

FRIENDS PARENT PROJECT: EFFECTIVENESS OF PARENT TRAINING IN  
REDUCING PARENT ANXIETY IN A UNIVERSAL PREVENTION PROGRAM FOR  
ANXIETY SYMPTOMS IN SCHOOL CHILDREN

by

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## Abstract

Anxiety is one of the most pervasive childhood mental health disorders of our day. This is reflected in the growing body of research investigating the most effective ways to treat and prevent childhood anxiety. This study adds to the discussion by examining the parent component of a school based universal prevention and intervention program. Participating parents ( $N = 122$ ) completed four measures on anxiety, the Anxiety Sensitivity Index (ASI, Reiss, Peterson, Gursky, & McNally, 1986), the Center for Epidemiological Studies-Depression (CES-D, Radloff, 1977), the Penn State Worry Questionnaire (PSWQ, Meyer, Miller, Metzger, & Borkovec, 1990), and the Screen for Child Anxiety Related Emotional Disorders (SCARED, Birmaher et al., 1999) before and after the parent program. The effectiveness of the program was investigated by analysing mean scores of the parent self-reported anxiety symptoms and parent reports of child anxiety symptoms. The main analyses conducted were 2 x 2 between-within ANOVAs for each measure. The hypothesis that parents who participated in the program ( $n = 20$ ) would report reduced anxiety symptoms for themselves and for their children when compared to parents who did not attend ( $n = 120$ ) was not confirmed. The parent's satisfaction level with the program was also studied with high acceptability ratings providing strong social validity for this program. Implications of the findings, strengths, limitations and suggestions for further research are discussed.

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## Dedication

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## Chapter 1: Introduction

### *Research problem*

Epidemiological studies conducted in the United States and Canada over the last 20 years have found that at any given time approximately 20% of children and youth are dealing with a significant mental disorder causing disruptions that can permeate many aspects of their lives (Angold et al., 1998; Burns et al., 1995; Costello et al., 1996; Ezpeleta, Keeler, Erkanli, Costello, & Angold, 2001). Translated into the British Columbian context, these studies indicate that up to 200,000 children in BC may be currently struggling with a significant mental disorder (Waddell, McEwan, Hua, & Shepherd, 2002). These disorders pervade and impair, to varying degrees, many areas of a child's development including the ability to succeed at school, and to relate with peers and family, at home and in the community. Anxiety disorders are the most common class of mental disorders found in both children and adults (Kessler et al., 2005). Based on the epidemiological data, it has been estimated that of the 200,000 BC children and youth who may be suffering from one or more mental health disorders, approximately 70,000, or 35% struggle with the debilitating effects of having an anxiety disorder in particular (Waddell, McEwan et al., 2002).

Anxiety disorders predominantly have an onset in childhood or early adolescence, (Kessler et al., 2005; Wittchen, Kessler, Pfister, & Lieb, 2000) and are the principal reason children are referred to mental health services (Beidel, 1991). Not only does having an anxiety disorder prevent children from developing along standard trajectories, it also leads to compromised adult functioning and productivity. If left untreated, children and youth with anxiety are vulnerable to substantial risk in adulthood for the development of mood disorders (Wittchen et al., 2000), suicide (Pawlak, Pascual-Sanchez, Rae, Fischer, & Ladame, 1999;

Sareen et al., 2005), substance use disorders (Le Fauve et al., 2004), and higher rates of smoking tobacco (Lasser et al., 2000).

Despite the prevalence of anxiety disorders in children and the consistently high rate of referral to mental health professionals, anxiety disorders are often overlooked and are under treated in children. Children with anxiety disorders are shy, inhibited, and avoidant: rarely do these behaviours attract parents and teachers' attention (Miller, in press). In a research report written for BC's Ministry of Child and Family Development (MCFD), Waddell, McEwan et al. (2002) found that the majority of children with mental disorders were not receiving interventions to address their health concerns. Similarly in their study on rates of referral for clinical child issues, Weisz and Weiss (1991), found that when compared to more overt, externalizing behaviour problems, anxiety is a low-referral disorder. Given the dire long-term personal, community and economic consequences of untreated anxiety in young people, there is clearly a need to address anxiety disorders from a broad perspective, including researchers, clinicians and educators alike.

Evidence in the literature clearly supports cognitive behavioural therapy (CBT) as the treatment of choice for children with anxiety disorders, specifically when offered in a group format (Mendlowitz et al., 1999; Shortt, Barrett, & Fox, 2001). In addition to group based CBT interventions, research has revealed increased success when parent involvement is included (Barrett, Dadds, & Rapee, 1996; Bogels & Siqueland, 2006; Cobham, Dadds, & Spence, 1998; Wood, Piacentini, Southam-Gerow, Chu, & Sigman, 2006).

Upon noticing a significant improvement in childhood anxiety when parents are involved in treatment, researchers have continued to investigate the effects that parents and parenting have in the development of anxiety. With a better understanding of how parents and their parenting beliefs and behaviours affects anxiety in children, better treatment and

prevention efforts focused on parents can be developed. Although this field is in its infancy, a number of familial factors have emerged, such as parent anxiety, parenting practices and parent modelling of coping strategies (Ginsburg & Schlossberg, 2002; Manassis, Hudson, Webb, & Albano, 2004; Spence, Donovan, & Brechman-Toussaint, 2000). One of the key factors in the development and maintenance of child anxiety, around which other factors seem to pivot, appears to be parent anxiety as some researchers have indicated (Cobham et al., 1998; Thienemann, Moore, & Tomkins, 2006). Aetiological studies have suggested that parent anxiety is one of the most crucial factors in the development of childhood anxiety. Research has established that parents of anxious children are more likely to have symptoms consistent with anxiety disorders than those of nonanxious children, with up to 80% of parents of anxiety disordered children having an anxiety disorder themselves (Cobham et al., 1998; Ginsburg & Schlossberg, 2002; Turner, Beidel, Roberson-Nay, & Tervo, 2003). Therefore in order to treat childhood anxiety most effectively, the program provided for the child should be accompanied by a family component that attempts to reduce parent anxiety. Clinical research has validated this hypothesis and has found that reducing anxiety in anxious parents increases the gains for their anxious children (Bogels & Brechman-Toussaint, 2006; Cobham et al., 1998; Thienemann et al., 2006; Wood et al., 2006). Furthermore, recent intriguing research conducted in clinical settings has found that by treating the parents of anxious children only, their children, who had not received treatment themselves, experienced decreased anxiety symptoms (Cartwright-Hatton, McNally, White, & Verduyn, 2005; Thienemann et al., 2006). There is an obvious necessity to conduct research that would lead to a better understanding of how parents can play a role in treating their child's disorder, leading to more effectual programs for the parent component of childhood anxiety interventions.

In addition to treating childhood anxiety by addressing parent anxiety, another area in the treatment of childhood anxiety that has garnered attention in the literature is the efficacy of preventing anxiety in children before it reaches clinical levels. There is convincing evidence that supports approaching anxiety disorders from a universal prevention perspective (Donovan & Spence, 2000; Rapee, 2002; Waddell, Offord, Shepherd, Hua, & McEwan, 2002) rather than a strictly treatment perspective. Taking a universal preventive approach is an effective and perhaps the most responsible way of using limited funding to address this important healthcare issue (Rapee, 2002; Waddell, Offord et al., 2002).

FRIENDS for Life (Barrett, 2004) is one such universal prevention and early anxiety intervention program, developed in Australia, that enjoys evidence-based support in classroom settings (Lowry-Webster, Barrett, & Dadds, 2001; Lowry-Webster, Barrett, & Lock, 2003). FRIENDS is a cognitive behavioural (CBT) based group intervention, designed to be run in Grade 4 and 5 classrooms that includes two parent training sessions. While the interventions designed for the children have been well researched, there has been no evaluation of the effectiveness of the parent-training program in a non-clinical population.

### *Purpose*

This study will evaluate the effectiveness of the parent training component of the FRIENDS for Life prevention and early intervention program for childhood anxiety by investigating adult self-reported anxiety symptoms and parent reports of child anxiety symptoms. It will also study the parent's satisfaction level with the FRIENDS parent program by asking parents to rate the different components of the program.

### *Research question and hypothesis*

This research will address the question: Do the parent training sessions of the FRIENDS for Life program affect parent self-report of anxiety symptoms and parent report of child anxiety

symptoms? The hypotheses driving this inquiry are that parents who participate in the FRIENDS parent training program will report reduced rates of self-reported symptoms of anxiety when compared to parents who do not participate in the parent training program, and that parent report of observed child anxiety symptoms will also be reduced when compared to parents who do not participate in the parent training program.

To augment these findings, parents who participate in the parent training programs will complete a questionnaire asking them to rate the components of the program and to comment on what they learned from the program to answer the question: What components of the parent program do the parents find most useful? This will be the first study to examine the effects of the parent-training component of the FRIENDS program in a community setting for which it was designed.

### *Conclusion*

Finding effective means to treat and prevent childhood anxiety is an agenda in which parents, clinicians, researchers, educators and society as a whole need to invest. Whether looking at this issue from a healthcare perspective of quality of life across the ages, a therapist's desire to help a child suffering from the symptoms of an anxiety disorder, an educator's goal of facilitating academic and social success in school, or a parent's hope of seeing his/her child succeed and thrive in life, childhood anxiety must be better understood and best practices for treating need to be discovered and implemented. A review of existing literature that follows will include the aetiology of childhood anxiety as well as current approaches to treating anxiety disorders in children, focusing on emerging research that has found the involvement of parents to be instrumental in achieving successful treatment outcomes. Lastly, research on the anxiety treatment and prevention program FRIENDS for Life parent training component will be discussed.

## Chapter 2: Literature Review

### *Introduction*

The following review of the literature will look at a number of areas relevant to this study. First the prevalence and effects of anxiety across the lifespan and the aetiology of childhood anxiety will be explored. In light of the connections between parent and child anxiety found in the aetiological research, the effectiveness of parent training programs in the treatment of children's mental health in general will be discussed. Next, the focus will be on the latest findings of treatments for childhood anxiety highlighting the discovery of the importance of involving the parents. The conclusion of this literature review will provide an exploration of the research done on the FRIENDS parent training program itself and how this current study addresses gaps in the existing literature.

### *Anxiety across the lifespan*

Research has well established that anxiety is the most common childhood psychological disorder, having deleterious effects on children's social, educational, and emotional well being (Cartwright-Hatton, McNicol, & Doubleday, 2006). A variety of epidemiological studies have found that anxiety disorders emerge in childhood and have been found to persist well into the elderly population. Kessler et al. (2005) conducted an American nationally representative survey of 9282 households between 2001 and 2003 and found that the estimated lifetime prevalence of having an anxiety disorder was 28.8% with the median age of onset being age 11. Their study found that the age group 30 - 44 had the highest percentage of anxiety disorders, at a rate of 35%. Geriatric research has found that the incidence of anxiety in the elderly is much higher than previously thought (Schuurmans et al., 2005). Most anxiety disorders do not suddenly begin in later adulthood but are in fact a reappearance or worsening of a pre-existing condition (Lang, 2001). In a six-year follow-up of a longitudinal study, 23% of participants

( $N = 112$ ), age 55 or older continued to meet criteria for an anxiety disorder with 46% suffering from sub-clinical symptoms (Schuurmans et al., 2005).

Living with an anxiety disorder at any age impairs functioning and optimal living. Even worse however, is the prospect that without intervention a very sad trajectory is projected for children and young people experiencing symptoms of anxiety. If anxiety is not treated, not only is child development jeopardized but there are well-established risks of developing further serious complications in adulthood as a result. Substance abuse disorders have been found to be associated with having an anxiety disorder (Le Fauve et al., 2004). These authors have suggested a self-medicating model, where alcohol and other substances are used to reduce stress; however, this stress-induced drinking serves to maintain drinking behaviour and leads to alcohol abuse. Anxiety plays such a central role in substance abuse disorders that the authors propose that any effective treatment for substance abuse must address the underlying anxiety.

Wittchen et al. (2000) used baseline and follow-up data of a longitudinal general population survey of German adolescents and young adults, aged 14 – 24 years to look at the relationship between anxiety and depression. They were interested in the rates of anxiety and depression amongst the different age groups and sought to elucidate whether anxiety and depression were found to be comorbid disorders or whether there was a temporal factor in the emergence of the two mental health disorders. Their research showed that the age of onset for anxiety was earlier than that of depression and that, “depending on the type of primary anxiety disorder, the risk for onset of secondary depression in the course of our study was increased two- to fourfold above the risk expected for subjects with no previous history of anxiety disorders” (p. 22).

Perhaps most concerning is the relationship between anxiety and suicide that is also being investigated in the literature. In 1999 Pawlak et al. conducted a small ( $N = 80$ )



preliminary study investigating whether anxiety disorders in psychiatric outpatient young women (ages 15 – 20) were related to suicide attempts. They did not find a significant difference in rates of anxiety between the young women with a history of attempted suicide and those who had not attempted suicide, although the rates of anxiety were quite high for both groups, 65% and 60% respectively. Pawlak and colleagues did, however find that when comorbid with depression, the presence of anxiety put them at greater risk for committing suicide, 95% of the young women who had tried to end their life were experiencing symptoms of anxiety in addition to depression at the time of the suicide attempt.

Two large scale epidemiological studies have also demonstrated the connection between anxiety and suicide attempts in youth ages nine to sixteen (Foley, Golston, Costello, & Angold, 2006) and in an adult population, 18 - 65 years (Sareen et al., 2005). Foley et al. (2006), as part of the Great Smoky Mountain Study (GSMS), analysed data from the first eight waves of the GSMS that was collected from 1420 nine to sixteen year olds, resulting in 6670 records. They interviewed both parents and children and looked at whether having a psychiatric disorder or symptoms of a psychiatric disorder at sub-clinical levels was a risk factor for wanting to die, suicide ideation, suicide plans or suicide attempts. Foley's team found that indeed having an anxiety disorder significantly increased the risk of suicidality. Sareen et al. (2005) examined the possibility of anxiety disorders predicting suicidal behaviour in a population-based sample of 4796 adults ages 18 – 65 at baseline and then at a one year and three year follow up. They too found that the presence of an anxiety disorder was significantly related to either suicide ideation or suicide attempts. The imperative to treat anxiety when it first emerges in childhood is obvious. However, building a sound empirically based understanding of the development of this disorder will help researchers and clinicians alike to provide for the creation of appropriate

interventions. In an effort to provide some clarity, a review of the relevant research in the area of the aetiology of childhood anxiety is provided.

### *Aetiology of childhood anxiety*

A number of authors have put forth models attempting to explain the aetiology of childhood anxiety (Albano, Chorpita, & Barlow, 2003; Bogels & Brechman-Toussaint, 2006; Ginsburg & Schlossberg, 2002; Manassis et al., 2004). Although they differ slightly in how they organize their models, in essence they all propose that the development of childhood anxiety is a result of both biological and environmental factors.

The biological component of the development of childhood anxiety is from family and twin research and has suggested that there is a general risk factor for anxiety that is based on genetics (Manassis et al., 2004). In fact, this biological or heritable transmission has been found to account on average for about one-third of the variance in anxiety measures (Albano et al., 2003). The incidence of anxiety disorders occurring within families is well established in the literature. In top-down studies looking at children of anxious parents such as Beidel and Turner, (1997), 129 children of anxiety disordered, depressed and comorbid anxiety/depressed parents were studied in comparison with non-clinical controls. The intent of the study was to look at the pervasiveness of anxiety disorders in children of parents with an anxiety disorder. They found that children of parents with either an anxiety disorder and/or depression were found to also have an anxiety disorder (36%), depression (38%) or comorbid anxiety/depression (45%). Furthermore, 33% of children whose parent had anxiety only were found to suffer from an anxiety disorder when compared to nonanxious controls, indicating that children of parents with an anxiety disorder were 5.4 times more likely to suffer from anxiety than children whose parent did not. Similarly, in a study of the conditioning effects of parenting behaviours of anxious parents, Turner et al. (2003) found that the percentage of children with some form of clinical

diagnosis was 40% if their parents had an anxiety disorder compared to 15% of the children of non-clinical control parents. And 23% of children with anxious parents had an anxiety disorder as compared to only 4% of children of non-clinical control parents. Finally, Spence, Najman, Bor, O'Callaghan, and Williams (2002) reported confirmatory findings from their 14 year longitudinal community study of 4434 families who were followed from infancy to adolescence. Amongst the many variables they studied, they found that at age five, 25% of children whose mothers were experiencing anxiety or depression were reported to score in the top 10% for anxiety and depression. By age 14, the percentage of children scoring in the top 10% for anxiety and depression whose mothers were depressed and/or anxious rose to 30%. Bottom-up research has found that when parents of children with anxiety disorders are studied, up to 80% of the parents are found to have anxiety disorders as well (Ginsburg & Schlossberg, 2002).

Temperament has also been found to be a natural or biological factor in the development of anxiety disorders. The two areas of research that have contributed to this have been Kagan's (1997) work on behavioural inhibition and Clark and Watson's (1991) tripartite model of emotion and its relationship to childhood anxiety and depression. Although Kagan's work was initially focused on temperamental differences in infants, as anxiety disorders research began to focus on children it became clear that there were similarities between inhibited and anxious children with studies finding that there was a greater prevalence of anxiety disorders found in inhibited than in non-inhibited children (Biederman et al., 1993). This has lead researchers to believe that the presence of a temperamental style of behavioural inhibition is also a familial vulnerability in the development of childhood anxiety.

Clark and Watson's (1991) tripartite model, while originally conceptualized based on adults, has been supported in research applying the model to children (Chorpita, 2002; Lonigan, Phillips, & Hooe, 2003). The tripartite model suggests that there are three factors that account

for the symptoms of anxiety and depression: Positive Affect (PA), Negative Affect (NA) and Physiological Hyperarousal (PH). According to this model, low PA is associated with depression; the presence of PH is a characteristic found in anxiety disorders and NA is a common factor related to both depression and anxiety. Albano et al. (2003) summarized the role of temperament in the aetiology of childhood anxiety:

Overall, the collective work in the area of temperament, affect, and anxiety continues to speak to the idea that negative emotions are characterized by a single temperamental risk factor, with some additional evidence that other factors may play an important role. (p. 311)

In trying to understand the development of childhood anxiety, researchers have uncovered a number of familial factors that contribute to the environmental side of the paradigm in the aetiology of childhood anxiety disorders. While the most significant variables will be discussed individually, it is important to note that it is not yet clear how the various factors interact, relate, or influence one another. Furthermore the mechanisms of transmission and the direction of effect are also under a great deal of investigation, without conclusive findings at this time. What follows then is a snapshot of the literature to date in this expanding field of inquiry into the family factors associated with the development of childhood anxiety.

Cognitions and beliefs that parents have about their children, and in particular about their children's anxiety are alleged to influence parenting behaviours (Bogels & Brechman-Toussaint, 2006). For example, one longitudinal study Rubin, Nelson, Hastings, and Asendorpf (1999), looked at whether children with behavioural inhibition (or who were "shy"), affected parenting behaviours, in particular to what degree the parents encouraged independence at age two and again at age four. In earlier research, Rubin and colleagues had found that behavioural inhibition in young children brought out parental responses of overprotectiveness and overcontrol. From their 1999 study, Rubin's team confirmed earlier findings. Parents who perceived their child as being shy, regardless of observed inhibited behaviour, at age two were less likely to encourage

independence at age four, in fact “their preference for socialization strategies...could best be construed as limiting children’s opportunities for developing an independent self” (p. 952). This study is important because of the relationship between behavioural inhibition and anxiety found in previous research (Biederman et al. 1993). It supports the theory that parents’ perception of their child affects their parenting behaviours, in particular the development of independence.

Barrett, Rapee, Dadds, and Ryan (1996) looked at how anxious children (ages 7 – 14) and their parents interpreted ambiguous situations. They compared responses given from the children before and after discussing them with their parents. Barrett et al. (1996) found that compared to controls, both the anxious children and their parents reported more avoidant responses based on their interpretation of level of threat in the scenarios. Furthermore, after discussing ambiguous situations with their parents, children with anxiety disorders changed their responses from the prosocial responses they had provided before interacting with their parents to avoidant responses after discussing the situations with their parents. These findings were confirmed in a replication study (Shortt, Barrett, Dadds, & Fox, 2001) with 147 children (ages 6 - 14) and their parents who were interviewed separately on seven of the 12 ambiguous situations used in Barrett’s 1996 study. The family was then asked to discuss two of the seven situations together – one related to potential social threat and the other related to potential physical threat. The number of threat interpretations and avoidance, aggressive or proactive solutions was recorded. In both situations children and mothers from the clinically anxious group ( $N = 101$ ) reported more threatening interpretations and greater avoidant and aggressive solutions than the nonclinical control group ( $N = 23$ ). Another important difference found was that mothers of children in the anxious group reported statistically significant higher scores on the anxiety measure (Depression Anxiety and Stress Scale) than those in the nonclinical control (Anxious  $M = 13.57$ ,  $SD = 10.16$ ; Control  $M = 7.29$ ,  $SD = 8.20$ ).

The conclusion drawn from this line of research is that children's avoidant cognitions related to anxiety are maintained and or enhanced because of the influence of their parents' anxious cognitions and responses. Although the parent's anxiety was measured, the direction of effect was not addressed. Questions remain about the effect and direction of parenting beliefs and behaviour. Do the parental beliefs about the child's anxiety cause parents to offer a greater interpretation of threat and therefore increased avoidant strategies to ambiguity? And do parents' own anxious cognitions influence their interpretation of threat and avoidant practices that are then modeled and transmitted to the child?

