared social situation almost invariably provokes anxiety, which may take the form of a situational-bound or pre-disposed panic attack. In young children (4-6 years), the anxiety may be expressed by crying, tantrums, freezing, or shrinking from social situations with unfamiliar people. (As cited in Bogels et al., 2010, p. 170)

Even though these symptoms are manifested similarly in young adults and older adults experiencing chronic panic attacks and anxiety, it is important to point out the symptomology of anxiety conditions that are distinct in middle childhood, as this

provides more specific and effective intervention strategies for that age group, in addition to a more accurate diagnosis of related anxiety conditions.

Risk Factors

Risk factors, also identified as affective predispositions are defined by Lara et al. (2008) as “multiple influences on childhood anxiety, including temperament, parent psychopathology, parenting practices, and family environment” (p. 321). These four factors are consistent across the literature in determining the development of anxiety symptoms or conditions in middle childhood (Lara et al., 2008). Warren & Stroufe (2004) support this viewpoint by stating that

anxiety in young children may be impairing, interfering with parent-child relationships, family functioning, and peer relationships. Despite their developmental fragility, symptoms in toddlers and preschoolers have been shown to persist for a period of a year or into adolescence. (pp. 375-376)

This section will examine the three of the four more significant risk factors associated with childhood anxiety, as identified above by Lara et al. (2008): temperament, genetic disposition, and parental influence (psychopathy, parenting practices, and family environment).

Temperament

Lara et al. (2008) succinctly state that “temperament relates to the emotional nature and the quality of the prevailing mood” (p. 321). Temperament is not only dependent on the quality of individuals’ mood, but also on their emotional nature, as determined by biological, environmental, and social factors. Factors that influence an individual’s temperament and are spread across biology, environment, and social

interaction include an individual's susceptibility to emotional stimulation; customary strength and speed of response; and the quality of one's prevailing mood—these phenomena being regarded as dependent upon “constitutional make-up” (Lara et al., 2008, p. 321). However, despite the marked association between emotional dimensions and prevailing mood, these two determinants are rarely studied in conjunction with each other.

Typically, temperament is measured using two distinct instruments. The first is the Temperament and Character Inventory (TCI) (Cloninger, Svrakic, & Przybeck, 1993), which uses self-report to measure the rate of basic emotions and their influence on temperament in conjunction with personality conditions. Cloninger et al. (1993) identified the basic emotions that influence temperament as fear, anger, attachment, and ambition, concurrently relating these emotions to four affective states of temperament. Two of the affective states believed to influence psychiatric conditions, such as anxiety, include novelty seeking (NS) and/or harm avoidance (HA). Both of these affective states are paired with one of the four basic emotions, with NS corresponding with anger and HA with fear (Lara et al., 2008). The likelihood of a psychiatric disorder is determined by the heightened or lack of presence of these states in the individuals' responses (Lara et al., 2006). Thus, the correlation between temperament and anxiety-related conditions and emotions is largely determined by the presence of these basic emotions, limiting the identification or presence of other emotions leading to anxiety-related conditions and emotions (i.e., worry, rumination). The use of other diagnostic scales, in conjunction with the TCI, is needed to assess the connection between psychiatric conditions (such as anxiety) and temperament, as the connections may be rooted in other more complex or

basic emotions.

The second most common scale that is used to assess temperament is the Temperament Evaluation of Memphis, Pisa, Paris and San Diego (TEMPS; Akiskal et al., 2005), which measures affective temperament constructs, based on the fundamental states of mood conditions (i.e., manic or hyperthymic, irritable, cyclothymic, anxious, depressive). These affective predispositions are often present in individuals who develop mood conditions, as well as in their relatives, with different distributions according to the type of mood disorder; for example, more hyperthymic traits in bipolar I disorder, cyclothymic traits in bipolar II disorder, and depressive traits in unipolar depression (Lara et al., 2006). Thus, although both scales (TEMPS-A and TCI) measure temperamental characteristics or prevailing moods in context of the development of psychiatric conditions, the modules are rarely used in conjunction with each other.

As a result of the TEMPS-A and the TCI module, Lara et al. (2006) proposed two potential integrations of emotional and affective temperament constructs. The first is the Fear and Anger Model (FAM), with clinical, neurobiological, and treatment implications. This model is based on the principle that activation (related to anger and drive/pleasure) and inhibition (related to fear and caution) are the two main emotional forces or vectors of the mind, thus combining the affective states identified in the TEMPS-A and pairing them with basic emotions that influence temperament in the TCI (Lara et al., 2006). However, the basis of the FAM module is still centred around fear and anger, with these two main basic emotions believed to influence the development of psychiatric conditions, as stated in the TCI. The second potential integration scale developed to assess temperament is the Combined Emotional and Affective Temperament Scale (CEATS;

Lara et al., 2006). The emotional section consists of 27 five-item multiple choice questions on disinhibition, fear, drive, control, and anger, whereas the affective section includes 10 descriptions of affective temperaments with a dimensional 5-point scale and a categorical choice of the best description. In addition, Lara et al. (2006) included two questions that subjects could rate in a 4-point scale according to the degree of problems and benefits related to their temperament). Thus, the development of this scale aims to allow professionals to examine both affective and emotional temperament factors, thus determining the presence of specific temperament dimensions as correlates or risk factors for psychopathology in infancy, childhood, and adolescence. Additionally, the identification of these temperament types in anxiety-related conditions and emotions might provide key information to elucidate causal mechanisms that underlie these relationships (Signoretta, Maremmanni, Liguori, Perugi, & Akiskal, 2005).

Despite temperament being based on affective and emotional characteristics, both genetics and environment can also play a role in the development of anxious or temperament related to psychopathological conditions. Concurrently, Lara et al. (2006) explain that “from a genetic point of view its role turns out to be central, the affective temperaments represent protracted, attenuated phases of mood conditions that could exist on their own, precede, or follow affective episodes” (p. 70). Thus, further investigation should be done into the connection between environmental and genetic factors that lead to anxiety-related conditions and emotions.

Genetic Disposition

Weeks et al. (2009) stated that a combination of etiological, genetic, and biological factors contribute to anxiety conditions in middle childhood (4-6 years). Thus,

Weeks et al.'s study measured the effect that these factors had on anxiety-related conditions and emotions in middle childhood. Their findings demonstrated that patients in the early-onset group scored higher on measures of neuroticism, trait anxiety, depression, and obsessional features, which indicated that genetic factors played the most significant role in the development of anxiety-related conditions and emotions. Further analyses revealed that earlier-onset GAD was associated with higher levels of disorder severity, high comorbidity rates with other psychiatric conditions, and genetic vulnerability to emotional conditions, through parents or other family members affected by undiagnosed/diagnosed anxiety, further emphasizing the strong genetic link between early-onset anxiety conditions. However, patients in the early onset group did not score higher on self-report measures of current symptom severity, and their levels of autonomic arousal were not distinguishable from the late-onset group, showing that the link between etiological and biological factors are not stable in determining early onset anxiety-related conditions and emotions (Weeks et al., 2009).

Therefore, earlier-onset GAD may reflect an anxious temperament that has been shaped by genetic or early environmental factors, whereas acute life stressors such as moving to a new city, loss of a family or friend, or change in lifestyle have a more prominent role in development of adulthood-onset GAD (Campbell, Brown, & Grisham, 2003). The fact that the severity of GAD symptoms was somewhat higher in earlier-onset cases also may relate to the idea that diagnosis can be determined largely through an individual's temperament, which is in turn shaped by biological and genetic factors. Individuals classified as having anxious temperaments in early onset anxiety-related conditions and emotions, specifically GAD, seemed more naturally inclined to approach

most situations with an anxious attitude, and this style likely becomes completely ingrained over time (Campbell et al., 2003). A high correlate of anxious temperament is the degree of anxiety symptoms witnessed in the home environment, as children between 4-6 years have few outside influences to imitate when dealing with conflict or problem solving situations. Therefore, the behaviour that parents and other family members/guardians model in the home can influence the means in which these children engage in anxious behaviour.

Parental Influences

Although there appears to be little difference in heritability across specific anxiety conditions, it is currently believed that the genetic component of child anxiety is probably common across the anxiety conditions and also possibly depression. Molecular genetic associations with child anxiety have been studied less in children than with adult anxiety and have generally demonstrated inconsistent results (Gregory & Eley, 2007). It has been argued that environmental influences will account for greater variance in the developmental period during which they have the greatest influence. For example, it would be expected that any shared environmental influence from parenting would account for the greatest variance in symptoms of anxiety during the early- to middle-childhood years (1-6 years), when parents exert their strongest influence on offspring (Rapee & Spence, 2004). Thus, if parents exhibit anxiety-disordered symptoms around children in early-middle childhood (1-6 years), when their cognitive-behavioural components are developing and strongly based on imitation and/or modeling (Wilson & Hughes, 2011), children are more likely to develop anxiety-related mechanisms of coping.

Theories of the role of parent-child interactions in the development of anxiety also argue for the importance of interactions between temperamental characteristics of the child's and parent's behaviours. For instance, Moore, Whaley, and Sigman's (2004) longitudinal study documenting the development of shyness in early/middle childhood (1-6 years) determined that an interaction between inhibited behaviour in the child and parent intrusiveness predicted child shyness 2 years later. These results indicate the possibility of an interaction between the child's genes and the child's parental environment. This may be especially true of the parenting style used during children's early years, where the majority of their time is spent in the home (Moore et al., 2004).

Traditionally, two styles of parenting have been connected with childhood anxiety conditions: overprotective or overcontrolling parenting and negative or critical parenting (Wood, McLeod, Sigman, Hwang, & Chu, 2003). Of the two styles of parenting, overprotective or overcontrolling parenting has been associated with anxious behaviour in early-middle childhood, whereas negative, critical parenting has been more commonly associated with depression (Wood, 2006; Wood et al., 2003). This evidence has come from self-report studies based on questionnaires about children's perceptions of parental behaviour as well as from laboratory-based observational studies of parent-child interactions (McLeod, Wood, & Weisz, 2007). However the results of these studies must also be interpreted with caution as it is difficult to obtain accurate information about children's reactions to parenting style, as these children do not have a great deal of exposure to alternate influences that directly impact cognitive behaviour and coping strategies.

Thus, the parenting dimensions of “rejection” and “control” emphasized in traditional theoretical models may lack specificity. McLeod et al. (2007, p. 157-8)

identifies characteristics of parental rejection as

adverseness, emotional/physical withdrawal, and a lack of warmth and control as, an over-involvement in a child’s daily activities in and outside of the home, as well as a lack of autonomy-granting in tasks that the child is mentally and developmentally capable of completing. (pp. 157-158)

Specifically, parental control is strongly associated with childhood anxiety, as the lack of independence and overinvolvement can contribute to nervousness and anxiety related to task completion, which is classified as one of the main features of childhood anxiety conditions.

Diagnosis

The systematic examination of anxiety conditions in children continues to lag far behind adult psychopathology research, even though childhood anxiety conditions constitute the primary reason for the referral of children and adolescents for mental health services (Albano, Chorpita, & Barlow, 2003). Fewer than 20% of children requiring mental health services receive necessary intervention. This lack of use of mental health services results from a combination of their lack of accessibility and availability in most communities. Due to their lack of availability, there is an inadequate identification of psychiatric conditions in children, particularly internalizing problems, such as anxiety conditions (Kendall, Hudson, Gosch, Schroeder, & Suveg, 2008). However, advances in early childhood assessment now make studying and diagnosing childhood anxiety conditions more possible. This section will examine the promotion of early diagnosis of

childhood anxiety conditions including the use of *DSM-IV* criteria and the role that educators can play in identifying symptomology leading to anxiety-related conditions and emotions.

Psychological Role

The diagnosis of childhood anxiety conditions often involves assessing for the presence of associated symptoms with the suspected disorder, as well as examining the comorbidity of the child's symptoms with other psychiatric conditions. The differentiation of symptoms is largely dependent on the *DSM-IV* classification of the predicted anxiety-related disorder, although combination of symptoms from each anxiety-related disorder can be used to form a comorbid diagnosis. Additionally, children often do not need to meet all the requirements for a specific *DSM-IV* classified anxiety disorder to be diagnosed. Rather, they can manifest a handful of symptoms listed in the criteria as the number of associated symptoms with anxiety-related conditions and emotions increases with age (Layne et al., 2009). For example, Layne et al. (2009) clarified that only one symptom is required for the diagnosis of GAD in children whereas three are required for adults. Although modifications may have the effect of either broadening or restricting a diagnostic definition, they also play a central role in early diagnosis and prevention of anxiety-related conditions and emotions. A broadened definition has the advantage of allowing more patients to receive a definitive, rather than a general diagnosis, allowing better identification and treatment of GAD (Layne et al., 2009). Finally, to the extent that anxiety-related conditions predict the onset of other conditions, a broadened definition has the potential to identify a higher proportion of those who

develop subsequent psychopathology, especially since comorbidity with other psychiatric conditions is highly relevant in childhood anxiety conditions (Ruscio et al., 2007).

Accurate identification of anxious youth can also be complicated by high rates of comorbidity. In Masi et al.'s (2004) study of children with clinically diagnosed anxiety conditions, the most common comorbid diagnoses were other anxiety conditions which occurred in 63% of the participants. Youth with GAD often have a comorbid anxiety disorder and/or mood disorder. Overall, out of all the clinically referred children between the ages of 4 to 8 years of age in Masi et al.'s study, 93% of participants with GAD met criteria for a comorbid disorder. Seventy-five percent of participants had a comorbid anxiety disorder, 56% had a comorbid depressive disorder, and 21% had a comorbid externalizing disorder—attention deficit hyperactivity disorder, oppositional defiant disorder, conduct disorder (Masi et al., 2004). One explanation for the strong comorbidity between anxiety conditions and other psychiatric conditions relates to the infrequency of diagnosis in early-middle childhood (1-6 years). By the time children are clinically diagnosed, they have typically been experiencing anxiety-related symptoms for a number of years and developed additional comorbidity (Layne et al., 2009). Thus, the identification of comorbid conditions is considered a strong indicator for anxiety, as symptoms of alternate psychiatric conditions often correspond with anxious thinking.

While studies outlined above provide great detail about the presentation of GAD among clinic-referred youth, little information is available about GAD in children from nonclinical samples (Layne et al., 2009). Nonclinical samples provide information regarding the presentation of GAD in a wider sample of children and may facilitate early intervention. Nonclinical samples would also allow for early detection of GAD and,

“enhance the ability of more severely disturbed children to benefit from timely educational, psychosocial, and pharmacological interventions” (Masi et al., 2004, p. 755). Specifically, early diagnosis is beneficial for educational practitioners, as it allows them to develop strategies in and outside the classroom to facilitate the development of their students’ academic and social success.

Role of Educators

The role of educators in combating anxiety-related conditions and emotions and symptoms in middle childhood (4-6 years) is a critical one as it relates to the amount of time children spend in school. When documenting the main concerns of children with a diagnosed anxiety condition, “the most significant worries appear to be school and family related, with the most common sources of anxiety centering around concerns regarding schoolwork, peer acceptance and teacher approval” (Layne et al., 2009, p. 285). Additionally, Herman et al. (2009) state that “one of the microsystems that has been under-examined in the literature on children’s mental health services is the school environment. For school-aged children, the school environment or climate should be a central focus of assessment and intervention” (p. 436). Thus, it is important that research about school-based intervention systems should be completed, especially in context of intervention strategies for anxiety.

Few specifics are known about the educator’s role in documenting, preventing, and recognizing anxiety-related symptoms in the primary/junior grades (K-3). While there is some evidence that suggests teachers are aware of anxiety symptoms among children in their class (Herman et al., 2009), it has also been argued that teachers are inaccurate at assessing internalizing problems (e.g., worry, rumination, anxiety, and stress), particularly in early childhood (Weeks et al., 2009). Weeks et al. (2009) cited

several explanations for teachers' lack of awareness or identification of symptoms including the absence of anxiety-provoking peer situations in the classroom they tend to occur the schoolyard where teachers are not always present), negative experiences, and children's efforts to hide emotional problems or anxious behaviours for fear of rejection or lack of understanding. These findings call for greater awareness of the identification and manifestation of anxiety symptoms among all school support staff (e.g., lunchtime monitors, educational assistants, volunteers) to aid the classroom teachers in reporting potential anxious behaviour. Layne et al. (2009) stated that teachers who are unaware of anxiety among children in their class are unlikely to provide help and assistance to anxious children experiencing socio-emotional difficulties potentially reducing the effectiveness of making any psychological or family-based interventions.

Theoretical Framework: Bronfenbrenner's Ecological Model

Despite the role that educators play in the everyday lives and development of children, there is little research that examines the impact that schools have on childhood anxiety (Herman et al., 2009; Layne et al., 2009). Schools play a privileged and strategic role in the lives of children acting as their principle environment away from home. In particular, schools have the capacity to promote academic, social, and emotional functioning as well as to potentiate difficulties in these areas of development (Herman et al., 2009). Thus, developmental–ecological models can be used to frame basic research attempts to understand layers of influence on behaviour and also to identify potential targets and mediators of intervention (Greenburg et al., 2001). Bronfenbrenner's (1986) Ecological Model is one of the most widely used developmental-ecological models,

because of its focus on the external environmental. Specifically, Bronfenbrenner defines *ecology* as

the scientific study of the progressive, mutual accommodation, throughout the life span, between a growing human organism and the changing immediate environments in which it lives, as this process is affected by relations obtaining within and between these immediate settings, as well as the larger social contexts, both formal and informal, in which the settings are embedded. Thus, the ecological environment is conceived topologically as a nested arrangement of structures, each contained within the next. (1986, p. 514)

Bronfenbrenner's focus on ecological factors and how they affect development and behaviour, is significant to childhood anxiety research because of its focus on non-biological factors, instead centering on environment and social influences.

Bronfenbrenner's (1986) Ecological Model posits four levels for classifying context beginning with those ecologies in which the child directly interacts and proceeding to increasingly distant levels of the social world that affect child development. The first level of development is classified as the *microsystem*, which comprises the ecologies with which the child directly interacts such as the family, school, peer group, and neighbourhood. Within the microsystem lies the second level of development, the *mesosystem*, which encompasses the relationships between the various microsystems (e.g., the family–school connection or between the parents and the child's peer group and peers' families). In contrast to these environmentally based systems, the final two systems are based on ideologies and beliefs. They include the *exosystem*, which involves the contexts and actions that indirectly impact the child's development, and

lastly the *macrosystem*, which represents the widest level of systems influence, consisting of the broad ideological and institutional patterns and events that define a culture or subculture (Greenburg et al., 2001).

Thus, Bronfenbrenner (1986) believed that all four systems have a subsequent influence on individuals' behavioural and emotional states, and that each system plays a role in developing their emotional responses. When using Bronfenbrenner's Ecological Model, it is important for researchers to specify what system(s) their interventions focus on. Concurrently, Greenburg et al. (2001) provide an outline of the potential focuses for researchers, including the microsystem or a particular portion of it (e.g., child skill development, the quality of the classroom environment, child–parent relations); multiple microsystems (e.g., interventions for both the home and school); the mesosystem (e.g., family–school connections); informal networks that in turn affect the microsystem (e.g., extended family or parental peer support networks); or the development of new models of service delivery or regulatory reform (e.g., formal services in the exosystem). Greenburg et al. (2001) also emphasize the need for researchers to ask if these different levels of focus emphasize changing the behaviour and attitudes of individuals at these levels (i.e., person-centered), or changing the nature of the system's operation itself (i.e., environment-focused). A narrowed focus on the specific components that researchers use in Bronfenbrenner's theory will allow for further examination of the impact of each system on specific interventions for childhood anxiety.

Anxiety Conditions in Middle Childhood (4-6 Years)

Although anxiety conditions can develop at any point in the lifespan, early onset anxiety conditions, manifesting in early or middle childhood (1-6 years) have a greater

likelihood of being chronic (Hirshfield-Becker et al., 2010). Due to the rise of diagnosis in early-middle childhood, the *DSM-IV* classified specific anxiety conditions as “childhood” anxiety conditions including GAD, SAD, and Separation Anxiety (SA), with the remainder of anxiety conditions being classified as adult anxiety conditions. A multitude of studies have emerged documenting the incidence and prevalence of these three conditions (GAD, SAD, and SA), classifying them as adult anxiety conditions; however, the criteria for the diagnosis of these conditions in adult patients also included their application and specific criteria for their manifestation in children (American Psychiatric Association, 2013).

