THE RELATION OF ANXIETY TO EMPATHY AND PROSOCIAL BEHAVIOUR IN SCHOOL-AGE CHILDREN

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Abstract

This study examines the relation of anxiety symptoms to empathy-related responses and reports of prosocial behaviour in children. Empathy and prosocial behaviour variables were also considered in order to examine their ability to predict subtypes of trait anxiety. Participants were a community sample of 104 children, ages 9 through 12 years, who completed self-report measures of anxiety, empathy-related responding, and prosocial behaviour. Peers and teachers completed assessments of students’ peer prosocial behaviour. Results indicated that empathic concern, perspective-taking, and personal distress were positively and significantly related to higher rates of self-reported anxiety in children (some variation depending upon the anxiety subtype). Children’s anxiety was generally unrelated to reports of their prosocial behaviour, with the exception of the social phobia subtype. Hierarchical regressions revealed that dimensions of empathy-related responding contributed uniquely to the prediction of all subtypes of children’s anxiety, while prosocial behaviour contributed unique information (beyond that provided by empathy variables) to the prediction of obsessive compulsive and social phobia anxiety subtypes. Implications are discussed considering variable associations, unique characteristics of middle childhood, variations by anxiety subtype, gender differences, construct definition, and measurement issues.
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Dedications

This thesis is dedicated to all of the amazing children, women and men who have - or who will - bravely invite me into your lives to hear your stories. I only hope that you are able to take away as much from our experience together as I.
Introduction

In recent years, an abundance of research literature has emerged indicating that anxiety disorders are the most prevalent and expensive mental health concern amongst adults and children in both Canadian and American populations (Anxiety Disorders Association of America [ADAA], 2006; Anxiety Disorders Association of Canada [ADAC], 2006; Mental Health Evaluation and Community Consultation Unit, April 2002). At least 1 in 10 adults in North America (ADAA, 2006) and more than 6 of every 100 of British Columbia’s children are affected by significant anxiety problems (Mental Health Evaluation and Community Consultation Unit, October 2002). In British Columbia alone, that statistic translates into over 65,900 children (BC Ministry of Children and Families, February 2003). According to Costello and Angold (1995), North American statistics indicate that 12-20% of the child population will experience anxiety as a mental health disorder - a challenge likely to persist into adulthood.

In a longitudinal study investigating life course outcomes for adolescents with anxiety disorders, Woodward and Fergusson (2001) found that as the number of anxiety disorder diagnoses in adolescence increased, so did the likelihood of continued diagnosis and risk for mental health problems in young adulthood. Adolescents with one anxiety disorder continued to meet criteria in young adulthood at a rate of 41.8%, while those with three anxiety diagnoses met ongoing criteria at a rate of 76.9%. With evidence of such links between childhood anxiety and the continued experience of anxiety into adulthood, it makes sense to further study the child population for the purposes of prevention.

Anxiety, as defined by Fonseca and Perrin (2001), is a set of emotional reactions arising from the anticipation of a real or imagined threat to the self. Trait anxiety refers specifically to, “a proneness or tendency to experience state anxiety under stressful or threatening conditions”
(Bouchard, Taylor, Cox, & Gauthier, 1999, p. 173). Lastly, more transient in nature, state anxiety refers to the temporary emotional experience of tension and apprehension. This study focuses on the concept of trait anxiety, which describes the stable tendency of an individual to engage in anxious responding or experiencing. Levels of trait anxiety vary from person to person and as a result, “anxiety can be conceptualized as lying on a continuum” (Endler & Kocovski, 2001, p. 235). The interest of the present study is to acknowledge this continuum and focus on trait anxiety as it occurs within a community or non-clinical population. However, in order to illustrate important points contributing to the rationale of this study, information gathered from research with clinical populations will be presented in places where information with non-clinical populations is not readily available.

Recognized as a natural and adaptive phenomenon, anxiety becomes a clinical problem (warranting classification as a mental disorder) when levels fall outside of the normal range of frequency, intensity, and duration expected for the child’s age and stage of development (Axelson & Birmaher, 2001). Thus, children meeting diagnostic criteria for an anxiety disorder would fall within the upper ranges of the anxiety continuum and be described as having high levels of trait anxiety. The Diagnostic and Statistical Manual of Mental Disorders (4th edition) lists clinical categories or subtypes of anxiety diagnoses including panic disorder or agoraphobia, specific phobia, social phobia, obsessive-compulsive, generalized anxiety disorder, post-traumatic stress disorder, acute distress disorder, and separation anxiety (4th ed.; DSM-IV; American Psychiatric Association, 1994; Mash & Wolfe, 1999; Spence, 1997; 1998). These categories are formed based upon clusters of symptoms characteristic of each subtype and various etiological explanations for each have been proposed. For example, social phobia is