Specific parenting behaviours that lead to the development and/or maintenance of childhood anxiety disorders have received a great deal of attention in the research. A number of prevailing variables that fall under this category have been investigated and are relevant to this research such as the role of parental overcontrol; negativity and criticism; and of particular importance, the modelling of anxiety related coping behaviour (Wood, McLeod, Sigman, Hwang, & Chu, 2003).

In the literature, overcontrol has been defined as parents using intrusive behaviour, granting minimal autonomy to their child, constraining a child's individuality, using excessive commands or instructions, and restricting a child's behaviour during a task (Ginsburg & Schlossberg, 2002). The contribution of parental overcontrol to the development of childhood anxiety is the assumption that it limits the development of children's autonomy, leading to the perception of their environment as being uncontrollable, creating a limited sense of personal competence or mastery (Bogels & Brechman-Toussaint, 2006).

Hudson and Rapee (2001) used an observational design to observe the interactions between clinically anxious children and their mothers during a stressful situation. The goal was to observe mother's level of control and negativity during a timed task deemed difficult for the

child and to investigate the effects of both the child's anxiety and the mother's anxiety on her level of involvement. They found that mothers of children with an anxiety disorder were more involved, intrusive and negative when compared to the nonclinical control children. Due to the cross-sectional nature of the study they could not predict causality, however the authors suggested that there is a reciprocal relationship between mother and child. Possibly due to the mother's own increased level of anxiety, or her desire to protect her child from distress, the mother's intrusive overinvolvement may deter the anxious child from interacting with difficult or stressful situations, preventing the child from confronting and overcoming situations of threat or danger.

In a subsequent study involving clinic referred children with anxiety disorders and their nonanxious siblings (Hudson & Rapee, 2002), no difference was found in the high level of overcontrol and overinvolvement of the mother in her interaction with both children. However, when compared to the level of involvement of mothers and their children in the control group (non-clinic referred children) statistically significant differences were found. Similar to the 2001 study, the mothers of clinically anxious children were found to have only slightly higher (but not statistically significant) levels of self-reported anxiety symptoms. In both cases, Hudson and Rapee suggest that this is the result of mothers underreporting their anxiety. To support their claim they highlight the fact that in the 2002 study, 30% of the nonclinically anxious siblings were found to have subclinical levels of anxiety suggesting that the presence of anxiety in the children may be related to the mother's anxiety. They continue by suggesting that the mother's pathology is a greater contributing factor to her overinvolved and intrusive parenting behaviours than the child's level of anxiety. Verifying the mother's diagnosis of anxiety, rather than relying solely on self-report measures, would add considerably to future studies in this area.

Parental negativity is defined as a lack of warmth and acceptance in the family and is experienced by the child in the form of criticism or rejection. Frequent and harsh negativity and rejection is believed to contribute to the development of childhood anxiety by affecting children's perceptions of the environment as being threatening or antagonistic and viewing themselves as less than competent to deal with it, anticipating a negative outcome when interacting with their surroundings (Bogels & Brechman-Toussaint, 2006). Hudson and Rapee (2001) found that mothers of clinically anxious children were significantly less positive and encouraging, therefore more negative of their children in their interactions over a difficult task than non-clinical controls. However, due to inconsistent results in other research, it has been suggested that the presence of parental negativity and criticism alone does not impact the development of childhood anxiety as much as overcontrol or overinvolvement or a combination of parental negativity and over-control (Bogels & Brechman-Toussaint, 2006).

The final environmental variable leading to development of childhood anxiety that will be discussed is the role of parents' modelling of anxious coping behaviours. Although it is established that anxiety runs in families, how it is transmitted is not understood. A number of studies have found that parents of anxious children modelled particular behaviours that were suggested to either lead to the development and/or maintenance of anxiety disorders in their children. Dadds, Barrett, Rapee, and Ryan (1996) compared how anxious and nonanxious children assessed and responded to hypothetical ambiguous situations independently, and if there were changes in their responses after they discussed the same situations with their parents. They observed 66 anxiety disordered children, (ages 7 - 14) in their interpretation and response to an ambiguous situation and rated their responses as prosocial or avoidant. After allowing the parents and child to discuss the situation for 5 minutes, they asked the child to again give their interpretation and response to the situation. They found that parents of the anxious group



modelled anxiety by demonstrating avoidance and anxious behaviours in their child's presence. This group also reinforced avoidant behaviour by paying attention to, agreeing with, tolerating and/or reciprocating their child's anxious avoidant interpretations and responses when compared to parents of nonanxious children. In contrast, parents of nonanxious children listened to their children more and agreed with prosocial responses, increasing greater autonomy of thought and action. Two other related studies Moore, Whaley, and Sigman (2004) and Whaley, Pinto, and Sigman (1999) observed maternal coping strategies and their effects on anxious children. Both found that anxious mothers modelled catastrophic thinking such as predicting calamitous outcomes in their conversations with their children significantly more than nonanxious control mothers. It was found that anxious mothers were more likely to have clinically anxious children, perhaps in part due to the modelling and subsequent imitating of this fearful cognitive style.

#### *Parent management programs*

Parent management training (PMT) programs have been researched for the past 20 years (Maughan, Christiansen, Jenson, Olympia, & Clark, 2005) and are now recognized as a crucial part of successfully treating problematic behaviours in general such as tantrums, verbal aggression, thumb-sucking, enuresis, hyperactivity, (Barlow & Stewart-Brown, 2000), externalizing disorders such as attention-deficit/hyperactivity disorder, (Chronis, Chacko, Fabiano, Wymbs, & Pelham, 2004), oppositional defiant disorder, (Webster-Stratton, Reid, & Hammond, 2004) and conduct disorder (Gross & Grady, 2002).

Theoretically, PMT programs have been broadly based on a range of theories that fall into two general categories: behavioural, largely based on cognitive-behavioural therapy and social learning theory; and relational, based on a combination of attachment theory, humanistic, Adlerian, psychodynamic, or family systems theory (Barlow & Stewart-Brown, 2000). The

relationally based programs tend to be used to teach general parenting skills such as the Adlerian based Systematic Training for Effective Parenting (STEP, Dinkmeyer & McKay, 1976). The programs focusing on specific issues such as behavioural problems and externalizing disorders tend to be drawn from the behavioural type.

The behaviourally focused PMT programs combine behaviour modification and social learning theory to help parents learn skills to manage better their child's difficult behaviours, although improving the parent-child relationship is also a recognized goal (Golding, 2000). While there is variation depending on the program, generally better child behaviour is accomplished by teaching parents, what noted child behaviour expert Kazdin (1997) refers to as the ABC's of parenting: antecedents, behaviours and consequences. Antecedents are the situations and stimuli that take place before a behaviour occurs and can be used to promote and facilitate the sought behaviour. Behaviours are the desired, prosocial behaviours that are taught and expected. Consequences refer to the possible outcomes that can follow a behaviour with the goal of extinguishing the negative behaviour and fostering a more positive behaviour. The general goal is to help parents interact with their children more successfully. This is achieved by teaching parents about the importance of play; how to use praise and reward for desired behaviour; effective limit setting; and handling undesired behaviour through the use of ignoring and mild consequences. Behavioural parent management programs are thought to improve relationships within the family and increase parent-child warmth (Cartwright-Hatton et al., 2005).

There has been success in the use of PMT because of the connection, well established in the literature, between parent practices and the resulting behaviour exhibited in children (Morrissey-Kane & Prinz, 1999; Snyder, Cramer, Afsar, & Patterson, 2005; Webster-Stratton et al., 2004). From the success of PMT programs for externalizing disorders, Cartwright-

Hatton et al. (2005) found that in addition to the externalizing behaviour improving, parents often anecdotally reported that internalizing symptoms improved serendipitously as well. In their review of the literature they were not able to find research on PMT programs designed specifically for treating internalizing disorders in children, therefore they developed a program based on the well-researched and effective model for externalizing behaviour problems in young children developed by Webster-Stratton (1990). Cartwright-Hatton et al. (2005) hypothesized that if they taught families effective parents skills, their children's internalizing problems would be reduced in addition to the expected reduction in external behaviour problems. This hypothesis was confirmed; both internalizing and externalizing symptoms were reduced to a significant degree. As a result of their research Cartwright-Hatton and colleagues suggest that PMT programs be developed that specifically address parenting issues associated with children's internalizing problems. Given the growing findings on the aetiology of childhood anxiety and the connections with parenting issues, this is an important area of research to be further developed.

#### *Treatment of childhood anxiety*

Cognitive-behavioural therapy (CBT) has been well established in the evidence based literature as the treatment of choice for children with anxiety disorders (Compton et al., 2004), significantly reducing anxiety in 50 – 80% of children (Ginsburg & Schlossberg, 2002). The common components of CBT are cognitive restructuring where children are taught how their thoughts affect their feelings and behaviour. CBT teaches children how to challenge anxious or negative thoughts and to replace them with more realistic and helpful ones. A key ingredient is the use of graded exposure where threatening situations are broken down into small steps so children are able to achieve mastery over a feared situation one step at a time. In a desire to increase its efficacy, researchers have investigated various aspects of the use of CBT with

children, for instance, looking at the differential outcomes of individual CBT versus group CBT, finding support for delivering CBT by group format (Manassis et al., 2002). Recently, due in part to the familial origins of anxiety that have emerged from aetiological research, more attention has been focused on how the involvement of family in treatment could lead to improved outcomes for anxious children. In their article on the future of research and practice related to childhood anxiety, Kendall and Ollendick (2004) raised some pertinent concerns about how best to involve parents in treating childhood anxiety,

Do we prefer to have parents as “consultants” on their child’s treatment, “collaborators” in the treatment or “co-clients” receiving treatment? And, separate from our preferences, which approach is optimal, based on the research literature, for the outcomes of anxious youth? To the degree that the parenting behaviour that maintains anxiety is addressed and corrected, then the inclusion of parents in sessions would seem advantageous. (p. 70)

Various studies have compared CBT with a family component (FCBT) and child only CBT (CCBT) against control groups (usually waitlist) with significant success in reducing child anxiety for both types of CBT treatment groups (Barrett, 1998; Barrett et al., 1996; Cobham et al., 1998; Manassis et al., 2002; Mendlowitz et al., 1999; Nauta, Scholing, Emmelkamp, & Minderaa, 2001; Nauta, Scholing, Emmelkamp, & Minderaa, 2003; Spence et al., 2000; Wood et al., 2006). While many of the studies did find positive results favouring the FCBT, they did not find a significant difference between the gains reported from the CCBT and FCBT groups. While these groups were similar in their inclusion of a parent treatment component, the way in which parents were involved varied significantly, creating difficulties in making generalizations about the effectiveness of including the parent treatment factor. For instance, Manassis et al. (2002) and Mendlowitz et al. (1999) combined parents with children in their treatment groups; whereas Barrett (1998), Nauta et al. (2003) and Spence et al. (2000) had the parents and children treated separately. Furthermore, the materials and duration of the parent programs differed, ranging from basic psychoeducational presentations to general parent management training to

cognitive restructuring training. The programs also differed in length from 2 – 12 sessions with boosters and follow-ups. What the studies did have in common was that the parent training components, although often CBT-based, were not specifically designed to ‘treat’ the possible parental factors that research has shown to contribute to the development of childhood anxiety, nor were measurements of parent anxiety included in the studies.

In contrast to the studies that did not find significant differences between FCBT and CCBT, three of the comparative studies did find FCBT to be superior to CCBT (Barrett et al., 1996; Cobham et al., 1998; Wood et al., 2006). One of the major differences in these three studies is that they directly addressed parental behaviours hypothesized as associated with parent anxiety. Barrett et al. and Cobham et al. both included parent anxiety management training as part of their treatment and Wood et al. included a component in their treatment addressing parent overcontrol and overinvolvement. At the end of treatment Barrett and colleagues found that of the 79 children (aged 7 – 14 years), 84% in the FCBT treatment group ( $n = 25$ ) no longer met a DSM-III-R diagnostic criteria for anxiety as compared with the 57% of CCBT group ( $n = 28$ ). These outcomes were maintained at 6-month (84% versus 71%) and 12-month (96% versus 70%) follow-up. In their six-year follow-up study Barrett, Duffy, Dadds, and Rapee (2001) the diagnostic status for 49 of the original participating children were analysed. While both groups maintained high degrees of being free of an anxiety diagnosis, 86% of the CCBT group and 86% of the FCBT, the previously seen differences between groups were wiped out.

Cobham et al. (1998) looked more specifically at the impact that parent anxiety had in the difference in child outcomes and whether FCBT benefited all families regardless of psychopathology in parent and child. Although both treatment groups improved, the authors did not find a significant difference between children whose parents did not have anxiety in the

CCBT and FCBT (82% versus 80%), however children whose parents had anxiety did poorly in the CCBT treatment when compared to the FCBT treatment group (39% versus 77%) and again these gains were maintained at 6- and 12-month follow up. This study certainly points towards the effectiveness, if not necessity of treating parent anxiety in order to treat childhood anxiety most effectively. It would appear that these studies were successful in addressing Kendall and Ollendick's (2004) assertion that in order to be effective, parent involvement in treating child anxiety must directly address problematic issues associated with the parents themselves.

Furthering this parental involvement line of research, three recent studies have focused their treatment of childhood anxiety on parent issues related to anxiety by working either largely or exclusively with the parents and have found significant positive gains in levels of children's anxiety (Bogels & Siqueland, 2006; Cartwright-Hatton et al., 2005; Thienemann et al., 2006). Bogels and Siqueland, designed an innovative FCBT program to address the reasons they believed previous studies including FCBT found inconsistent results. They suggested that previous research had underestimated the impact of parent involvement in a number of ways. Most studies were based on children recruited from advertisements or from families attending a university clinic and therefore would represent a different population from community mental health referrals. Most studies on FCBT have been studied largely with respect to the child variables and not as much with the family variables such as dysfunctional parental thinking, child-rearing, family environment and parental pathology. Previous studies involving families had spent a majority of the sessions only or primarily focused on the child. They asserted that an effective FCBT treatment would have a greater focus on working with and through the parents by teaching them how to manage and deal with anxiety and then have them model and coach their child to do the same as well as modifying dysfunctional parental beliefs. Finally, the authors suggested that involving siblings could increase the success of the family component.

The outcome of their study was positive. Statistically significant reductions on measures of child anxiety and dysfunctional thinking were reported at post-treatment and increased at both the 3-month and 12-month follow up and with high effect sizes ( $d$ ) ranging from 0.5 – 1.5. Both mother and fathers reported statistically significantly reduced anxiety symptoms ( $d = 1.0$  for both parents) and dysfunctional beliefs ( $d = 1.5$  for fathers,  $d = 1.9$  for mothers). Parental rearing and family functioning also improved although not to a significant degree. At 12-month follow-up the authors found that the family improvement was maintained including child and parent anxiety levels, supporting their rationale that better outcomes over time would be achieved by facilitating change through the parents and family. Although only one session was spent with the child challenging negative thoughts, children's cognitive improvement was striking  $t(12) = 4.7, p < .05, d = 1.3$ . The authors suggest that this may have been because parents were coaching their children in challenging dysfunctional thoughts after the treatment was finished which seemed to show that the program was “successful in empowering and educating parents to facilitate the necessary changes in their anxious child” (p. 135). Finally, the study was successful in changing parental dysfunctional beliefs about their child's anxiety and their role as parents that in previous studies have been assumed to hinder the progress of a child's treatment.

In their extensive experience with the success of behavioural parent skills training for children with externalizing behaviour problems, Cartwright-Hatton et al. (2005) found that parents often commented on improvements in their child's self-esteem and confidence. Cartwright-Hatton's team implemented an eight session parent training course based on a program developed by Webster-Stratton (1990) that has been highly successful in treating behaviour problems in children. In their study, they measured changes in parent report of internalizing symptoms and behaviours (anxiety, depression, withdrawal and somatic

symptoms) as well as problematic externalizing behaviours. They found that the parent report of their child's internalizing and externalizing symptoms reduced significantly from pre to post-test, (externalizing  $F(1,42) = 56.2, p < .001, d = 0.41$ ; internalizing  $F(1,42) = 38.7, p < .001, d = 0.44$ ) and that the gains were maintained after six months. This change in parent report of child internalizing behaviours and symptoms from a parent only treatment is noteworthy especially due to the fact that the program they offered was not designed with internalizing problems as its target but was an unmodified behavioural parent skills training program. They concluded that if success in reducing children's internalizing problems was achieved with a parent training program based on externalizing problems, how much more effective would parent training programs be if they were designed with the goal of addressing internalizing disorders?

Lastly, Thienemann et al. (2006) conducted a pilot study that was the first group intervention for treating childhood anxiety that only involved parents, in this case mothers ( $N = 24$ ). They hypothesized that the children's anxiety symptoms would decrease as mothers learned how to manage their own anxiety and that maternal anxiety would affect the treatment outcome for the child. Children and mothers completed self-report anxiety measures, mothers reported on their children and both the children and their mothers were assessed for anxiety using diagnostic interviews at intake and posttreatment. The outcome confirmed their hypotheses with 25% of primary anxiety diagnosis and 55% for all anxiety diagnosis for the children's being fully remitted. The mean number of children's anxiety disorders dropped from 3.42 to 1.54. Although children's anxiety diagnosis improved overall, only the children of anxious mothers reported a significant improvement. The improvement of children of nonanxious mothers did not reach significance. These results were similar to the findings of Cobham et al. (1998), confirming that treatment outcomes for childhood anxiety are markedly improved when anxious parents learn how to address their own anxiety. Thienemann and



colleagues found that assessing parent anxiety would be necessary early in the treatment of childhood anxiety disorders to determine the level of parent involvement needed.

As greater research into the treatment of childhood anxiety is conducted, an evolution of sorts is taking place, one that is shifting the focus of where the most effective place to start treatment begins. Treatment of anxiety in children began by focusing on the child alone with individual CBT, and then the benefits of group CBT became evident and were developed. More recently research into the involvement of the parents and the family system has been garnering strong empirical support as the most effective way to treat childhood anxiety. As researchers widen their perspective, another emerging area under investigation is the merit of approaching childhood anxiety through a preventative and universal perspective.

*Universal prevention and treatment: The FRIENDS for Life program*

Given that the average age of onset for anxiety is in childhood and that children spend 187 days (VSB, 2008) or 53% of the year in school, it makes sense that in taking a universal and preventative approach, schools would be a logical place to deliver anxiety prevention programs. The FRIENDS for Life program (Barrett, 2004) is an empirically validated prevention program delivered in classrooms by teachers to Grade 4 and 5 students. It includes a number of program components found to be effective in the treatment of childhood anxiety; it is a group based CBT program that includes a parent training component. It consists of 10 one-hour long sessions that are delivered weekly with two booster sessions that follow-up at one and three months. The content is consistent with CBT based programs focusing on cognitive restructuring and graded exposure as well as teaching relaxation techniques; it involves individual written reflection, group discussion and interaction as well as homework. The two-session parent training component is run separately from the child program and provides psychoeducation on childhood

anxiety, an overview of the content FRIENDS program, and a review of the basic skills taught in the program.

The FRIENDS program delivered in universal settings (e.g., class-wide) has several advantages, including accessibility. Children do not have to be screened or segregated in order to teach anti-anxiety skills. Those children who are at risk for anxiety but may never seek treatment can be reached. Additionally it is preventative because all children are taught skills that can enhance their resiliency against anxiety disorders regardless of their level of risk. Because it is delivered in the classroom in a group setting, peer support and reinforcement through modelling are available. The program can also be integrated into the ethos of the classroom (McLoone, Hudson, & Rapee, 2006).

The FRIENDS program has been researched in a universal, school setting ( $N = 594$ ) and when compared to a control group it was found that all children in the FRIENDS group, regardless of anxiety levels pretreatment reported fewer anxiety symptoms after participating in the program. Seventy-five percent of children who had clinical levels of anxiety before the FRIENDS program reported a drop in anxiety symptoms to subclinical levels after the program, a significant difference when compared to the 45.2% in the control group (Lowry-Webster et al., 2001). These gains were maintained at 12-month follow-up with 85% of children who had participated in the FRIENDS program remaining free of anxiety diagnosis compared to only 31.2% of children in the control group (Lowry-Webster et al., 2003). The FRIENDS program in this study did include a three session parent program but it was not reported in the research.

Bernstein, Layne, Egan, and Tennison (2005) tested the FRIENDS program in a school setting, investigating the effects of adding the parent training component to the group CBT program. The targeted intervention included children ( $N = 61$ ) who satisfied DSM-IV criteria for an anxiety disorder and their parents, placing them into the following groups: group CBT ( $n$

= 17), group CBT plus parent training component ( $n = 20$ ), and wait-list control ( $n = 24$ ). The two treatment groups (smaller groups of 8 – 10 children) met in classrooms in different schools after school hours and the parent and child groups were run separately but simultaneously. The parent training component was enhanced significantly from the original FRIENDS program of four 80-minute sessions to become nine 60-minute sessions to parallel the time frame of their child's sessions. Additional in-session and between-session activities and handouts were developed to address parent anxiety and stress management, promote understanding of a child's anxiety in the context of his/her familial relationships, help parents identify ways that the family system has been affected by their child's anxiety, and teach parents how to use behavioural contracting. At posttreatment both the child-only FRIENDS group and the child plus parent training FRIENDS group were more effective in decreasing child anxiety levels than the control. Although there were some discrepancies between measures, they found that the group CBT with parent training resulted in beneficial outcomes for the child.