However, clinical practitioners caution that the *DSM-IV* categories, while guiding clinicians toward modifying certain criteria for youths, do not actually reflect a developmental psychopathology perspective. A better understanding of the developmental course of anxiety symptoms during early and middle childhood (1-6 years) is essential for advancing basic research and for providing targets for preventive interventions. Further, identifying childhood precursors to anxiety conditions can inform both our understanding of the cause of these conditions and the prevalence of interventions in middle childhood (4-6 years; Hirshfield-Becker et al., 2010). Therefore, this section will focus on the specific characteristics of anxiety in middle childhood (4-6 years), including environmental and social factors and the characteristics of childhood anxiety conditions including GAD and SAD.

Characteristics of Childhood Anxiety

Childhood anxiety is largely characterized by environmental and social factors that influence anxious behaviour. The recent increase in research on childhood anxiety is

related to the realization that childhood anxiety conditions represent a serious mental health problem (Barrett & Turner, 2001). Anxiety conditions are among the most prevalent forms of psychopathology affecting children and adolescents, significantly interfering with children's interpersonal and academic functioning. Without treatment, childhood anxiety can have a chronic and unremitting course (Barrett & Turner, 2001). Anxious children reported more failure thoughts and less hostile thoughts and less positive thoughts, but only when they were 12-years-old or older. In younger children there were no differences between groups on these thoughts. Anxious children also reported less positive thoughts and lower state of mind (SOM) ratios than nonanxious children (Hogendoorn et al., 2011). The impact that anxiety-related traits has on behaviour increases the likelihood of the development of anxiety-related conditions and emotions, requiring early diagnosis and intervention to prevent further manifestation in adolescence and adulthood.

Several reports indicate that a large proportion of specific phobias begin in early to middle childhood, social phobia in early to middle adolescence, obsessive-compulsive disorder in middle to later adolescence, and panic disorder in early adulthood (Kessler, Berglund, Demler, Jin, & Walters, 2005). As well, epidemiological research suggests that anxiety conditions among children, adolescents, and adults have the highest overall prevalence rate among psychiatric conditions (Olatunji et al., 2007). Their commonality among psychiatric conditions has made them a central topic when researching children's emotional conditions, as many symptoms of anxiety-related conditions and emotions (e.g., nervousness, maladaptation to social situations, and heightened levels of emotional arousal) can be present without an diagnosis (Olatunji et al., 2007). Interest in the

assessment of quality of life in relation to anxiety conditions is growing, primarily due to the increased prevalence and diagnosis of conditions in early childhood, especially Social Phobia (SP), GAD, and SAD (Barrera & Norton, 2009). Interest has also been growing because of the association of childhood anxiety conditions with later anxiety conditions, depression, and externalizing conditions. As a result, evidence that the mental state of individuals in childhood will influence their disposition in the future has caused more extensive research in the field of childhood anxiety and its related conditions.

Concurrently, statistics show that the diagnosis of anxiety-related conditions are similar in middle and preschool-aged children (3-6 years). Evidence of anxiety symptoms can be present in children as young as 1 and 2 years of age (Mian, Godoy, Briggs-Gowan, & Carter, 2012). Mian et al. (2012) stated that the reason for the increase in diagnosis was “based on advances in early childhood assessment” (p. 104). As well, evidence of the presence of anxiety-disorder symptoms in children as young as 1-2 years of age (Carthy et al., 2010; Mian et al., 2011, 2012) has made the study of anxiety conditions in middle childhood (4-6 years) more feasible.

Overall, the diagnosis, prevalence, and manifestation of anxiety-related conditions and emotions in middle childhood (4-6 years) is increasing, as approximately 1 in 10 children are estimated to experience an emotional disturbance so severe to cause impairment or decreased emotional and social functioning. In particular, childhood anxiety and depression are two of the most overlooked, undertreated, and debilitating psychological conditions (Herman et al., 2009). The lack of research on anxiety conditions in early childhood (4-6 years) is largely due to the difficulty in obtaining, or obtaining reliable information from young children (Mian et al., 2012) or associated

confidential documentation including birth records, pediatric reports and school records. As Carter et al. (2010) stated, “the majority of studies addressing the prevalence of children’s mental health in North America (Canada and the United States) have ascertained samples through pediatric offices or public school records” (p. 687). Thus, even though the instances of diagnosis and prevalence of these conditions is increasing, there is still a lack of reliable and cohesive studies studying childhood anxiety symptoms and specific childhood anxiety conditions.

Generalized Anxiety Disorder (GAD)

GAD as defined in the *DSM-IV* “is characterized by excessive anxiety of at least six months’ duration, occurring most days, and that is hard to control, not focused on a specific situation or objects, and not triggered by recent stressful events. Associated symptoms can be restlessness, fatigue, concentration difficulties, irritability, muscle tension, sleep conditions” (as cited in Masi et al., 2004, p. 752). Andrews et al. (2010) defined GAD as

a chronic and debilitating disorder-independent of its substantial co-morbidity. Further, worry is identified as the primary avoidant coping strategy that is negatively enforced by reductions in patients’ worry; reducing emotional reactivity in the short term but because patients do not process their distress other than in the abstract they experience ongoing distress and continue to use worry to reduce this distress. (pp. 135-136)

The diagnosis of GAD in childhood differs significantly from the *DSM-IV* definition. First, out of the six associated symptoms listed in the *DSM-IV* (i.e., restlessness, easily fatigued, difficulty concentrating, irritability, muscle tension, sleep

disturbance), only one is required for the diagnosis of GAD in children whereas three are required for a diagnosis in adults. The most frequent domains of worry included: parents would die; bad things would happen to their parents; and concerns about schoolwork (Layne et al., 2009). Thus, the ability to differentiate between childhood and adult GAD is essential in order to provide effective intervention to children.

Determining patterns of onset of GAD at different points in the lifespan (e.g., early childhood-adolescence), is a major focus in current research, due to the greater volume of cases in early and middle childhood (2-6 years). Due to the variance of age in diagnosis, predictable traits among early- and later-onset cases of GAD have been identified in the literature as means to help clinicians and researchers understand the differences between the ages of onset. Campbell et al. (2003) noted several discriminating factors between early (2-6 years) and late onset of GAD (17 years and older). Specifically, late onset GAD is more likely to emerge in the context of life stressors and increasingly high levels of onset stress. In contrast, earlier-onset cases are thought to require fewer environmental catalysts to develop, but are instead associated with higher scores on traits that predispose individuals to anxiety-related conditions and emotions, including negative affect, neuroticism, and behavioural inhibition (Campbell et al., 2003). As well, earlier onset GAD in early-middle childhood (2-6 years) was found to contribute to the development of other emotional conditions largely due to these individuals' proneness towards worry as a coping mechanism. Thereby, individuals' dependence on worry increased the likelihood that another anxiety-related or emotional disorder would manifest in adulthood (Campbell et al., 2003). Despite the existing research on the differentiation between childhood and adult anxiety, additional research is

needed to determine whether these associated symptoms truly differentiate children with GAD from children with other anxiety conditions or from children experiencing severe worry (Layne et al., 2009). However, the challenge in identifying the differences between clinical anxiety-related conditions and anxiety-related symptoms, as well as the difficulty in obtaining permission to study anxious children, make research in childhood anxiety limited.

Social Anxiety Disorder (SAD)

SAD is defined in the *DSM-IV* as “the fear of social situations and being negatively evaluated by others. Notwithstanding, social anxiety in childhood has been associated with a number of social-cognitive deficits and socio-emotional problems” (as cited in Weeks et al., 2009, pp. 966-967). As compared with their nonanxious peers, socially anxious children are more likely to anticipate negative consequences in social interactions and display biases in their interpretations of facial expressions. Due to its contained symptomology, most of the research on childhood social anxiety has focused on clinical populations (i.e., children diagnosed with SAD), and children 10-16 years of age (Weeks et al., 2009). The diagnosis of SAD has been limited to adolescence (11-15 years) because it is believed that younger children do not possess the requisite ability to make associations between their subjective feelings of anxiety and social situations they encounter, and may only begin to experience social fears as the focus of their fears at age 14 and older. Thus, the few nonclinical studies of SAD have only studied the manifestation of SAD and its related symptoms in older children (10-12 years) and adolescence (13-16 years; Klein, 2009).

Increased recognition of the link between SAD symptoms and impairment in social functioning has initiated the development of instruments to assess SAD in youth, with one of the most widely used being the *Social Anxiety Scale for Children-Revised* (SASC-R). The SASC-R is a self-report measure designed to assess the two major features of social anxiety, fear of negative evaluation and social avoidance and distress. It has yielded three separate factors including: (a) *Fear of Negative Evaluations* (FNE) which reflects fears, concerns, or worries with regard to negative evaluations from peers; (b) *Social Avoidance and Distress–New* (SAD-New) which reflects avoidance and distress with new situations or unfamiliar peers; and (c) *Social Avoidance and Distress–General* (SAD General) which reflects generalized social distress, discomfort, and inhibition (Reijntjes, Dekovic, & Telch, 2007). The use of this scale allows for the increased diagnosis of SAD and its related conditions as well as an understanding of the symptoms in SAD, allowing for a greater number of diagnoses to be made in younger children.

In recent years, there has been a shift towards diagnoses of SAD in younger children. Both developmental and clinical researchers have begun to consider the implications of elevated (but subclinical) levels of social anxiety in early childhood (Feng, Shaw, & Silk, 2008; Rubin, Coplan, & Bowker, 2009). Further, Weeks et al. (2009) stated that “although young children who have difficulty interacting with other children and adults may not meet diagnostic criteria for social phobia, they can be viewed as part of the ‘social anxiety spectrum’” (pp. 966-967). Thus, the rise in diagnosis without requiring confirmation or validation from the *DSM-IV* or a clinical professional has provided researchers with greater access to children experiencing SAD or its related

symptoms. This has not only resulted in a greater understanding of the disorder and its effects, but has also given researchers and practitioners a more detailed analysis of the emotions that contribute to SAD and other anxiety-related conditions and emotions in middle childhood (4-6 years).

Worry

Theoretically different than basic emotions, the construct of worry is most consistent with the description of emotion schemas. Worry is defined as “an interaction between affect, perception, and cognition that influences mental processes and behavior” (Izard, 2009, pp. 11-12). In contrast to anxiety, worry comprises the cognitive component of anxiety, whereas fear involves the physiological or biological alarm system (Zeman, Cassano, Suveg, & Shipman, 2010). Childhood worry is common, and yet little is known about why some children develop pathological worry and others do not.

Worry is further defined as “a troubled state of mind arising from the tribulations and threats of life, precluding anxiety and solitude” (Andrews et al., 2010, p. 137). In the diagnosis of anxiety-related conditions and emotions, worry is considered one of the defining features is the *DSM-IV*, especially when it is focused on multiple events and activities. However, the worry that is referred to in the *DSM-IV* is avoidant worry, which is negatively enforced and emotional reactive in the short term due to an individual’s inability to process distress (Andrews et al., 2010). As a consequence, patients use avoidant worry to attempt to make sense and reduce subsequent episodes of distress. Despite the connection between the manifestations of avoidant worry in anxiety, the casual processes associated with the construction of negative affect leading to worry have been less documented (Zeman et al., 2009). This causes worry to be examined solely as a

cognitive avoidance strategy, as opposed to looking at the positive problem-solving solutions that worry can help generate. Wells (2005) explains that individuals who reported positive thoughts about worry believe that worry helps avoid problems, solve problems, accomplish tasks, distract from more emotional issues, and demonstrates care.

Worry and Anxiety

Anxiety has been defined as a multicomponent response system involving affective, behavioral, physiological, and cognitive components (Barlow, 2002). Excessive and avoidant worry make up some of the cognitive components of anxiety that act as a response system to allow the individual to anticipate future danger (Weems, 2008).

Despite the obvious correlation between worry and anxiety-related conditions and emotions, worry is also associated as a common emotional response for children between 3-6 years of age. For instance, worry is predominantly viewed as a disordered thinking pattern and is considered to be one of the defining features of GAD. However, researchers suggest that the *DSM-IV* defined anxiety conditions have incredibly high rates of comorbidity with other conditions, with the only variables that distinguish them being definitional (Weems, 2008). Therefore, worry is not seen as a developmentally normative response and coping strategy in middle childhood, but is consistently associated with the development of disordered anxious behaviour and thinking.

Coplan and Rapee (2010) stated that the study of childhood anxiety conditions focuses mainly on cognitive components, such as worry and evaluation, but rarely looks at these components in terms of individual temperament. Although worry is not a temperament type, it is conceptually and empirically related to fearful temperament

(Coplan & Rapee, 2010). Researchers have demonstrated that it is possible to identify individuals at the high end of the worry dimension who do not meet full criteria for a diagnosis of GAD (Weems, 2008). This causes thinking patterns that are commonly associated with anxiety-related conditions and emotions to be classified as the defining features in the diagnosis.

For Wilson and Hughes (2011), worry is further connected to avoidant and disordered thinking patterns in anxiety-related conditions and emotions. Wilson and Hughes argue that the use of worry as a coping strategy is dependent on its endorsement from other individuals, such as parents, teachers, and their peers, as well as the child's overall problem-solving confidence. Concurrently, Carthy et al. (2010) characterize worry as a primary problem-solving strategy, representing an individual's inability to engage in emotional regulation or determine how these emotions are experienced or expressed. Suveg and Zeman (2004) also stated that anxious children reported higher levels of dysregulated expression such as worry, sadness, or anger and less use of adaptive regulation methods. Thus, the frequent uses of avoidance strategies, such as worry, are key factors in the development of anxiety related conditions, as worry is associated with low confidence in problem solving. Children as young as 5 years of age have reported experiencing positive and negative beliefs about worry (Wilson and Hughes, 2011). Despite this finding, few studies have studied the potential of a positive correlation between worry and problem-solving strategies.

Worry and Problem Solving

Positive beliefs that individuals have reported about worry include that it helps to solve problems, accomplish tasks, distracts from more emotional issues, and demonstrates care (Wells, 2005). Carthy et al. (2010) support this claim by stating that children with anxiety conditions tend to rely on emotional regulation strategies that increase the risk of functional impairment, intense negative emotion and low emotional regulation and self-efficacy. Therefore, individuals who engage in excessive worry see it as a legitimate means of emotional regulation and problem solving.

Even though the lack of emotional regulation corresponding to negative thoughts plays a large role in reducing symptoms of anxiety, little is known about the role of positive thinking in anxiety and the cognitive affect responses (i.e., worry) that produce it (Hogendoorn et al., 2011). Although worry is considered to be an ineffective means of emotional regulation when done to excess, its role as a motivator for action and preparedness has not been considered in current research. Worry's label as a primary symptom of GAD has caused researchers to only consider it as a determinant of the disorder, rather than a legitimate source of emotional regulation and a necessary process for understanding one's thoughts.

According to Zeman et al. (2010), worry is a normative developmental process that develops with maturity. Zeman et al. investigated the differences between children with a diagnosis of various anxiety-related conditions and emotions and children with no psychological conditions using the *Children's Worry Management Scale* (CWMS). The CWMS classifies three subscales that regulate worry, including inhibition (the suppression of worry), dysregulation (exaggerated displays of worry), and coping

(constructive ways of managing worry). In contrast to the inhibition method of management, dysregulated expressions of worry involve excessive behaviours such as crying and whining, and differentiate between clinical and nonclinical groups of anxious children in contrast to inhibitive expressions of worry. Concurrently, dysregulated expressions of worry are correlated with negative psychological outcomes and other indices of poor emotional competence in a community sample (Zeman et al., 2010).

In contrast, Prados (2010) stated that positive beliefs about worrying do not predict the affective change experienced in the worrisome situation, and in contrast to negative beliefs, are not related to trait worry. Prados suggested that that negative beliefs surrounding worry could play an “initial inhibitory role” that are difficult to detect in patients with anxiety-related conditions and emotions (2010, p. 220). Thus, the presence of dysregulated and inhibited beliefs can be shown throughout the scope of worry among anxiety-related conditions and emotions. Further research needs to be conducted to support the role of emotional regulation and its role in anxious thinking and worry, as the role of worry in emotional development is dependent on the developmental state of the individual.

Rumination

Worry and rumination produce increases in negative affect and decreases in positive affect (Hogendoorn et al., 2011). However, while worry primarily occurs around future events, rumination is classified as repetitive thought about past events, current mood states, or failure to achieve goals (McLaughlin et al., 2007). Various types of rumination have been presented in current literature, the most common being depressive rumination as cited in Nolen-Hoeksema, Wisco, & Lyubomirsky, (2008) Ruminative

Response Styles Theory (RST), which posits two main styles of responding to depressive mood: rumination and distraction.

Nolen-Hoeksema et al. (2008) developed the *Ruminative Responses Scale* (RRS) to measure depressive rumination. Even though worry and rumination are associated concurrently with depression and anxiety, worry is viewed as the defining characteristic of anxiety and its related conditions, while rumination is viewed as the primary emotional response in clinical depression (McLaughlin et al., 2007). Nolen-Hoeksema et al defined depressive rumination as “thoughts that focus one’s attention on one’s depressive symptoms and on the implication of these symptoms” (2008, p. 419). Subsections of the RST include stress-reactive rumination, which involves the process of repetitively thinking about negative inferences in response to the occurrence of stressful events and emotion-focused rumination, which involves repetitive thoughts about depressive symptoms, as well as the causes and consequences of these symptoms (Robinson & Alloy, 2003). Despite their separate associations with different mental states, worry and rumination generate negative affect and lead to general decreases in positive affect processes (McLaughlin et al., 2007).

In contrast, Rude, Maestas, and Neff (2007) argued that attention to distress or negative affect is what makes rumination harmful. Although the traditional definitions of rumination address the general processes of ruminative thought, they are not fully satisfactory in providing a description of rumination that allows a particular observed train of thought to be characterized as either rumination or emotional processing.

Rumination and Anxiety

The development of anxiety and its related conditions focuses on repetitive negative thought and dysregulated emotional processes. Positive associations were found between all indices of repetitive thinking and symptoms of depression and anxiety, but the effects of emotion-focused rumination disappeared when controlling for the other forms of repetitive thinking (Feldman, Joorman, & Johnson, 2010). Unconstructive forms of repetitive thinking may represent a cognitive vulnerability factor implicated in the development and maintenance of various emotional conditions such as anxiety conditions and depression (Rood, Roelofs, Bogels, & Alloy, 2010). Feldman et al.'s (2010) study supported the idea that rumination, as well as worry, were equally related to depressive symptoms as to anxiety symptoms, suggesting that rumination and worry are not specific to depression and anxiety symptoms. Despite this correlation, the study of rumination as an individual construct in relation to anxiety is limited.

Although rumination is typically examined in the context of depressive mood and feelings, there have been several attempts to investigate response styles to other negative mood states. Roelofs et al. (2009) demonstrated a clear relationship between rumination and anxiety in adults, adolescents, and children. Other coping strategies that can be used to cognitively distract individuals from negative mood states should be examined, particularly with respect to attempts to escape from self-focused attention, which is common in rumination (Roelofs et al., 2009). In sum, rumination is defined as a thinking process and its manifestation as a symptom of anxiety or depression is determined by the presence of negative affect within this process.

Rumination and Problem Solving

Stress-reactive rumination, emotion-focused rumination, and worry are related but distinct forms of repetitive negative thinking. Positive associations were found between all indices of repetitive thinking and symptoms of depression and anxiety, but the effects of emotion-focused rumination disappeared when controlling for the other forms of repetitive thinking (Rood et al., 2010). Rude et al. (2007) countered this connection by stating that the harmful properties of rumination stem not from attention to unhappiness, but from attention that is cloaked in negative judgments about the meaning of the unhappiness. These results have important implications, not only for the measurement of rumination, but also for the conceptualization of the difference between adaptive emotional processing and harmful rumination (Rude et al., 2007). Thus, the impact of rumination depends on the attitude of the individual towards the impact and manifestation of specific thought processes, whether positive or negative.