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1 Classification of anxiety disorders occurring in childhood and adolescence has undergone dramatic changes over the past two decades (Saavedra & Silverman, 2002). Research indicating that children experience anxiety subtypes similar to adults has led to the inclusion of such classification subtypes within the DSM.
characterized by exaggerated fears of social or performance situations and potential exposure to scrutiny by others (Johnson, Inderbitzen-Nolan, & Anderson, 2006; Mash & Wolfe, 1999; Velting, Setzer, & Albano, 2004). Meanwhile, symptoms involving “non-age-appropriate, excessive worry and anxiety regarding separation from caregivers or from home” (Cronk, Slutske, Madden, Bucholz, & Heath, 2004; Mash & Wolfe, 1999) would be indicative of separation anxiety.

The typical age of onset of anxiety disorders is between 10 to 12 years, while some variation by subtype has been noted (Albano, Chorpita, & Barlow, 1996). For example, researchers have suggested that separation anxiety disorder and specific phobias are more common among younger age groups, while social phobia is more prevalent upon entry into adolescence (Albano et al., 1996; Spence, 1997, 1998; Strauss & Last, 1993). Reviews of anxiety research also indicate differences by gender, including an increased prevalence of separation anxiety disorder and social phobia among girls compared to boys, with the opposite being true for obsessive-compulsive disorder (Mash & Wolfe, 1999; Saavedra & Silverman, 2002; Spence, 1997, 1998). Studies involving non-clinical, community populations encompass a larger continuum of trait anxiety levels and suggest similar trends to those reported amongst clinical populations. More specifically, anxiety symptom subtypes, gender, and developmental differences are noted for their presence within community populations (Spence, 1997, 1998).

Children living with significant anxiety not only experience its effects in their body as a physiological response (as measured by heart rate and galvanic skin response; Langley, Bergman, & Piancentini, 2002), but also experience the ripple effects it can have throughout their lives. Some researchers and practitioners have noted that anxiety disorders may be related to school refusal/pre-mature withdrawal from school (King & Bernstein, 2001; Van Amerigen,
Mancini, & Farvolden, 2003), disruptions in the family environment (Woodward & Fergusson, 2001) somatic health complaints/issues (Firestone, 1999; Simonian, Beidel, Turner, Berkes, & Long, 2001), co-occurring diagnosis of childhood depression (Axelson & Birmaher, 2001; Kovacs & Devlin, 1998), reduced quality of life in terms of emotional functioning (Bastiaansen, Koot, Ferdinand, & Verhulst, 2004) and difficulties with peer relations (Inderbitzen, Walters, & Bukowski, 1997; La Greca & Stone, 1993; Strauss, Lahey, Frick, Frame, & Hynd, 1988). It is for these reasons that further investigation of anxiety is warranted. The latter suggestion of a relation between anxiety and poor peer relations is of particular interest to this study.

The peer relations of anxious children have been primarily examined within clinical populations and in terms of three dimensions including (1) peer status and acceptance, (2) social expectancies and perception, and (3) social adjustment and functioning. Results of such studies suggest that anxiety may serve to interfere with building positive peer relationships. Studies of peer status and acceptance tend to place participants in categories reflective of these terms and are formed considering the child's level of social impact and social acceptance or preference (for an overview of sociometric measure classifications see Hymel, Valliancourt, McDougall, & Renshaw, 2002). In terms of how anxious children are viewed and accepted by others, Strauss et al. (1988) found that, in comparison to nonreferred children, children with anxiety disorders (ages 6 through 13-years) were liked significantly less by their peers and tended to fall into neglected sociometric categories. Similarly, using peer sociometric nomination strategies, authors have found that adolescents classified as neglected and submissive rejected (Inderbitzen

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2 In this particular study, definitions of the various classifications were as follows: popular — having high social impact and positive social preference; rejected — having high social impact and negative social preference; and neglected — low social impact and negative social preference.
et. al., 1997) or victims (Storch, Brassard, & Masia-Warner, 2003) have also demonstrated a tendency to score higher on levels of anxiety and social avoidance (La Greca & Stone, 1993).