The FRIENDS program has also been researched specifically with regards to the effectiveness of the parent training component. The Shortt, Barrett, and Fox (2001) study was the first randomized clinical trial investigating the FRIENDS program using a group, family based approach. It involved 71 anxious children (6.5 – 10 years) and their parents. Fifty-four children and parents participated in the FRIENDS program and 17 were wait-list controlled. The FRIENDS program consisted of the ten standard child sessions with the original four, two-hour parent sessions divided into ten, 40 minute sessions run concurrent to the child sessions. Families spent the first ten minutes together reviewing homework and the last five minutes together establishing goals and homework for the week. At posttreatment, 69% children in group family based FRIENDS program were diagnosis free, compared to only 6% of WL

control, a statistically significant difference. At 12-month follow-up 68% of children from the treatment group who responded ( $n = 48$ ) remained diagnosis free.

These studies on the FRIENDS program that have included the parent component have supported the effectiveness of this universal approach. However, there are aspects of each of the studies mentioned above that make it difficult to generalize the findings to the context and conditions for which the program is intended. While the programs were offered in universal and targeted format for school children and their families, results from the parenting program need careful consideration. Of the three studies reporting using the parent training component, one program did not report any results of the parent component (Lowry-Webster et al., 2003). Two studies altered the original four session (two-hour) parent program. Shortt, Barrett, and Fox (2001) changed the parent program to become ten 40 minute sessions, adding a joint parent-child component and Bernstein et al. (2005) changed it significantly to nine one-hour long sessions with extra material given during and between sessions. Thus, no study has investigated a universal approach to the FRIENDS parent training component.

#### *Importance of current research*

The FRIENDS parent program has not been evaluated in a preventive, universal public school setting. The current study focused on the parent training component of the FRIENDS program as it was designed to be delivered: with two parent training sessions offered separately from the child part of the program run in classrooms and facilitated by people from within the community (school or community counsellors or trained parents).

#### *Conclusion*

This review of the literature has highlighted a number of important issues related to childhood anxiety such as the prevalence and aetiology of childhood anxiety. The familial connections found from the aetiological research have led researchers to find more effective

means of treating anxiety disordered children by addressing these family related matters. The FRIENDS for Life program is one such program that can be implemented as universal, preventative and includes the parents. The FRIENDS program is currently run in schools all across British Columbia and is supported and funded by the Ministry of Child and Family Development (MCFD). The parent program is also funded by MCFD and is offered in 15 different school districts each year. Given the program's intentions and the public funding it receives, it is necessary to investigate the effectiveness of the parent component of FRIENDS. Educators, researchers and policy makers need to be confident that the parent component of the FRIENDS program is helping to accomplish the goals of reducing childhood anxiety. The FRIENDS Parent Project seeks to add to the research base that will help to determine the optimal method of treating and ideally preventing childhood anxiety.

## Chapter 3: Methods

### *Introduction*

The current literature in the area of treatment and prevention of childhood anxiety and in particular the involvement of parents was reviewed in the previous chapter. This chapter includes a description of the methods employed to gather and analyse the data for this research. The study design, participants, instruments, procedure and statistical analyses used are discussed.

### *Study design*

This study was approved by the University of British Columbia Behavioural Research Ethics Board on September 13, 2006 (Appendix A). The present study employed a quasi-experimental non-equivalent groups design (Dawson, 1997), where non-randomized convenience sampling was used to form an intervention group and a non-intervention control group. This research investigated whether the FRIENDS (Barrett, 2004) parent training program was effective in reducing parent anxiety. The intervention and control groups answered four questionnaires on the topic of anxiety pre- and postintervention: the Anxiety Sensitivity Index (ASI; Reiss et al., 1986), the Center for Epidemiological Studies-Depression (CES-D; Radloff, 1977), the Penn State Worry Questionnaire (PSWQ; Meyer et al., 1990), and the Screen for Child Anxiety Related Emotional Disorders (SCARED; Birmaher et al., 1999), (Appendices B, C, D, E, F, G).<sup>1</sup> In order to assess treatment satisfaction, parents who attended the parent training programs were also asked to complete a Program Evaluation Questionnaire (PEQ, Appendix H).

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<sup>1</sup> For a small subsample the Beck's Anxiety Inventory for Adults (BAI; Beck, Epstein, Brown, & Steer, 1988) was used in place of the PSWQ and the Multidimensional Anxiety Screen for Children-Parent version (MASC-R/parent; March, 2004) in place of the SCARED at preintervention. The reasons for this will be discussed in more detail in the measures section below.

### *Intervention*

The FRIENDS for Life parent training component is a psychoeducation program that occurs over two evenings, held four weeks apart. The two-hour sessions consisted of interactive power point presentations that included a general overview of childhood anxiety, a review of the topics that are taught to children in the FRIENDS for Life program, (FRIENDS is an acronym for the different skills taught in the program: F = feeling worried; R = relax and feel good; I = inner helpful thoughts; E = explore plans; N = nice work, reward yourself; D = don't forget to practice; and S = stay calm for life!) and a chance to learn and briefly practice some of the skills taught such as the role of thoughts affecting or controlling feelings and behaviour. All participating parents received the same power point presentation and in all but one of the five school districts, the same person delivered the parent training sessions. Program facilitators were given a Treatment Integrity Checklist (Appendix I) to complete to ensure the consistency of the parent programs.

### *Participants*

Participants were recruited from 5 diverse school districts in BC ranging from the urban Lower Mainland to the rural northern part of the province. These districts were recommended by Dr. Lynn Miller, Assistant Professor, UBC and lead FRIENDS Trainer; together with the MCFD manager of the FRIENDS program. Initial contact with the district was made via the FRIENDS district liaison, a school board employee responsible for administering the FRIENDS program in their district. An initial recruitment letter was sent to the district liaisons (Appendix J). If the district liaison expressed interest in the project, further documents describing the research project and outlining the benefits and responsibilities of being involved were sent (Appendices K, L). School district approval was requested and granted from the superintendent or designate of each school board (Appendices M, N, O, P, Q). The district liaison was

responsible for recruiting teachers in their district to participate in the current study by personal contact, inter-district mail, fax and e-mail contact. In two districts teachers of individual schools were contacted and faxed or e-mailed letters of invitation to be involved in the research project (Appendix R). Thirty-three teachers who were running the FRIENDS program in their classroom agreed to be involved in this project. Teachers were sent packages to send home with parents, accompanied by a thank-you letter (Appendix S). These packages containing the letter of invitation and consent (Appendix T), a demographic questionnaire (Appendix U) and the measures were sent home with the children in these classes to their parents along with an envelope to return all paperwork confidentially. In each district the class that brought back the most envelopes received a pizza party lunch. There was an option on the consent for parents to simply indicate that they were not interested so that every child could potentially return an envelope. Parents were also informed that if they participated in the research by completing both the pre- and postintervention questionnaires their names would be entered into a draw for a \$50 gift certificate. In total 799 packages were sent home to parents of children receiving the FRIENDS program in the participating districts, inviting them to participate in the FRIENDS Parent Project. From this initial invitation, 235 parents returned consents and measures. Teachers were provided gift bags to collect the returned sealed envelopes from the children. The district liaison collected the sealed envelopes and couriered to UBC where they were stored in a locked filing cabinet. After the FRIENDS Parent Program was completed the postintervention measures, with return envelopes, were sent home via the children of the 235 parents who had completed the preintervention measures. Parents who had attended the parent training program were also sent the Program Evaluation Questionnaire. Again, classroom teachers collected the sealed envelopes, the district liaison picked them up from the teachers and



couriered them to UBC. Teachers were sent thank-you letters and a coffee card upon receipt of the envelopes to UBC (Appendix V).

Demographic information for the 235 parents who participated in the study is presented in Table 1 below. The gender of the child participating in the classroom-based FRIENDS

Table 1: Demographic characteristics: Preintervention only, intervention and control ( $N = 235$ )

Variable	Preintervention only ( $n = 113$ )	Intervention ( $n = 20$ )	Control ( $n = 120$ )
Gender of Child in FRIENDS			
Female	65	7	54
Male	48	13	48
Parent relationship to Child			
Mother	94	18	94
Father	14	2	7
Other <sup>a</sup>	4	0	0
Parent's Marital Status			
Married	77	16	84
Common-law	17	3	9
Separated/Divorced	13	1	7
Single	6	0	2
Age range in Years			
20-30	13	1	11
31-40	67	11	63
41-50	30	8	26
51-60	3	0	2
Parent's Education Level			
No high school diploma	10	1	8
High school diploma	24	5	24
Post secondary training <sup>b</sup>	56	5	42
University degree	23	9	28
Dominant language spoken at home			
English	105	16	91
Punjabi	-	-	5
Korean	2	-	2
Other	6 <sup>c</sup>	3 <sup>d</sup>	3 <sup>e</sup>
Mean Family Income <sup>f</sup>	\$69,542	\$72,104	\$69,982

Notes: <sup>a</sup> Other relative or nonrelative, included foster mother, grandmother, guardian and home stay parent.

<sup>b</sup> Community college, vocational or technical training diploma or certificate. <sup>c</sup> Russian, Vietnamese, German,

Croatian, Mandarin, Polish. <sup>d</sup> Vietnamese, Punjabi, Cantonese. <sup>e</sup> Russian, Vietnamese, Spanish. <sup>f</sup> Median income in 2005, (SC, 2006).

program for the 235 parents was 54% (126) girls. Eighty seven percent (206) of the 235 parents were mothers of the child in the FRIENDS program. Eighty seven percent (206) of parents reported their marital status as married or common-law; 60% (141) reported their age as being in the 31 - 40 year age range and 44% (103) had community college or technical training post secondary education. Cultural background was obtained by asking for the dominant language spoken in the home with English reported by 90% (212) and the median family income was \$70,543.

Of the 235 parents who completed the preintervention questionnaires 113 did not complete them at postintervention, forming the preintervention only group. In this group, 57% (65) were daughters of the participating parents; 83% (94) of the parents were mothers; 83% (94) were married or in a common-law relationship and 59% (67) of the parents were between the ages of 31 and 40. Forty-nine percent (56) had community college or technical training post secondary education with 21% (24) reporting having obtained a high school diploma and 20% (23) a university degree. The dominant language spoken at home was reported as English for 93% (105) of the parents in this preintervention only group and the median family income was \$69,542.

The remaining 122 parents fully participated in the study by completing both the preintervention and postintervention measures. The gender of the children of this group was 50% (61) boys and girls. The majority of participants in this group were comprised of mothers 91% (112); and were either married or in a common-law relationship 91% (112). Sixty percent (74) were in the 31 – 40 age range, 39% (47) had community college or technical training post secondary education while a close 30% (37) had university degrees. English (89%, 107) was the most common dominant language spoken at home with the next dominant language (Punjabi) at 5% (6) and median family income (SC, 2009) was \$70,329. It is with this subset of 122 parents

that further analyses were conducted; 20 of which formed the intervention group by attending the FRIENDS for Life parent training program and completing the pre- and postintervention measures and 102 parents who did not participate in the parent training intervention.

### *Measures*

#### *Anxiety Sensitivity Index (ASI).*

The ASI (Reiss et al., 1986), is a 16-item questionnaire that measures fear of the symptoms of anxiety, in particular “the fear of anxiety-related bodily sensations, based on the beliefs that the sensations have harmful somatic, social, or psychological consequences” (Taylor & Cox, 1998, p. 37-38). Questions such as, “It scares me when my heart beats rapidly,” and “When I am nervous, I worry that I might be mentally ill,” are rated from 0 (Very little) to 4 (Very much) to reflect one's usual way of thinking and feeling. In keeping with previous research, ( $\alpha = 0.86$ , Schmidt & Joiner, 2002;  $\alpha = 0.80 - 0.90$ , Blais et al., 2001) the preintervention alpha in the current study was very high  $\alpha = 0.90$ .

#### *Center for Epidemiological Studies-Depression (CES-D).*

The CES-D (Radloff, 1977), is a 20-item non-clinical measure that assesses the frequency and duration of the symptoms associated with depression (e.g., depressed mood, feelings of guilt and worthlessness, feelings of helplessness and hopelessness, psychomotor retardation, loss of appetite, and sleep disturbance). Items such as, “I did not feel like eating; my appetite was poor,” and “I felt that everything I did was an effort” are rated on a four-point Likert-type scale ranging from 0 (Rarely or none of the time, less than one day) to 3 (Most or all of the time, 5-7 days) based on how often the participant felt in the past week. Depression often co-occurs with anxiety and very commonly is assessed in studies assessing adult anxiety (Lowry-Webster et al., 2001). The present study calculated Cronbach's alpha at 0.90 which is consistent with the research ( $\alpha = 0.88$ , O'Rourke, 2004). The CES-D is intended for use in the

general population although it was normed in both general ( $n = 1209$ ) and clinical populations ( $n = 140$ ). Researchers suggest that the CES-D is a valid measure of depression with construct validity in particular being confirmed across diverse groups ranging from university students, to women in middle life, to community residing older adults (Joseph & Lewis, 1995; Lewinsohn, Seeley, Robert, & Allen, 1997; Knight, Williams, McGee, & Olaman, 1997).

*Penn State Worry Questionnaire (PSWQ).*

The PSWQ (Meyer et al., 1990) is a frequently used instrument to assess the intensity and frequency of pathological worry in both clinical and non-clinical settings. In keeping with its intent to be a measure of general worry, Fresco, Mennin, Heimberg, and Turk (2003) confirmed it to be a good measure of Generalized Anxiety Disorder in a clinical setting. Participants are asked to rate the 16 items (e.g., “My worries overwhelm me,” and “When I’m under pressure I worry a lot,”) by how typical or characteristic they are of him or her on a five-point Likert-type scale ranging from 1 (Not at all typical) to 5 (Very typical). Studies investigating the psychometric properties of the PSWQ have found very good internal consistency for college students ( $\alpha = 0.93$ , Meyer et al. 1990) and a community sample ( $\alpha = .90$ , Brown, Antony, & Barlow, 1992) and high test-retest reliability,  $r = 0.93$  reported after a four week period (Meyer et al., 1990). The Cronbach’s alpha for the current study was found to be high,  $\alpha = 0.93$ .

*Beck Anxiety Inventory (BAI).*

The BAI (Beck et al., 1988) is a 21-item instrument that measures the symptoms associated with anxiety by asking to degree they have occurred over the past week. It was designed to be able to discriminate between depression and anxiety (Beck et al.). Each item (e.g., “Fear or losing control”), is rated on a four-point Likert scale from 0 (Not at all) to 3

(Severely) to reflect the respondents' symptomatic distress during the past week.

Preintervention Cronbach alpha for the current study was high,  $\alpha = 0.83$ .

*Screen for Child Anxiety Related Emotional Disorders (SCARED).*

The parent version of the SCARED (Birmaher et al., 1999) was used in this study. It is a 41-item questionnaire measure of a parent's observation of their child's anxiety symptoms. Parents are asked to respond to items such as, "It is hard for my child to talk with people he/she doesn't know well" and "When my child gets frightened, he/she feels like passing out," on a three-point likert scale from 0 (Not True or Hardly Ever True) to 2 (Very or Often True) based on the observations of their child for the last three months. Research on the SCARED has confirmed good internal consistency ( $\alpha = .90$ ) and discriminant validity (Birmaher et al., 1999). The alpha for the data collected in this study was high,  $\alpha = 0.94$ .

*Multidimensional Anxiety Screen for Children-Revised/Parent version (MASC-R).*

The MASC-R/parent (March, 2004) assesses a parent's evaluation of their child's anxiety. It is a 59-item revision of the well researched and validated 39-item MASC questionnaire (Baldwin & Dadds, 2007). Parents are asked to rate how often each statement is true about their child on a four-point Likert scale from 1 (Never) to 4 (Often). They are encouraged to answer based on how their child has been feeling recently (e.g., "My child is afraid that other kids will make fun of him/her" and "My child tries to do everything exactly right"). This revised version includes additional subscales and is still in the norming phase, thus has not been empirically validated but based on the success of the original MASC, is considered to be a robust measure. Dr. John March, the author, is a long-term collaborator with Dr. Miller and has allowed her the use of his instruments for research projects. Although there are no published findings with which to compare, the Cronbach's alpha for the current study was high,  $\alpha = 0.88$ .

### *Program Evaluation Questionnaire (PEQ).*

Parents who participated in the FRIENDS parent training programs were asked to complete an additional questionnaire, developed specifically for this study, after they had attended the parent training sessions. This questionnaire asks parents to rate how important and useful the material presented at the parent training sessions (e.g., relaxation strategies, challenging and changing unhelpful thoughts) were on a five-point Likert scale ranging from 1 (Not important) to 5 (Very important). Further insight into the parent's perspective and experience was gathered from four open-ended questions such as, "Have you been able to use any newly learned skills? Which one(s)?" where parents gave written responses regarding their experience in the program and their opinion as to its effectiveness. This survey data added a further dimension to the data collected on the measures that helped to provide further understanding of the parent's experience of the FRIENDS parent training program.

### *Procedure*

Data collection took place over the course of the 2007/2008 school year. One week before the FRIENDS parent evenings occurred children ( $N = 799$ ) in the participating classes were given a package containing a consent form explaining the project and inviting parents to participate in the FRIENDS Parent Project (FPP) along with the four preintervention measures. Parents indicated whether they would be participating by completing the questionnaires before and after they attended the parent training program (intervention group), or whether they only intended to complete the measures and not attend the parent evenings (control group).<sup>2</sup> It was emphasized that participation in this project was entirely voluntary and that parents were free to take the parent training program without participating in the research. Parents who agreed to participate ( $N = 235$ ) returned the consent and completed preintervention measures to the

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<sup>2</sup> One of the school 'districts' was a large independent school system in the Lower Mainland. These parents were asked to pre-register for their parent program and were then consequently invited to participate in this research. Therefore, all participants from this 'district' were in the treatment group.

teachers. Within one week of the consent and measures being sent home and returned to school, Night 1 of the FRIENDS parent program was run, followed by Night 2 one month later. With the exception of one of the larger districts that ran two separate parent programs, each participating school district ran one two-evening parent program that parents from all schools running the FRIENDS program were invited. One district ran their parent program in the fall of 2007 and the remainder took place between January and May of 2008. One week after Night 2 of the FRIENDS parent program the postintervention measures were sent to the 235 parents who had agreed to participate via their children in the 33 classes and 122 parents, (intervention  $n = 20$  and control  $n = 102$ ) returned completed measures in sealed envelopes to the teachers who gave them to the district liaison who couriered them to UBC.

#### *Data analysis*

The quantitative data was analyzed using the computer program Statistical Package for Social Sciences (SPSS) 16.0. Group equivalency at baseline between preintervention only group ( $n = 113$ ) and full participation group ( $n = 122$ ) as well as between the intervention ( $n = 20$ ) and control group ( $n = 120$ ) was assessed by conducting one-way between groups analysis of variance (ANOVAs) on the mean scores for each of the measures. For each of the four measures 2 x 2 mixed ANOVA with group (intervention and control) as the between-subjects factor, and the pre- and postintervention mean scores for each measure as the within-subjects factor was conducted. To test the assumptions of normality, Kolmogorov-Smirnov tests were conducted and histograms with normal curves and Normal Q-Q Plots were evaluated. Assumptions of homogeneity were tested by the Levene's test for equality of variance on each of the four measures. To account for the use of multiple ANOVA's and the associated risk of Type I error Bonferroni adjustments were applied for each test ( $\alpha = .05/4 = 0.0125$ ).

Treatment satisfaction was reported through basic descriptive analysis with the data from the Likert scale question on the PEQ. Open ended questions were analysed for common themes and this survey data added to the discussion of the statistical analyses to provide a clearer understanding of the relationship between the experience of the participants and their scores on the anxiety assessments.

The overall goal of this research was to arrive at an empirically sound understanding of the experience of parents who participate in the FRIENDS parent training program in relation to their level of anxiety and the effects in the reported anxiety levels of their children.



## Chapter 4: Results

### *Introduction*

The current chapter discusses the results from the analyses conducted. Due to a number of issues with the dataset, preliminary matters such as the way missing data was handled and the composite scoring of measures will be addressed. Following that will be the results from the equivalency of groups analysis, correlation of measures and the descriptives. Finally the main analyses of this study, the analysis of variance and the treatment satisfaction will be discussed.

The hypotheses driving this inquiry are that parents who participate in the FRIENDS parent training program will report reduced rates of self-reported symptoms of anxiety when compared to parents who do not participate in the parent training program, and that parent report of observed child anxiety symptoms will also be reduced when compared to parents who do not participate in the parent training program. The primary analyses conducted to test the hypothesis were a series of four 2 x 2 mixed between-within subjects ANOVAs, one for each of the measures. Due to a number of issues in the data set the preliminary analysis discussed describes the data that were used.

### *Preliminary analysis*

#### *Missing data.*

Data were returned from 235 people. Seventeen participants were either missing or had an incomplete measure. If more than 10% of the items on any of the measures at a given time point were unanswered, that measure was considered invalid and not included for that participant in the analysis. No participants were excluded due to missing data. Because the main analysis in this study was based on a comparison of means, the individual means for each measure was calculated instead of the raw score so any missing items were taken into

consideration in the mean calculation, equivalent to the conservative approach of mean substitution suggested by Tabachnick and Fidell (2007).