Feldman et al. (2010) defined rumination as “the tendency to respond to positive affective states with recurrent thoughts about positive self-qualities, positive affective experience, and one’s favorable life circumstances” (p. 511). Individuals who engage in positive rumination do so to maintain a positive mood and are characterized as “ruminating on the positive” (Feldman et al., 2010, p. 514). Specific positive affect regulation strategies include focusing on personal strengths or favourable life circumstances (Larsen & Prizmic, 2004). A second process related to the regulation of positive emotion is dampening, which is defined as “the tendency to respond to positive moods states with mental strategies to reduce the intensity and duration of the positive mood state” (Feldman et al., 2010, p. 513).

Both positive rumination and dampening reflect cognitive response-focused emotion regulation strategies that attempt to modify an emotion once it is experienced (i.e., maintain/enhance the positive mood in the case of positive rumination and decrease/eliminate the positive mood in dampening). Since both strategies have positive emotions as their starting point, they differ from strategies used to decrease negative emotions by shifting one's attention to positive thoughts in an attempt to feel better (Feldman et al., 2010). The creation of positive rumination demonstrates the need for further research on rumination in connection with positive thinking, and coping and problem-solving strategies that assist individuals in addressing their depressive feelings and thoughts.

Interventions

Although there is a great deal of focus on the broad area of anxiety conditions, the systematic examination of anxiety conditions in children continues to lag far behind adult psychopathology research especially as related to early intervention and treatment (Beck & Beck, 2011). Cognitive-behavioural therapy (CBT) is the most common intervention for young children (Beck & Beck, 2011; Hirshfield-Becker et al., 2010 Walkup et al., 2008). Although pharmaceutical (Beidel et al., 2007; Rapee, Schniering, & Hudson, 2009) and school-based interventions (Bernstein, Bernat, Victor, & Layne, 2008) are also implemented as intervention methods for primary-grade children (K-3) experiencing anxiety-related conditions and emotions, they are not commonly examined in the literature, partially due to the questionable nature of using pharmaceutical intervention with young children. In the case of school-based interventions, there is a lack of research in this area with examination into school-based interventions and their implementation

being identified as sustainable topics for further research (Bernstein et al., 2008; Walkup et al., 2008). This section will examine pharmaceutical and cognitive-behavioural therapeutic by providing an overview of the methodology and describing their effectiveness. A discussion about the effectiveness of school-based interventions is also provided, for the purpose of providing further resources for primary teachers (K-3) working with children experiencing anxiety-related conditions and emotions and symptomology.

Pharmacological Interventions

Pharmacological interventions are among the most widely used interventions for anxiety in adolescence and young adults (Rapee et al., 2009). Although pharmaceutical interventions are effective for youth and adults experiencing anxiety, few clinical trials have examined their effects on children and adolescents, due in part to their controversial chemical and emotional side effects (March, Entusah, Ryann, Albano, & Tourian, 2007). Beidel et al. (2007) also critiqued the existing research indicating that there are few randomized, controlled trials of pharmacological interventions (only one study had more than 20 subjects per group), making it difficult to demonstrate their effectiveness in treating anxiety. Beidel et al. (2007) also observed that most studies have compared active intervention to clients on a waitlist. Only two studies used an attention-placebo or active, nonspecific comparison group. Lastly, active treatment comparisons consist of CBT in combination with a second condition termed family treatment/support. There are no comparisons of different, active interventions, particularly a comparison of pharmacological and psychological interventions (Beidel et al., 2007). Thus, a combination of factors, including a lack of research in the field of pharmaceutical

interventions in middle childhood and a lack of individuals receiving this treatment, successively contribute to a low incidence of pharmaceutical or pharmaceutical-psychological interventions in early and middle childhood, in addition to early adolescence.

Beidel et al. (2007) addressed some of these limitations by conducting a two-site trial comparing Social Effectiveness Therapy for Children (SET-C), fluoxetine, and a pill placebo in youth with a primary diagnosis of SAD. It was hypothesized that both active interventions would be more effective than the placebo on measures of social anxiety. It was further hypothesized that the individual and/or group Social Skills Training (SST) component of SET-C would result in greater efficacy on measures of social competence (Beidel et al., 2007). Thus, the purpose of Beidel et al.'s (2007) study was to determine whether fluoxetine or SET-C would be more effective in treating SAD over a 12-week period.

Beidel et al.'s (2007) study included 122 participants ranging in age from 7-17 years and presented with a primary diagnosis of SAD. Any coexisting anxiety-related conditions and emotions could not have higher severity ratings, with the exception of bipolar disorder, psychosis, conduct disorder, autism spectrum conditions, and other intellectual disabilities such as Down syndrome and cerebral palsy (Beidel et al., 2007). Participants' parents completed *The Child Behavior Checklist* (CBCL; Achenbach, 1991) before and after the treatment and at 3-, 6-, and 12-month follow-ups to determine the severity of the disorder throughout the trial. Participants and their parents were interviewed by psychiatrists, clinical psychologists, or doctoral students using the *Anxiety Conditions Interview Schedule for Children and Parents* (Silverman & Albano, 1996).

Parents were interviewed first with same clinician interviewing their child, thereby making a diagnosis based on information provided by both informants (Beidel et al., 2007).

Participants were assigned to one of three treatment conditions randomly. In the first group, 57 children received SET-C; in the second group, 33 youth received fluoxetine; and in the third group, 32 youth received pill placebo (Beidel et al., 2007). Participants in the first and third groups received identical capsules of either fluoxetine or a placebo capsules. The children continued to be seen weekly throughout the 12-week program. In addition to medication management, the psychiatrist offered general encouragement and support during the 60-minute session (Beidel et al., 2007). Concurrently, in the second group, social skills training/ peer generalization was conducted in small groups (four to five youths), whereas exposure to feared situations was conducted individually. Treatment consisted of one weekly individual and one group session over the 12 weeks, with group sessions being 150 minutes in length (60 minutes of SST and 90 minutes of peer generalization) and individual sessions averaging 60 minutes (Beidel et al., 2007). The SST intervention targeted seven major topic areas including, greeting skills, initiating and maintaining conversations, listening skills, joining groups of peers, friendship establishment and maintenance, positive and negative assertion, and telephone skills. Content of the treatment sessions and role-play scenarios were always modified to be age appropriate. Nonverbal skills (eye contact, voice volume, vocal tone) were also addressed (Beidel et al., 2007).

The results of the study indicated that participants receiving the SET-C performed significantly superior relative to participants who received the pill placebo on the primary

outcome measures as well as specific symptom measures (e.g., social anxiety, behavioural avoidance, and overall functioning). Previously, SET-C was demonstrated to be superior to an active, nonspecific psychological treatment (Beidel, Turner, & Morris, 2000). These data indicate that SET-C is efficacious in comparison to pill placebo. With respect to the comparative treatment effects, there was no difference between SET-C and fluoxetine on the SPAI-C, suggesting that both groups benefited equally in terms of decreased social distress (Beidel et al., 2007). In addition, youths treated with SET-C demonstrated less behavioural avoidance, lower symptom severity, and higher overall general functioning (Beidel et al., 2007). Although there were several threats to the reliability and validity of Beidel et al.'s study (i.e., parental preference for medication treatments, patient intolerance to treatment medications, small sample size), Beidel et al. argue that the data are important because they suggest treatment stability. Thus, further research in pharmaceutical interventions for children experiencing SAD and other anxiety-related conditions and emotions in early/middle childhood should be implemented to examine the true effectiveness of SSRI drugs.

Cognitive-Behavioural Interventions

In contrast to Beidel et al.'s (2007) study comparing the effectiveness of a fluoxetine-based pharmaceutical intervention and SET-C therapy on SAD, Cognitive behavioural therapy (CBT; Beck & Beck, 2011) is among one of the most widely used interventions for anxiety-related conditions and emotions in early/middle childhood. CBT is derived from Beck and Beck's (2011) Cognitive therapy model (CT), which assumes that anxious individuals process external and internal stimuli in a biased way, resulting in a variety of cognitive errors such as: overgeneralization, personalizing and selective

abstraction (Hogendoorn et al., 2011). Prochaska and Norcross (2007) characterize CBT as the “fastest growing and most heavily researched system of psychotherapy on the contemporary scene” (p. 348). In this therapeutic approach, patients are trained to replace their anxious thoughts with positive self-statements or affirmations, fundamentally changing their cognition (Hogendoorn et al., 2011). CBT operates on the belief that there are three levels of cognition (automatic thoughts, schemas or underlying assumptions, and cognitive distortions) that play a significant role in producing emotional and behavioural difficulties. Clinical improvement depends on cognitive restructuring, which is defined as significant changes in the three levels of cognition as demonstrated through behavioural and thought modification (Cormier, 2008). Thus, traditional CBT focuses on replacing negative anxiety-provoking thoughts with positive self-statements.

Due to the higher prevalence of children and youth requiring treatment, CBT has been adapted “for patients with diverse levels of education and income, as well as a variety of cultures and ages from children to adults” (Beck & Beck, 2011, p. 3). In current child psychotherapy, there are two main types of CBT interventions, individual (or self) and family (or group), with each session lasting approximately 45-60 minutes. Even though CBT was primarily designed for individual treatment, treatment can be adapted to suit the individual’s needs (Beck & Beck, 2011). In current literature, individuals in middle childhood (4-6 years) experiencing anxiety-related conditions and emotions enter combination therapy, where therapy is conducted with the family (Hirshfield-Becker et al., 2010; Bernstein et al., 2008). Similar adaptations can be made when working with the patient’s family, as support from primary caregivers (i.e., parents,

teachers, daycare providers) is essential in ensuring that early intervention is successful in middle childhood.

In Hirshfield-Becker's (2010) open-series pilot study, researchers used the handbook "Being Brave" to determine the effectiveness of CBT therapy for younger children and their parents. The purpose of the study was to discuss the adaptations necessary in providing cognitive-behavioural therapy to young anxious children while simultaneously describing a manualized, cognitive-behavioural intervention. Participants in the study included nine families with children between 4 to 7 years of age. Each child had multiple risk factors for developing anxiety conditions, and most children had already presented with anxiety conditions, as determined by the *Schedule for Affective Conditions and Schizophrenia for School-Age Children-Epidemiologic Version (K-SADS-E*; Hirshfield-Becker et al., 2010). It was expected that the cognitive-behavioural protocols of anxiety could be adapted and implemented successfully with young children.

Hirshfield-Becker et al.'s (2010) study included nine participants between the ages of 4-7 years and 15 parental participants acting as "coaches," with the number of participants totaling 24 individuals. Participants were recruited through the Massachusetts General Hospital or at other local practices (three participants), email advertisements to employees of the hospital (two participants), posters in local pediatrics practices (one participant), and print advertisements to the greater community (three participants). Children were assessed at baseline and post-intervention using structured diagnostic research interviews administered to mothers, such as the *Interview for Children and Adolescents, Parent Version (ICAPV)* and also by clinical interviews, standardized behavioural observations, and questionnaire measures (Hirshfield-Becker et al., 2010). In

addition to determining the presence or absence of a diagnosis, researchers counted the total number of anxiety disorder symptoms met on the K-SADS-E. Interviews were administered by trained raters, as described above, at baseline and at 2-year follow-up. All K-SADS-E diagnoses and severity ratings were based on a consensus judgment by two senior clinicians (Hirshfield-Becker et al., 2010).

“Being Brave: A Program for Coping with Anxiety for Young Children and Their Parents” (2008) is a cognitive-behavioural, parent-child treatment manual, modeled after Kendall et al. (2008)’s “Coping Cat” intervention for childhood anxiety. “Being Brave” is offered in up to 20 weekly, 50-minute sessions and it is accompanied by a parent workbook, as parents were enlisted as coaches to assist their children and learn further strategies for managing both their child’s and their own anxiety (Hirshfield-Becker et al., 2010). The program begins with six parent-only sessions that focus on general principles of anxiety management (three sessions) and strategies for coaching the child to face feared situations, also in three sessions (Hirshfield-Becker et al., 2010). These sessions are followed by up to 13 others that the child and one or both parents attend. The child is presented with a model for coping with anxiety, taught basic coping skills, and then encouraged to practice coping with feared situations through graduated exposure (Hirshfield-Becker et al., 2010).

At Becker et al.’s (2010) 2-year follow-up, six of nine children had no current anxiety diagnoses, and improvement from baseline was noted on mean number of anxiety conditions and symptoms, mean ability to cope with feared situations and rates of multiple anxiety conditions. Four children had sought further treatment during the interval, and three of these children were treated for diagnoses other than those addressed

specifically in the intervention. Overall, the findings of the study suggested that CBT protocols similar to those used with older children can be adapted successfully for younger children (Hirshfield-Becker et al., 2010).

Even though Hirshfield-Becker et al.'s (2010) pilot study showed promise as a treatment for anxiety conditions in children aged 4 to 7 years, there were several threats to validity for the current study. First, as with many first trials of new or newly adapted protocols, the trial used a monitoring-only (wait list) control condition, causing the method used for sampling is not randomized, as individuals were recruited through the Massachusetts General Hospital, and were preselected based on their diagnosis (Hirshfield-Becker et al., 2010). In the post-test to gain a greater diversity among subjects, researchers should consider sampling from more than one hospital group to ensure the participation of a variety of subjects. In addition, the assessments of these young children relied heavily on input from parents; as in clinical work involving children in middle childhood (4-6 years), parents typically serve as the primary informant of their child's condition. Parents are relied upon in this way because young children often lack the verbal and comprehension abilities to report on their own symptoms (Hirshfield-Becker et al., 2010). The subsequent lack of presence of these interventions threatens the validity of the instrumentation measuring the correlates in Hirshfield-Becker et al.'s (2010) study, as input should be measured from all individuals who observe the child, in addition to the child themselves, to ensure the validity of the results.

Similarly, Walkup et al. (2008) conducted a randomized clinical trial comparing the relative efficacy of Individual Cognitive–Behavioral Therapy (ICBT), Family Cognitive–Behavioral Therapy (FCBT), and a Family-Based Education/Support/

Attention (FESA). Walkup et al. hypothesized that ICBT and FCBT would produce significant change from pre- to post-treatment compared with FESA on child diagnostic status (fewer principal diagnoses; reduced severity) as well as significant reductions in anxious distress and improved. Due to the increased parent prevalence and younger age of anxiety diagnosis, the study diagnosed parent psychopathology to examine whether treatment produced changes in parental anxiety and the presence of parental anxiety moderated child outcomes. Thus, it was additionally hypothesized that parental anxiety would moderate child outcomes; that is, less parental anxiety, better child outcome (Walkup et al., 2008).

Walkup et al.'s (2008) study evaluated the relative efficacy of ICBT and FCBT in comparison to family-based education, support, and attention (FESA), an active comparison treatment, for children experiencing anxiety conditions. In the past, studies comparing the relative efficacy of child-focused CBT with interventions combining child-focused CBT and increased parent involvement have yielded inconsistent findings (Walkup et al., 2008).

Participants in Walkup et al.'s (2008) study consisted of 161 youth between 7-14 years and their parents. Youths possessed a principal diagnosis of separation anxiety disorder, social phobia, or generalized anxiety disorder. Exclusion criteria were few but included psychotic symptoms, developmental delay, a disabling medical condition, participation in concurrent treatment, or use of antianxiety or antidepressant medications (Walkup et al., 2008). Of the randomized cases, 55 were assigned to ICBT, 56 to FCBT, and 50 to the FESA condition. Outcome analyses were conducted using hierarchical linear models on the intent-to-treat sample at post-treatment and 1-year follow-up using

diagnostic severity, child self-reports, parent reports, and teacher reports (Walkup et al., 2008).

Overall, Walkup et al.'s (2008) study indicated that children evidenced treatment gains in all conditions, although FCBT and ICBT were superior to FESA in reducing the presence and principality of the principal anxiety disorder, and ICBT outperformed FCBT and FESA on teacher reports of child anxiety. Treatment gains, when found, were maintained at 1-year follow-up. FCBT outperformed ICBT when both parents had an anxiety disorder. The child's principal anxiety disorder was no longer present after treatment and the child's principal anxiety disorder was no longer the principal diagnosis after treatment. Therefore, it was found that ICBT and FCBT outperformed FESA (Walkup et al., 2008). Future research will need to examine the potential role of complexities of comorbidities in the treatment gains.

In contrast to Hirshfield-Becker et al.'s (2010) pilot study, a central threat to validity that exists in Walkup et al.'s (2008) study is external; as both participants and clinical practitioners conducting the study are exposed and aware of both treatments prior to participation. More specifically, therapists were not blind to the comparison treatments, and future work should evaluate outcomes when therapists are unaware of the alternate treatment conditions. Research needs to consider these issues as well as to address the optimal methods for dissemination (Walkup et al., 2008). Another threat to validity that exists is related to the treatments applied to participants in Walkup et al.'s study. As defined by Beck and Beck (2011), FCBT is a modified treatment condition that was adapted from ICBT; the traditional form of CBT. Since FCBT is operationalized in this study, the format has been adapted to incorporate additional parental

involvement— which is not usually incorporated into traditional CBT. Relatedly, the individual skills taught in ICBT may not have received optimal focus for a child when presented in FCBT (Walkup et al., 2008). Therefore, further research needs to be conducted in order to further develop the terms of CBT, for use by the families of children experiencing anxiety-related conditions and emotions.

School-Based Interventions

Although there have been some adaptations of traditional CBT therapy piloted in schools, there are few interventions that provide a specific outline of the differences between school-based therapy and traditional CBT. Despite the integral role of schools in children's lives, research has only recently examined aspects of educational settings that confer mental health risk or protection (Herman et al., 2009). Schools play a privileged and strategic role in the lives of children acting as their principle environment away from home. In terms of anxiety intervention, treatment can be further adapted to meet the needs of the traditional instructional day, with interventions are often applied in a group setting or individually in short intervals when necessary.

Bernstein et al. (2008) conducted a full-scale study similar to Kendall et al.'s (2008) comparative study of ICBT and FCBT. Bernstein et al. recruited students for this comparative study of ICBT and FCBT from three separate elementary schools in Minnesota. Even though Bernstein et al. obtained their sample from schools, it simply compares the affects of ICBT and FCBT, not their effectiveness in the classroom. The intervention method that Bernstein et al. applied to their control group is entitled FRIENDS, an acronym of related strategies: **F**eeling Worried? **R**elax and feel good; **I**nnner thoughts; **E**xplore plans; **N**ice work so reward yourself; **D**on't forget to practice; and **S**tay calm, you know how to cope now. The FRIENDS program also encourages

children to (a) think of their body as their friend because it tells them when they are feeling worried or nervous by giving them clues; (b) be their own friend and reward themselves when they try hard; (c) make friends, so that they can build their social support networks; and finally (d) talk to their friends when they are in difficult or worrying situations (Shortt, Barrett & Fox, 2001). Thus, the program's focus on interacting with others makes it an optimal choice for integration in a school setting.

Teacher–student relationships can positively motivate student learning and bonding with the school institution (Roeser, Eccles, & Sameroff, 2000). Children who are resilient tend to find emotional support from adults outside their immediate family (Warner, Mufson, & Weissman, 1995). For many children, their classroom teacher serves as this supportive adult. Furthermore, quality teacher–student relationships may lead to early identification of and intervention for students experiencing childhood depression.

Results of Bernstein et al.'s (2008) study in integrating the FRIENDS program with FCBT and ICBT suggested that it was beneficial for anxious children to participate in an early intervention program that targets anxiety. These programs have been successfully implemented in Australia as part of the school curriculum by training classroom teachers to lead groups using the FRIENDS approach. However, this program has not been piloted in North American schools. Implementation of these programs within the school setting would likely lead to a reduction in the number of anxious children needing mental health services in the future and assist teachers in identifying students who might benefit from early intervention for anxiety-related conditions and emotions in the primary grades (K-3) and increase students' healthy coping strategies for dealing with anxiety.