Looking at how anxious children view themselves in relation to social situations, studies have indicated links between increased levels of trait anxiety to lowered levels of social self-competence, increased negative expectation, as well as to increased early detection and perception of threat in ambiguous situations (Chansky & Kendall, 1997; Muris, Rapee, Meesters, Schouten, & Geers, 2003; Spence, Donovan, & Brechman-Toussaint, 1999). The particular subtype of anxiety which is often the focal point of such studies is social phobia (also termed social anxiety).

Moving away from aspects of cognition to examine the behavioural component of social functioning, authors have proposed social skills performance deficits in children having high levels of trait anxiety, especially during unstructured social activity (e.g., interactions at parties or recess). In their review of the literature, Spence et al. (1999) found these deficits have been attributed to such factors as the avoidant nature of anxiety and reduced use of assertive responses. In the same study, which investigated the social skills of children with social phobia, these authors found that anxious children initiated fewer interactions and exhibited shorter response length during social exchanges. Reviews of effective treatment programs for anxiety have shown improvement of such deficits through training sessions using role-play, modeling and behavioural rehearsal (Beidel, Turner, & Morris, 2000; Beidel, Turner, Young, & Paulson, 2005; Spence et al., 1999).

Demonstrated links between peer acceptance, friendships, and prosocial behaviours (such as sharing and helping) provide reason to further consider how anxiety may affect the social

Victims are typically defined in the literature as those individuals whom are the recipient of negative acts of physical, verbal, or relational aggression (Storch et al., 2003).
behaviours of children (Ladd & Prolifet, 1996; Warden & MacKinnon, 2003). As research has primarily focused on the social deficits emerging from anxious children's behaviour, little has been intentionally observed concerning their prosocial behaviour, defined as, “voluntary, intentional behavior that results in benefits for another; the motive is unspecified and may be positive, negative or both” (Eisenberg & Miller, 1987, p. 92). In the current study, prosocial behaviour refers to descriptions of positive prosocial behaviour, with no distinction concerning the quality of motivation (positive, negative, internal, or external) driving the behaviour.

It seems that a vital piece of information is missing among the current efforts to bring together what is known about anxiety and social functioning in children. There remains gaps in our understanding of how aspects of the internal experience of anxiety, and related cognition, interact with social functioning or behaviour. Other aspects of internal experiencing and social functioning have been considered by researchers, however, in studies of social behaviour and empathy. More specifically, researchers have found evidence suggesting a positive link between levels of sympathy and perspective-taking, and higher levels of prosocial responding (Roberts & Strayer, 1996) in adolescents. These two processes – sympathy and perspective-taking – are believed to be dimensions of the larger composite process of empathy.

Empathy is often discussed in terms of being the basis by which humans understand and in turn, are able to relate to one another. Variously defined and measured by a multitude of authors (Batson, Fultz, & Schoenrade, 1987; Bryant, 1982; Davis, 1983; Eisenberg & Miller, 1987; Feschbach, 1983; Hoffman, 2000, 1977), in the present study, empathy is defined as, “...an affective response that stems from the apprehension or comprehension of another's emotional state or condition, and that is identical or very similar to what the other person is feeling or would be expected to feel” (definition by Eisenberg and Strayer, reported in Eisenberg,
Empathy involves then a multidimensional process of affect and cognition in order to *feel* and *understand* another’s experience. Further distinctions have been made between *situational* and *dispositional* empathy/empathy-related responding. The first of these terms refers to the vicarious emotional response induced within a specific situation, while the latter refers to an individual’s tendency toward experiencing empathy and responding in a certain manner (Eisenberg et al., 1994). The present study is concerned primarily with *dispositional* empathy, which suggests the stable empathic-response tendency of the individual. Bringing these points together, effectively relating to others and knowing how to respond behaviourally would be hypothetically altered without the process of empathy.

The symptoms associated with anxiety in children seem to suggest a pre-occupied cognitive and affective state (e.g., negative or obsessive thoughts, fear, panic, and agitation). Given empathy’s reliance on affect and cognition, one may question; what is the association between empathy and anxiety symptoms in childhood? Considering empathy’s ties with social behaviour and social relating processes, such information on the anxiety-empathy link seems essential.

The purpose of the present study was to explore the relation of anxiety symptoms to empathy and prosocial behaviour in a sample of non-clinical children. The focus was on middle childhood because this is a time wherein children’s behaviour begins to become more peer-focused and social relations become an essential part in developing a child’s sense of self and belonging (McNamara Barry & Wentzel, 2006). It is also a time children’s empathy-related responses are typically more-fully developed (Hoffman, 2000), and significant anxiety problems become more apparent (Mash & Wolfe, 1996; Saavedra & Silverman, 2002). The choice to study children from a non-clinical population was intentional considering that this aspect appears
to have received less attention to date. Results of this study may be best generalized to preadolescent children from community (as opposed to clinical) populations.