*Composite scoring of measures.*

The primary measures of anxiety used in this study were the Anxiety Sensitivity Index (ASI; Reiss et al., 1986), the Center for Epidemiological Studies-Depression (CES-D; Radloff, 1977), the Penn State Worry Questionnaire (PSWQ; Meyer et al., 1990), and the Screen for Child Anxiety Related Emotional Disorders (SCARED; Birmaher et al., 1999). However, due to copyright issues, in a small subsample ( $n = 15$ ) from the first school district, at the preintervention time point, the BAI was substituted for the PSWQ (both adult self-report measures of anxiety) and the MASC-R/parent was substituted for the SCARED (both parent measures of their child's anxiety). These standardized instruments were included in the study after sound intercorrelational evidence was established for each of the substituted measures. The PSWQ and the BAI are both widely used instruments that measure anxiety and worry. Pallesen, Nordhus, Carlstedt, Thayer, and Johnsen (2006) found that the two measures had a moderate correlation,  $r(879) = 0.53, p < 0.01$ , as did de Jong-Meyer, Beck, and Riede (2009),  $r(86) = 0.39, p < 0.01$ . The MASC-R/parent measure does not yet have any published research to report and compare to the parent version of the SCARED. However, the original 39-item MASC and SCARED are widely used parent report measures of child anxiety symptoms where the parent versions simply change the person for each item and retain the same language of the content being assessed. For instance, question one in the child version reads, "When I feel frightened, it is hard to breathe," whereas the parent version reads, "When my child feels frightened, it is hard for him/her to breathe." Researchers have found statistically significant and positive correlations between the child versions of the original 39-item MASC and the SCARED,  $r(521) = 0.81, p < 0.001$  (Muris, Merckelbach, Ollendick, King, & Bogie, 2002).

Mean scores for the preintervention PSWQ, BAI, SCARED and MASCR measures were converted to  $z$ -scores to enable statistical comparison (Huck, 2008, p. 41).  $T$ -tests were conducted for each pair using  $z$ -scores and there were no statistically significant differences found between the PSWQ ( $M = -0.05$ ,  $SD = 1.02$ ) and BAI ( $M = 0.02$ ,  $SD = 0.76$ ),  $t(119) = ns$ , nor for the SCARED ( $M = 0.10$ ,  $SD = 0.86$ ) and MASCR ( $M = 0.13$ ,  $SD = 1.10$ ),  $t(115) = ns$  indicating equivalent mean score results for both sets of measures, allowing the use of a single composite score for the two sets of combined measures at preintervention.

To use the sets of measures in the analysis, they were rescaled<sup>3</sup> (Suarez-Almazor, Kendall, Johnson, Skeith, & Vincent, 2000) to have the same level of Likert scale. Responses to the 1 - 5 Likert scale of the PSWQ were rescaled by converting to numerical values ranging from 0 – 4 and the BAI (0 – 3 scale) was rescaled by converting to the same metric (0 – 4). Similarly, the MASCR (1 - 4 scale) was rescaled to match the 0 – 2 scale of the SCARED. Cronbach's alphas were calculated for the rescaled measures and were all found to have equally high internal consistency scores as their non-rescaled counterparts: PSWQ,  $\alpha = 0.93$ ; BAI,  $\alpha = 0.84$ ; MASCR,  $\alpha = 0.88$ . Finally, the mean scores for the three rescaled measures (PSWQ, BAI, MASCR) were recalculated. For the preintervention scores the PSWQ and the BAI means were combined into a single composite score and compared with the postintervention PSWQ mean score. Similarly the preintervention SCARED and MASC were combined into a composite score and compared with the postintervention SCARED mean scores.<sup>4</sup>

#### *Equivalency of groups.*

Of the 235 parents that completed preintervention measures, 122 fully also completed the postintervention measures. This left 113 participants who only completed the preintervention measures, forming a preintervention only group. One-way between group

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<sup>3</sup> As suggested by Dr. Maria Trache, Statistical consultant for the Faculty of Education, UBC.

<sup>4</sup> For the remainder of this paper the PSWQ/BAI combined preintervention mean score will simply be referred to as the PSWQ measure and the SCARED/MASCR combination will likewise be referred to as the SCARED.

ANOVAs ( $\alpha = 0.05$ ) were conducted for each of the four measures between the preintervention only group ( $n = 113$ ) and the group that completed the measures at both time points ( $n = 122$ ). No significant differences were found on the mean scores suggesting that the preintervention only group and the full participation group were equivalent on the dependent measures (ASI  $F(1,233) = 0.04, ns$ ; CES-D  $F(1, 230) = 0.00, ns$ ; PSWQ  $F(1,230) = 2.02, ns$ ; SCARED  $F(1,228) = 0.02, ns$ ). Although the attrition rate in this study was high (52%), no further analyses were conducted because participation rates was not the main focus of this study and it is acknowledge that this is a reality of conducting research in a community setting.

Due to the convenience sampling method employed in this study, the intervention ( $n = 20$ ) and control ( $n = 102$ ) groups were not equal. According to Tabachnick and Fidell (2007), “in nonexperimental work, unequal  $n$  often results from the nature of the population. Differences in sample sizes reflect true differences in numbers of various types of subjects. To artificially equalize  $n$  is to distort the differences and lose generalizability” (p. 49). They recommend that there should be least as many research units as there are dependent variables (DV) and that the Box’s M test be run to ensure homogeneity of variance. In this study there are four DV (ASI, CES-D, PSWQ and SCARED) so the intervention sample of  $n = 20$  satisfies this criteria. For each of the ANOVAs conducted on the measures, a Box’s M test was conducted with no significant results suggesting that for each DV there is homogeneity of variance. Therefore, although the unequal sample size issue affects the power of the analysis it is not an impediment to conducting it as planned.

A one-way between-groups ANOVA was conducted for the four measures at baseline between the intervention and control group ( $\alpha = 0.05$ ). No statistically significant differences were found between the intervention and control group for the four preintervention measures,

ASI  $F(1,120) = 3.28, ns$ ; CES-D  $F(1,118) = 0.26, ns$ ; PSWQ  $F(1,119) = 0.06, ns$ ; SCARED  $F(1,115) = 3.39, ns$ .

Finally, one of the school districts included in this study was not from the public system but was a large independent school system in the Lower Mainland. Independent sample  $t$ -tests were conducted at baseline for each of the measures, comparing the mean scores of public school parents and independent school parents. Again, no statistically significant differences were found for the four measures, ASI  $t(120) = -0.78, ns$ ; CES-D  $t(118) = -0.66, ns$ ; PSWQ  $t(119) = -1.32, ns$ ; SCARED  $t(115) = -0.16, ns$ , demonstrating the equivalence of the two types of school districts on the scores of the measures.

#### *Correlation of measures*

To investigate the relationship between the scores of the measures used in this study, Pearson product-moment correlations were conducted on the ASI, CES-D, PSWQ, and the SCARED. See Table 2.

Table 2: Correlation of dependent variable measures: ASI, CES-D, PSWQ and SCARED

Measure	1	2	3	4	5	6	7
1. ASI 1	—						
2. ASI 2	.67**	—					
3. CES-D 1	.51**	.46**	—				
4. CES-D 2	.42**	.53**	.68**	—			
5. PSWQ 1	.55**	.38**	.53**	.42**	—		
6. PSWQ 2	.44**	.38**	.51**	.52**	.65**	—	
7. SCARED 1	.42**	.31**	.32**	.26**	.11	.30**	—
8. SCARED 2	.46**	.47**	.40**	.45**	.24**	.27**	.71**

Note: ASI = Anxiety Sensitivity Index; CES-D = Center for Epidemiological Studies-Depression; PSWQ = Penn State Worry Questionnaire; SCARED = Screen for Child Anxiety Related Emotional Disorders.

1 = Preintervention, 2 = Postintervention. \*\*Correlation is significant at the 0.01 level (2-tailed).

## Descriptives

Results describing the sample on the four dependent variable measures, ASI, CES-D, PSWQ, and SCARED are reported in Table 3 below. The means, standard deviation and range are reported for the preintervention only, intervention and control groups at preintervention and the intervention and control groups at postintervention. Means, standard deviation and range values derived after the square root transformations, as described in the assumptions of ANOVA section following, appear in parentheses.

Table 3: Descriptives for preintervention only, intervention and control groups on measures.

Measure		Preintervention			Postintervention	
		Preintervention only	Intervention	Control	Intervention	Control
ASI <sup>a</sup>	N	113	20	102	20	102
	M	1.01	1.24 (1.08)	0.99 (0.93)	1.18 (1.04)	0.90 (0.88)
	SD	0.68	0.62 (0.27)	0.69 (0.35)	0.65 (0.33)	0.59 (0.34)
	Range	0-3.19	0.44-2.69 (0.66-1.64)	0-3.12 (0-1.77)	0.19-2.31 (0.43-1.53)	0-3.19 (0-1.79)
CES-D <sup>a</sup>	N	112	18	102	20	101
	M	0.49	0.52 (0.66)	0.49 (0.63)	0.55 (0.66)	0.48 (0.64)
	SD	0.43	0.38 (0.28)	0.42 (0.31)	0.50 (0.36)	0.40 (0.28)
	Range	0-1.90	0.05-1.30 (0.22-1.14)	0-1.65 (0-1.28)	0-1.85 (0-1.36)	0-1.95 (0-1.4)
PSWQ	N	111	19	102	20	101
	M	1.54	1.34	1.40	1.62	1.45
	SD	0.82	0.86	0.84	0.73	0.72
	Range	0-3.69	0.13-2.69	0-4	0.38-3.44	0.19-3.75
SCARED <sup>a</sup>	N	113	18	99	20	102
	M	0.41	0.50 (0.66)	0.36 (0.57)	0.44 (0.61)	0.34 (0.54)
	SD	0.32	0.31 (0.26)	0.24 (0.20)	0.33 (0.26)	0.26 (0.22)
	Range	0-1.41	0.02-1.05 (0.16-1.02)	0.02-1.41 (0.16-1.19)	0.07-1.15 (0.27-1.07)	0-1.40 (0-1.18)

Note: ASI = Anxiety Sensitivity Index; CES-D = Center for Epidemiological Studies-Depression;

PSWQ = Penn State Worry Questionnaire; SCARED = Screen for Child Anxiety Related Emotional Disorders;

<sup>a</sup>ASI, CES-D and SCARED square root transformation data shown in parentheses.

## *Analysis of variance*

### *Assumptions of ANOVA.*

Before conducting the ANOVA for each measure, the underlying assumptions of statistical tests concerning means were taken into account or tested: random sampling, independence of observations, normal distribution and homogeneity of variance. Because this project took place in a community setting with a non-clinical sample, and due to funding and practical issues, there was no randomization of the sample. However these quasi-experimental samples likely reflect some differences of the populations they represent (Tabachnick & Fidell, 2007, p. 49). The assumption of independence of observations was upheld. The pre- and postintervention measures were sent home for parents to complete individually; at no time did parents participating in the study complete measures at the same time in the same place.

The assumption of normality of distribution was tested by conducting the Kolmogorov-Smirnov Test and by producing Normal Q-Q Plots and histograms with normal curves for each measure at each time point. The Kolmogorov-Smirnov test produced significant results, indicating a lack of normality not uncommon with larger samples (Pallant, 2007). Inspecting the normal probability plots and histograms indicated that the PSWQ pre- and postintervention variables satisfied the assumptions of normality, however the ASI, CES-D and SCARED measures were all moderately and positively skewed, with skewness values ranging from 0.815 to 1.431. Square root transformations (Tabachnick & Fidell, 2007) were applied to these three measures and again inspected for normality, showing that the skew and kurtosis values, the Normal Q-Q Plots and histograms with curves all satisfied the assumption of normality. To test the assumption of equal variances, Levene's test was conducted for each of the ANOVAs with no significant results, indicating samples of homogeneous variance.

### *Analysis of variance.*

For each of the four measures separate 2 x 2 ANOVAs were conducted to assess the impact of participating in the FRIENDS parent program on the parents' mean scores on each measure at two time points. For the analysis, group (intervention or control) was the between-subjects factor, and time (pre- and postintervention mean scores) was the within-subjects factor. To adjust for the use of multiple ANOVA's and the associated risk of Type I error Bonferroni corrections were applied for each test ( $\alpha = .05/4 = 0.0125$ ). There was no significant interaction between group and time for any of the measures (See Table 4). For the ASI there was a significant main effect for group,  $F(1, 120) = 4.12, p = .05$ , partial  $\eta^2 = 0.3$  with the intervention group reporting higher mean scores than the control group. For the PSWQ there was a significant main effect for time,  $F(1, 118) = 4.71, p = 0.03$ , partial  $\eta^2 = 0.4$  with postintervention scores being higher than at preintervention. However, these results failed to reach significance after the Bonferroni corrections were applied. No further statistically significant differences were found on the main effects of group or time for any of the four measures.

### *Treatment satisfaction*

Parents who attended the FRIENDS parent program ( $n = 20$ ) were asked to complete a Program Evaluation Questionnaire that asked them to rate the components of the two evening sessions and to respond to four open-ended questions. The results, shown in Table 5, indicate that parents felt that the topics of giving praise, modelling appropriate behaviour and the core CBT component of the role of thoughts controlling feelings and behaviours were the most important components in the program. In response to the open-ended question, "What is the most significant thing you learned in the program?" five parents wrote about the topic of how to recognize the signs and symptoms of anxiety and how it affects their children; three wrote about the importance of the tools to help someone with anxiety.



Table 4: 2 x 2 mixed between-within subjects ANOVAs for dependent variable measures

Source	Sum of Squares	df	Mean Squares	F	Partial $\eta^2$
ASI					
Between-subjects effects					
Group	0.78	1	0.78	4.12	.03
Error (between)	22.77	120	0.19		
Within-subject effects					
Time	0.06	1	0.06	1.63	.01
Group x time	0.00	1	0.00	0.00	.00
Error (within)	4.70	120	0.04		
CES-D					
Between-subjects effects					
Group	0.03	1	0.03	0.21	.00
Error (between)	17.68	117	0.15		
Within-subject effects					
Time	0.00	1	0.00	0.01	.00
Group x time	0.00	1	0.00	0.04	.00
Error (within)	3.38	117	0.03		
PSWQ					
Between-subjects effects					
Group	0.16	1	0.16	0.16	.00
Error (between)	120.81	118	1.02		
Within-subject effects					
Time	1.04	1	1.04	4.71	.04
Group x time	0.44	1	0.44	2.01	.02
Error (within)	25.99	118	0.22		
SCARED					
Between-subjects effects					
Group	0.25	1	0.25	3.30	.03
Error (between)	8.87	115	0.08		
Within-subject effects					
Time	0.02	1	0.02	1.73	.02
Group x time	0.00	1	0.00	0.08	.00
Error (within)	1.54	115	0.01		

Note: ASI = Anxiety Sensitivity Index; CES-D = Center for Epidemiological Studies-Depression; PSWQ = Penn State Worry Questionnaire; SCARED = Screen for Child Anxiety Related Emotional Disorders. Bonferroni corrected alpha = .0125.

For answers to whether they have been able to use any newly learned skills three parents indicated the concept of how positive and negative thoughts can affect behaviour; two parents answered the use of praise and another two parents mentioned the problem solving plan. Two

others replied by indicating they thought all of the techniques were helpful and already use them. When asked if they have seen a difference in their child's behaviour, of the 11 parents who responded to this question, three indicated they had seen an improvement, three said they had not yet seen any change and three parents responded by saying they did not feel their child had problems with anxiety and therefore did not expect to see any changes (two answers were ambiguous and not amenable to categorization).

Table 5: Program Evaluation Questionnaire results

Topic	Mean	SD
Overview of Anxiety	3.75	0.85
Overview of the FRIENDS for Life program	3.90	0.85
Feelings: Physiological clues associated with anxiety	4.00	0.80
Relaxation strategies	3.85	0.75
Role of thoughts affecting/controlling feelings and behaviours	4.05	0.71
I can do it: Challenging and changing unhelpful thoughts	3.79	0.86
Explore solutions: Coping Step Plan to overcome challenging situation	3.95	0.78
6 – Block Problem Solving Plan	3.63	0.76
Now reward yourself: Rewards	3.42	0.77
Parent practice of skills presented in program	3.58	0.77
Modelling appropriate behaviour	4.11	0.74
Praise: Giving and receiving positive feedback	4.21	0.79

Note: Responses to the question: “Please indicate how useful these techniques were for you as a parent”.

Where 1 = Not important, 2 = Somewhat important, 3 = Important, 4 = Quite important, 5 = Very important.

### *Summary*

For the main analyses of this research, the 2 x 2 ANOVAs for the four dependent variable measures, (ASI, CES-D, PSWQ, SCARED), no statistically significant results were found on the mean scores between parents who attended the FRIENDS parent training program and those who did not or between the pre and postintervention time points. Results of the treatment satisfaction analysis showed that parents who did attend the parent sessions rated the

topics covered in the program, on average, “Quite important”. Responses to the open-ended questions were positive and parents reported liking the program. Many parents indicated that they were able to use newly learned skills and had seen an improvement in their child’s behaviour since attending the program.

## Chapter 5: Discussion

### *Introduction*

This study focused on the FRIENDS for Life (Barrett, 2004) program which is currently offered in schools throughout British Columbia. The primary question of the investigation was: Do the parent training sessions of the FRIENDS for Life program affect parent self-report of anxiety symptoms and parent report of child anxiety symptoms? What follows in this final chapter is a discussion on the reasons for this study, how this research fits in the context of existing literature in the area of treating childhood anxiety, comments on the results of this study and in conclusion, remarks on the strengths, limitations and suggested areas for future research.

This study evaluated 122 parent responses to the FRIENDS program offered in their community. Of the 122 responses, 20 parents attended parent training sessions that offered direct instruction in child anxiety management. The hypothesis that participation in the parent training sessions would result in reduced self-report of anxiety symptoms as well as reduced parent-report of child anxiety symptoms was not supported.

### *Significance of current research*

The prevalence of childhood anxiety and the substantial long-term risks of not treating children with anxiety point to problems of significant proportions. Untreated child anxiety, while a private family issue, is a documented healthcare challenge that could affect our society as a whole, both socially and economically. This current study is important because it looked at a program that is both preventative and universal, two aspects of addressing childhood anxiety that have received increased support in the effort to reach the growing number of children affected by anxiety. It also addresses gaps in the literature such as focusing research on the parent component of childhood anxiety interventions. Furthermore, it is significant because the parent component of the FRIENDS for Life program has not been evaluated on its target

population, a primary preventative, universal school setting. This is the first study to examine the effectiveness of the parent-training component of the FRIENDS program in the context for which it was designed. As this program receives public funding from the Ministry of Child and Family Development (MCFD) it is also of interest to those who make important decisions about the allocation of limited resources.

Researchers are, with growing confidence, establishing that adding a parent or family component to CBT group-based programs enhances the outcomes for children struggling with anxiety – in particular for those children with anxious parents. Results in the literature are mixed due to the wide variability in design, different measurements and informants used, and inconsistent ways parents have been included in treatment. However, one area that has been receiving more attention is how to best involve parents in the treatment of childhood anxiety. Researchers have suggested to focus on the parents by including assessments of parents' level of anxiety and parenting behaviours (Ginsburg & Schlossberg, 2002) when developing treatments for childhood anxiety. This current study looked at the effectiveness of the increasingly popular prevention and early intervention program for childhood anxiety that includes a parent component and focused on investigating the change in parent anxiety symptoms as recommended in the literature.

#### *Possible reasons for results*

No significant results were found in the main analysis of comparing the group of parents who attended anxiety management training and those who did not. There were no statistically significant differences in the mean scores of the self-report parent anxiety measures or the mean scores of the parent report of observed child measures between the parents that attended the parent program and those who did not attend. Suggestions for these finding are many. First, due to the small size ( $n = 20$ ) of the intervention group, there was likely insufficient power to

detect any significant differences between the scores on the measures of parents that participated in the parent training program and those that did not. Secondly, the timing of the postintervention assessment may have affected the results. A number of studies that investigated the effectiveness of CBT based interventions have found delayed effects, or later than capturing response immediately following program implementation. Possible explanations for this alleged effect are that the skills learned take time to practice and master to show any change in behaviour. For parent report of child behaviour in particular, parents may perceive changes in their children slowly or they may need a number of positive experiences over time with their child before reporting an noticeable change in behaviour (Mendlowitz et al., 1999; Nauta et al., 2001; Bogels & Siqueland, 2006). Thirdly, the length and content of the parent program (two, two-hour sessions) may not have been sufficient to make a measurable difference in parent's anxiety and their observations of their child's anxiety. Most of the clinical studies included parent programs that lasted between 8 and 16 sessions and were more in-depth. From their review of the theoretical models of the development of childhood anxiety and family-based treatments in the literature, Ginsberg and Schlossberg (2002) suggest that to be effective, treatment including parents should last between 10 and 16 sessions and should include: (a) psychoeducation; (b) contingency management; (c) reducing parental anxiety; (d) cognitive restructuring; (e) improving the parent-child relationship; (f) relapse prevention. The FRIENDS parent training component is largely psychoeducational, explaining the CBT components of the child's classroom based program with its emphasis on cognitive restructuring. Parents are given limited direct instruction with regards to their own cognitions in relation to their child and parent anxiety is not directly addressed.