Proposed Study

The literature just reviewed suggests that innovative methods to prevent and treat anxiety-related conditions and emotions in the primary grades (K-3) must consider the role of the school. Rather than counseling children how cope better with their life circumstances only, effective preventive interventions also need to ensure that students encounter positive and supportive school environments. On a school-wide level, promoting positive school climates and providing students with abundant opportunities for specific praise helps promote positive feelings and a sense of relatedness (Herman et al., 2009). Further research exploring the teacher's role in combating anxiety-related conditions and emotions in the primary grades (K-3) is also necessary. As Herman et al. (2009) stated, teachers play a role in the overall school climate and they have particular influence over the classroom environment including instruction. Classroom instruction has a direct link to academic achievement but may also play a part in childhood socio-emotional development (Herman et al., 2009). Thus, further investigation into teachers' knowledge of anxiety-related processes and how they might affect student behaviours will be examined, as it is essential for teachers to develop a clear understanding of anxiety and its related conditions. This study explored teachers' existing understandings of treatment options for students with anxiety and their beliefs about appropriate supports for such students in the classroom.

Research Questions and Design

In contrast with quantitative studies, qualitative research places greater emphasis on the study of a phenomenon from the perspective of insiders or individuals directly involved in it. While quantitative researchers attempt to remain independent of the phenomenon by studying it with the aim of generalizing findings, qualitative researchers immerse themselves within their research, viewing meaning as context and time specific (Creswell, 2013; Willis, 2008). In other words, qualitative research seeks to determine meaning from the perspective of the participants.

Qualitative data most often are collected through words and images and organized to present clear themes, consistencies and at times, contrasting views (Creswell, 2013; Willis, 2008). Most importantly, to understand the “whole picture” or story, qualitative research seeks to understand the experiences of participants (Neuman, 2007). Thus, I used the descriptive case study research approach to guide my study, as my results will be centered on the perspectives and experiences of my subjects.

Case study research is a qualitative approach where the investigator explores a real-life contemporary bounded system (case) or multiple bounded systems (cases) over time through in-depth data collection involving multiple sources of information (Creswell, 2013, p. 112). These explorations are then reported through study description and themes (Creswell, 2013). This study will take the form of an exploratory case study, which is defined by Willis (2008) as “an effort to develop more knowledge about a particular phenomenon with the expectation that the information gathered will be used to guide and shape additional research” (pp. 212-213). Thus, my study seeks to expand two specific areas, the first being the prevalence of anxiety conditions in middle childhood (4-

6 years) and the second being teachers' experiences and perceptions of these conditions in school.

When deciding to implement the case study methodology, Willis (2008) provides several conditions or requirements that need to be met in order to utilize it. The first step, as described by Willis (2008, p. 214), is issue choice, which is described as choosing the areas of interest or prerogative for conducting the case study. For instance, the area of interest for this study is multifaceted, as I have chosen to focus both on anxiety-related conditions and emotions in middle childhood (4-6 years) or the primary grades (K-3) and existing educator perceptions looking at the significance of these conditions in the classroom.

The second condition that applies to this study, as described by Willis (2008), is experiential knowledge or knowledge gained by experience. In the context of case-study research, experiential knowledge specifically facilitates the understandings of all stakeholders in the study, including both participants and researchers, through descriptive recordings of their experiences and how this has impacted their perspectives (Willis, 2008). Even though I will not be serving as a participant in my own research, my perspectives and experiences will be used indirectly, as examples to help support the experiences that my participants will provide for me. As the study is being conducted as an exploration of primary-grade teachers' (K-3) perspectives, most of the discussion in the participant interviews will be around their teaching practice and experiences with students experiencing anxiety-related conditions and emotions. Further description of the research methodology used for this study can be found in chapter 3.

CHAPTER THREE: RESEARCH METHODOLOGY

This chapter describes the research methodology and procedures undertaken in order to examine primary-grade teachers' perceptions of anxiety-related conditions. The chapter outlines the research design, a description of the research methodology, an outline of the ethical considerations, the interviewing process and techniques, analysis methods, methodological assumptions, and the limitations of this study.

Description of Research Design

Objectives and perspectives of qualitative research best match the focus on anxiety as presented in this study, as qualitative research seeks to identify themes and generalizations, rather than measuring specific outcomes resulting from a treatment (Neuman, 2007). This study took the form of a descriptive case study approach, which seeks to develop more information about a topic to guide and shape additional research (Willis, 2008). In the case study methodology, the unit of analysis may be multiple cases (multisite study) or a single within-case study (Creswell, 2013). This study uses multiple cases from separate participants (four to six) to frame the analysis. Face-to-face interviews were employed as the primary method of data collection. Case study interviews are typically structured as open-ended interviews with descriptive questions that ask the participant to provide examples, experiences, or information that pertain to the research questions (Creswell, 2013). Specifically, participant meanings refer to how individuals in social scenes conceive of their world and how they explain or make sense of the important events in their lives (McMillan & Schumacher, 2009).

Three basic interviewing approaches that can be employed to collect qualitative data include informal conversation, interview guides, and standardized open-ended

interview (McMillan & Schumacher, 2009). While the informal conversational interview relies on a spontaneous generation of questions, based on the flow of conversation, the interview guide approach is based on questions that the researcher selects in advance. However, during the interview, the researcher makes a decision on how questions will be worded to help facilitate the participant's responses (McMillan & Schumacher, 2009). Both the informal conversational and the interview guide approach are relatively conversational and situational (Creswell, 2013).

For this study, the interview guide approach was used in combination with informal conversation. Although interview prompts were prepared in advance, the guide was merely used to prompt inquiry and assist the participants in reflecting on their experiences with primary-grade (K-3) children experiencing anxiety-related conditions and emotions. The questions were formulated to ensure there was space for participants to openly reflect on their experiences and allow for them to talk naturally, without being limited by the prompts or feeling like they had to answer every question. A list of these questions can be found in Appendix A.

Materials

Interviewing research in educational studies is done best when more flexible, open interviewing methods are used, especially where the individual who is being interviewed is able to take an active role in the research process (Willis, 2008). Since the purpose of the study to examine the perceptions of teachers regarding students experiencing anxiety-related conditions, the interview prompts were designed to facilitate a combination of authentic reflection of educational practices, as well as an active transmission of knowledge about the manifestation of these conditions in the classroom

environment. This section will provide a brief outline of the interview prompts in Appendix A and explain their relevance in allowing the participants to provide meaningful reflection on their experiences with children experiencing anxiety conditions in the primary grades (K-3).

Teacher Knowledge of Children's Diagnosis of Anxiety

As Weeks et al. (2009) note, few specifics are known about the educators' role in understanding and identifying anxiety symptoms in the primary/junior grades (K-3). However, the role of educators in pinpointing anxiety symptoms in middle childhood (4-6 years) is a crucial one, as school and the home are the two places that children aged 4-6 spend most of their time and develop many of the internalizing and externalizing behaviours that will guide their emotional temperament (Layne et al., 2009). To facilitate the investigation and potential knowledge that educators possess regarding the diagnosis and the identification of anxiety-related symptoms, my first prompts are focused on discussing my participants' perceptions and knowledge of anxiety symptomology. More specifically, individuals participating were asked to identify any potential symptoms of anxiety-related conditions and emotions that are visible in the classroom environment to see how aware teachers are of the potential of these conditions developing in the primary grades (K-3). Although Weeks et al. (2009) suggest teachers are aware of anxiety symptoms in their class, my study sought to identify exactly what teachers are observing and to what extent they are aware of anxiety-related symptoms.

Anxiety, Worry, and Rumination

Anxiety is defined as a part of the basic fear-response behaviour system which prepares the individual for escape from a dangerous or frightening situation (Barlow,

2002), both worry and rumination are classified as defining features of anxiety-related conditions and emotions in the *DSM-IV* (Andrews et al., 2010). Thus, it is important for educators to be able to differentiate between these emotional responses in order to successfully identify the manifestation of anxiety-related conditions and emotions. The diagnosis of childhood anxiety conditions often involves assessing for the presence of associated symptoms with the suspected disorder, as well as examining the comorbidity of the child's symptoms with other psychiatric conditions (Layne et al., 2009).

Concurrently, the role of educators in combating anxiety-related conditions and emotions and symptoms in middle childhood (4-6 years) is largely significant, because of the amount of time spent at school and the nature of the diagnosed children's worry and anxiety. Thus, I will be asking teachers to define anxiety, worry, and rumination in their own terms, so that their observations and awareness can be documented. This will further allow me to gain an idea of teachers' observations of these related emotions so that they can add their observations to the *DSM-IV* definitions of worry, rumination, and anxiety.

Educational Interventions

The final section of my interview prompts will look at current intervention methods that are in place to assist children experiencing anxiety-related conditions and emotions, as well as any additional supports that teachers think should be in place, based on their experiences. Despite the integral role of schools in children's lives, research has only recently examined aspects of educational settings that confer mental health risk or protection to children and nearly all has focused on the development of externalizing conditions. However, relatively few studies examine specific in-class intervention methods or designs, even though the school has been identified as one of the principle

environments away from home (Bernstein et al., 2009; Herman et al., 2009). Thus, my interview prompts ask what current intervention methods/strategies are in place, both in the classroom and school environment. As well, participants were asked to reflect on their experiences and provide input pertaining to additional intervention methods that could be applied to increase awareness of anxiety-related conditions and emotions and provide further in-class treatment methods for students experiencing anxiety-related conditions and emotions. This allowed participants to reflect on the resources currently available to them within the school district and allowed them to think about what additional supports could be put in place to inform educators and help students experiencing anxiety-related conditions and emotions.

Selection of Participants

Participants were selected from five elementary schools, using tri-tiered, convenience and snowball sampling method. While three participants were employed with various school boards across the GTA, the other two participants worked for an independent organization providing emotional, academic, and behavioural support to at-risk students. I was one of the two participants, because of my professional experience working with students experiencing anxiety and my experiences with anxiety throughout childhood. Thus, by participating in the study, I was able to provide a dual perspective, as both a student who had experienced anxiety and an educator who had worked with students experiencing anxiety. The purpose of this study was to examine primary grade educators' perceptions about anxiety-related conditions and emotions in young children (K-3). Therefore, teachers currently teaching grades K-3 were recruited to participate in this study as this student group has been identified as representing an important

developmental period in terms of anxiety-related conditions and emotions (Coplan, Zheug, & Weeks, 2012; Wilson & Hughes, 2011).

In addition, teachers play a role in the overall school climate and they have particular influence over the classroom environment including instruction (Herman et al., 2009). However, it has been argued that despite their instrumental role in the school climate, teachers are inaccurate at assessing internalizing problems, such as worry, rumination, anxiety, and stress (Weeks et al., 2009). Several studies (Herman et al., 2009; Layne et al., 2009; Weeks et al., 2009) suggest that teachers' inaccuracies in assessing anxiety-related symptoms leading to childhood anxiety conditions is a result of a combination of a lack of exposure to educational material and workshops focusing on symptomology surrounding anxiety-related symptoms and little external evidence of the symptoms leading to these internalizing emotions. Thus, this study focused on gaining teacher perspectives, based on their experiences with children experiencing anxiety-related conditions and emotions in the primary grades (K-3) to provide educators with an idea of the signs and symptoms they need to look for, as well as the knowledge to identify students experiencing these issues.

Data Collection

Upon clearance from Brock University's Research Ethics Board (REB-12-085-WOLOSHYN) letters of invitation and consent forms were emailed to potential participants. The potential participants were selected based on my knowledge of the individuals as colleagues and professional acquaintances (e.g., teachers encountered through placements in teacher education). Teachers who were currently teaching in grades K-3 were sent a letter of invitation informing them about the general nature and

intent of the research project. The letter of consent asked participants for their permission to participate in one 45-60 minute interview or two 20-30 minute interviews at a mutually agreed upon time and location to discuss their perceptions and experiences with anxiety-related conditions and emotions in the primary grades (K-3).

Participants

In addition to myself, the four individuals who were contacted chose to participate. All participants in the study were female; three were 24 years of age, one was 28 years of age, and one was 42 years of age. Three participants were current employees and practicing full-time, occasional, or long-term occasional teachers in the Greater Toronto Area (GTA). The first teacher (Anne¹) had been employed by as an occasional teacher for more than a year and served a voluntary post as a teacher's assistant in a Grade 2/3 classroom. The second teacher (Carly) was employed as a long-term occasional teacher teaching senior kindergarten and Grade 2/3 science and physical education. Prior to the beginning of her contract placement, which began in October 2012, she served as an occasional teacher in the primary/junior grades for a year and a half. The third and final participant (Maria), was employed as a full-time teacher and had taught in the primary and junior grades for 12 years, as well as in special education for 5 years.

The other two participants; including myself, were not currently employed by a designated school board in the GTA. However, both were highly active in the education system and had obtained their Ontario College of Teachers teaching certificate. At the time of the study, I was acting as a home coach for students experiencing behavioural and emotional conditions in the primary/junior and intermediate ages. My students varied between the

¹ Pseudonyms are used for confidentiality.

ages of 7-13, and I used this, as well as my past classroom experiences, to reflect on the study questions. The second participant (Dana) not currently employed by a school board was employed as a supervisor and behavioural coach for a private tutoring company and had previously worked for Reach Out Centre For Kids (ROCK) as a preschool/primary facilitator for children experiencing emotional and behavioural conditions.

Students' Confidentiality

Since participants were asked to draw upon their experiences with children experiencing anxiety-related conditions or emotions, they often brought in students they had taught or worked with, to help frame their perspectives. To ensure confidentiality, pseudonyms were used to protect the identities of the children and the participants involved in my study. In addition, pseudonyms were provided for each child so I, as the principal researcher, could provide the necessary information regarding whether the student was diagnosed or awaiting diagnosis or whether he/she was simply suffering from anxiety-related emotions described in the study. This section will provide a brief description of the students mentioned by each participant and specify the official/suspected diagnoses and emotion(s) the students may be experiencing.

Norris

In my interview, I discuss a student named Norris, a Grade 2 student to whom I provided behavioural and academic counseling through a private tutoring service. Norris was diagnosed by the school psychologist as having attention deficient hyperactivity disorder (ADHD), oppositional defiance disorder (ODD), and generalized anxiety disorder (GAD). As well, I discussed my personal experiences surrounding anxiety quite frequently in my interview, as I was diagnosed with social anxiety disorder (SAD) when I

was 6 years old and chronic depression later in my teens.

Liam and Jacob

In Anne's interview, she mentions two students in her Grade 4 classroom—Liam and Jacob. Liam was a very nervous child who had a lot of trouble making friends and experienced anxiety-related symptoms. More specifically, he would not engage with his peers, would vocally express a great deal of worry surrounding school, and was very attached to the teachers in the school. Jacob was in the same Grade 4 class and was diagnosed with schizoaffective disorder (SD). Schizoaffective disorder is classified as a psychiatric disorder that is characterized by reoccurring mood and psychotic components. As a result, Jacob's mood would change very quickly and suddenly without warning, causing him to be very anxious and overwhelmed when engaging in classroom activities.

Bruce, Victor, and Ingrid

In Carly's interview, she mentioned three students: Bruce, Victor, and Ingrid. Both Bruce and Victor were in the same Grade 2 class. Bruce displayed his anxiety in a very overt way, as he was a chronic nail biter who would constantly bite his nails during stressful situations in the classroom. He was not diagnosed with an anxiety-related condition, but was simply displaying nervousness through his nail biting. However, Victor was a very socially destructive child who would leave the classroom in fits of rage and constantly yell at other students. He was diagnosed as having social anxiety disorder (SAD) by the school psychologist and attended weekly CBT sessions with her. Ingrid was another student in the same Grade 2 class. She was not diagnosed with any underlying anxiety condition, but worried quite a bit about being the centre of attention in the classroom.

Ava, Josh, and Hal

In both Dana's and Maria's interviews, they mentioned students who were not diagnosed with underlying anxiety conditions by a medical or psychological professional, but experienced anxious symptoms or behaviours mentioned in this study. Dana mentioned two students throughout her interview: Josh, a 3-year-old preschooler, and Ava, a 4-year-old junior kindergarten student. Josh experienced severe separation anxiety whenever his mother would leave him at preschool to the point where he would force himself to fall asleep for several hours. He would withdraw from social activities in the preschool and simply stay curled up in the fetal position for several hours. In contrast, Ava was a very aggressive child in the junior kindergarten classroom. She would often push other students and try to dominate social interaction by hitting and punching. During transition times in the classroom, she would throw temper tantrums because she did not want to go onto an alternate activity.

Similar to Ava's outward display of anxious behaviour, Maria's Grade 3 student Hal would constantly act out in transitional or academic situations where he did not feel safe. He would move around the classroom constantly and often run from the playground or portable when he did not want to participate in an activity. Even though Hal was classified as "behavioural" by the school psychologist, he never received an official diagnosis and eventually that classification was removed.

Therefore, my study was made up of a mixture of students who were diagnosed with various disorders, as well as students who were experiencing anxiety-related symptoms, but were in the process of being or were not diagnosed. This allowed for a

greater diversity among participants, as I was able to examine behaviours of diagnosed and undiagnosed students experiencing anxiety-related conditions and emotions.

Interview Procedure

All five interviews took place between December 14, 2012 and January 27, 2013. The first interview (with the principal student investigator) took place on December 14, 2012 at approximately 12:00 p.m. in the student investigator's home. Four of the five interviews were conducted in one 45-60 minute session, with only one participant having to separate them into two separate 20-30 minute sessions, due to scheduling conflicts. The second interview (with Anne) took place on December 17, 2012 at 7:00 p.m. at the individual's home. The third interview (with Carly) took place on December 28, 2012 at 8:00 p.m. at a mutually agreed-upon location. The first part of Dana's interview took place on January 17, 2013 at 2:30 p.m. and the second half was conducted on January 30, 2013 at 10:00 a.m. The final interview (with Maria) was conducted on February 1, 2013 at 1:00 p.m. The researcher obtained permission from each participant to audio-record the interviews. A microcassette recorder was used, along with a regular-sized back-up tape recorder in case of equipment problems or failure. As well, I took written notes during each interview mainly consisting of any pauses in the interview or clarification of any terms or experiences discussed in the individual interviews. Each meeting lasted approximately 45-60 minutes, with one interview being divided into two 20-30 minute segments. The tapes themselves were self-transcribed by the student principal investigator and distributed for review by the participants 12 weeks prior to their interviews.

Upon meeting, I reviewed the purpose of my study with my participants, which was to understand their perceptions surrounding anxiety-related conditions and emotions in the primary grades (K-3) and to gain their opinion on the effectiveness on current classroom intervention programs, as well as suggestions for improvement or expansion of these programs. However, I made sure participants were aware that they were not restricted to these conditions and could reflect on their experiences outside the parameters of these prompts, based on the flow of the conversation, as well as their personal teaching practice. In addition, I reminded the participants that the study would have no bearing on their professional role and that they had the option of withdrawing from the interview at any time. Last, to protect the identity of the students they might discuss in their professional teaching practice, as well as their own identity, we came up with mutually agreed-upon pseudonyms for the participants, as well as their students to ensure that anonymity was maintained. Participants were also asked not to reveal the name of their school board or alternate place(s) of employment where these students were encountered to further ensure that professional and personal confidentiality was maintained. Reviewing these conditions and ensuring that participants understood their significance and gave their consent took approximately 15 minutes.

After the conditions of the study were reviewed a second time with participants, I began by asking my participants about their perceptions of anxiety-related symptoms and diagnostic practices to gain a rough idea of their general knowledge and experiences with anxiety-related symptoms. First, I gave my participants a list of symptoms that are characteristic of anxiety-related conditions and emotions in middle childhood (4-6 years), based on the *DSM-IV*. I then asked participants to define these terms, based on their

personal experiences and knowledge. If the terms were unfamiliar to the participants, I asked my participants to identify symptoms of anxiety-related conditions and emotions that they had observed in the children they had worked with, such as worry, rumination, and anxiety. After providing the terms, I told participants that they could elaborate on whichever ones they thought were the most indicative of their experiences and gave them the option of giving alternate terms if they did not feel that any of them matched their experiences. I did not give the *DSM-IV* definitions, and only provided a brief explanation of the terms if requested by the participants. In addition, I made sure participants were aware that these symptoms did not have to be directly related to clinically diagnosed anxiety conditions, but could also be in combination with other suspected conditions or simply reflecting the general temperament of the child.

If participants were able to identify symptoms that they believed related to the diagnosis of anxiety-related disorders, I asked them to elaborate on why they believed they were characteristic of anxiety-related conditions and emotions, based on their personal and professional knowledge of anxiety-related symptoms. Asking participants about their experiences allowed me to identify exactly how much exposure each individual had to anxiety-related symptomology and conditions, which allowed me to map further prompts based on their responses. If participants had considerable experiences, I allowed them to guide the conversation, based on what they wanted to discuss. However, if I noticed that they were having difficulty identifying specific symptoms, I asked them to talk about children they had worked with that they suspected might have been experiencing anxiety-related conditions and emotions and subsequently, discuss their experience with them. In most cases, this inadvertently

caused the participants to reveal temperamental and emotional characteristics that they thought indicated that the child(ren) were exhibiting anxiety-related symptomology or conditions. In the interview, I allotted approximately 30-45 minutes to discuss anxiety-related symptomology and conditions. As well, the second half of the interview focusing on the teacher's role in treating and identifying anxiety conditions, as well as their opinion(s) on current educational interventions, which took approximately 20-25 minutes.

After asking teachers about the symptoms that they believed caused them to exhibit anxiety-related symptomology and/or conditions, I then proceeded to ask educators what they believed their role was in treating and identifying anxiety-related conditions and emotions and symptoms. To help facilitate this conversation, I first asked participants what they believed their role was in treating anxiety-related conditions and emotions and symptoms among their students. To further clarify, I provided participants with the example of the healthy living (K-3) curriculum, which has a unit focusing on mental health and how they might use this unit to assist students experiencing anxiety-related symptomology. After inquiring what role my participants believed they played, I then asked them what the interventions were being implemented to aid students with anxiety-related conditions and emotions. I explained to my participants that they did not have to limit their discussion to interventions or programs specifically designed for students with anxiety-based symptoms, but that they could also include general programs surrounding mental health.

I continued to facilitate the conversation surrounding educational programs and interventions for anxiety-related conditions and emotions by asking my participants the

effectiveness of these interventions for students with anxiety-related conditions. I ensured that participants could discuss not only the effectiveness of these programs but also the issues that they have encountered within them and what they believe could be improved. If participants did not mention what could be done to improve existing interventions, I ensured that that statement was integrated into the next prompt surrounding general improvement of existing programs, as well as any additional resources and knowledge that can be provided to teachers to help improve their understanding of anxiety-related conditions. This allowed me to identify any resources that my participants felt were missing that could be added to help teachers identify, treat and aid in the diagnosis of anxiety-related conditions in the primary grades (K-3).

After approximately 45- 60 minutes, I closed each interview by thanking my participants once again for their participation in the interview. I informed them that they would receive a copy of a transcription of their interview in 4-6 weeks, by email or mail, along with a letter of acknowledgement, thanking individuals for their participation and a feedback form. I explained to the participants that the feedback form would have a summary of their interview, with any conclusions reached based on the data provided in the interview. I informed participants that they would have the option to accept or reject any findings, as well as specify any information that they did not want disclosed. As well, I informed participants that they could provide clarification and/or corrections to the interview summaries, based on their experiences so that the meaning one was to gain from their experiences for the purposes of this study was clear.

Data Analysis

The transcribed tapes, along with the written notes taken during the interviews for each participant provided a rich base of information for the researcher. Although each participant interview was conducted separately, the information was analyzed collectively with regards to the issue of anxiety-related conditions and emotions in the primary/junior grades (K-3). Each of the five participants was selected through purposeful maximal sampling, which Creswell (2013) defines as “cases that show different perceptions on the problem, process or event that is being portrayed” (p. 100). This allowed me to gain a variety of experiences and opinions, instead of limiting myself to teachers or individuals with similar experiences, based on the above factors.

After the interviews were conducted, the data were analyzed holistically to gain an understanding and document the details of the case, including the length of time the participant had been a teacher, the chronology of their experiences with students experiencing anxiety-related conditions and emotions in the primary grades (K-3), and a rendering of the day-to-day activities involving these students (Creswell, 2013). By examining the data collectively, I looked across all five cases to identify common issues that transcend across the cases, conducting a within-case analysis (Yin, 2009). Creswell (2013, p. 101) defines a within-case analysis as a procedure that provides a detailed description of each case and the themes within the case. Since multiple cases are being analyzed, this allows the data from each case to be analyzed independently and collectively to gain an understanding of the individual nature of each case, as well as the themes that were specifically linked to each other.

Although the themes were not predetermined prior to the analysis of the data, a data collection matrix was used that allowed me to specify the information I expected to collect about the case and define the boundaries of the case, including how it might be constrained in terms of time, events, and processes. The purpose of this method of data analysis is to document the elements that the researcher has chosen to focus on (i.e., the interview questions), the sources from which he/she has gained the data, and the key findings from this information (Creswell, 2013).

For the purposes of my study, I made a separate data collection matrix for each prompt, making the interview questions my subheadings or the “elements” for each table. After breaking up each interview question into separate tables for collection, I listed each participant as a “source” of data collection along the top of the chart. I then examined each participant’s interview for themes that resonated across each interview “prompt” and listed the themes as potential indicators/ determinants of my data. After determining the themes that resonated across each prompt or question, I documented them as the main perspectives or experiences that expressed teacher perceptions surrounding anxiety-related conditions and emotions in the primary-junior grades (K-3). A sample of one of the data collection matrixes can be found in Appendix B.

Limitations

There were a number of limitations regarding the methodology of this study, which corresponded to the prompts covered in the interview guide. More specifically, the limitations in the interview guide or prompts included the explanation of worry and rumination, discussion about the availability of educational interventions in the participants’ school boards, and the participants’ access to interview prompts.

First, as previously described in my outline of the interview prompts, I asked participants to define worry, rumination, and anxiety; either by giving an example of a student who might be experiencing these conditions or to give a definition based on their personal knowledge through literature or general teaching experiences. Due to the formality of these terms, several of my participants had a hard time formulating their responses to this question and three out of the five participants did not have an example for rumination, even after providing them with a definition. Because I wanted the participants to provide their perspectives on these terms, I did not want to provide too much context or detail, because I thought that may have swayed their responses or caused them to give an answer, based on the definition I gave them. To limit this, I tried to further prompt my participants through informal discussion of the symptomology of each emotion (e.g., if rumination is defined as focusing on past events, “Does the student in question focus more on past events or events that are waiting to happen?) so I could gain some insight from their responses while still allowing them to form individual perspectives on each emotion with little context.

Following the discussion surrounding the symptomology of anxiety and examples of students experiencing anxiety-related conditions or symptoms, the final question or prompt corresponded to the participants’ knowledge and/or perceptions of the interventions available in their region or school board. Many of the participants had difficulty identifying specific intervention strategies or had little knowledge of the services that were provided to assist students with anxiety outside of the participants’ schools. Even though they had very little knowledge, I felt that the only response to that question would be for the teachers to say that they knew of few services outside of the

school because they were not given the prompts and could not properly access the resources that might have provided them with a list of these organizations (i.e., principal, school psychologist, SERT).

Last, as specified in the outline of my methodology, participants did not have access to the interview prompts before the interview in order to create an environment where they could provide responses without any outside sources to influence them. However, this caused a few of my participants to be unsure of their responses or provide short, choppy responses with very little context or description. I felt that a few of my participants would have benefited from seeing the interview prompts or receiving a rough outline of the topics they were going to talk about, as a few of them had a lot of trouble answering the questions thoroughly without any preparation or discussion beforehand.

Ethical Considerations

Research with human participation requires careful attention to the rights and protections that will be ensured for the participants (REB-12-085 WOLOSHYN). There were no physical risks to the participants as an outcome of participation in this research project. There were no economic risks/stressors to the participants as an outcome of participation in this research project. Psychological/emotional risks were deemed to be minimal, as participants did not encounter any risks greater than those associated with their everyday lives. Teachers are frequently asked to reflect on their teaching experiences and instructional approaches, with teachers being asked to reflect on their experiences and perceptions of anxiety-related conditions and emotions and related emotions (such as worry and rumination) in the primary grades (K-3).

Although this study involved a sensitive topic that could cause emotional distress, measures were taken to ensure the participants' psychological and emotional safety. Participants were informed that they were not obligated to answer the interview questions and that they could avoid any item that caused them distress. As well, if participants became upset or agitated in the interviews, the line of questioning was redirected or a short pause would have been taken in order to regain comfort within the interview process. The research project did not infringe on the rights of the participants. All participants were informed (in writing and verbally) that they had the right to refuse to participate or terminate their participation in the study or individual interviews.

The psychological and professional safety of the participants was maintained in three ways. First, all contact with participants was done through personal non-employer-related means of contact, such as personal emails and telephone numbers. Second, participants were provided with the names and contact information of local organizations that they could contact if they had any additional questions/concerns about their own wellbeing or that of another individual(s). Local support organizations included the Canadian Mental Health Association (CMHA), the Reach Out Centre for Kids (ROCK) and the Kids Help Phone. Finally, all questions in the interview were neutrally worded so that participants would not believe that there were correct and/or desired responses.

CHAPTER FOUR: RESEARCH FINDINGS

In this chapter, participants' perceptions and observations of anxiety-related conditions and emotions in the primary-junior grades are described, allowing for connections to be made across the data and the literature. In addition, this chapter will provide an overview of the major themes found in my data, as well as additional subthemes that emerged across all of my participants. Lastly, this chapter will also detail the means by which these themes and subthemes were created and demonstrate their significance in analyzing my data.

My study employed a descriptive case study approach, with five participants' data, including the student researcher's, examined collectively and individually for underlying themes. I used the following research questions to guide my analysis:

1. What are educators' perceptions of anxiety-related conditions and emotions and how do these interpretations influence their teaching practice?
2. What knowledge/experience do primary teachers (K-3) have regarding the diagnostic processes of anxiety-related conditions and emotions, their symptomology, and emotions relating to their manifestation?
3. What knowledge/experience do primary teachers (K-3) have about emotional regulation strategies/therapeutic approaches that available when working with students who may experience anxiety-related conditions and emotions?
4. What strategies/knowledge do primary teachers believe should be available to help students with anxiety-related conditions and emotions in the primary grades?

The data were analyzed holistically to determine the commonalities across participant experiences, as well as independently to conduct within-case analysis

(Creswell, 2013). Four themes emerged: (a) symptoms and situational contexts, (b) knowledge of strategies and interventions, (c) understanding and perspectives of student's anxious emotional responses, and (d) challenges. Several subthemes were also identified within each of the four themes, allowing for greater depth of the participant's experiences. These subthemes will be identified separately in the individual descriptions of each of the four themes. Both themes and subthemes were then explored with reference to Bronfenbrenner's (1986) Ecological Model, which outlines ecologies in which children interact and develop. Further expansion on connections to Bronfenbrenner's Ecological Model is provided in chapter 5.

Theme 1: Symptoms and Situational Contexts

This theme encompassed the external and internal symptoms that were present when students appeared to experience anxiety, as well as the environments and situations that triggered these responses. Although anxiety conditions primarily are defined as internalized conditions in childhood suggesting that the symptoms are not observable, they are manifested in corresponding externalized emotional responses such as panic attacks or defiant behaviour (Kendall et al., 2008). In this first section, participants were asked to describe symptoms of anxiety-related conditions and emotions or anxious emotion that they believed they had witnessed during their practice. After teachers had described the symptoms, I asked them to elaborate on the environment, situation, or context that influenced these behaviours thus creating a connection between the ecology and observable behaviours (Herman et al., 2009). Subthemes found within this section included participants' perceptions of common symptoms of anxiety-related conditions and examples of these behaviours, and participants' knowledge of situational contexts

associated with anxiety-related conditions and emotions. Participants identified behaviours that could be labeled as either internal (e.g., silence, clenched hands, widened eyes) or external (e.g., screaming, punching, crying, withdrawal from peers). These findings suggest that it is important for educators to have some knowledge and/or awareness of situational contexts, whether within the classroom or school, associated with anxiety-like responses so that they are able to employ effective intervention and/or educational strategies that provide support for students who are experiencing anxiety.

Perceptions of Common Symptoms Associated With Anxiety

Dana described one of her kindergarten students, Josh, who would force himself to fall asleep after his parents left, as being “Almost in a trance-like state because he was almost trying to remove him from the situation.” Anne described a similar response from one of her students, Liam, who seemed to be fearful of social situations: “He just kind of withdraw himself from the group of kids...if there was a group of them, he would be standing at the back of the group or taking himself out of the circle.” In contrast, to these more passive forms of anxious behaviour, I described a Grade 2 student, Norris, who appeared to be more vocally and physically expressive than either Liam or Josh: “Once you give him a reading comprehension activity, he’ll shut down. He’ll throw a fit, he’ll throw the book across the room, he does not want to do it. He won’t read, he’ll close his mouth and just sit there.” According to educators and psychologists, a situation that provokes fear or anxiety might generate a similar response to an individual experiencing a phobia or dangerous situation (Barlow, 2002). In this case, participants perceived withdrawal and avoidance as key student behaviours associated with anxiety in the classroom associated.

Knowledge of Situational Contexts Associated With Anxiety

In addition to identifying withdrawal and/or avoidance as a primary symptom of childhood anxiety, all five participants provided differing examples of everyday situations that influenced anxiety, with all of the situational contexts being directly embedded in students' direct environments or microsystems. Bronfenbrenner (1986) defines the microsystem as "the ecologies with which the child directly interacts such as the family, school, peer group, and neighbourhood" (p. 724). The two main environmental stressors identified by the participants included transitions to the classroom (e.g., parental drop off) or transitioning to a different environment (e.g., gym) or activity within the classroom (e.g., transitioning from one subject to another). Dana described students who had difficulty with transitions: "They would say that they didn't want their mom and dad to leave...these kids I'm thinking of were distraught for about three hours or more." Carly also spoke about a Grade 2 student, Bruce, who had trouble with specific transitions within the school day and constantly bit his nails when encountering with a new task or situation: "But it's that constant need to please and make sure he's always doing it right. I'll always say, 'Bruce! Your nails!'" As Barrett and Turner (2001) stated, childhood anxiety is largely characterized by environmental and social factors that influence anxious behaviour.

The teachers described several transitional situations that appeared to provoke anxiety in some of their students. They also were able to identify the triggering situation and/or transition that might have caused the anxious behaviour. As Dana stated, "Teachers have to look at the function of the behavior. ...It's not because [students] don't want to listen, it's because they don't have that skill or ability to overcome their anxiety

or follow through with the task.” Maria, the most experienced teacher of the five participants, emphasized the choices that teachers have when working with students experiencing anxiety symptomology or situational anxiety:

You have a choice to dismiss [the anxiety] or you have a choice to say, “Maybe through some nurturing techniques, if the student believes in me as the adult, in this room ... [with whom] they are going to be spending 6 hours with every day, that in time, they’ll be able to get over their...anxiety.” And if not, then you know that its more... it might be something that’s happening at home and not at school.

Teachers play an important role in creating the overall school climate and have an especially relevant role in developing the classroom environment. Classroom instruction has a direct link to academic achievement but may also play a part in childhood socio-emotional development (Herman et al., 2009). An understanding of the situational and symptomology of anxiety-related conditions and emotions is essential for teachers to identify and assist students with anxiety.

Theme 2: Knowledge of Strategies and Interventions

The second theme focused on participants’ awareness of educational strategies and/or clinical interventions associated with working with students with anxiety-related conditions and emotions as part of their educational practice. In this section, participants were asked to describe strategies that they used with students who they believed may have anxiety conditions or other interventions that they recognized through reading relevant literature, completing professional development/workshops, teacher education programs, or additional qualifications courses. Subthemes within this theme included available or known psychological interventions and educational used by the participants

in their classrooms or schools and general educational philosophies and beliefs associated with providing support for anxious students.

Available/Known Psychological Interventions

Participants' responses could be identified as belonging to one of two categories. The first included psychological interventions provided by mental health practitioners. The second category involved educational strategies that reflected differentiated instruction or formal accommodations implemented through students' IEPs following diagnosis. Generally, the participants shared similar underlying beliefs about interventions in that they believed it was important to develop a safe, nurturing environment for their students. Maria synthesized this environment as "a form of essential relationship building between students and teachers," and explained that

I've used this term [relationship building] successfully whether I'm teaching Grade 8, or Grade 1 or Grade 3, that here we all belong and here we are your family. We are your family away from home and you know there will be times where you may not get along with each other and its my role to kind of figure that out.

Dana also supported this belief, explaining that she emphasized celebrating students' capabilities:

You create a safe environment that's hopefully, in terms of their sensory needs, can support their anxiety needs and is focused on creating an environment that's safe, a relationship that's safe and sending a message that's safe. And creating a relationship that ensures the child feels capable.

Since the most prominent worries in middle childhood (4-6 years) are centred

around school and family, especially with respect to gaining approval and acceptance in the school community (Layne et al., 2009), it is important for teachers to establish a supportive classroom community. Through discussing their general educational beliefs, participants demonstrated a distinct awareness of the importance of creating an accepting environment, especially when working with students experiencing anxiety. Specifically, participants stated that a healthy and accepting classroom environment should be focused on developing secure attachments and accepting all students' strengths and weaknesses.

Educational Strategies

Participants also provided very specific examples about different strategies used to combat anxiety and their implementation in the classroom setting. For instance, Dana described the preschool and primary intervention program:

So, I'd go in, and observe, then we'd have a meeting. I'd offer strategies and we'd work collaboratively with other professionals involved in the case. So we'd all meet and we'd all have this communication and then we'd move forward on strategies...so the teachers were for example, not punishing a child, but teaching a child and doing that kind of thing or language they could use that might be a good alternative for this particular child and all the kids really generalized.

By providing support for the whole class including students whom were not experiencing anxiety-related issues, the program supported intervention practices that may prevent the development of mental health concerns (Herman et al., 2006). This encourages children to learn and adopt emotional regulation strategies early, since a large proportion of specific phobias and anxious emotional responses are learned in early or middle childhood (Kessler et al., 2005).

Dana also provided some examples of strategies that she implemented in her classroom. The strategies Dana discussed focused on changing the use of language, specifically around classroom management. Instead of sending students away or removing them from the classroom, the preschool intervention program emphasized providing children time to calm down, while demonstrating support. Dana explained how the principle of “time in” supported this approach: “Time in says, I’m here for you, these are my clear boundaries and I’m going to support you through this.” Another example involved the use of a “calm down chair,” where students were provided with an opportunity to reflect on their behaviour versus being removed from the classroom or sent to a time out. Dana describes how changing the language surrounding the “naughty chair” changed the students’ and teachers’ perspectives about classroom management:

They had this chair in the classroom that they used to call the “naughty chair.” So, we changed that language where it was just the “calm down chair.” And everyone could go there if they needed to calm down, even without being told by a teacher.

Dana’s participation in the preschool intervention program seemed to influence her beliefs about classroom management and introduced her to a variety of strategies to help regulate anxious emotions.

The other participants stated that an important consideration in applying an educational strategy or accommodation was to be flexible and responsive to the students’ emotional states. Maria described working with a student named Hal: “A strategy that I am using at 9:00 a.m. in the morning will change at 9:30, because it doesn’t work. So, there’s a whole spectrum of strategies that I was trying to use.” Maria emphasized a

communal approach when working with students experiencing anxiety, even if the children were not diagnosed with a formal anxiety condition. Maria provided an example of classroom community building that involved providing students with options and opportunities intended to help them succeed: “We read on the mat to make it a cozy situation and they [students] read a sentence each, and that’s all. Even though I know there are strong readers, it’s to compensate for those weaker readers.” Maria’s strategy demonstrated her awareness of her students’ abilities and the instructional technique that she used to help her students feel comfortable in the classroom.

Anne explained a similar strategy that she used to assist a student named Jacob when he wanted to run from the classroom called “the cabin”: “We called it ‘the cabin’ to make it seem less threatening So it’s a kind of a place where kids could go to work on social skills to solve problems...if they just needed to remove themselves from the classroom.” Another strategy involved using a chart, where Jacob identified specific emotions that he was experiencing and then selected an action path from a list of solutions: “The first was labeled [This is how I’m feeling] and it had a variety of emotions (happy, sad angry) and then solutions [This is what you could do to help me].” Dana described an additional strategy that she used with Frankie, a child who experienced difficulty transitioning from home to school. She created a transition kit with activities and games that he could play with at the beginning of the day: “So, we started doing things where he had a special kit that was for him and a small group of kids that were there at the time, that were just for those first 10 minutes, so it was a transition kit.”