The parent training component consists of two sessions with the second session being largely review. In this study, many of the parents only attended one session. Lastly, unlike the

published studies included in the literature review, the sample in this study came from a community setting that had lower mean scores on self-report anxiety measures than the clinical populations studied in other research. The preintervention raw scores on the ASI for both the intervention (ASI:  $M = 19.65$ ;  $SD = 9.91$ ) and the control group (ASI:  $M = 15.72$ ;  $SD = 10.89$ ) were lower than the non-clinical populations on which the scale was normed (ASI:  $M = 19.8$ ;  $SD = 9.11$ , Reiss et al, 2008). The same was found for the preintervention raw scores of the CES-D which has a cut off point of 16 to screen for depression in adults (Knight et al, 1997). Both the intervention group (CES-D:  $M = 10.33$ ;  $SD = 7.63$ ) and the control group (CES-D:  $M = 9.69$ ;  $SD = 8.27$ ) had lower scores than the cut off point for depression. Parents in this sample self-reported lower scores on measures of anxiety and depression, thus it would not be expected to see drops in self-report scores due to the intervention.

### *Strengths*

This study has a number of strengths that highlight its contribution in terms of current research in the specific area of childhood anxiety and also in the broader field of healthcare research. This study did address the most recent recommendations in the literature by including parents in the treatment of childhood anxiety, and in particular by measuring parental anxiety before and after the intervention. Furthermore it was the first to study the parent component of a universal and prevention focused program in the school setting with participants for which is was designed. Standardized measures were used. Although no statistically significant results were found in the formal assessments, social validity for the FRIENDS parent program was captured. Parental response to the program was overwhelmingly positively. The results of the Program Evaluation Questionnaire were favourable with the five-point Likert scale questions on the content reporting means ranging from  $M = 3.42$ , ( $SD = 0.77$ ) to  $M = 4.21$ , ( $SD = 0.79$ ).

These findings are similar to a study conducted by Barrett, Shortt, Fox, and Wescombe (2001)

that specifically looked at the social validity of the FRIENDS program (range:  $M = 3.98$ ;  $SD = 0.95$  to  $M = 4.62$ ;  $SD = 0.58$ ) even though the context of their study was with clinical participants and the parents had more (three two-hour) sessions.

The open-ended questions also revealed overwhelmingly positive comments: the question asking what parents would have changed about the program elicited answers largely referring to technical details such as not being able to hear the facilitator very well or wanting more from the program such as providing a handout with the content of the FRIENDS program. Parents also suggested making the sessions longer or offering more of them to enable greater attendance. The positive reception the FRIENDS for Life parent program received occurred even before the program began. All 235 parents who completed the preintervention questionnaires also completed a demographic form that included a question asking parents if anything prevented them from attending the parent evenings. Of the 104 parents in the preintervention only group ( $n = 113$ ) who provided responses, seven said they were not interested in the program. The remaining 97 parents said they were not able to attend the parent program due to the time or date of the sessions ( $n = 37$ ), work responsibilities ( $n = 30$ ), a need for childcare ( $n = 15$ ) or conflicting commitments ( $n = 5$ ). In the control group ( $n = 102$ ) all indicated they were interested in attending the parent training program but could not due to competing demands (time or date of sessions,  $n = 40$ ; work responsibilities,  $n = 33$ ; or need for childcare,  $n = 19$ ). It should be noted that these numbers are only reflective of the parents who participated in the FRIENDS Parent research project. The FRIENDS for Life parent program is run in 15 BC school districts each year and is well attended and regularly receives very positive anecdotal reports from the parents who participate. While the social validity for the parent program was found to be favourable these findings should also be tempered by the fact that the sample size these results were drawn from was small ( $n = 20$ ).



Parents are clearly interested in the FRIENDS for Life parent program. Given the strong evidence of involving parent in the treatment of clinical childhood anxiety it would make sense to find ways to involve parents to help make the parent component of the FRIENDS program even more successful. This inclusion of parents as stakeholders in both the process and outcome of research is central to the research practice of Knowledge Translation (KT), a leading innovation in current healthcare research. KT, as defined by the Canadian Institute of Health Research (CIHR) is, “a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system.” The core mandate of the CIHR is “the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and by strengthening Canadian health care system” (CIHR, 2008). By including parents in the evaluation of the FRIENDS parent program, information from this current project could be the starting point for the treatment and prevention of childhood anxiety to be approached from a broader healthcare perspective using a novel approach that involves the end users at the outset.

### *Limitations*

There are a number of limitations to be addressed, most of which are methodological. The small intervention sample size decreased the power of the analysis making it difficult to detect differences. The fact that no statistically significant results were found on the four measures of anxiety could be due simply to lack of power. Second, non-randomized convenience sampling was utilized which limits the generalizability of the findings. Results obtained reflect the sample in this study but may not, with confidence, be applied to other samples or be representative of the larger population. Third, the use of the composite scoring for two of the measures also limits findings to this particular sample. A fourth limitation of this

study is that there was only one type of measurement (self-report) and only one informant (parent) on both the symptoms of anxiety experienced by parents and their children. Another limitation is that while the two-session FRIENDS parent program was advertised and offered together, not all parents who participated went to both evenings. Data was not collected on which parents went to one or both of the parent training evenings. Finally, due to the realities of dealing with a large number of different schools in five different school districts, and the scope of this project, data on the timing, duration and effect of the children's FRIENDS for Life program were not collected which may have influenced the scores of the parent report of child anxiety symptoms measure.

#### *Suggestions for further research*

From the studies reviewed on the aetiology of childhood anxiety, many questions remain in the pursuit of understanding how anxiety disorders are developed and maintained in children. One area of research that should be focused on is the direction of effect and how anxiety in parents, and anxiety in their children is transferred. In short, this is the chicken and the egg paradigm – which comes first? Does a child's anxiety bring out certain parenting characteristics and behaviour or is it the parent's anxiety that leads to the development and maintenance of childhood anxiety or a combination of the two? If the effect is bidirectional, what are the mechanisms of transmission of the part of the parent? of the child? Also, given the growing cultural diversity in society, how does culture influence our understanding of anxiety and can current models be applied across cultural milieu? Studies investigating the cultural relevance of constructs and theoretical framework of anxiety as well as the measurements used are needed.

In response to current research in the literature and the findings of this study there are a variety of suggestions that could continue this inquiry into universal community based, prevention, early intervention and treatment of childhood anxiety. Using what CIHR refers to as

“integrated KT”, also known as collaborative or action-oriented research (CIHR, 2008), research should involve parents in the development of research projects. This inclusion may further the goal of finding results that are more relevant and more likely to be used by the parents. As this process is largely applied in medical setting in health research, considerable thought would need to be put into developing a process or system that to ensure success of KT research in a public school setting.

Another consideration is to select more sensitive measures. Developing tools that would reflect the process of prevention and that measure specific targeted program goals such as changes in parent’s cognitions or level of control in parent-child relationship rather than merely anxiety symptoms may provide greater depth of understanding beyond simply a change in clinical diagnosis.

In terms of measuring change more effectively, future studies designed to include multiple informants (i.e., parent, child, teacher, clinician) and using different forms of measurement (i.e., self-report, clinician diagnosis, observational) would provide the necessary triangulation of data to be able to verify and cross-reference findings from one source to another. Given the appropriate time and resources, longitudinal studies that look at the effectiveness of including parents in prevention and treatment of childhood anxiety could further clarify a number of areas including: researchers’ understanding of the aetiology of childhood anxiety, the most effective age and stage to intervene in the prevention and treatment, and the mechanisms of change in how CBT based strategies are incorporated into the lives of families dealing with anxiety longer term.

### *Conclusion*

Given the vulnerability of children, and the effectiveness of treating anxiety at a young age, it is crucial that not only parents but larger communities such as schools, health care

practitioners and researchers be involved in finding solutions to this growing challenge. This current study offers one small part of a picture that continues to be understood with more detail and clarity. Discovering successful and resource efficient ways of preventing and treating childhood anxiety to provide better trajectories for individual children and their families is a necessary and worthwhile endeavour that must continue until the best solutions are found.

## References

- Albano, A. M., Chorpita, B. F., & Barlow, D. H. (2003). Childhood anxiety disorders. In E. J. Mash & R. A. Barkley (Eds.), *Child Psychopathology* (Second ed., pp. 279 - 329). New York: The Guildford Press.
- Angold, A., Messer, S., C., Stangl, D., Farmer, E. M. Z., Costello, E. J., & Burns, B., J. (1998). Perceived Parental Burden and Service Use for Child and Adolescent Psychiatric Disorders. *American Journal of Public Health*, 88(1), 75-80.
- Baldwin, J., & Dadds, M. (2007). Reliability and Validity of Parent and Child Versions of the Multidimensional Anxiety Scale for Children in Community Samples. *Journal of the American Academy of Child and Adolescence*, 46(2), 252-260.
- Barlow, J., & Stewart-Brown, S. (2000). Behaviour problems and group-based parent education programs. *Journal of Developmental and Behavioural Pediatrics*, 21(5), 356-340.
- Barrett, P., Shortt, A., Fox, T., & Wescombe, K. (2001). Examining the social validity of the FRIENDS Treatment Program for Anxious Children. *Behaviour Change*, 18(2), 63-77.
- Barrett, P. M. (1998). Evaluation of cognitive-behavioral group treatments for childhood anxiety disorders. *Journal of Clinical Child Psychology*, 27(4), 459-468.
- Barrett, P. M. (2004). *FRIENDS for Life: Group Leader's Manual for Children*. Bowen Hills, Australia: Australian Academic Press.
- Barrett, P. M., Dadds, M., R., & Rapee, R. M. (1996). Family treatment of childhood anxiety: A controlled trial. *Journal of Consulting and Clinical Psychology*, 64(2), 333-342.
- Barrett, P. M., Duffy, A. L., Dadds, M. R., & Rapee, R. M. (2001). Behavioral treatment of anxiety disorders in children: Long-term (6-year) follow-up. *Journal of Consulting and Clinical Psychology*, 69(1), 135-141.

- Barrett, P. M., Rapee, R. M., Dadds, M. R., & Ryan, S. M. (1996). Family enhancement of cognitive style in anxious and aggressive children. *Journal of Abnormal Child Psychology*, 24(2), 187-203.
- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, 56(6), 893-897.
- Beidel, D. C. (1991). Social phobia and overanxious disorder in school-age children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 30, 545-552.
- Beidel, D. C., & Turner, S. M. (1997). At risk for anxiety: I. Psychopathology in the offspring of anxious parents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36, 918-924.
- Bernstein, G. A., Layne, A. E., Egan, E. A., & Tennison, D. M. (2005). School-based interventions for anxious children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 44(11), 1118-1127.
- Biederman, J., Rosenbaum, J. F., Bolduc-Murphy, E. A., Faraone, S. V., Chaloff, J., Hirshfeld, D. R., et al. (1993). A three-year follow-up of children with and without behavioural inhibition. *Journal of the American Academy of Child & Adolescent Psychiatry*, 32, 814-821.
- Birmaher, B., Brent, D., Chiappetta, L., Bridge, J., Monga, S., & Baugher, M. (1999). Psychometric properties of the Screen for Child Anxiety Related Emotional Disorders (SCARED): A replication study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38(10), 1230-1236.

- Blais, M. A., Otto, M. W., Zucker, B. G., McNally, R. J., Schmidt, N. B., Maurizio, F., et al. (2001). The Anxiety Sensitivity Index: Item analysis and suggestions for refinement. *Journal of Personality Assessment*, 77(2), 272-294.
- Bogels, S. M., & Brechman-Toussaint, M. L. (2006). Family issues in child anxiety: Attachment, family functioning, parental rearing and beliefs. *Clinical Psychology Review*, 26, 834-856.
- Bogels, S. M., & Siqueland, L. (2006). Family cognitive behavioral therapy for children and adolescents with clinical anxiety disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 45(2), 134-141.
- Brown, T., Antony, M., & Barlow, D. (1992). Psychometric properties of the Penn State Worry Questionnaire in a clinical anxiety disorders sample. *Behaviour Research and Therapy*, 30, 33-37.
- Burns, B., J., Costello, E. J., Angold, A., Tweed, D., Stangl, D., Farmer, E. M. Z., et al. (1995). Children's mental health service use across service sectors. *Health Affairs*, 14(3), 147-159.
- Canadian Institute of Health Research. (2008). *About Knowledge Translation*. Retrieved April 1, 2009, from <http://www.cihr-irsc.gc.ca/e/29418.html>
- Cartwright-Hatton, S., McNally, D., White, C., & Verduyn, C. (2005). Parenting skills training: An effective intervention for internalizing symptoms in younger children? *Journal of Child and Adolescent Psychiatric Nursing*, 18(2), 45-52.
- Cartwright-Hatton, S., McNicol, K., & Doubleday, E. (2006). Anxiety in a neglected population: Prevalence of anxiety disorders in pre-adolescent children. *Clinical Psychology Review*, 26, 817-833.

- Chorpita, B. F. (2002). The tripartite model and dimensions of anxiety and depression: An examination of structure in a large school sample. *Journal of Abnormal Child Psychology*, 30(2), 177-190.
- Chronis, A. M., Chacko, A., Fabiano, G. A., Wymbs, B. T., & Pelham, W. E. (2004). Enhancements to the behavioral parent training paradigm for families of children with ADHD: Review and future directions. *Clinical Child and Family Psychology Review*, 7(1), 1-28.
- Clark, L. A., & Watson, D. (1991). Tripartite model and anxiety and depression: Psychometric evidence and taxonomic implications. *Journal of Abnormal Psychology*, 100(3), 316-336.
- Cobham, V. E., Dadds, M., R., & Spence, S. H. (1998). The role of parental anxiety in the treatment of childhood anxiety. *Journal of Consulting and Clinical Psychology*, 66(6), 893-905.
- Compton, S., N., March, J. S., Brent, D., Albano, A. M., Weersing, R., & Curry, J. (2004). Cognitive-behavioral psychotherapy for anxiety and depressive disorders in children and adolescents: An evidence-based medicine review. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43(8), 930-959.
- Costello, E. J., Angold, A., Burns, B., J., Stangl, D., Tweed, D., Erkanli, A., et al. (1996). The Great Smoky Mountain Study of Youth: Goals, design, methods, and the prevalence of the DSM-III disorders. *Archive of General Psychiatry*, 53(12), 1129-1136.
- Dadds, M., R., Barrett, P. M., Rapee, R. M., & Ryan, S., M. (1996). Family process and child anxiety and aggression: An observational analysis. *Journal of Abnormal Child Psychology*, 24(6), 715-734.



- Dawson, T. E. (1997). *A primer on experimental and quasi-experimental design*. Paper presented at the Southwest Educational Research Association, Austin, Texas.
- de Jong-Meyer, R., Beck, B., & Riede, K. (2009). Relationships between rumination, worry, intolerance of uncertainty and metacognitive beliefs. *Personality and Individual Differences, 46*, 547-551.
- Dinkmeyer, D. C., & McKay, G. D. (1976). *Systematic Training for Effective Parenting: Leader's manual*. Circle Pines: MN: American Guidance Services.
- Donovan, C., & Spence, S. H. (2000). Prevention of childhood anxiety disorders. *Clinical Psychology Review, 20*(4), 509-531.
- Ezpeleta, L., Keeler, G., Erkanli, A., Costello, E. J., & Angold, A. (2001). Epidemiology of psychiatric disability in childhood and adolescence. *Journal of Child Psychology and Psychiatry, 42*(7), 901-914.
- Foley, D. L., Golston, D. B., Costello, E. J., & Angold, A. (2006). Proximal psychiatric risk factors for suicidality in youth: The Great Smoky Mountains Study. *Archives of General Psychiatry, 63*, 1017-1024.
- Fresco, D., Mennin, D., Heimberg, R., & Turk, C. (2003). Using the Penn State Worry Questionnaire to identify individuals with Generalized Anxiety Disorder: A receiver operating characteristic analysis. *Journal of Behavior Therapy and Experimental Psychiatry, 34*, 283-291.
- Ginsburg, G. G., & Schlossberg, M. C. (2002). Family-based treatment of childhood anxiety disorders. *International Review of Psychiatry, 14*, 143-154.
- Golding, K. (2000). Parent management training as an intervention to promote adequate parenting. *Clinical Child Psychology and Psychiatry, 5*(3), 357-371.

- Gross, D., & Grady, J. (2002). Group-based parent training for prevention mental health disorders in children. *Issues in Mental Health Nursing*, 23, 367-383.
- Huck, S. (2008). *Reading Statistics and Research* (5th ed.). Boston: Pearson Education Inc.
- Hudson, J. L., & Rapee, R. M. (2001). Parent–child interactions and anxiety disorders: An observational study. *Behaviour Research and Therapy*, 39(12), 1411-1427.
- Hudson, J. L., & Rapee, R. M. (2002). Parent-child interactions in clinically anxious children and their siblings. *Journal of Clinical Child and Adolescent Psychology*, 31(4), 548-555.
- Joseph, S., & Lewis, C. A. (1995). Factor analysis of the Center for Epidemiologic Studies Depression scale. *Psychological Reports*, 76, 40-42.
- Kagan, J. (1997). Temperament and the reactions to unfamiliarity. *Child Development*, 68(1), 139-143.
- Kazdin, A. E. (1997). Parent management training: evidence, outcomes, and issues. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36(10), 1349 – 1357.
- Kendall, P. C., & Ollendick, T. H. (2004). Setting the research and practice agenda for anxiety in children and adolescence: A topic comes to age. *Cognitive and Behavioral Practice*, 11, 65-74.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey replication. *Archive of General Psychiatry*, 62(6), 593-602.
- Knight, R., Williams, S., McGee, R., & Olaman, S. (1997). Psychometric properties of the Centre for Epidemiologic Studies Depression scale (CES-D) in a sample of women in middle life. *Behaviour Research and Therapy*, 35(4), 373-380.
- Lang, A. J., & Stein, M.B. (2001). Anxiety disorders. *Geriatrics*, 56(5), 24-30.

- Lasser, K., Boyd, J. W., Woolhandler, S., Himmelstein, D. U., McCormick, D., & Bor, D. H. (2000). Smoking and mental illness: A population-based prevalence study. *Journal of the American Medical Association*, 284(20), 2606-2610.
- Le Fauve, C. E., Litten, R. Z., Randall, C. L., Moak, D. H., Salloum, I. M., & Green, A. I. (2004). Pharmacological treatment of alcohol abuse/dependence with psychiatric comorbidity. *Alcoholism: Clinical and Experimental Research*, 28(2), 302-312.
- Lewinsohn, P. M., Seeley, J. R., Robert, E. R., & Allen, N. B. (1997). Center for Epidemiologic Studies Depression Scale (CES-D) as a screening instrument for depression among community-residing older adults. *Psychology and Aging*, 12(2), 277-287.
- Lonigan, C. J., Phillips, B. M., & Hooe, E. S. (2003). Relations of positive and negative affectivity to anxiety and depression in children: Evidence from a latent variable longitudinal study. *Journal of Consulting and Clinical Psychology*, 71(3), 456-481.
- Lowry-Webster, H. M., Barrett, P. M., & Dadds, M., R. (2001). A universal prevention trial of anxiety and depressive symptomatology in childhood: Preliminary data from an Australian study. *Behaviour Change*, 18(1), 36-50.
- Lowry-Webster, H. M., Barrett, P. M., & Lock, S. (2003). A universal prevention trial of anxiety symptomatology during childhood: Results at 1-year follow-up. *Behaviour Change*, 20(1), 25-43.
- Manassis, K., Hudson, J. L., Webb, A., & Albano, A. M. (2004). Beyond behavioral inhibition: Etiological factors in childhood anxiety. *Cognitive and Behavioral Practice*, 11, 3-12.
- Manassis, K., Mendlowitz, S. L., Scapillato, D., Avery, D., Fiksenbaum, L., & Freire, M. (2002). Group and individual cognitive-behavioral therapy for childhood anxiety disorders: A randomized trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 41(12), 1423-1430.