Thus, participants appeared to use similar strategies to provide students with support across educational settings. Supportive adults (teachers, parents) often serve as

the primary communicator during interactions involving young children who often lack the verbal and comprehension abilities to report on their own symptoms (Hirshfield-Becker et al., 2010). Therefore, applying strategies that encourage children to understand and communicate about their emotions, including anxiety, are important for understanding and addressing anxiety-related conditions and emotions and symptomology.

Theme 3: Understanding and Perspectives of Students' Anxious Emotional Responses

In this section, I review participants' opinions about students' anxious emotional responses, as well as the factors and contexts that influence them. Specifically, I explore the "why" behind participants' perspectives surrounding anxiety related conditions and related emotions such as worry, as worry is consistently associated with the development of disordered anxious behaviour and thinking in middle childhood (Weems, 2008). Subthemes within this section include participants' perspectives and understandings of worry, rumination, and anxiety, and classifications and definitions of anxiety, worry, and rumination based on their personal and professional experience.

Definitions of Worry, Rumination, and Anxiety

Perceptions of worry and anxiety are essential to understanding the manifestation of anxiety-related conditions and emotions, as worry comprises the cognitive component of anxiety (Zeman et al., 2010). Concurrently, both worry and rumination are considered to be the defining emotional features of anxiety in middle childhood (4-6) and are cited in the *DSM-IV* as the primary cognitive components to look for when diagnosing anxiety-related conditions and emotions (Andrews et al., 2010; Wilson & Hughes, 2011).

However, even though worry is considered one of the defining features of diagnosis, it can be considered a normative developmental process when it is not conducted to excess, (Zeman et al., 2010). Thus, it was important to have the participants discuss differences associated with excessive worry leading to anxiety-related symptomology and normal worry.

Carly used the term “worrywart” when discussing what she believed to be a normative level of worry. She provided an example using one of her students:

A worrywart is someone who is a bit dramatic about the situation but you can tell there isn't as much mental stress on the individual as someone who is anxious.

...I know a girl named Ingrid who's a bit of a worrywart. She does want to please but it's because she wants to be the star of the classroom.

Anne elaborated that worry was an easy emotion for teachers to identify as most students in the primary/junior grades experience worry as a critical piece of their development: “Every kid seems to worry about their presentations, their grades, what their friends think of them.”

Participants classified excessive worry as an emotion that interfered either physically or emotionally with their ability to function or complete a task. In her interview, Dana provided an overview of worry that equated it to a children's inability to meet their milestones: “I would say excessive worry is incessant thinking that again results in the child's inability to meet their milestones or their goals like their pulling them back to a point affecting their ability to function.” Anne provided a similar explanation that followed this definition, stating that individuals experiencing excessive

anxiety demonstrated an inability to complete everyday tasks without a great deal of assistance:

Not able...so like a normal student experiencing anxiety would still be able to go through with... the situation even though they're worried about doing a presentation or whatever they're still able to go through with it. And complete it at an acceptable level.

Carly differentiated normative worry from excessive worry by classifying it along a continuum of anxiety stating: "I guess worry would be a small amount of concern for a certain situation while anxiety is something that takes over the entire life of the child, it eats away at them inside where they can't focus on anything else." Dana also identified excessive worry and anxiety in conjunction with each other, stating that in both affective states, there is a physical manifestation: "You see more of the physical symptoms in anxiety versus worry... Anxiety is a little bit more debilitating because you start seeing physical manifestations such as sickness to your stomach or headaches or illness." Thus, once worry got to a point where it was interfering with the child's ability to function, participants classified it as an anxious response. This finding corresponds with the literature on anxiety-related conditions and emotions whereby worry is highly associated with the development of anxiety conditions. In the *DSM-IV*, GAD is classified as "the worry disorder," suggesting that the terms are synonymous in identifying anxiety-related conditions and emotions in middle childhood (as cited in Andrews et al., 2010).

Although rumination is considered to be a defining symptom of childhood anxiety throughout the literature (Hogendoorn et al., 2011; Nolen-Hoeksema et al., 2008), participants still had a difficult time defining and/or providing examples of this state,

suggesting unfamiliarity with the state. Anne explained that rumination was difficult to recognize: “Also, I think worry is easier for them to share with a teacher, then maybe something they were ruminating on that happened to them before... they can just say that I’m worried about this thing that’s coming up then.” Consistent with Anne’s thinking, the literature identifies that the internalized nature of rumination makes it difficult for practitioners and parents to identify. Furthermore, children are better informants than parents or teachers with respect to their own internalizing symptoms, including rumination (Rieffe et al., 2011).

Perspectives of Worry, Rumination, and Anxiety

Personal experience played a large role in determining teachers’ responses to individuals experiencing anxiety. Having experienced a mental health or anxiety condition or having a family member, friend, or student experience one seemed to have a profound effect on the participants. Two of the five participants experienced a mental health condition and formed connections between their experiences and how they might relate to students experiencing similar challenges. For instance, I have experienced an anxiety disorder (SAD) and chronic depression for most of my life. Thus, my perspective about mental health is based on my personal experiences as described in my self-interview:

But I can definitely emphasize with what students are going through and I can definitely understand what it’s like to go through these feelings, but to not know why you’re feeling like this, but to just kind of innately know that you’re different and that you deal with things differently.

Carly shared similar sentiments, explaining that she also suffered from depression and

anxiety for most of her teenage and adult life. Based on these experiences, she indicated that she was especially involved with students who experienced anxiety:

Personal experience definitely plays a role. ... You can get so close to the children that you become involved in their anxieties and they become a part of you. That makes it difficult to step outside of it and really solve the issue that's going on in mental health situation, which is something deeper than just giving praise here and there or ignoring a situation.

Teachers who are unaware of anxiety in children are unlikely to provide assistance to anxious students (Layne et al., 2009). Personal experiences with such affective conditions seemed to make these participants more empathetic and understanding of students experiencing anxiety-related conditions. However, it can also be very difficult for teachers who experience mental health challenges to observe their students in similar situations. Carly explains: "I know but you become so much a part of what they're suffering that you kind of go through it every time that they go through it too." Further, teachers hold a position within the school that allows them extended contact with children throughout the day, allowing them to observe facets of their learning and development (Herman et al., 2009). In her interview, Maria highlighted the danger of teachers interpreting their students' anxious behaviour as a reflection of their teaching: "And many of us might say, 'This is personal, they're doing this to me, they're disrespecting me.' But you need to step out of that and say, 'It's not personal.'"

Carly discussed how teachers become attached to their students and the dual roles that they often assume: "Anybody who works with children has a parent role and a teacher role. And you can get so close to the children that you become involved in their

anxieties.” For many children, classroom teachers serve as a source of emotional support outside of the members of their immediate family (Herman et al., 2009). Thus, the extended role that teachers can have within the school system may impact their perceptions of mental health, making them more sensitive towards the challenges that their students could be experiencing. Potential difficulties associated with being a support person for students who experience anxiety and anxiety-related conditions and emotions need to be considered when providing support and information about these conditions as their emotional health is essential to maintaining the emotional and mental health of their students.

Even though the literature provides great detail about the experiences and symptoms of students experiencing anxiety-related conditions and emotions (Lara et al; 2008; Weeks et al., 2009; Wilson & Hughes 2011), there is little information about educators’ perspectives about anxiety-related conditions and emotions. Therefore, it is important to examine the factors and experiences that influence teachers’ perceptions’ of anxiety, as well as their general teaching philosophy about students’ anxious emotional responses.

Theme 4: Challenges

This theme focuses on the challenges identified by the participants with respect to the identification and accommodation of students experiencing anxiety-related conditions and emotions in the primary-junior classrooms (K-3). Even though schools play an integral role in children’s lives, researchers only recently have begun to examine aspects of educational settings that impact mental health (Herman et al., 2009). In this study, participants identified a variety of challenges that they faced as educators surrounding the

identification of anxiety symptoms in students as well as the lack of general psychological and educational strategies for use in a classroom setting. Subthemes within this section include: the importance and need for enhanced professional development, challenges within the classroom setting (i.e. lack of awareness of grade-appropriate interventions), and overall challenges surrounding the diagnosis and identification of anxiety (i.e., co-operation between teachers, parents, and other educational professionals).

Need for Enhanced Professional Development

The main challenge that the participants identified was the lack of awareness of grade-appropriate intervention programs and instructional strategies for working with students with anxiety-related conditions and emotions. Some educators and administrators may argue that mental health services are not central to schools' educational mandates. From this perspective, funding mental health services would diminish already limited school resources and undermine efforts to fulfill the primary mission of schools (Herman et al., 2009; Roeser et al., 2000). Participants identified the need for more support and access to professional development and practical resources associated with mental health and anxiety. Dana discussed the lack of time set aside for students to become aware of their emotions, as well as the lack of information about metacognitive strategies when working with students who demonstrate anxious emotions: "I feel as though the gap might be in overall strategies. ... We place so much emphasis on the curriculum, which is so important." I also echoed Dana's concern:

Another key thing isn't necessarily education, but having support in place... I think that it's very important for teachers to understand and for other practitioners

to understand that the support can be as simple as getting a child to identify their emotions.

Therefore, Dana and I thought that the lack of professional development related to metacognitive and self-regulation whereby students would be encouraged to think about and understand their emotional responses was a challenge.

Challenges in the Classroom

The three teachers employed in school boards across the GTA were also adamant about the importance of professional development. Anne explained: “Maybe just place more importance on professional development. Because right now it seems more like one of those add-on things, just tucked away there where you just cover it briefly.” Maria also explained the significance of workshops and professional development: “I think the best and most result-oriented would be through a workshop to say, ‘This is something that we’re finding and if you see any children with these symptoms, this is quite real and this is how you need to deal with it.’” Thus, the participants expressed a need for specific professional development about anxiety and general mental health, with a focus on increasing teachers’ awareness of symptoms, behavioural manifestation, and classroom strategies.

Participants also identified the need for additional support when working with students experiencing anxiety-related conditions and emotions including administrative support and classroom assistance. Maria cited administrative support as being the most important: “Well, best supported always comes from the top down, so if you have a strong leadership and someone that you can confide in, your principal...if you’re experiencing a day where it’s a little too much, well, we’re here to give you a break.”

Other participants described the assistance they received from other educational support individuals such as CYW workers, educational assistants, or support from other classroom teachers. Anne elaborated about the challenges that her placement teacher, “Mr. P.” faced when working with Liam, a child who was diagnosed with schitzoaffective disorder and the help that the child and youth worker (CYW) provided: “I think it comes down to... resources and having just that one extra teacher there. It really helps because [teachers] can’t focus on one kid the whole day... they have the rest of the class too.” Similarly, Dana shared Anne’s sentiments regarding additional support when talking about Ava, a student who was not on her case load but who was experiencing anxiety, stating that: “It was really hard not to be able to find that right thing that could help her. She wasn’t even on my caseload. I was actually there for...another student.” Both of these participants called for additional support from other professionals as they believed that working with such qualified individuals would increase their teaching practice when working with students experiencing anxiety.

Communication Between Parents, Teachers, and Students

Participants identified communication between parents and teachers about the diagnosis of anxiety-related conditions and emotions as a potential challenge. Researchers have concluded that children are more likely to develop anxiety-related symptoms if their parents exhibit anxiety-disordered symptoms during their early-middle childhood years (1-6 years), when their cognitive-behavioural responses are developing and strongly based on imitation and/or modeling (Rapee & Spence, 2004; Wilson & Hughes, 2011). Thus, past experiences with anxiety or other mental-health related issues might affect parents’ abilities to communicate or express their children’s symptoms and

behaviour. Communication between parents, educators, and psychological professionals may be stressed when each hold different interpretations about the symptoms displayed by children. When discussing Jacob's diagnosis of schitzoaffective disorder, Anne explained his teachers' beliefs that he was too young to be diagnosed conclusively: "But the teachers don't agree with Jacob's diagnosis.... The parent wants the diagnosis and the teachers don't think it's appropriate."

In contrast, Carly cited her belief that many parents wish to avoid such diagnosis: "It's difficult to get parent approval for a diagnosis. A lot of parents don't want to deal with the fact that their kids have an issue, a mental health issue." The literature indicates that by the time children are diagnosed formally, they have typically been experiencing anxiety-related symptoms for a number of years (Layne et al., 2009). Thus, participants identified contrasting views about diagnosis between parents and educators as a challenge in identifying anxiety-related conditions and emotions or symptomology in middle childhood (4-6 years).

Participants also acknowledged, however, that there can be challenges working with support personnel, especially if they do not gain students' trust. Maria described an instance when a CYW came into the class to help provide extra support for Hal who refused to engage with her or accompany her to her office: "And even though she would have had a ton more strategies [I'm sure] for dealing with people like him, he did not sense a connection and he did not respond." Dana also identified the difficulty that teachers and professionals have with showing empathy for their students, and cited ego as the main difficulty in failing to understand students: "In education, ego gets in the way. Ego does. I feel as though teachers have this wall up, 'my bulletin boards are so pretty,

my classroom is so nice, don't mess with me.'” This demonstrates how ego can get in the way, as well as the impact that teachers have on positive identity development of students through their attitude (Roeser et al., 2000). Thus, the nature of the support provided by trained professionals is conditional upon their ability to develop trusting connections with students.

Summary

In conclusion, the primary themes associated with this study allowed for greater understanding to be developed about participants' knowledge and perceptions of anxiety-related conditions in the primary grades. In addition, it provided participants with an opportunity for reflection on their practice, allowing them to share their experiences with children experiencing anxiety and anxiety-like conditions. The data were organized into four main themes—(a) symptoms and situational contexts, (b) knowledge of strategies and interventions, (c) understanding and perspectives of student's anxious emotional responses, and (d) challenges—and several subthemes emerged within each theme.

Chapter 5 will provide further explanation about the significance of the data collected, as well as recommendations for practice, based on the participants' responses. Specific connections will be made to Bronfenbrenner's (1986) Ecological Model focusing on the different environments or “systems” that may influence children's anxiety and worry, based on theoretical practices and the data collected in this study.

CHAPTER FIVE: SUMMARY, DISCUSSION, AND IMPLICATIONS

The study of teachers' perceptions about primary-aged children (K-3) experiencing anxiety-related symptoms and disorders is a multifaceted topic that requires further exploration. Participants here were able to draw upon their anxiety-related experiences to help guide their understandings and behaviours when working with primary students who may be experiencing anxiety as well as provide suggestions for further exploration, based on these observations.

In this chapter, I will first provide an overview of the current study in connection to the literature reviewed in chapter 2. I will then focus on the implications of this research for future teacher training, teaching practice, and professional development. In addition to providing recommendations for the Ontario Ministry of Education and general curriculum considerations, suggestions for teacher in-service and professional development opportunities are also outlined. Lastly, I will provide an overview of the study's implication for further research including implications for theory, practice, and for families and children who may be experiencing anxiety or anxiety-related disorders.

Summary of the Study

The purpose of this study was to investigate teachers' perceptions of anxiety-related disorders or symptomology in the primary grades (K-3) or middle childhood (4-7 years of age), exploring their current awareness, knowledge, and understanding of the manifestation and consequences of these emotional conditions. A qualitative research approach was applied for this study in order to understand teachers' perceptions of their experiences with students experiencing anxiety-related conditions or emotions. This study used semi-structured interviews that allowed participants to share their experiences

without being constrained by a highly structured interview approach. Participants consisted of five teachers (three who were employed in various school boards across the GTA; one who worked as a preschool intervention worker; myself, the primary researcher; and a qualified teacher). Thus, the selection of the participants and the diversity associated with their varied employment settings allowed for a plethora of perspectives surrounding anxiety-related conditions and emotions.

A descriptive case-study approach was employed to gather participants' stories and experiences. Descriptive case study approaches are typically used when developing information about a topic and can take the form of either multiple cases or single case analysis (Willis, 2008). Since this study contained multiple interviews from participants in different locations, it employed multiple case analyses.

Overview of Data Analysis Procedure

This study used one-on-one semi-structured interviews with five participants who were employed in various educational capacities across the GTA. Three of the five participants were employed in school boards. The other two participants, including the primary investigator in the study, were employed in educational settings outside of the school board (one worked with a tutoring agency and the primary investigator was employed as an at-home behavioural consultant). There were some differences in participants' responses based on their experiences, including a focus on instructional strategies for those employed in school boards and a focus on theoretical and psychological concepts for the other two participants. Despite the differences in theoretical and practical knowledge, all participants emphasized the importance of relationship building and providing a safe, secure environment for students experiencing

anxiety-related conditions and symptoms. In addition, all participants highlighted the need for enhanced professional development and additional resources to assist them in further understanding anxiety-related conditions and symptoms.

Summary of Research Questions and Associated Findings

The following research questions were used throughout the study to frame and guide the analysis, including the formation of themes and subthemes:

1. What are educators' perceptions of anxiety-related disorders and how do these interpretations influence their teaching practice?
2. What knowledge/experience do primary teachers (K-3) have regarding the symptomology and emotions of anxiety-related disorders?
3. What knowledge/experience do primary teachers (K-3) have regarding emotional regulation strategies/therapeutic approaches available for the treatment of anxiety-related disorders?
4. What strategies/knowledge do primary teachers believe should be available to help them work with students experiencing anxiety-related disorders in the primary grades?

This section of the chapter will be structured as a response to these questions, drawing upon corresponding themes and subthemes that arose from the data. The first two themes and corresponding subthemes relate to educators' perceptions and knowledge of anxiety-related disorders and include (a) symptoms and situational contexts, (b) perceptions of common symptoms associated with anxiety/examples, (c) knowledge of situational contexts associated with anxiety, and (d) knowledge of strategies and interventions, including available/known psychological interventions as well as

educational strategies. The final two themes are related to teachers' experiences with students having anxiety-related conditions and include (a) understanding and perspectives of students' anxious emotional responses, including definitions and perceptions of worry, rumination, and anxiety, and (b) challenges, including need for enhanced professional development, challenges in the classroom, and communication between parents, teachers, and students.

Research Question 1: Educators' Perceptions

The first research question asks, "What are educators' perceptions of anxiety-related disorders and how do these interpretations influence their teaching practice?" One of the main purposes of this study was to examine educators' perceptions of anxiety-related disorders in the primary grades as based on their experiences with students, as well as their lived experiences. Data associated with this question was gleaned in the third theme "understanding and perspectives of students' anxious emotional responses" and one of its corresponding subthemes, "perceptions of worry, rumination, and anxiety," as well as in the theme "symptoms and situational contexts" and its associated subtheme, "perceptions of common symptoms associated with anxiety/examples." In each of the themes, participants discussed the experiences that they had working with students experiencing anxiety-related conditions and emotions. Participants listed common symptoms demonstrated by students that they believed were experiencing anxiety (e.g., internalized—withdrawal from activities—and external: crying or screaming), as well as the situations that might have prompted students' anxious behaviours (e.g., transitioning from subject to subject, changing rooms, recess). The situations and symptomology described were consistent with the literature, as anxiety is triggered by fear or withdrawal

in specific situations and events; thereby creating an anxious response (Barlow & Craske, 2007). Thus, the role of educators in combating anxiety-related disorders and symptoms in middle childhood (4-6 years) is a critical one as it relates to the amount of time children spend in school. When documenting the main concerns of a child with a diagnosed anxiety condition, “the most significant worries appear to be school and family related, with the most common concerns including schoolwork, peer acceptance and teacher approval” (Layne et al., 2008; Weems et al., 2008). Therefore, the opinions and perspectives of the participants were significant to understanding the symptoms of anxiety in the primary grades, as well as the situations that motivated it.