- March, J. S. (2004). Multidimensional anxiety scale for children - parent version.
- Maughan, D., R., Christiansen, E., Jenson, W. R., Olympia, D., & Clark, E. (2005). Externalizing behaviors and disruptive behavior disorders: A meta-analysis. *School Psychology Review*, 34(3), 267-286.
- McLoone, J., Hudson, J. L., & Rapee, R. M. (2006). Treating anxiety disorders in a school setting. *Education and Treatment of Children*, 29(2), 219-242.
- Mendlowitz, S. L., Manassis, K., Bradkey, S., Scapillato, D., Mieztis, S., & Shaw, B. (1999). Cognitive-behavioural group treatment in childhood anxiety disorders: The role of parental involvement. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38(10), 1223-1229.
- Meyer, T., Miller, M., Metzger, R., & Borkovec, T. (1990). Development and validation of the Penn State Worry Questionnaire. *Behaviour Research and Therapy*, 28, 487-495.
- Moore, P. S., Whaley, S. E., & Sigman, M. (2004). Interactions between mother and children: Impacts of maternal and child anxiety. *Journal of Abnormal Psychology*, 113(3), 471-476.
- Morrissey-Kane, E., & Prinz, R. J. (1999). Engagement in child and adolescent treatment: The role of parental cognitions and attributions. *Clinical Child and Family Psychology Review*, 2(3), 183-198.
- Muris, P., Merckelbach, H., Ollendick, T., King, N., & Bogie, N. (2002). Three traditional and three new childhood anxiety questionnaires: Their reliability and validity in a normal adolescent sample. *Behaviour Research and Therapy*, 40, 753-772.
- Nauta, M. H., Scholing, A., Emmelkamp, P. M., & Minderaa, R. B. (2003). Cognitive-behavioral therapy for children with anxiety disorders in a clinical setting: No additional

- effect of a cognitive parent training. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42(11), 11270-11278.
- Nauta, M. H., Scholing, A., Emmelkamp, P. M. G., & Minderaa, R. B. (2001). Cognitive-behavioral therapy for anxiety disordered children in a clinical setting: Does additional cognitive parent training enhance treatment effectiveness? *Clinical Psychology and Psychotherapy*, 8, 330-340.
- O'Rourke, N. (2004). Reliability generalization of responses by care providers to the Center for Epidemiologic Studies-Depression scale. *Educational and Psychological Measurement*, 64(6), 973-991.
- Pallant, J. (2007). *SPSS Survival Manual* (3rd ed.). New York: McGraw-Hill Education.
- Pallesen, S., Nordhus, I., Carlstedt, B., Thayer, J., & Johnsen, T. (2006). A Norwegian adaptation of the Penn State Worry Questionnaire: Factor structure, reliability, validity and norms. *Scandinavian Journal of Psychology*, 47, 281-291.
- Pawlak, C., Pascual-Sanchez, T., Rae, P., Fischer, W., & Ladame, F. (1999). Anxiety disorders, comorbidity, and suicide attempts in adolescence: A preliminary investigation. *European Psychiatry*, 14, 132-136.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in general population. *Applied Psychological Measurement*, 1, 385-401.
- Rapee, R. M. (2002). The development and modificatino of temperamental risk for anxiety disorders: Prevention of a lifetime of anxiety? *Biological Psychiatry*, 52, 947-957.
- Reiss, S., Peterson, R. A., Gursky, D. M., & McNally, R. J. (1986). Anxiety sensitivity, anxiety frequency and the predictions of fearfulness. *Behaviour Research and Therapy*, 24(1), 1-8.

- Rubin, K. H., Nelson, L. J., Hastings, P., & Asendorpf, J. (1999). The transaction between parents' perceptions of their children's shyness and their parenting styles. *International Journal of Behavioral Development*, 23(4), 937-957.
- Sareen, J., Cox, B. J., Afifi, T. O., Graaf, R. d., Asmundson, G. J. G., Have, M. t., et al. (2005). Anxiety disorders and risk for suicide ideation and suicide attempts: A population-based longitudinal study of adults. *Archive of General Psychiatry*, 62, 1249-1257.
- Schmidt, N. B., & Joiner, T. E. (2002). Structure of the Anxiety Sensitivity Index psychometrics and factor structure in a community sample. *Anxiety Disorders*, 16, 33-49.
- Schuurmans, J., Comijs, H. C., Beekman, A. T. F., de Beurs, E., Deeg, D. J. H., Emmelkamp, P. M. G., et al. (2005). The outcome of anxiety disorders in older people at 6-year follow-up: results from the Longitudinal Aging Study Amsterdam. *Acta Psychiatrica Scandinavica*, 111(6), 420-428.
- Shortt, A. L., Barrett, P. M., Dadds, M., R., & Fox, T. L. (2001). The influence of family and experimental context on cognition in anxious children. *Journal of Abnormal Child Psychology*, 29(6), 585-596.
- Shortt, A. L., Barrett, P. M., & Fox, T. L. (2001). Evaluating the FRIENDS program: A cognitive-behavioral group treatment for anxious children and their parents. *Journal of Clinical Child Psychology*, 30(4), 525-535.
- Snyder, J., Cramer, A., A Frank, J., & Patterson, G. R. (2005). The contributions of ineffective discipline and parental hostile attributions of child misbehavior to the development of conduct problems at home and school. *Developmental Psychology*, 41(1), 30-41.
- Spence, S. H., Donovan, C., & Brechman-Toussaint, M. (2000). The treatment of childhood social phobia: The effectiveness of a social skills training-based, cognitive-behavioural

- intervention, with and without parental involvement. *Journal of Child Psychology and Psychiatry*, 41(6), 713-726.
- Spence, S. H., Najman, J. M., Bor, W., O'Callaghan, M., J., & Williams, G. M. (2002). Maternal anxiety and depression, poverty and marital relationship factors during early childhood as predictors of anxiety and depressive symptoms in adolescence. *Journal of Child Psychology and Psychiatry*, 43(4), 457-469.
- Statistics Canada. (2009). *2006 Census: Median Family Income in 2005*. Retrieved March 17, 2009, from <http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/prof/92-597/index.cfm?lang=E>
- Suarez-Almazor, M., Kendall, C., Johnson, J., Skeith, K., & Vincent, D. (2000). Use of health status measures in patients with low back pain in clinical settings. Comparison of specific, generic and preference-based instruments. *Rheumatology*, 39, 783-790.
- Taylor, S., & Cox, B. J. (1998). Anxiety sensitivity: Multiple dimensions and hierarchic structure. *Behaviour Research and Therapy*, 36, 37-51.
- Thienemann, M., Moore, P., & Tomkins, K. (2006). A parent-only group intervention for children with anxiety disorders: Pilot study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 45(1), 37-46.
- Turner, S. M., Beidel, D. C., Roberson-Nay, R., & Tervo, K. (2003). Parenting behaviors in parents with anxiety disorders. *Behaviour Research and Therapy*, 41, 541-554.
- Vancouver School Board. (2008). *School Calendar*. Retrieved February 12, 2009, from <http://www.vsb.bc.ca/schools/schoolcalendar/default.htm>
- Waddell, C., McEwan, K., Hua, J., & Shepherd, C. (2002). *Child and youth mental health: Population health and clinical service considerations* (Research Report for BC

- Ministry of Children and Family Development). Vancouver: University of British Columbia.
- Waddell, C., Offord, D. R., Shepherd, C. A., Hua, J. M., & McEwan, K. (2002). Child psychiatric epidemiology and Canadian public policy-making: The state of the science and the art of the possible. *Canadian Journal of Psychiatry*, 47(9), 825-832.
- Webster-Stratton, C. (1990). Long-terms follow-up of families with young conduct problem children: From preschool to grade school. *Journal of Clinical Child Psychology*, 19(2), 144-149.
- Webster-Stratton, C., Reid, M. J., & Hammond, M. (2004). Treating children with early-onset conduct problems: Intervention outcomes for parent, child, and teacher training. *Journal of Clinical Child and Adolescent Psychology*, 33(1), 105-124.
- Weisz, J. R., & Weiss, B. (1991). Studying the "referability" of child clinical problems. *Journal of Consulting and Clinical Psychology*, 59(2), 266-273.
- Whaley, S. E., Pinto, A., & Sigman, M. (1999). Characterizing interactions between anxious mothers and their children. *Journal of Consulting and Clinical Psychology*, 67(6), 826-836.
- Wittchen, H. U., Kessler, R. C., Pfister, H., & Lieb, M. (2000). Why do people with anxiety disorders become depressed? A prospective-longitudinal community study. *Acta Psychiatrica Scand*, 102, 14-23.
- Wood, J. J., McLeod, B. D., Sigman, M., Hwang, W.-C., & Chu, B. C. (2003). Parenting and childhood anxiety: Theory, empirical findings and future directions. *Journal of Child Psychology and Psychiatry*, 44(1), 134-151.



Wood, J. J., Piacentini, J. C., Southam-Gerow, M., Chu, B. C., & Sigman, M. (2006). Family cognitive behavioral therapy for child anxiety disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 45(3), 314-321.

## Appendices

Appendix A: University of British Columbia Ethics Board certificate of approval



*The University of British Columbia  
Office of Research Services  
**Behavioural Research Ethics Board**  
Suite 102, 6190 Agronomy Road, Vancouver,  
B.C. V6T 1Z3*

## CERTIFICATE OF APPROVAL- MINIMAL RISK RENEWAL

<b>PRINCIPAL INVESTIGATOR:</b> Lynn Miller	<b>DEPARTMENT:</b> UBC/Education/Educational & Counselling Psychology, and Special Education	<b>UBC BREB NUMBER:</b> H06-80627
<b>INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT:</b>		
<b>Institution</b> UBC Other locations where the research will be conducted: N/A	<b>Site</b> Vancouver (excludes UBC Hospital)	
<b>CO-INVESTIGATOR(S):</b> Marnie Fukushima-Flores		
<b>SPONSORING AGENCIES:</b> Unfunded Research - "FRIENDS Parent Project (Parents of FRIENDS: Effectiveness of Parent Training in Reducing Parent Anxiety in a Universal Prevention Program for Anxiety Symptoms in School Children)"		
<b>PROJECT TITLE:</b> FRIENDS Parent Project (Parents of FRIENDS: Effectiveness of Parent Training in Reducing Parent Anxiety in a Universal Prevention Program for Anxiety Symptoms in School Children)		

**EXPIRY DATE OF THIS APPROVAL: September 23, 2009**

<b>APPROVAL DATE: September 23, 2008</b>
The Annual Renewal for Study have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.
<i>Approval is issued on behalf of the Behavioural Research Ethics Board</i>
<hr/> Dr. M. Judith Lynam, Chair Dr. Ken Craig, Chair Dr. Jim Rupert, Associate Chair Dr. Laurie Ford, Associate Chair Dr. Daniel Salhani, Associate Chair Dr. Anita Ho, Associate Chair

## Appendix B: Anxiety Sensitivity Index

### ASI

Please circle the number that best corresponds to your agreement with each statement below.					
	Very little	A little	Some	Much	Very much
1. It is important to me not to appear nervous.	0	1	2	3	4
2. When I cannot keep my mind on task, I worry that I might be going crazy.	0	1	2	3	4
3. It scares me when I feel 'shaky' (trembling).	0	1	2	3	4
4. It scares me when I feel faint.	0	1	2	3	4
5. It is important to me to stay in control of my emotions.	0	1	2	3	4
6. It scares me when my heart beats rapidly.	0	1	2	3	4
7. It embarrasses me when my stomach growls.	0	1	2	3	4
8. It scares me when I am nauseous.	0	1	2	3	4
9. When I notice that my heart is beating rapidly, I worry that I might have a heart attack.	0	1	2	3	4
10. It scares me when I become short of breath.	0	1	2	3	4
11. When my stomach is upset, I worry that I might be seriously ill.	0	1	2	3	4
12. It scares me when I am unable to keep my mind on a task.	0	1	2	3	4
13. Other people notice when I feel shaky.	0	1	2	3	4
14. Unusual body sensations scare me.	0	1	2	3	4
15. When I am nervous, I worry that I might be mentally ill.	0	1	2	3	4
16. It scares me when I am nervous.	0	1	2	3	4

Reiss, S., Peterson, R. A., Gursky, D. M., & McNally, R. J. (1986). Anxiety sensitivity, anxiety frequency and the predictions of fearfulness. *Behaviour Research and Therapy*, 24(1), 1-8.

## Appendix C: Center for Epidemiological Studies-Depression

### CES-D

Below is a list of the ways you might have felt or behaved. Please read each statement carefully and, using the scale below, circle a number (0 to 3) to indicate how often you have felt this way **during the past week**.

	Rarely or none of the time (Less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of the time (3-4 days)	Most or all of the time (5-7 days)
1. I was bothered by things that usually don't bother me.	0	1	2	3
2. I did not feel like eating; my appetite was poor.	0	1	2	3
3. I felt that could not shake off the blues even with help from my family or friends.	0	1	2	3
4. I felt that I was just as good as other people.	0	1	2	3
5. I had trouble keeping my mind on what I was doing.	0	1	2	3
6. I felt depressed.	0	1	2	3
7. I felt that everything I did was an effort.	0	1	2	3
8. I felt hopeful about the future.	0	1	2	3
9. I thought my life has been a failure.	0	1	2	3
10. I felt fearful.	0	1	2	3
11. My sleep was restless.	0	1	2	3
12. I was happy.	0	1	2	3
13. I talked less than usual.	0	1	2	3
14. I felt lonely.	0	1	2	3
15. People were unfriendly.	0	1	2	3

	Rarely or none of the time (Less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of the time (3-4 days)	Most or all of the time (5-7 days)
16. I enjoyed life.	0	1	2	3
17. I had crying spells.	0	1	2	3
18. I felt sad.	0	1	2	3
19. I felt that people dislike me.	0	1	2	3
20. I could not get going.	0	1	2	3

© Randloff, L.S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.

## Appendix D: Penn State Worry Questionnaire

### PSWQ

Please circle a number (1-5) that best describes how typical or characteristic each item is of you.

	Not at all typical		Somewhat typical		Very typical
1. If I don't have enough time to do everything, I don't worry about it.	1	2	3	4	5
2. My worries overwhelm me.	1	2	3	4	5
3. I don't tend to worry about things.	1	2	3	4	5
4. Many situations make me worry.	1	2	3	4	5
5. I know I shouldn't worry about things, but I just can't help it.	1	2	3	4	5
6. When I'm under pressure I worry a lot.	1	2	3	4	5
7. I am always worrying about something.	1	2	3	4	5
8. I find it easy to dismiss worrisome thoughts.	1	2	3	4	5
9. As soon as I finish one task, I start to worry about everything else I have to do.	1	2	3	4	5
10. I never worry about anything.	1	2	3	4	5
11. When there is nothing more that I can do about a concern, I don't worry about it anymore.	1	2	3	4	5
12. I've been a worrier all my life.	1	2	3	4	5
13. I notice that I have been worrying about things.	1	2	3	4	5
14. Once I start worrying, I can't stop.	1	2	3	4	5
15. I worry all the time.	1	2	3	4	5
16. I worry about projects until they are all done.	1	2	3	4	5

Meyer, T. J. , Miller, M. L., Metzger, R. L., & Borkovec, T. D. (1990). Development and validation of the Penn State Worry Questionnaire. *Behaviour Research and Therapy*, 28, 487-496.

## Appendix E: Screen for Child Anxiety Related Emotional Disorders

### Screen for Child Anxiety Related Disorders (SCARED)

Below is a list of statements that describe how people feel. Read each statement carefully and decide if it is "Not True or Hardly Ever True" or "Somewhat True or Sometimes True" or "Very True or Often True" **for your child**. Then for each statement, circle the number that corresponds to the response that seems to describe your child for the last 3 months. Please respond to all statements as well as you can, even if some do not seem to concern your child.

	Not True or Hardly Ever True	Somewhat True or Sometimes True	Very True or Often True
1. When my child feels frightened, it is difficult for him/her to breathe.	0	1	2
2. My child gets headaches when he/she is at school.	0	1	2
3. My child doesn't like to be with people he/she doesn't know well.	0	1	2
4. My child gets scared if he/she sleeps away from home.	0	1	2
5. My child worries about other people liking him/her.	0	1	2
6. When my child gets frightened, he/she feels like passing out.	0	1	2
7. My child is nervous.	0	1	2
8. My child follows me wherever I go.	0	1	2
9. People tell me that my child looks nervous.	0	1	2
10. My child feels nervous with people he/she doesn't know well.	0	1	2
11. My child gets stomach aches at school.	0	1	2
12. When my child gets frightened, he/she feels like he/she is going crazy.	0	1	2
13. My child worries about sleeping alone.	0	1	2
14. My child worries about being as good as other kids.	0	1	2
15. When he/she gets frightened, he/she feels like things are not real.	0	1	2
16. My child has nightmares about something bad happening to his/her parents.	0	1	2
17. My child worries about going to school.	0	1	2
18. When my child gets frightened, his/her heart beats fast.	0	1	2
19. He/she gets shaky.	0	1	2



	<b>Not True or Hardly Ever True</b>	<b>Somewhat True or Sometimes True</b>	<b>Very True or Often True</b>
20. My child has nightmares about something bad happening to him/her.	0	1	2
21. My child worries about things working out for him/her.	0	1	2
22. When my child gets frightened, he/she sweats a lot.	0	1	2
23. My child is a worrier.	0	1	2
24. My child gets really frightened for no reason at all.	0	1	2
25. My child is afraid to be alone in the house.	0	1	2
26. It is hard for my child to talk with people he/she doesn't know well.	0	1	2
27. When my child gets frightened, he/she feels like he/she is choking.	0	1	2
28. People tell me that my child worries too much.	0	1	2
29. My child doesn't like to be away from his/her family.	0	1	2
30. My child is afraid of having anxiety (or panic) attacks.	0	1	2
31. My child worries that something bad might happen to his/her parents.	0	1	2
32. My child feels shy with people he/she doesn't know well.	0	1	2
33. My child worries about what is going to happen in the future.	0	1	2
34. When my child gets frightened, he/she feels like throwing up.	0	1	2
35. My child worries about how well he/she does things.	0	1	2
36. My child is scared to go to school.	0	1	2
37. My child worries about things that have already happened.	0	1	2
38. When my child gets frightened, he/she feels dizzy.	0	1	2
39. My child feels nervous when he/she is with other children or adults and he/she has to do something while they watch him/her (for example: read aloud, speak, play a game, play a sport.)	0	1	2
40. My child feels nervous when he/she is going to parties, dances, or any place where there will be people that he/she doesn't know well.	0	1	2
41. My child is shy.	0	1	2

Boris Birmaher, M.D., Suneeta Khetarpal, M.D., Marlane Cully, M.Ed., David Brent M.D., and Sandra McKenzie, Ph.D., Western Psychiatric Institute and Clinic, University of Pgh. (10/95).

## Appendix F: Beck's Anxiety Inventory for Adults

### BAI

This questionnaire consists of a list of 21 symptoms associated with anxiety. Please read each carefully and indicate, by circling a number (0 to 3), to what degree you have been affected by each of these symptoms **over the past week, including today**.

	Not at all	A little	Somewhat	Severely
1. Numbness or tingling.	0	1	2	3
2. Feeling hot.	0	1	2	3
3. Wobbliness in legs.	0	1	2	3
4. Unable to relax.	0	1	2	3
5. Fear of the worst happening.	0	1	2	3
6. Dizzy or lightheaded.	0	1	2	3
7. Heart pounding or racing.	0	1	2	3
8. Unsteady.	0	1	2	3
9. Terrified.	0	1	2	3
10. Nervous.	0	1	2	3
11. Feelings of choking.	0	1	2	3
12. Hands trembling.	0	1	2	3
13. Shaky.	0	1	2	3
14. Fear of losing control.	0	1	2	3
15. Difficulty breathing.	0	1	2	3
16. Fear of dying.	0	1	2	3
17. Scared.	0	1	2	3
18. Indigestion or discomfort in abdomen.	0	1	2	3
19. Faint.	0	1	2	3
20. Face flushed.	0	1	2	3
21. Sweating (not due to heat).	0	1	2	3

Beck, A.T., Epstein, N., Brown, G., & Steer, R.A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, 56, 893-897.

## Appendix G: Multidimensional Anxiety Screen for Children-Parent version

MASC-R<sup>Parent</sup>  
John S. March, M.D., M.P.H

Child's First Name: \_\_\_\_\_ Child's Last Name: \_\_\_\_\_  
Child's Gender (circle one):      Male      Female      Child's Grade: \_\_\_\_\_

Instructions: These sentences ask how your child might have been thinking, feeling or acting recently. For each item, please circle the number that shows **how often the statement is true about your child**.

Circle 1 if a sentence is Never true about your child.  
Circle 2 if a sentence is Rarely true about your child.  
Circle 3 if a sentence is Sometimes true about your child.  
Circle 4 if a sentence is Often true about your child.

Remember, there are not right or wrong answers, just answer how your child has been feeling recently.

Here is an example to show how to complete the questionnaire. In the example, if you child is hardly ever scared of dogs, you would circle 2 meaning that the statement is "Rarely" true about your child..