Participants’ responses and ability to empathize with students were influenced by personal experiences with anxiety-related conditions. Although all of the participants had taught students with suspected anxiety-related disorders or conditions, it was their personal experiences outside of the classroom that shaped their perceptions of these conditions and influenced their teaching philosophy when working with students experiencing anxiety-related conditions. When discussing their experiences in working with students experiencing these conditions, all of the participants had a friend or family member who had experienced an anxiety-related or mental health condition. Although the literature corresponding to teachers’ perceptions of anxiety and mental health looks at their thoughts surrounding students whom they suspect are experiencing these difficulties (Greenwood et al., 2008; Reinke et al., 2011), the literature does not extend to include the experiences of participants surrounding anxiety. The information that my participants gave related to their own experiences with mental health and anxiety can thus provide much needed insight into the documentation and analysis of educators’ perspectives of

anxiety. Even though the lived experiences of the educators may not have been identical to those of their students, they can still aim to provide an empathetic response to their students by placing themselves in their situation.

Research Question 2: Knowledge of Symptomology and Emotions

The second research question asks, “what knowledge/experience do primary teachers (K-3) have regarding the symptomology and emotions of anxiety-related disorders?” Participants’ understanding of the symptomology and emotions surrounding anxiety-related conditions in primary-aged children was another central concept that emerged in this study. Data related to this question emerged across a number of themes and subthemes including, “symptoms and situational contexts” and its associated second subtheme, “knowledge of situational contexts associated with anxiety” and the theme “understanding and perspectives surrounding anxious emotional responses” and its associated subtheme “perceptions surrounding worry, rumination and anxiety.” While the first theme addressed the participants’ interpretation of specific anxious emotional responses, the third theme looked specifically at anxiety, worry, and rumination.

Participants drew from a wealth of knowledge about symptoms and emotions corresponding to anxiety-related conditions, including their teaching experiences in the traditional classroom and other contexts in which they worked with children (e.g., preschool). All participants indicated behaviours that interfered with normal functioning (e.g., not completing schoolwork, not participating in classroom activities) as being potential indicators of a more severe condition. Weeks et al. (2009) concluded that teachers tended to lack awareness of anxiety-related symptoms due in part to the absence of anxiety-provoking situations in the classroom (indicating that they tend to occur in the

schoolyard where teachers are not always present) and children's efforts to hide emotional problems or anxious behaviours for fear of rejection or lack of understanding. Aligned with Weeks et al.'s (2009) findings, the most significant indicator among my participants in regards to identifying students with suspected anxiety was withdrawal either from social situations (e.g., recess, group-work, playtime), or from everyday classroom activities (e.g., circle time, extracurricular activities). When participants were asked how they were able to identify students who might be experiencing a higher than normal level of anxiety, they indicated that the best technique was to speak and/or observe the children directly. They indicated that this approach was better than gaining the perceptions and observations of others close to the children including parents, child and youth workers, and educational assistants. For many children who do not have the ability to discuss their emotions at home, classroom teachers can serve as supportive adults (Warner et al., 1995).

Participants indicated that when children were able to describe how they were feeling through words and actions, they were better able to understand the emotions they were experiencing and address them accordingly. In addition, speaking to the children directly allowed them to consider the most viable option for further intervention, whether through continued observation or referral to other more qualified professionals. However, there is little research available on the impact that emotional discussion and identification has on treatment, as the majority of current research focuses on diagnosis and symptom classification (Layne et al, 2009; Mian et al., 2012). Thus, participants believed that open communication between themselves and the children experiencing anxiety-related disorders or symptomology would help them to better understand children who may be

experiencing these difficulties and subsequently, provide them with further support or refer them to a more qualified professional.

Research Question 3: Knowledge About Treatment and Therapeutic Approaches

The third research question examined teachers' knowledge and awareness of treatment for anxiety-related conditions and disorders. It asks, "what knowledge or experience do primary teachers (K-3) have regarding emotional regulation strategies/therapeutic approaches available for the treatment of anxiety-related disorders?" Responses related to this question were contained within the second major theme, "knowledge of strategies and interventions" and the two subthemes, "available/known psychological interventions" and "educational strategies." Participants commented on informal classroom strategies as well as psychological and therapeutic interventions. All five participants emphasized the importance of relationship building with their students and creating safe environments where their students could talk about their feelings and any emotional difficulties that they might be experiencing.

Some approaches and strategies that the participants discussed included the use of language surrounding behavioural modification (e.g., naughty chair, time in and time out), engaging in open discussion with students about their emotions, and having students generate viable strategies to assist them in coping with their emotions (e.g., leaving the room, playing on the computer). Participants who used such strategies tended to focus on being flexible and responsive to the students' changing emotional states within the classroom versus relying on assistance from psychological professionals (e.g., school psychologist, child and youth worker, educational assistant) or using formal intervention strategies. It is important that teachers understand students' emotional states, as without

such knowledge any outside classroom intervention (e.g., psychological, social) will be ineffective (Layne et al., 2009). The most effective strategies may be those that can be adapted to meet the needs of the traditional instructional day and be integrated seamlessly into daily classroom activity (Herman et al., 2009). Consistent with such approaches, the majority of the strategies reported by the participants were informal and focused on getting to know their students and trying to adapt to their needs while providing them with a stable classroom community. Although there was some discussion surrounding formal psychological interventions, their primary focus involved promoting positive teacher orientation and attitudes.

Another strategy commonly mentioned by the participants related to providing a safe environment within the classroom. They believed that this space allowed students to remove themselves from anxiety-provoking situations, while still feeling safe and cared for. According to Stormont et al. (2011, pp. 140-1), “effective interventions emphasize interacting with others and modifying language related to behavioural modification in order to make it more positive.” Consistent with such approaches, the participants often changed the language related to defiant behaviour as part of their attempts to create safe classroom environments. An emphasis on positive language surrounding behavioural modification and emotions assists students in thinking positively, accomplishing tasks, and engaging in effective problem-solving (Hogendoorn, 2011; Wells, 2005). For example, participants removed the connotation of “punishment” and replaced it with calming, reinforcing language (e.g., calm down chair, the cabin) in order to provide security for students. The context surrounding place or location were very important to emphasize, as participants believed that if students felt like they were in trouble or being

threatened, they would not respond to any sort of treatment or strategies provided in the classroom.

Research Questions 4: Availability of Strategies/Knowledge

The last of the four research questions asked, “what strategies/knowledge do primary teachers believe should be available to help them work with students experiencing anxiety-related disorders in the primary grades?” It looked at participants’ beliefs related to the strategies and knowledge they had access to or should have access to surrounding anxiety-related conditions and symptomology. Data associated with this question were contained in the fourth theme, “challenges,” as well as in one of its corresponding subthemes, “need for enhanced professional development.” One of the main challenges that the participants identified related to knowledge of strategies and symptoms related to anxiety-related conditions was the lack of grade-appropriate intervention programs. All participants identified the gap in professional development focused on information and strategies about anxiety-related conditions and other mental health issues although they acknowledged that there was an overall greater awareness or interest in these phenomena, due to the increase in students experiencing these issues within the educational community. There was a call for more information on how to provide early intervention in the primary grades beyond information provided for older students.

Another concern was the lack of emphasis on mental health in the curriculum. Some educators and administrators may argue that mental health services are not central to schools’ educational mandates. Despite the integral role of schools in children’s lives, research has only recently examined aspects of educational settings that confer mental

health risk or protection (Herman et al., 2009). It is often argued that funding mental health services would diminish already limited school resources and undermine efforts to fulfill the primary mission of schools (Herman et al., 2009; Roeser et al., 2000). Several participants identified the gap in the curriculum concerning mental health and called for greater focus on mental health in the health and physical education sections of the curriculum. Participants proposed that this could be done through identifying emotions that may be associated with poor mental health, as well as an emphasizing emotional and conflict resolution strategies that could be used in the primary/junior grades. They believed that it was important to provide students with different means of coping with their emotions as well as support in accepting and acknowledging their emotions in context of safe classroom environments.

Implications for Theory

In this study, Bronfenbrenner's (1986) Ecological Model provided the opportunity to examine the participants' experiences with children experiencing anxiety-related conditions and emotions from environmental and social perspectives. Bronfenbrenner explains that an ecology "is determined through the interactions within and between the individual and the environments they live in" (1986, p. 515). In the context of children who might be experiencing an anxiety-related condition or anxious feelings, it is important to examine components of their everyday environments might influence their anxiety.

Bronfenbrenner (1986) identifies four levels of interaction that individuals directly or indirectly experiences as part of their environment. The first or most direct level of interaction is classified as the microsystem, which constitutes "the ecologies with

which the child directly interacts such as the family, school, peer group, and neighborhood” (1986, p. 514). The second system, the mesosystem, looks at relationships between the microsystems; for example the family–school connection or between the parents and the child’s peer group and peers families (Greenburg et al., 2001). In the context of this study, these systems are the most significant in determining the factors that potentially influenced the anxiety of primary-aged children. Since the interview questions focused on obtaining participants’ experiences working with children who experienced anxiety, their discussion was largely centered on the microsystem and the impact of school and peers. In addition, communication between parents, teachers, and students emerged as a subtheme. Since parents are considered to be the main point of contact for children experiencing anxiety-related conditions (Beck & Beck, 2011; Mian et al., 2012), many of the challenges that were encountered by the participants centred on communication between children, teachers, and parents in their individual microsystems. The interviews demonstrated there were conflicting reports and perspectives between parents, children, school, and peers.

The interactions between primary-grade children, the microsystem and the mesosystem, is still significant to the study, as even though the majority of the direct interaction is within the microsystem, the values and behaviours projected by the microsystem and the mesosystem are subsequently influenced by the other two systems, which are rooted in ideology and innate beliefs (Greenburg et al., 2001). They include the exosystem, which constitutes the contexts and actions that indirectly impact the child’s development, and the macrosystem, which represents the widest level of systems influence, consisting of the broad ideological and institutional patterns and events that

define a culture or subculture (Greenburg et al., 2001). Even though there is some conflict about the impact that these systems have on the development of young children (Herman et al., 2009), the relationship, although somewhat hidden, is apparent in the behaviour of those individuals present in the mesosystem (Greenburg et al., 2001). In the context of this study, teacher perceptions and philosophies about classroom management greatly influenced their responses to students they believed may be experiencing anxiety-related conditions, as well as the general classroom environment. Thus, the ideology of educators can determine the means by which they frame their classroom environments and manage their students' behaviours.

Greenburg et al. (2001) discuss the practical implications of Bronfenbrenner's (1986) Ecological Model, emphasizing the need for researchers to question how the different systems can change or influence the behaviour and attitudes of individuals (i.e., person-centred), or change the nature of the system's operation (i.e., environment-focused). One of the primary goals associated with this study was to provide teachers with the opportunity to discuss their personal perspectives and philosophies with respect to assisting students who they believed were experiencing anxiety, as well as the strategies that were available or could be improved upon in their environment. Future research should continue to broaden this perspective and investigate how the interactions between different systems can influence the environment so that early intervention and identification of anxiety-related conditions can be improved.

Limitations

There were two limitations that were prominent in the analysis and review of the findings that were related to the structure of the case study approach and the professional

diversity among the candidates. First, typically, descriptive case studies last a couple of months and provide a profile over that extended period of time, including observations that the researcher has collected in the participants' personal and professional lives (Willis, 2008). However, this study only focuses on the experiences of my participants, based on their descriptions in the in-person interviews. There were no other observations or descriptions outside the interviews, which made it difficult to provide a direct description of the strategies these teachers used, as I could only go by the information that they provided in the interviews. In order to provide a more detailed perspective of teachers' experiences with anxiety-related conditions and emotions, researchers should strongly consider the integration of observations of teachers engaging in their educational practice inside the classroom and school.

Second, this study only included the perspectives of teachers who had finished their teacher education program and who were currently teaching primary/junior grades. Even though I could have included other participants who were qualified teachers but had never taught or were not currently teaching in the primary/junior grades, I limited the study so it would only include teachers who had a class in this particular division. To further extend the study, researchers could include the perspectives of teachers outside the primary/junior division to compare the signs and symptoms across age groups and divisions. This would allow further examination and a greater integration of perspectives of children of all ages who are experiencing anxiety-related conditions.

Implications for Practice/Teacher Education

The primary motivation for this study was to fill the gap in the literature exploring teacher strategies, knowledge, and experiences related to anxiety. Schools are considered

as the primary sites for interventions corresponding to anxiety-related conditions and can also be the sites that trigger anxious emotions in students (Greenwood et al., 2008; Herman et al., 2009). Therefore, this study has several implications for teaching practice and educators including the need for continued support and strategies to assist teachers in providing assistance to students who may be or are experiencing anxiety-related conditions, as well as the importance of building individualized relationships with students in order to develop trust and open communication.

The extensive commentary provided by the participants about their experiences with the students as well as their role in providing students with treatment and support demonstrated that teachers' roles extend beyond providing instruction and include being a caring adult who can provide emotional support for students. Participants discussed engaging in roles that they assumed were outside of their classroom responsibilities (e.g., talking to students outside of school hours, weekly meetings with parents to discuss a child's specific condition). They also provided flexible strategies to assist students (e.g., accommodated work without an IEP, freedom to move within reason around the classroom) when feeling anxious or scared. Thus, the findings of this study underscore the instrumental role that primary teachers have in the classroom and demonstrate the importance of providing teachers with the resources and support so that they can assist students experiencing anxiety.

One of the central strategies in providing support for anxiety-related conditions or emotions was taking the time to develop a relationship with and understand the needs of each student. Although the literature has provided some data on the impact of school-based interventions (Herman et al., 2009; Stormont et al., 2011), there has been less focus

on knowing and understanding students. In this study, participants considered this strategy as central in assisting students with anxiety as they might not respond positively to any intervention if they do not trust the adults who are administering them.

Considering the privileged and central role that schools and educators play in the lives of primary-aged children (Herman et al., 2009; Mian et al., 2012), a focus on strategies to assist teachers in building strong relationships with their students seems essential to providing successful interventions for anxiety-related conditions and emotions.

Suggestions for Future Research

Overall, this study demonstrates how teacher perceptions can shape children's school experiences, including those who are or may be experiencing anxiety-related conditions. Although there is much greater awareness and acceptance of mental health conditions and their associated treatment in adolescence and adulthood, further research needs to be conducted surrounding the mental health of children and youth (Beck & Beck, 2011). With respect to understanding teachers' perceptions about anxiety-related conditions and symptoms, researchers need to focus on the influences that shape these perspectives and the experiences that can be provided to assist teachers in developing strategies to address these conditions in their classrooms (Herman et al., 2009). This section will focus on the considerations that this study raises for further research and provide some details about topics that I believe require further exploration.

Although a great deal of research pertains to the perspectives of older children in high school and the upper elementary years related to anxiety and mental health, it is often assumed that children in the primary years are unable to report on such conditions (Herman et al., 2009; Wells, 2005). Additional factors that complicate exploring the

perceptions of these younger students include confidentiality laws surrounding personal information (Mian et al., 2012; Wilson & Hughes, 2011). Therefore, the majority of studies involving primary-aged children (4-6 years) have been completed using parent and teacher accounts and reports of suspected anxious behaviour. Thus, future research should examine strategies in gaining the perspectives and voices of young children experiencing anxiety-related emotions or symptoms. By obtaining this information, researchers may be able to better understand the factors that influence corresponding anxious emotions, as well as the educational and psychological treatments associated with anxiety-related conditions.

The use of positive language surrounding anxiety-related conditions and symptoms was a strong theme amongst the participants in this study. Language was found to be important in reassuring students and acknowledging their emotions and providing support. There is a great deal of research related to the role of the school in child development and the factors that might lead to anxiety-related conditions, such as genetics, home, family, environment (Herman et al., 2009). However, more research needs to be completed exploring how the use of language may affect the development of anxious emotions and how negative connotations (e.g., time out, punishment, going out into the hall) can affect children's emotional states or produce anxiety.

Alternatively, although there is a great deal of focus on the broad area of anxiety disorders, the systematic examination of anxiety disorders in children is very limited, especially in relation to early intervention and treatment (Beck & Beck, 2011). Therefore, further research also needs to focus on strategies and the availability of interventions for young children, particularly in the primary grades, who are experiencing anxiety-related

conditions. This will allow a greater selection of resources to be available to educators and psychological professionals when providing treatment for young children.

Lastly, an additional topic that went largely unmentioned in this research is the use of medication in treating children, as well as educators' perspectives about its use in treatment. Although pharmaceutical interventions are effective for youth and adults experiencing anxiety, few clinical trials have examined their effects on children and adolescents due, in part, to their controversial chemical and emotional side effects (March et al., 2007). Studies that have used medication in a trial basis (Beidel et al., 2007; Rapee et al., 2009) have involved very few participants and did not include the perspectives of educators and/or other professionals on the use of medication. Therefore, a significant area for future research could involve exploring the perspectives of educators and other professionals around the usage of medication with young children who are experiencing anxiety-related conditions or symptoms. An investigation into educators' perspectives related to medication will allow for a more balanced perspective on the treatment options for anxiety-related disorders, thus providing greater understanding of the projected benefits and disadvantages that educators might experience or witness in their practice.

Concluding Thoughts

There is growing concern surrounding anxiety and other mental illnesses with this topic being especially important to teachers who spend considerable time with children (Campbell et al., 2003). In the context of the new primary curriculum and the implementation of full-day early learning programs (Grieve, 2013), teacher perspectives related to the emotional state of students will become more crucial in providing early intervention and treatment. This study aimed to provide teachers with opportunities to

express their perspectives about anxiety-related conditions and symptoms and encourage discussion and examination about their understanding of students' emotional states. The main goal of conducting this study was to gain participants' perceptions of the symptoms, general emotional state, and behaviours of students who may be experiencing anxiety. In addition, the study also aimed to understand participants' knowledge of educational and psychological strategies associated with anxiety and anxiety-related conditions. Lastly, this study invited participants to make suggestions for educational improvements.

Through the use of descriptive case study, I was able to gain the perspectives of a variety of professionals working in different educational settings (e.g., school board, preschools) and who had firsthand experience with anxiety (e.g., themselves, family, friends). In the future, I hope to use the data I have collected in this study to assist me in my doctoral work as the perspectives of these educators is essential in providing further intervention for students experiencing anxiety-related conditions or emotions. Lastly, I walk away from this research with the hope that my participants are able to reflect on their experiences and use the knowledge they have gained through the discussions here in further assisting students who might be experiencing anxiety-related difficulties.

References

- Achenbach, T. M. (1991). *Child behavior checklist: 4-18*. Burlington, VT: University of Vermont.
- Akiskal, H. S., Mendlowicz, M. W., Girardin, J. L., Rapaport, M. J., Kelsoe, J. R., Gillin, C., & Smith, T. L. (2005). TEMPS-A: A validation of a short version of a self-rated instrument designed to measure variations in temperament. *Journal of Affective Disorders*, 85(1-2), 45-52. doi:10.1016/j.jad.2003.10.012
- Albano, A. M., Chorpita, B. F., & Barlow, D. H. (2003). Childhood anxiety disorders. In E. J. Marsh & R. A. Barkley *Childhood psychopathology* (2nd ed., pp. 279-329). New York, NY: Guilford Press.
- American Psychiatric Association (ed). (2013). *Diagnostic and statistical manual of mental disorders fifth edition, text revision: DSM-V-TR®*. Arlington, VA: American Psychiatric Pub.
- Andrews, G., Hobbs, M. J., Borkovec, T., Beesdo, K., Craske, M. G., Heimberg, R. G., ... Stanley, M. A. (2010). Generalized worry disorder: A review of *DSM-IV* generalized anxiety disorder and options for *DSM IV*. *Depression and Anxiety*, 27(2), 134-147. doi:10.1002/da.20658
- Barlow, D.H. (2002). *Anxiety and its disorders, second edition: The nature and treatment of anxiety and panic*. New York, NY: The Guilford Press.
- Barlow, D. H., & Craske, M. P. (2007). *Mastery of your anxiety and panic workbook*. Toronto, ON: Oxford University Press.