<b>Example:</b> My child is scared of dogs.	1	2	3	4
---	---	---	---	---

<b>Rating:</b> 1 = Never    2 = Rarely    3 = Sometimes    4 = Often
--

- |  |  |
|--|--|
| <p>1. My child feels tense or uptight.      1    2    3    4</p> <p>2. My child usually asks permission to do things.      1    2    3    4</p> <p>3. My child worries about other people laughing at him/her.      1    2    3    4</p> <p>4. My child gets scared when his/her parents go away.      1    2    3    4</p> <p>5. My child keeps his/her eyes open for danger.      1    2    3    4</p> <p>6. My child has trouble getting his/her breath.      1    2    3    4</p> <p>7. My idea of going away to camp scares my child.      1    2    3    4</p> <p>8. My child gets shaky or jittery.      1    2    3    4</p> <p>9. My child tries to stay near mom or dad.      1    2    3    4</p> <p>10. My child is afraid that other kids will make fun of him/her.      1    2    3    4</p> <p>11. My child tries hard to obey his/her parents and teachers.      1    2    3    4</p> <p>12. My child gets dizzy or faint feelings.      1    2    3    4</p> <p>13. My child checks things out first.      1    2    3    4</p> | <p>14. My child worries about getting called on in class.      1    2    3    4</p> <p>15. My child is jumpy.      1    2    3    4</p> <p>16. My child is afraid other people will think he/she is stupid.      1    2    3    4</p> <p>17. My child keeps the light on at night.      1    2    3    4</p> <p>18. My child has pains in his/her chest.      1    2    3    4</p> <p>19. My child avoids going places without the family.      1    2    3    4</p> <p>20. My child feels strange, weird, or unreal.      1    2    3    4</p> <p>21. My child tries to do things other people will like.      1    2    3    4</p> <p>22. My child worries about what other people think of him/her.      1    2    3    4</p> <p>23. My child avoids watching scary movies and TV shows.      1    2    3    4</p> <p>24. My child's heart races or skips beats.      1    2    3    4</p> <p>25. My child stays away from things that upset him/her.      1    2    3    4</p> <p>26. My child sleeps next to someone from the family.      1    2    3    4</p> |
|--|--|

<b>Rating:</b>	<b>1 = Never</b>	<b>2 = Rarely</b>	<b>3 = Sometimes</b>	<b>4 = Often</b>
----------------	------------------	-------------------	----------------------	------------------

- |  |   |
|--|---|
| 27. My child feels restless and on edge. <b>1 2 3 4</b>  | 46. My child has to check that nothing terrible has happened. <b>1 2 3 4</b>                    |
| 28. My child tries to do everything exactly right. <b>1 2 3 4</b>  | 47. My child has to check things several times or more. <b>1 2 3 4</b>                          |
| 29. My child worries about doing something stupid or embarrassing. <b>1 2 3 4</b>                        | 48. My child has to reread or rewrite things. <b>1 2 3 4</b>                                    |
| 30. My child gets scared riding in the car or on the bus. <b>1 2 3 4</b>                                 | 49. My child has to keep things straight, even, or balanced. <b>1 2 3 4</b>                     |
| 31. My child feels sick to his/her stomach. <b>1 2 3 4</b>   | 50. My child has trouble throwing things away. <b>1 2 3 4</b>                                   |
| 32. If my child gets upset or scared, he/she lets someone know right away. <b>1 2 3 4</b>                | 51. My child counts things for no reason. <b>1 2 3 4</b>  |
| 33. My child gets nervous if he/she has to perform in public. <b>1 2 3 4</b>                             | 52. My child has trouble making up his/her mind about simple things. <b>1 2 3 4</b>             |
| 34. Bad weather, the dark, heights, animals, or bugs scare my child. <b>1 2 3 4</b>                      | 53. My child has to move or talk in a special way. <b>1 2 3 4</b>                               |
| 35. My child's hands shake. <b>1 2 3 4</b>   | 54. My child gets too concerned with sin or wrongdoings. <b>1 2 3 4</b>                         |
| 36. My child checks to make sure things are safe. <b>1 2 3 4</b>   | 55. My child has to repeat things until it feels just right. <b>1 2 3 4</b>                     |
| 37. My child has trouble asking other kids to play with him/her. <b>1 2 3 4</b>                          | 56. My child has to touch things for no reason. <b>1 2 3 4</b>                                  |
| 38. My child's hands feel sweaty or cold. <b>1 2 3 4</b>   | 57. My child gets upset over the thought that he/she might get sick. <b>1 2 3 4</b>             |
| 39. My child feels shy. <b>1 2 3 4</b>   | 58. My child has to pick his/her skin, bite his/her nails, or pull his/her hair. <b>1 2 3 4</b> |
| 40. My child has bad or silly thoughts that he/she can't stop. <b>1 2 3 4</b>                            | 59. My child has the thought that some part of his/her body is really ugly. <b>1 2 3 4</b>      |
| 41. My child has to do things over and over again for no reason. <b>1 2 3 4</b>                          |   |
| 42. My child gets really upset about dirt, germs, chemicals, radiation, or sticky things. <b>1 2 3 4</b> |   |
| 43. My child feels he/she has to wash or clean more than he/she really needs to. <b>1 2 3 4</b>          |   |
| 44. My child fears he/she will be responsible for something bad happening. <b>1 2 3 4</b>                |   |
| 45. My child fears that he/she might cause someone to get sick or hurt. <b>1 2 3 4</b>                   |   |

## Appendix H: Program Evaluation Questionnaire



UNIVERSITY OF BRITISH COLUMBIA  
Faculty of Education

**Department of Educational and Counselling  
Psychology, and Special Education**

2125 Main Mall  
Vancouver BC, Canada V6T 1Z4  
Phone: 604-822-0242 Fax: 604-822-3302

### FRIENDS Parent Project: Program Evaluation

We would like your feedback about the parent program you have participated in so that we can improve future FRIENDS parent programs. Please take a few minutes to complete this form and return it to school with your child. Your responses will be kept confidential. Thank you for your assistance!

Today's Date: \_\_\_\_\_ Sessions attended: Night 1: Yes / No; Night 2: Yes / No

My child's school: \_\_\_\_\_

*Using a 5-point scale where 1 is "Strongly Disagree" and 5 is "Strongly Agree" please indicate your level of agreement with the following statements by circling a number.*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) Prior to receiving this training, I already knew a lot about childhood anxiety	1	2	3	4	5
b) I acquired significant learning about childhood anxiety.	1	2	3	4	5
c) I acquired an understanding of the Friends Program.	1	2	3	4	5
d) I acquired the skills to assist my child with his/her anxiety.	1	2	3	4	5
e) The information was presented clearly.	1	2	3	4	5

*Please indicate how useful these techniques were for you as a parent from 1 (Not important) to 5 (Very important) by circling a number.*

	Not important	Somewhat important	Important	Quite important	Very important
Overview of Anxiety	1	2	3	4	5
Overview of the FRIENDS for Life program	1	2	3	4	5
Feelings: Physiological clues associated with anxiety	1	2	3	4	5
Relaxation strategies	1	2	3	4	5
Role of thoughts affecting/controlling feelings and behaviours	1	2	3	4	5
I can do it: Challenging and changing unhelpful thoughts	1	2	3	4	5

	Not important	Somewhat important	Important	Quite important	Very important
Explore solutions: Coping Step Plan to overcome challenging situation	1	2	3	4	5
6 – Block Problem Solving Plan	1	2	3	4	5
Now reward yourself: Rewards	1	2	3	4	5
Parent practice of skills presented in program	1	2	3	4	5
Modelling appropriate behaviour	1	2	3	4	5
Praise: Giving and receiving positive feedback	1	2	3	4	5

1. What was the most significant thing you learned from the FRIENDS parent program?
2. Have you been able to use any newly learned skills? Which one(s)?
3. What would you change to make the FRIENDS parent program better?
4. Have you seen a difference in your child's behaviour? How has it changed?

Any additional comments:

***Thank you for your help! Please return this form and the other questionnaires to school with your child.***

## Appendix I: Treatment Integrity Checklist



UNIVERSITY OF BRITISH  
COLUMBIA

**Faculty of Education**

Department of Educational and Counselling  
Psychology, and Special Education

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### **FRIENDS Parent Project: Treatment Integrity Checklist**

Please place a checkmark beside the components you covered in the two parent training sessions:

- ☐ Group Rationale: Why are we here?
- ☐ Overview of Anxiety
- ☐ Normative Data on Children's Fears
- ☐ Overview of Depression
- ☐ Principles of the FRIENDS for Life program (Body, Mind, Learning)
- ☐ Overview of the FRIENDS for Life program
- ☐ F=Feelings: Physiological clues associated with anxiety
- ☐ R=Relaxation strategies: \_\_\_\_\_
- ☐ Role of thoughts affecting/controlling feelings and behaviours
- ☐ Parent practice of identifying thoughts, feelings and behaviours
- ☐ I=I can do it: Challenging unhelpful thoughts
- ☐ Parent practice of challenging unhelpful thoughts
- ☐ Changing unhelpful thoughts to helpful/powerful thoughts
- ☐ Parent practice of changing unhelpful to helpful/powerful thoughts
- ☐ E=Explore solutions: Coping Step Plan to overcome challenging situation
- ☐ Parent practice of using the Coping Step Plan
- ☐ 6 – Block Problem Solving Plan
- ☐ Parent practice of 6 – Block Problem Solving Plan
- ☐ N=Now reward yourself: Rewards
- ☐ Modelling appropriate behaviour
- ☐ Attending to positive behaviour
- ☐ Parent practice of Approaching and Avoiding Behaviour activity
- ☐ Talking with Your Children
- ☐ Evaluating situations in terms of partial success
- ☐ Praise: Giving and receiving positive feedback
- ☐ D=Don't forget to practice
- ☐ S=Stay calm for life

Any additional information or activities:

List of handouts (or attach copies):

Name(s) of  
Facilitator(s): \_\_\_\_\_

Location (school): \_\_\_\_\_

Dates of presentations: Night 1: \_\_\_\_\_ Night 2: \_\_\_\_\_

Number of participants in attendance: Night 1: \_\_\_\_\_ Night 2: \_\_\_\_\_



Appendix J: Recruitment letter to FRIENDS district liaison



UNIVERSITY OF BRITISH  
COLUMBIA

Faculty of Education

Department of Educational and Counselling  
Psychology, and Special Education

2125 Main Mall  
Vancouver BC, Canada V6T 1Z4  
Phone: 604-822-0242 Fax: 604-822-3302

***FRIENDS Parent Project Summary***

**Marnie Fukushima-Flores, MA Student**

Dr. Lynn Miller, Assistant Professor, Supervisor

Dear \_\_\_\_\_,

My name is Marnie Fukushima-Flores and I am a graduate student at the University of British Columbia. I am working on an exciting research project under the supervision of FRIENDS Lead Trainer, Dr. Miller and in conjunction with the FORCE who is excited to be running the FRIENDS parent training in your school district this coming school year. Donna Murphy of the FORCE passed along your name as she has recognized your enthusiasm for the FRIENDS for Life program.

The research project involves investigating the Parent Training component of the FRIENDS program with the purpose of finding out how effective the training component is and to see if there are ways it could be improved. This e-mail is to invite you to be a part of this exciting research project - the first of its kind to look at the Parent Training program in a school setting. It is completely optional for all districts, but we see your district as a particularly "keen" and helpful district. For the research to be most effective we would ideally need to have the FRIENDS Parent Training program run twice in your district. Our suggestion would be to have one group of parents in the fall of 2006, and a different group in the spring of 2007 or twice between January and June 2007. Would you consider working with us: the FORCE, Dr. Miller and myself to carry out a research project that would provide invaluable information on how we can best support parents and ultimately their children?

I would be happy to provide further information on the details of the research project as well as the benefits and minimal amount of work we would be asking of your district. I look forward to hearing from you and for the possibility of working together to learn how to best support students and their families.

Sincerely,

Marnie Fukushima-Flores

Appendix K: FPP Information Package



UNIVERSITY OF BRITISH  
COLUMBIA

Faculty of Education

Department of Educational and Counselling  
Psychology, and Special Education

2125 Main Mall  
Vancouver BC, Canada V6T 1Z4  
Phone: 604-822-0242 Fax: 604-822-3302



**FRIENDS Parent Project**  
**Research**  
**Information Package**

*A UBC research project investigating the FRIENDS for Life parent training program conducted by graduate student Marnie Fukushima-Flores under the supervision of lead FRIENDS trainer, Dr. Lynn Miller, Assistant Professor, Department of Educational and Counselling Psychology in collaboration with the F.O.R.C.E (Families Organized for Recognition and Care Equality - Society for Kids Mental Health).*

## FRIENDS Parent Project Summary

Marnie Fukushima-Flores, MA Student  
Dr. Lynn Miller, Assistant Professor, Supervisor

### Research Project:

As of the 2006/2007 school year, 30 school districts in BC will have run the FRIENDS Parent Training programs in conjunction with the FORCE. A number of school districts within this group have been approached to participate in the FRIENDS Parent Project (FPP) research being conducted by UBC graduate student Marnie Fukushima-Flores under the supervision of lead FRIENDS trainer, Dr. Lynn Miller. Our goal is to investigate the effectiveness of the FRIENDS parent training program and to get feedback from parents themselves as to the usefulness of the program.

In advance of the parent training program start date, Grade 4 and 5 students who are receiving the FRIENDS program in their classes will be given a package to take home to their parents to invite them to participate in the FRIENDS Parent Project. It will be emphasized that parents will be free to take the parent training program without participating in the research. We will also have consent forms and measures available at the first parent training session for those parents who may have changed their mind and would like to participate in the FPP research or for parents who may not have received the measures via their child. Parents can participate in the FPP in one of two ways:

1) Attend the FRIENDS parent training sessions AND complete a set of four questionnaires on the topic of anxiety twice (once before the program starts and once at the end) plus a Program Evaluation at the end of the parent training program.

**OR**

2) ONLY complete the set of four questionnaires twice (*without* attending the parent training program).

If parents do sign-up to take part in the research component in either capacity, they will be asked to complete and return the set of four enclosed questionnaires to school with their child. The classroom teacher will collect the questionnaires and record on a class list, whose parents are participating and in what capacity. To encourage children to return the packages, the class in each district that brings in the most completed forms will win a pizza party lunch.

The two FRIENDS parent training sessions will then be delivered by a representative of the child mental health advocacy group Families Organized for Recognition and Care Equality Society for Kids Mental Health (FORCE), a school counsellor and/or MCFD counsellor. A treatment integrity checklist will be completed by the facilitators to ensure standardization between the treatment groups. After the second session, all participating parents will have the second round of anxiety related questionnaires sent home with their children to complete and return to school. Parent who attended the parent training sessions will also be asked to complete the Program Evaluation Questionnaire. All questionnaires will be given to the District Liaison to mail back to UBC.

The overall commitment for parents attending the two FRIENDS parent training session evenings and complete the questionnaires would be approximately an extra hour of their time (four questionnaires twice plus Program Evaluation once). For parents only completing the questionnaires, we would be asking for about an extra 45 minutes of their time (four questionnaires twice). In order to encourage participation in this project, the chance to enter their name in a draw for an iPod or similar prize will offered to parents upon completion of the measures.

The following table is a suggested timeline of events for the FRIENDS Parent Project:

### Overview of 2006/2007 Proposed Timeline for *FRIENDS Parent Project*

Dates*	Activity
September 2007	<ul style="list-style-type: none"> <li>• Package sent home with all Grade 4/5 students who are doing the FRIENDS program at school, informing parents of the opportunity to participate in the <i>FRIENDS Parent Project</i> research.</li> <li>• If they agree, they are asked to complete the accompanying four questionnaires and return them to school with their child.</li> <li>• Gr. 4/5 classroom teacher collects completed questionnaires and records on class list, which parents are participating.</li> <li>• Teachers give completed questionnaires to District Liaison.</li> </ul>
October '07 – November '07	<ul style="list-style-type: none"> <li>• Two FRIENDS parent training sessions take place. <ul style="list-style-type: none"> <li>○ Parent are sent home four questionnaires (plus the Program Evaluation Questionnaire if they attended the parent training sessions) with child and asked to complete and return to school. Again, Gr. 4/5 classroom teacher collects completed questionnaires and gives to District Liaison.</li> </ul> </li> </ul>
December '07	<ul style="list-style-type: none"> <li>• District Liaison collects all completed questionnaires and mails to FRIENDS Parent Project to UBC (<i>all postage and photocopying costs incurred will be reimbursed</i>).</li> </ul>

\* Dates are just guidelines, to give an example of the flow of events.

## **SAMPLE School District Letter of Support**

Date:

Mrs. Marnie Fukushima and Dr. Lynn Miller  
University of British Columbia  
Faculty of Education  
2125 Main Mall  
Vancouver, B. C. V6T 1Z4

Dear Mrs. Fukushima-Flores and Dr. Miller,

This letter is in support of the FRIENDS Parent Project to take place in the \_\_\_\_\_ School District for the 2006/2007 school year. I believe the project meets the needs of our students and their families by taking an innovative and preventative approach to issues of childhood anxiety.

Our school district would be very eager to implement the proposed project. As educators, we understand clearly the link between healthy psychosocial development and school success. By including the family in this part of their child's educational experience we are working in close cooperation with the home. We believe the FRIENDS Parent Project would help support families in working towards establishing a sound foundation of beliefs and behaviours for the student and for providing a healthy, stable and supportive environment which will enhance the student's continuing growth and development.

The FRIENDS Parent Project provides an approach that is strongly supported by the administration of this school district as well as the faculty. We understand that by participating in this project, there are no financial responsibilities or remuneration involved. We are committed to understanding the debilitating effects of anxiety in children and look forward to learning practical strategies for intervention that involve both the school community and the families we serve.

I look forward to working with the investigators of this program.

Sincerely,

Name:  
Position:



UNIVERSITY OF BRITISH  
COLUMBIA

**Faculty of Education**

Department of Educational and Counselling  
Psychology, and Special Education

2125 Main Mall  
Vancouver BC, Canada V6T 1Z4  
Phone: 604-822-0242 Fax: 604-822-3302

## **FRIENDS Parent Project**

Marnie Fukushima-Flores, MA Student  
Dr. Lynn Miller, Assistant Professor, Supervisor

### **School District Information and Checklist**

#### **SCHOOL DISTRICT INFORMATION**

Name of School District: \_\_\_\_\_

Name of District Research Liaison: \_\_\_\_\_

Contact information for Liaison: Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-mail \_\_\_\_\_ Other \_\_\_\_\_

Dates and location of FRIENDS Parent Training Sessions:

Session/Evening one: \_\_\_\_\_ Location: \_\_\_\_\_

Session/Evening two: \_\_\_\_\_ Location: \_\_\_\_\_

Number of Gr. 4/5 classrooms running FRIENDS for Life program: \_\_\_\_\_

#### **CHECKLIST**

- ☐ School district information form completed (see above)
- ☐ School district letter of support
- ☐ For *each classroom* running the FRIENDS program: please attach, for the purposes of providing FPP packages to all parents of the Grade 4/5 students:
  - ☐ Class list
  - ☐ Start and end dates of the classroom programs

*Please send all documents to Marnie Fukushima-Flores c/o Dr. Lynn Miller:*

**Mail:** University of British Columbia,  
Faculty of Education, 2125 Main Mall  
Vancouver, British Columbia V6T 1Z4

**Fax:** 604-822-3302



## **FRIENDS Parent Project Information**

### **BENEFITS for a District Research Liaison:**

- You will gain school-based research experience.
- You will be among the first in the world to be a part of researching the parent training component of the FRIENDS program in a school setting.

### **BENEFITS for your schools and community:**

- Parents in your community will have the opportunity to gain experience with the program, *FRIENDS for Life* through the Parent Training program. Parent participation is designed to enhance the positive effects of the *FRIENDS* program which has been found to be very successful in preventing anxiety and depression in children and youth and improving coping skills.
  - **85%** of children showing signs of anxiety disorder no longer display that disorder after completing the program.
  - **100%** of non-anxious children had significantly increased self-esteem and reduced feelings of worry and sadness after completing the FRIENDS program.

### **RESPONSIBILITIES of the District Research Liaison:**

- ⇒ Plan for the FRIENDS Parent Training to be offered twice in your district.
- ⇒ Attend a FORCE facilitated training either Fall 2006 or early 2007.
- ⇒ Organize and oversee administration of a short group of assessments to the participating parents three times (see details in accompanying Summary document).
- ⇒ Mail back all data to UBC (postage costs will be reimbursed).

- ⇒ Maintaining regular contact with UBC, sending updates when needed.
- ⇒ We estimate that this will take a total of **approximately eight to ten hours** of your time over course of the 2006/2007 school year.

**RESPONSIBILITIES of Program Facilitator:**

- ⇒ Commit to facilitating the FREENDS parent training program twice, in the 2006/2007 school year.
- ⇒ You may be asked to assist the District Research Liaison with the dissemination and collection of questionnaires and consent forms to parents participating in the program.
- ⇒ We estimate that this will take **approximately eight hours** of your time at two peak periods over the year.

**RESPONSIBILITIES of the Grade 4/5 Classroom Teacher:**

- ⇒ Three times in the 2006/2007 school year hand out questionnaire packages for students to send home to parents. Collect and keep track (using a class list) of parents who have returned their questionnaires.
- ⇒ Give all completed questionnaires to District Research Coordinator.





## PARENT PROJECT

### OUR Promise to you:

We want to acknowledge your essential role and contributions to this project. Your knowledge of (and connection to) the children, parents/guardians, schools and community will be important to the success of this project.

As much as possible, our aim will be to have a **collaborative approach** with you and the community in general, and we will sincerely appreciate your thoughts and ideas during this ongoing process. Your feedback is very important to us.

We hope that our shared goal - **increasing the quality and effectiveness of programs that are delivered to children and families dealing with anxiety** - will be the driving force behind our successful collaboration.

Respectfully,

*Marnie Fukushima-Flores*  
MA Student, Counselling Psychology, UBC

## **FRIENDS Parent Project 2006-2007**

### **Oath of Confidentiality and Commitment**

I, \_\_\_\_\_ understand that by agreeing to participate in this one year project I am bound by the principles of ethical research to maintain confidentiality on any information that is collected for the project.

I have read and understood the benefits and responsibilities of the role of the Regional Research Coordinator / Program Facilitator / Classroom Teacher (circle one or both) and to my knowledge will be able to fulfill the requirements of this (these) role(s).