- Barrera, T. L., & Norton, P. J. (2009). Quality of life impairment in generalized anxiety disorder, social phobia and panic disorder. *Anxiety Disorders, 23*(8), 1086-1090. doi:10.1016/j.janxdis.2009.07.011
- Barrett, P., & Turner, C. (2001). Prevention of anxiety symptoms in primary schoolchildren: Preliminary results from a universal school-based trial. *British Journal of Clinical Psychology, 40*, 399-410.
- Beck, J. S., & Beck, A.T. (2011). *Cognitive therapy: Basics and beyond* (2nd ed.). New York, NY: Guilford Press.
- Hirshfield-Becker, D. R., Masek, B., Henin, A., Blakely, L. R., Pollock-Wuram, R. A., McQuade, J,...& Biederman, J. (2010). Cognitive behavioural therapy for 4-7 year old children with anxiety disorders: A randomized clinical trial. *Journal of Consulting and Clinical Psychology, 78*(4), 498-510.
- Beidel, D. C., Turner, S. M., & Morris, T. L. (2000). Behavioral treatment of childhood social phobia. *Journal of Consulting Clinical Psychology, 68*, 1072-1080.
- Beidel, D. C., Turner, S. M., Sallee, F. R., Ammerman, R. T., Crosby, L. A., & Pathak, S. (2007). SET-C versus fluoxetine in the treatment of childhood social phobia. *Journal of the American Academy of Child and Adolescent Psychiatry, 46*(12), 1622-1632.
- Bernstein, G. A., Bernat, D. H., Victor, A. M., & Layne, A. E. (2008). School-based interventions: 3, 6, and 12 month follow-ups. *Journal of the American Academy of Child and Adolescent Psychiatry, 47*(9), 1039-1047.

- Bogels, S. M., Alden, L., Beidel, D. C., Clark, L. A., Pine, D. S., Stein, M. B., & Voncken, M. (2010). Social anxiety disorder: Questions and answers for the DSM-V. *Depression and Anxiety, 27*, 168-189.
- Brofenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology, 22*(6), 723-742. doi: 10.1037/00121649.22.6.723.
- Campbell, L. A., Brown, T. A., & Grisham, J. R. (2003). The relevance of age of onset to the psychopathology of generalized anxiety disorder. *Behaviour Therapy, 34*, 31-48.
- Cannon, W. B. (1929). *Bodily changes in pain, hunger, fear, and rage: An account of recent research into the function of emotional excitement* (2nd ed.). New York, NY: Appleton Century Crofts.
- Carter, A. S., Briggs-Gowan, M. J., & Davis, N. O. (2004). Assessment of young children's social-emotional development and psychopathology: Recent advances and recommendations for practice. *Journal of Child Psychology and Psychiatry, 45*, 109-134. doi:10.1046/j.0021-9630.2003.00316.x
- Carter, A. S., Wagmiller, R. J., Grey, S. A. O., McCarthy, K. J., Horwitz, S. M., & Briggs-Gowan, M. J. (2010). Prevalence of DSM-IV disorder in a representative, healthy birth cohort at school entry: Socio-demographic risks and social adaptation. *Journal of the American Academy of Child and Adolescent Psychiatry, 49*(7), 686-698.

- Carthy, T., Horesh, N., Apter, A., & Gross, J. J. (2010). Patterns of emotional reactivity and regularity in children with anxiety disorders. *Journal of Psychopathology and Behavioural Assessment*, *32*, 23-36.
- Cloninger, C. R., Svrakic, D. M., & Przybeck, T. R. (1993). A psychobiological model of temperament and character. *Archives of General Psychiatry*, *50*, 975-990.
- Coplan, R. J., Zheung, S., & Weeks, M. (2012). Young children's perceptions of social withdrawal in China and Canada. *Early Childhood Development and Care*, *182*(5), 591-607.
- Cormier, E. (2008). Attention deficit/hyperactivity disorder: A review and update. *Journal of Pediatric Nursing*, *23*(5), 345-357.
- Creswell, J. W. (2013). *Educational research: Planning, conducting and evaluating quantitative and qualitative research*. Toronto, ON: Pearson.
- Egger, H. L., & Angold, A. (2006). Common emotional and behavioral disorders in preschool children: presentation, nosology, and epidemiology. *Journal of Child Psychology and Psychiatry*, *47*(3/4), 313-337. doi:10.1111/j.1469-7610.2006.01618.x
- Feldman, G. C., Joorman, J., & Johnson, S. L. (2010). Responses to positive affect: A self-report measurement of worry and dampening. *Cognitive Therapy and Research*, *32*(4), 507- 525.
- Feng, X., Shaw, D. S., & Silk, J. S. (2008). Developmental trajectories of anxiety symptoms among boys across early and middle childhood. *Journal of Abnormal Psychology*, *117*, 32-47.

- Greenburg, M. T., Domitrovich, C., & Bumbarger, B. (2001). The prevention of mental disorders in school-aged children: Current state of the field. *Prevention and Treatment, 4*(1), 1-62.
- Greenwood, R., Oliver, C., Suddaby, R., & Sahalin, K. (Eds.). (2008). *The Sage handbook of organizational institutionalism*. Los Angeles, CA: Sage.
- Gregory, A. M., & Eley, T.C. (2007). Genetic influences on anxiety in children: What we've learned and where we're heading. *Clinical Child and Family Psychology Review, 10*(3),199-212.
- Grieve, J. (2013). *Full day early learning kindergarten program funding for 2013-14 school year (SY) (Year 4)* (Memorandum to Directors of Education, Ontario Ministry of Education, Early Learning Division). Retrieved from <http://www.edu.gov.on.ca/eng/policyfunding/memos/march2013/2013EL1.pdf>
- Herman, K. C., Reinke, W. M., Parkin, J., Traylor, K. B., & Agarwal, G. (2009). Childhood depression: Re-thinking the role of the school. *Psychology in the Schools, 46*(5), 433-446. doi:10.1002/pits.20388
- Hogendoorn, S. M., Prins, P. J. M., Vervoot, L., Wolters, L. H., Nauta, M. H., Hartman, C. A., ... Boer, F. (2011). Positive thinking in anxiety disorders reconsidered. *Journal of Anxiety Disorders, 26*, 71-78.
- Hudson, J. L. (2006). Treating anxiety disorders in a school setting. *Education and Treatment, 29*(2), 219-242.
- Izard, C. E. (1977). *Human emotions*. New York, NY: Plenum Press.
- Izard, C. E. (2009). Emotion theory and research: Highlights, unanswered questions, emerging issues. *Annual Review of Psychology, 60*(1), 1-25.

- Jessop, H. (2004). *Fostering positive body image and healthy dietary behaviours in junior grade classrooms* (Unpublished master's thesis). Brock University, St Catharines, ON.
- Kendall, P. C., Hudson, J. L., Gosch, E., Schroeder, E. F., & Suveg, C. (2008). Cognitive behavioural therapy for anxiety-disordered youth: A randomized clinical trial evaluating child and family modalities. *Journal of Consulting and Clinical Psychology, 76*(2), 282-97.
- Kessler, R., Berglund, P., Demler, O., Jin, R., & Walters E. E. (2005). Lifetime prevalence and age of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*, 593-602.
- Klein, R. G. (2009). Anxiety disorders. *Journal of Child Psychology and Psychiatry, 50*, 153-162.
- Lara, D. R., Lorenzi, T. M., Borba, D. L., Silveira, L. C. L., & Reppold, C. T. (2008). Development and validation of combined emotional and affective temperament scale (CEATS): Toward a brief scale-related instrument. *Journal of Affective Disorders, 111*, 320-333.
- Lara, D. R., Pinto, O., & Akiskal, K. (2006). Toward an integrative model of the spectrum of mood, behavioral and personality disorders based on fear and anger traits: Clinical implications. *Journal of Affective Disorders, 94*(1-3), 67-87.
- Larsen, R. J., & Prizmic, Z. (2004). Affect regulation. In R. F. Baumister & K. D. Vohs (Eds.), *The handbook of self-regulation: Research, theory and applications* (pp. 40-61). New York, NY: Guilford Press.

- Layne, A. E., Bernat, D. H., Victor, A. M., & Bernstein, G. A. (2009). Generalized anxiety disorder in a non-clinical sample of children: Symptom presentation and predictors of impairment. *Journal of Anxiety Disorders, 23*, 283-289.
- March, J. S., Entusah, A. R., Rynn, M., Albano, A. M., & Tourian, K. A. (2007). A randomized controlled trial of venlafaxine ER versus placebo in pediatric social anxiety disorders. *Journal of Biological Psychiatry, 62*(10), 1149-1154.
- Masi, G., Millepiedi, S., Mucci, M., Poli, P., Bertini, N., & Milantoni, L. (2004). Generalized anxiety disorder in referred children and adolescents. *Journal of the American Academy of Children and Adolescent Psychiatry, 43*(6), 752-760.
- McLaughlin, K. A., Borkovec, T. D., & Sibrava, N. J. (2007). The effects of worry and rumination on affect states and cognitive activity. *Behaviour Therapy, 38*, 28-37.
- McLeod, B. D., Wood, J., & Weisz, J. R. (2007). Examining the association between parenting and childhood anxiety: A meta-analysis. *Clinical Psychology Review, 27*, 155-172.
- McMillan, J., & Schumacher, S. (2009). *Research in education: A conceptual introduction* (5th ed.). Toronto, ON: Lavoisier.
- Mian, N. D., Godoy, L., Briggs-Gowan, M. J., & Carter, A. S. (2012). Patterns of anxiety symptoms in toddlers and preschool-aged children: Evidence of early differentiation. *Journal of Anxiety Disorders, 26*, 102-110.
- Mian, N. D., Wainwright, L., Briggs-Gowan, M. J., & Carter, A. S. (2011). An ecological risk model for early childhood anxiety: The importance of early childhood symptoms and temperament. *Journal of Abnormal Child Psychology, 39*, 501-512.

- Moore, P. S., Whaley, S. E., & Sigman, M. (2004). Interactions between mothers and children: Impacts of maternal and child anxiety. *Journal of Abnormal Psychology, 113*(3), 471-476.
- Neuman, L.W. (2007). *Social research methods: Qualitative and Quantitative Approaches* (6th ed.). Whitewater, WI: Pearson Education.
- Nolen-Hoeksema, S., Wisco, B. E., Lyubomirsky, S. (2008). Re-thinking rumination. *Perspectives on Psychological Science, 3*, 400-424.
- Olatunji, B. O., Cisler, J. M., & Tolin D. F. (2007). Quality of life in the anxiety disorders: A meta-analytic review. *Clinical Psychology Review, 27*(5), 572-581.
- Prados, J. M. (2010). Do beliefs about worry facilitate the utility of worry? *Journal of Anxiety Disorders, 25*, 217-235.
- Prochaska, J. O., & Norcross, J. C. (2007). *Systems of psychotherapy: A trans-theoretical analysis* (6th ed.). Belmont, CA: Thomson Brooks/Cole.
- Rapee, R. M., Schniering, C. A., & Hudson, J. L. (2009). Anxiety disorders during childhood and adolescence: Origins and treatment. *Annual Review of Clinical Psychology, 5*, 311-341.
- Rapee, R. M., & Spence, S. H. (2004). The etiology of social phobia: Empirical evidence and an initial model. *Clinical Psychology Review, 24*, 737-767.
- Reijntjes, A., Dekovic, M., & Telch, M. J. (2007). Support for the predictive validity of the SASC-R: Linkages with reactions to an in vivo peer evaluation manipulation. *Journal of Anxiety Disorders, 21*, 903-917.

- Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teachers' perceptions of needs, roles and barriers. *School Psychology Quarterly*, *26*(1), 1-13.
- Rieffe, C., Oosterveld, P., Terwogt, M.M., Mootz, S., Van Leeuwen, E., & Stockmann, L. (2011). Emotion regulation and internalizing symptoms in children with autism spectrum disorders. *Autism*, *15*(6), 665-670.
- Robinson, M. S., & Alloy, L. B. (2003). Negative cognitive styles and stress-reactive rumination interact to predict depression: A prospective study. *Cognitive Therapy and Research*, *23*(3), 275-291.
- Roelofs, J., Rood, L., Meesters, C., Dorsthorst, V., Bogels, S., & Hoeksema-Nolen, S. (2009). The influence of rumination and distraction on depressed and anxious mood: A prospective examination of the response-style theory in children and adolescents. *Journal of Early Childhood and Adolescent Psychiatry*, *18*, 635-642.
- Roeser, R.W., Eccles, J.S., & Sameroff, A.J. (2000). School as a context of early adolescents' academic and social-emotional development: A summary research findings. *The Elementary School Journal*, *100*(5), 443-473.
- Rood, L., Roelofs, J., Bogels, S., & Alloy, L. B. (2010). Dimensions of negative thinking and the relations of symptoms of depression and anxiety in children and adolescents. *Cognitive Therapy and Research*, *34*, 333-342.
- Rubin, K. H., Coplan, R. J., & Bowker, J. (2009). Social withdrawal in childhood. *Annual Review of Psychology*, *60*, 141-171. doi:10.1146/annurev.psych.60.110707.163642
- Rude, S. S., Maestas, K. L., & Neff, K. (2007). Paying attention to distress: What is wrong with rumination?. *Journal of Cognition and Emotion*, *21*(4), 843-864.

- Ruscio, A. M., Chiu, W. T., Byrne, P. R., Stang, P. E., Stein, D. J., Wittchen, H. U., & Kessler, R. C. (2007). Broadening the definition of generalized anxiety disorder: Effects on prevalence and associations with other disorders in the National Comorbidity Survey Replication. *Journal of Anxiety Disorders, 21*, 662-676.
- Schwartz, C., Waddell, C., Barican, J., Garland, O., Gray-Grant, D., & Nightingale, L. (2012). Treating anxiety disorders. *Children's Mental Health Research Quarterly, 6*(2), 1-16.
- Shortt, A.L., Barrett, P.M., & Fox, T.L. (2001). Evaluating the FRIENDS program: A cognitive behavioural group treatment for anxious children and their parents. *Journal of Clinical Child and Adolescent Psychology, 30*(4), 525-535. doi: 10.1207/S15374424JCCP3004_09
- Signoretta, S., Maremmanni, I., Liguori, A., Perugi, G., & Akiskal, H.I. (2005). Affective temperament traits measured by TEMPS-I and emotional-behavioural problems in clinically-well children, adolescents, and young adults. *Journal of Affective Disorders, 85*, 169-180.
- Silverman, W.K., & Albano, A.M. (1996). *Anxiety disorders interview schedule for DSM-IV child version: Parent interview schedule*. Toronto, ON: Graywind Publications Incorporated.
- Stormont, M., Reinke, W., & Herman, K. (2011). Teachers' knowledge of evidence based interventions and available school resources for children with emotional and behavioural problems. *Journal of Behavioural Education, 20*, 138-147.
- Suveg, C., & Zeman, J. (2004). Emotion regulation in children with anxiety disorders. *Journal of Clinical Child and Adolescent Psychology, 33*, 750-759.

- Walkup, J. T., Albano, A. M., Piacentini, J., Birmaher, B., Compton, S.N., Sherrill, J. T., ... Kendall, P. S. (2008). Cognitive behavioural therapy, setraline, or a combination in childhood anxiety. *New England Journal of Medicine*, *359*, 2753-2776.
- Warren, S. L., & Sroufe, L. A. (2004). Phobic and anxiety disorders in children and adolescents: A clinician's guide to effective psychosocial and pharmacological interventions, *Developmental Issues*, 92-115.
- Weeks, M., Coplan, R. J., & Kingsbury, A. (2009). The correlates and consequences of early appearing social anxiety. *Journal of Anxiety Disorders*, *23*, 965-972.
- Wells, A. (2005). The metacognitive model of GAD: Assessment of meta-worry and relationship with *DSM-IV* generalized anxiety disorder. *Cognitive Therapy and Research*, *29*(1), 107-121.
- Willis, J. (2008). *Qualitative research methods in education and educational technology*. New York, NY: Information Age.
- Wilson, C., & Hughes, C. (2011). Worry, beliefs about worry and problem solving in young children. *Behavioural and Cognitive Psychology*, *39*, 507-521.
- Wood, J. J. (2006). Parental intrusiveness and children's separation anxiety in a clinical sample. *Child Psychiatry & Human Development*, *37*, 73-87.
- Wood, J. J., McLeod, B. D., Sigman, M., Hwang, W. C., & Chu, B. C. (2003). Parenting and childhood depression: Theory, empirical findings, and future directions. *Journal of Child Psychology and Psychiatry*, *44*, 134-151.
- Wood, J. J. (2006). Parental intrusiveness and children's separation anxiety in a clinical sample. *Child Psychiatry & Human Development*, *37*, 73-87.

Zeman, J. L., Cassano, M., Suveg, C., & Shipman, K. (2010). Initial validation of the children's worry management scale. *Journal of Children and Family Studies*, *19*(4), 381-392.

Appendix A

Interview Prompts

-Describe a characteristics or behaviours of a student who you believe is experiencing a higher than normal level of anxiety.

Some common symptoms of anxiety and anxiety-related disorders in the primary/junior grades include: excessive amounts of worry, rumination and avoidance of feared situations (e.g., school, recess, extra-curricular activities). Please define all/some of the following term(s), in the context of a student with a diagnosed anxiety disorders or symptoms relating to one:

- 1) Anxiety
- 2) Worry
- 3) Rumination

-Have you ever taught/worked with a/any student(s) who was very anxious, was diagnosed with an anxiety related disorder(s), or displayed emotions that were related to high anxiety? Describe the characteristics of this/these student(s).

-Describe your current role, duties and responsibilities as a primary/junior (K-3) occasional/long-term occasional or full-time teacher in relation to working with students who may experience mental health concerns needs (such as anxiety or anxiety-related conditions).

-What are your beliefs about how to work effectively with students who struggle with anxiety and/or anxiety-related conditions/symptoms at the primary/junior (K-3) level? How do you believe teachers can support and assist these students best?

-Were there any services/programs/intervention methods in place in your school/classroom to assist students with high levels of anxiety? If so, please describe.

-What challenges have you encountered when working with students who you suspected were anxious or who you know were diagnosed as anxious or anxiety-related disorders/symptoms? Were you able to overcome these challenges/obstacles? How? What people, resources, experiences were helpful/ in your role? (not so helpful?)

-How can teachers be best supported to work with children suffering from anxiety or anxiety related-disorders in the primary/junior grades (K-3). What resources and supports would be helpful?

-What additional information/support (if any) should be available to primary/junior classroom teachers regarding the identification, diagnosis/treatment and intervention methods for anxiety and anxiety-related disorders? How can this information be situated so that it is meaningful in the context of classroom practice?

Appendix B

Data Collection Matrix Sample: Themes/Quotes

Themes	Participant 1: (student researcher) Liz	Participant 2: Anne	Participant 3: Carly	Participant 4 Dana
Emotion and Language a) Surrounding anxiety b) Acknowledging anxious emotion/label	a) Common dialogue- language surrounding anxiety from students suffering from it (general perspective- mainly Norris) “Oh my goodness, oh my goodness, oh my goodness I’m going to fail this test”. Bringing it back to the little boy I work with he’s worrying [“Oh my goodness, oh my goodness I have to go to this reading activity, I hate reading, I hate this activity, I don’t want to do it, I’m going to fail, I’m going to...[um] disappoint my parents, I’m going to disappoint myself”].	a) Luke -Language surrounding anxiety- vocalizes fears and perspectives	a) General experience surrounding watching students who suffer - Makes one feel as though they are going through the anxiety with the child	a) Internalized language of defiant children- how they mask anxious emotions b) Acknowledging anxious/emotion label -How can we help students who are miserable- are they miserable or anxious -Separating self from anxiety- identifying self with anxiety as a young child a) Language surrounding anxiety -“Oh, I don’t think this is right, do I have enough time? I don’t think I have enough time to do it...I think I have to I have to stay up all night tonight or something.”
Environment Situational/context a) School -Oral presentations -Transitions -Teacher-student interaction (being put on the spot, getting in trouble) b) Social Situations -Confrontation -Meeting new people c) Home -Trauma -Temperament of parents/siblings	a) Norris -Reading/school situations where he has to read	a) Jacob -Classroom - School -Interactions with peers Home -Molestation (occurred when he was a child; father) Liam a) Luke a) -Oral presentations	a) Bruce -Test anxiety a) Louis - Teacher-student interaction (getting in trouble)	a) Transitions (parents leaving) -Students would vocalize they didn’t want parents to leave - Run from situation -Force self to sleep (Josh) a) Josh -Force self to fall asleep when parents left