I am also aware that the project team will be available by phone to give me support and answer any questions during this project.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

School District: \_\_\_\_\_

My Role in Project \_\_\_\_\_

Once signed, please return to Marnie Fukushima-Flores c/o Dr. Lynn Miller

Mail: University of British Columbia,  
Faculty of Education, 2125 Main Mall  
Vancouver, British Columbia V6T 1Z4

Fax: 604-822-3302

## Appendix M: Chilliwack Letter of Support



### Chilliwack School District

*PARTNERS IN LEARNING*

October 17, 2007

Mrs. Marnie Fukushima and Dr. Lynn Miller  
University of British Columbia  
Faculty of Education  
2125 Main Mall  
Vancouver, B. C. V6T 1Z4

Dear Mrs. Fukushima-Flores and Dr. Miller,

This letter is in support of the FRIENDS Parent Project to take place in the Chilliwack School District for the 2007/2008 school year. I believe the project meets the needs of our students and their families by taking a preventative approach to issues of childhood anxiety.

We understand that by participating in this project, there are no financial responsibilities or remuneration involved. Please ensure that you seek permission from the school principal for all the sites where FRIENDS is to be implemented.

Yours truly,

Corinne McCabe  
Superintendent of Schools

C Michael Audet, Assistant Superintendent

8430 Cessna Drive, Chilliwack, BC V2P 7K4  
Tel: 604-792-1321 Fax: 604-792-9665

*"Recycled Paper"*



## *The Catholic Independent Schools of Vancouver Archdiocese*

Office of the Superintendent

April 3, 2008

Mrs. Marnie Fukushima and Dr. Lynn Miller  
University of British Columbia  
Faculty of Education  
2125 Main Mall  
Vancouver, B. C. V6T 1Z4

Dear Mrs. Fukushima-Flores and Dr. Miller,

This letter is in support of the FRIENDS Parent Project to take place with the Catholic Independent Schools of the Vancouver Archdiocese during the 2007/2008 school year. I believe this innovative and preventative approach to childhood anxiety addresses some of the issues arising among students and their families.

The CISVA would support the implementation of the proposed project. As educators, we understand clearly the link between healthy psychosocial development and school success. By including the family in this part of their child's educational experience we are working in close cooperation with the home, which is in line with our philosophy. We believe the FRIENDS Parent Project would help support families in working towards establishing a sound foundation of beliefs and behaviors for the student and for providing a healthy, stable and supportive environment which will enhance the student's continuing growth and development.

The FRIENDS Parent Project provides an approach that is strongly supported by the principals and the Superintendent's Office. We understand that by participating in this project, there are no financial responsibilities or remuneration involved. We are committed to understanding the debilitating effects of anxiety in children and look forward to learning practical strategies for intervention that involve both the school community and the families we serve.

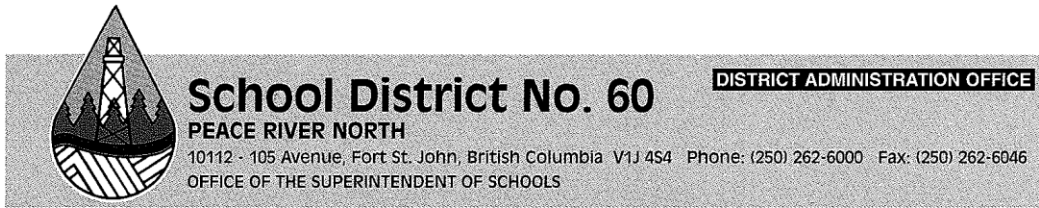
I look forward to working with the investigators of this program.

Sincerely,

Jennifer Tong  
Director of Special Education

150 Robson Street, Vancouver, BC V6B 2A7 Tel: (604) 683-9331 Fax: (604) 687-6692  
e-mail: info@cisva.bc.ca www.cisva.bc.ca

## Appendix O: Fort St. John Letter of Support



September 11, 2007

Mrs. Marnie Fukushima & Dr. Lynn Miller  
University of British Columbia  
Faculty of Education  
2125 Main Mall  
Vancouver, B. C. V6T 1Z4

Dear Mrs. Fukushima-Flores & Dr. Miller,

This letter is in support of the FRIENDS Parent Project to take place in School District No. 60 (Peace River North) for the 2007/2008 school year. I believe the project meets the needs of our students and their families by taking an innovative and preventative approach to issues of childhood anxiety.

Our school district would be very eager to implement the proposed project. As educators, we understand clearly the link between healthy psychosocial development and school success. By including the family in this part of their child's educational experience we are working in close cooperation with the home. We believe the FRIENDS Parent Project would help support families in working towards establishing a sound foundation of beliefs and behaviours for the student and for providing a healthy, stable and supportive environment which will enhance the student's continuing growth and development.

The FRIENDS Parent Project provides an approach that is strongly supported by the administration of this school district as well as the faculty. We understand that by participating in this project, there are no financial responsibilities or remuneration involved. We are committed to understanding the debilitating effects of anxiety in children and look forward to learning practical strategies for intervention that involve both the school community and the families we serve.

I look forward to working with the investigators of this program.

Sincerely,

Larry Espe  
Superintendent of Schools

LE:js

## Appendix P: Smithers Letter of Support

09/21/2007 09:26

2508475413

LEARNER SUPPORT CNTR

PAGE 01/01

### SCHOOL DISTRICT #54 - BULKLEY VALLEY

3603 3<sup>rd</sup> Ave, Box 758,  
Smithers, B.C. V0J 2N0  
Phone: 250-847-5517 Fax: 250-847-5413

### ***Learner Support Centre***

*A school community resource supporting learner success*

June 6, 2007

Mrs. Marnie Fukushima-Flores and Dr. Lynn Miller  
University of British Columbia  
Faculty of Education  
2125 Main Mall  
Vancouver, B.C. V6T 1Z4

Dear Mrs. Fukushima-Flores and Dr. Miller,

This letter is in support of the FRIENDS Parent Project to be carried out in School District #54 for the 2007/2008 school year. I believe the project meets the needs of our students and their families by taking an innovative and preventative approach to issues of childhood anxiety.

Our school district would like to participate in the proposed project. As educators, we understand clearly the link between healthy psychosocial development and school success and we believe it is important to include the family in this part of their child's educational experience. The FRIENDS Parent Project would help support families in our community to work towards establishing a sound foundation of beliefs and behaviours for their children and providing a healthy, stable and supportive environment which will enhance their children's continuing growth and development.

The FRIENDS Parent Project provides an approach that is supported by the administration of this school district. We understand that by participating in this project, there are no financial responsibilities or remuneration involved. We are committed to understanding the debilitating effects of anxiety in children and look forward to learning practical strategies for intervention that involve both the school community and the families we serve.

I look forward to working with the investigators of this program.

Sincerely,

Leesa Easterday  
Principal Learner Support  
School District 54 - Bulkley Valley



## School District No. 36 (Surrey)

### Superintendent's Department

14225 - 56th Avenue, Surrey, BC V3X 3A3 • Tel: (604) 596-7733 Fax: (604) 596-7941

November 15, 2007

File: 21000-01 (R&E)

Dr. Lynn Miller  
2125 Main Mall  
Vancouver, BC  
V6T 1Z4

Dear Dr. Miller:

*Re: Friends Parent Project*

Please use this letter as confirmation of acceptance of your research project in principle. As you know, district level endorsement does not imply commitment of individual schools, students or other participants and you are required to seek consent, sequentially of those involved.

I wish you every success with your research and remind you that a final report is to be submitted to this department on completion.

Yours truly,

Dr. Sharon Cohen  
Assistant Superintendent  
School District 36 (Surrey)  
SC/k

## Appendix R: Recruitment letters to Chilliwack teachers



UNIVERSITY OF BRITISH  
COLUMBIA

Faculty of Education

Department of Educational and Counselling  
Psychology, and Special Education

2125 Main Mall  
Vancouver BC, Canada V6T 1Z4  
Phone: 604-822-0242 Fax: 604-822-3302

### ***FRIENDS Parent Project***

Marnie Fukushima-Flores, MA Student

Dr. Lynn Miller, Assistant Professor, Supervisor

As you may know, the parent component of the FRIENDS for Life program is being offered to parents of Grade 4/5 children in Chilliwack. It is a joint effort of the F.O.R.C.E. Society for Kid's Mental Health, and the Ministry of Children and Family Development and the Ministry of Education.

There has been a great deal of positive feedback from parents who have participated in the program. During the past few years we have heard from parents about the importance of teaching the FRIENDS program in schools, and how much they appreciate the information and tools that were given to them. Many parents actually wished that there were more sessions offered, with more time allotted to practice the skills, which indicates to us the need for this type of information and skills for parents. This year, the FRIENDS Parent Project (FPP) is researching the parent program to find out how effective it is in helping families deal with anxiety and what parents find useful about the program.

***We are writing to you to ask for your help in this important research project.*** The two night parent program will be at Strathcona Elementary on Tuesday Feb. 5<sup>th</sup> and Tuesday Mar. 4<sup>th</sup>. We are looking for teachers who have or are teaching the FRIENDS program in their classrooms sometime this school year who would be willing to:

1. Send forms home to parents, inviting them to participate in the FRIENDS Parent Project - a class set of the forms will be delivered to your school by Friday Feb. 1<sup>st</sup> and would need to be collected by Tuesday Feb. 5<sup>th</sup>, the first evening of the parent program. They would then be shipped to the FPP at UBC (paid by UBC). *There is a pizza party lunch prize for the class that brings back the most forms in the district.*
2. A second set of forms, only for parents who have said "Yes" to participating in the FPP, will be sent to you after the second parent evening again to be sent home with the kids, collected and shipped back to UBC (paid by UBC).

In recognition of your time, which we appreciate is at a premium, we would be happy to say "Thank-you" with a coffee card from either Tim Horton's or Starbucks – your choice!

If you have any questions about this project please contact Marnie Fukushima-Flores (604-837-9151, marnie.flores@telus.net). To sign up to participate, please contact Marnie by the end of the day on Monday, January 28, 2008...if possible, please include the number of kids in your class and of course which coffee card you would like!

Sincerely,

Marnie Fukushima-Flores  
M.A. Student, Counselling Psychology  
Department of Educational and Counselling Psychology & Special Education  
Faculty of Education  
University of British Columbia



## Appendix S: Preintervention letter to participating teachers



UNIVERSITY OF BRITISH  
COLUMBIA

Faculty of Education

Department of Educational and Counselling  
Psychology, and Special Education

2125 Main Mall  
Vancouver BC, Canada V6T 1Z4  
Phone: 604-822-0242 Fax: 604-822-3302

### ***FRIENDS Parent Project***

**Marnie Fukushima-Flores, MA Student**

Dr. Lynn Miller, Assistant Professor, Supervisor

Dear

Thank-you very much for participating in the FRIENDS Parent Project! Your involvement is crucial to the success of this research project. From conducting this research we hope to better understand how to best support students in their social and emotional well being; and in particular, how involving parents can increase the success of this goal.

In addition to inviting parents to the FRIENDS parent training evenings being held at Strathcona Elementary on Feb. 5<sup>th</sup> and Mar. 4<sup>th</sup>, we want to invite all the parents of the children in your class to participate in the FRIENDS Parent Project as well. In order to do this, I have provided a package to be sent home to each family that includes: a letter of invitation and consent, a participant information sheet and four questionnaires in an envelope to return the completed paperwork confidentially. If possible, please include a class list with the returned envelopes to check off which children have returned their packages to facilitate our record keeping. The deadline for returning the envelopes is **Tuesday, February 5<sup>th</sup>**, the first evening of the parent program. Please give all the returned envelopes to Joe in a sealed envelope or box and he will courier them to me at UBC.

To encourage all the children to take the packages home to their parents and return the completed forms (there is an option on the consent form for parents to check a box saying they are NOT able/interested to participate so all children can bring back their forms) *we will provide a pizza party lunch to the class in your district that brings back the most envelopes.* Please feel free to remind them of this incentive as much as necessary!

After the two parent training evenings have taken place, we will send another set of envelopes home to only those families who signed up to participate in the research component, at which point I will again send you a set of envelopes to be sent home to parents with their kids. As before, if you are able to record the children who return the envelopes and give them to Joe to have them couriered to me, that would be great! Thank-you again for your key involvement in this important study – and *as token of our appreciation we will be sending you a coffee card to either Tim Horton's or Starbucks* – if you haven't done so already, please send me a note indicating your preference and we will mail it to you at the end of the study.

Sincerely,

Marnie Fukushima-Flores  
M.A. Student, Counselling Psychology  
Department of Educational and Counselling Psychology & Special Education  
Faculty of Education  
University of British Columbia

## Appendix T: Letter of invitation and consent



UNIVERSITY OF BRITISH  
COLUMBIA

**Faculty of Education**

Department of Educational and Counselling  
Psychology, and Special Education

2125 Main Mall  
Vancouver BC, Canada V6T 1Z4  
Phone: 604-822-0242 Fax: 604-822-3302

Questionnaire and Consent Form: FRIENDS Parent Project

Dear Parent/Guardian,

Grade 4 and 5 students in schools all across British Columbia are participating in the FRIENDS for Life program for the prevention and early intervention of anxiety. As a parent of a student in Grade 4 or 5 receiving the FRIENDS program, you have been invited to participate in the parent component of the FRIENDS program. The purpose of this letter is to invite you to participate in a research project called the FRIENDS Parent Project, conducted by a graduate student at the University of British Columbia that will take place around the same time as the parent evenings. If you choose not to take part in the FRIENDS Parent Project research, you can still participate in the FRIENDS parent program.

**Principal Investigator:** Dr. Lynn Miller, Assistant Professor, Department of Educational and Counselling Psychology, and Special Education; Phone: 604-822-8539.

**Co-Investigator:** The FRIENDS Parent Project is research for the thesis of Marnie Fukushima-Flores, a Master's student in Counselling Psychology, Department of Educational and Counselling Psychology, and Special Education; Phone: 604-822-8539.

**Purpose:** The FRIENDS Parent Project is a research project conducted by the University of British Columbia with support from Families Organized for Recognition and Care Equality - Society for Kids Mental Health (F.O.R.C.E). The purpose of this research project is to determine how effective the FRIENDS parent sessions are and how parents feel they have helped them learn to recognize and cope with potential anxiety in their families. You have been invited to participate in this research project because your child is or will be doing the FRIENDS program in his/her classroom and parent sessions are being offered through the school district.

**Procedure:** Parents are invited to participate in the FRIENDS Parent Project in one of two ways:

1) Attend the parent evenings and fill out four short questionnaires on the topic of anxiety twice (before and after the parent program) plus a Program Evaluation Questionnaire at the end of the program. Each set of questionnaires should take approximately 20 - 30 minutes each time, and the Evaluation about 20 minutes for a total time of about 1 – 1.5 hours of your time to participate in this research project.

**OR**

2) Complete four short questionnaires on the topic of anxiety twice (they will be sent home from school with your child) *without* attending the parent evenings. Each set of questionnaires should take approximately 20 - 30 minutes each time, for a total time of approximately 40 minutes - 1 hour of your time to participate in this research project.

*For either option, upon the completion of both sets of questionnaires parent's names will be entered into a draw to win a \$50 gift certificate to Sears.*

**Confidentiality:** All measures will be taken to ensure confidentiality of your information. All documents will be identified only by code number and will be kept in a locked filing cabinet. Participants will not be identified by name nor will any codes be used in any reports of the completed study. Any information entered into a computer will be strictly password protected with access given to only Dr. Lynn Miller or MA student, Marnie Fukushima-Flores.

**Resources and referrals:** If, in the course of the research project any participant feels the need for more information or resources to deal with any issues brought up as a result of the project, local community resources such as counselling referrals will be made available.

**Contact for more information about the study:** If you have any questions or desire further information with respect to this study, you may contact Dr. Lynn Miller at 604-822-8539.

**Contact for concerns about the rights of research participants:** If you have any concerns about your treatment or rights as a research participant, you may contact the Research Subject Information line in the UBC Office of Research Services at 604-822-8598.

**Consent:** Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time without consequence.

Please indicate your participation in the FRIENDS Parent Project by placing a check in the applicable box below:

- ☐ I plan to attend the parent evenings **and** agree to complete the questionnaires on the topic of anxiety twice (before and after the parent program) plus a Program Evaluation Questionnaire at the end of the program. I agree to complete the questionnaires and return them to school with my child.
- ☐ I plan on completing the questionnaires on the topic of anxiety twice **without** attending the parent evenings. I agree to complete the questionnaires and return them to school with my child.
- ☐ I am **not** able/interested in participating in the FRIENDS Parent Project.

Please sign below - by signing you are giving consent to participate in this study. If the questionnaires are completed it will be assumed that your consent has been given for the questionnaires. You will receive a copy of this form for your own records.

*If you **are** participating and have filled out the questionnaires, please place this consent form plus the completed questionnaires in the envelope provided and seal to provide confidentiality, then return to school with your child. If you are **not** participating, please complete this form and return it in the sealed envelope with the blank questionnaires and return to school with your child.*

---

Participant Signature

---

Date

---

Printed Name of Participant

## Appendix U: Participant Information Form



UNIVERSITY OF BRITISH  
COLUMBIA

**Faculty of Education**

Department of Educational and Counselling  
Psychology, and Special Education

2125 Main Mall  
Vancouver BC, Canada V6T 1Z4  
Phone: 604-822-0242 Fax: 604-822-3302

### **FRIENDS Parent Project: Participant Information Form**

Dear Parent/Guardian,

Thank-you for participating in the FRIENDS Parent Project! Please complete this information form and the attached questionnaires and return them to school with your child in the envelope sealed, with your name on the outside. All information will be kept strictly confidential.

#### ***Information on child who is receiving the FRIENDS for LIFE program at school:***

First name: \_\_\_\_\_ Last name: \_\_\_\_\_

Gender: \_\_\_\_\_ Birthdate: \_\_\_\_\_(day)\_\_\_\_\_(month)\_\_\_\_\_(year)

#### ***Family Information:***

Your first name: \_\_\_\_\_ Your last name: \_\_\_\_\_

#### **Your relationship to child:**

- |  |  |
|--|--|
| <input type="checkbox"/> Biological mother     | <input type="checkbox"/> Non-biological father     |
| <input type="checkbox"/> Biological father     | <input type="checkbox"/> Other relative: _____     |
| <input type="checkbox"/> Non-biological mother | <input type="checkbox"/> Other non-relative: _____ |

#### **Your age:**

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| <input type="checkbox"/> under 20 | <input type="checkbox"/> 41 – 50 |
| <input type="checkbox"/> 20 – 30  | <input type="checkbox"/> 51 – 60 |
| <input type="checkbox"/> 31 – 40  | <input type="checkbox"/> over 61 |

#### **Your education level:**

- ☐ No high school diploma  
☐ High school diploma  
☐ Community college/vocational or technical training diploma/certificate  
☐ University degree

#### **Your marital status:**

- |   |                                       |
|---|---------------------------------------|
| <input type="checkbox"/> Married            | <input type="checkbox"/> Common-law   |
| <input type="checkbox"/> Separated/Divorced | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Single             |                                       |

Dominant language spoken in the home: \_\_\_\_\_

Other languages spoken at home: \_\_\_\_\_

Ages and relationship (brother, sister, cousin, step sibling, etc.) of other children living in the home: \_\_\_\_\_

Did any of the following prevent you from participating in the FRIENDS parent trainings sessions?

- |   |   |
|---|---|
| <input type="checkbox"/> Date of sessions   | <input type="checkbox"/> Lack of transportation |
| <input type="checkbox"/> Time of sessions   | <input type="checkbox"/> Distance from program  |
| <input type="checkbox"/> Need for childcare | <input type="checkbox"/> Work responsibilities  |
|   | <input type="checkbox"/> Other? _____           |

Appendix V: Thank-you letter to teachers



UNIVERSITY OF BRITISH  
COLUMBIA

Faculty of Education

Department of Educational and Counselling  
Psychology, and Special Education

2125 Main Mall  
Vancouver BC, Canada V6T 1Z4  
Phone: 604-822-0242 Fax: 604-822-3302

***FRIENDS Parent Project***

**Marnie Fukushima-Flores, MA Student**

Dr. Lynn Miller, Assistant Professor, Supervisor

Dear \_\_\_\_\_,

Thank-you again for your help in the FRIENDS Parent Project – without teachers like yourself, we wouldn't be able to gather the information from parents that will help us to better understand how including parents in programs like FRIENDS for LIFE may be beneficial for the child's social and emotional growth.

Attached is the list of students whose parents agreed to complete the second set of forms. I have asked parents to return the forms by **Monday May 5<sup>th</sup>** but I am more interested in getting as many envelopes back rather than meeting that deadline so please feel free to use your discretion in how strict to be with the deadline. As before, please give the returned envelopes to Patti and she will courier them to me at UBC.

The FRIENDS Parent Project is mainly looking at the effect of the parent sessions on reported anxiety levels of the children and therefore the classroom component of the FRIENDS program is not our focus. However, knowing when the children have or are receiving the program will provide helpful information in addition to that we receive from the parents. Therefore, if you could please indicate the start and end dates of the FRIENDS program you have, are or will be teaching in your classroom – estimates or months (ie. September to April) are just fine.

Start date: \_\_\_\_\_ End date: \_\_\_\_\_

And, please check the box for the coffee card of your choice - our small way of saying a big THANK-YOU!

I would like a: ☐ Starbucks coffee card  
☐ Tim Horton's coffee card

Again, your time and involvement in this research project has been much appreciated. If you have any questions/concerns or you are interested in finding out information on the outcome of the study, please feel free to contact me at [marnie.flores@telus.net](mailto:marnie.flores@telus.net). Please include this form with the returned envelopes.

Sincerely,

Marnie Fukushima-Flores  
M.A. Student, Counselling Psychology  
Department of Educational and Counselling Psychology & Special Education  
University of British Columbia