In conclusion, research questions for this study were two-fold:

1. What is the relation of anxiety symptoms to empathy-related responses and reports of prosocial behaviour in school-age children?

2. Do empathy and prosocial behaviour singularly and collectively predict subtypes of anxiety disorders in school-age children?
Literature Review

To understand the rationale guiding the research questions of this study, it is important to examine relevant concepts in greater detail. This section provides an overview of empathy-related responding, relations between empathy and social behaviour, relations between empathy and anxiety, and the concept of prosocial behaviour.

Empathy and Empathy-related Responses

When a person views and recognizes another’s emotional state or condition, there is an opportunity to engage in an emotional response. To empathize with a target other, a viewer would experience an emotional response similar or identical to the emotion expressed by the target other (Eisenberg et al. 1996). This could include a range of emotions such as happiness, anger, sadness, and surprise (Zhou, Valiente, & Eisenberg, 2003). Authors have identified and distinguished between two common empathic responses - sympathy and personal distress. Sympathy is defined as an emotional response that is different from the distressed individual and involves feelings of sorrow or concern for the target other. It has also been referred to as empathic concern within the literature (Eisenberg, 2002) and is considered to be an other-oriented response (Batson et al., 1987). Personal distress is defined as aversive, self-oriented feelings of anxiety or distress. It has also been referred to as empathic distress (Funke, 2003) and is considered to be a self-oriented response (Batson et al., 1987). To align with terminology used in the present study's research measures, empathic concern will be used to refer to the other-oriented empathic response and personal distress will be used when referring to the self-oriented empathic response. Empathy will be viewed as the emotional-matching precursor to either of these two emotion-based reactions.
Hoffman (1977, 2000) suggests a developmental model of empathy consisting of four stages. The first of these stages describes the emotional contagion experienced by newborn babies, wherein an infant will cry in response to hearing another infant’s cry. Hoffman describes this stage as one characterized by *global empathy* and a lack of self-other definition. This empathic capacity further develops by 2 or 3 years old into an ability to perceive and distinguish that another’s feelings and perceptions may differ from one’s own. However, toddlers cannot distinguish the quality of other person’s potential wants or needs. Hoffman describes this as *egocentric empathy*. The underpinnings of sympathy are also proposed to be evident at this stage. The third stage, involving the pre-school and elementary years, is characterized by the developing ability to empathize with another’s feelings, improved recognition of emotional cues and distress, and an increased understanding of the other person’s potential wants and needs. Middle-to-late childhood (approximately 9-years-old) is characterized by the ability to empathize with others in a wide-variety of situations, including those not within immediate proximity (e.g., imagined situations of distress). This fourth stage is paired with increased development of the cognitive capacity necessary to facilitate perspective-taking skills (Litvak-Miller & McDougall, 1997).

Empathy has been measured using a variety of methods including picture/story assessment procedures, self-report questionnaires, reactions to simulated experimental situations, reports by others, physiological indices, facial/vocal/gesture indices, and various inductive procedures (Zhou et al., 2003). Based on her own research and that conducted by others, Eisenberg and colleagues have considered possible age and gender differences concerning aspects of empathy. For example, she notes that larger differences have been observed regarding age changes in empathy-related responding when measured by self-reported questionnaires.
versus facial/gestural indices. A proposed explanation of this finding describes the development of an increased ability to "mask" facial emotions with age (Eisenberg, 2000). The ability to bypass potential emotional masking provides support for the use of self-report methods within the present study.

Considering gender, differences have been found between girls and boys in the following areas: relations of empathy and positive emotion to externalizing behaviour; physiological arousal and sympathy; as well as family expressivity and empathy-related responding (Liew et al., 2003). More specifically, females were discovered to report more distress, but not more sympathy than males (Eisenberg et al., 1988). Similarly, females have been found typically to report higher scores on self-report measures of empathy (Bryant, 1982; Davis, 1980). However, it is difficult to ascertain if such differences are true and indicative of the effects of gender, or method of measurement. Although females score higher on self-reports, Eisenberg (2002, p. 684) notes, "No gender differences were obtained when empathy was assessed with either physiological or unobtrusive observations of nonverbal behaviour." Thus, gender differences in empathy and potential methodological issues are important areas for consideration in this study which uses methods of self-report.

**Empathy and Social Behaviour**

**Empathy and Prosocial Behaviour**

Empathy has been studied from a variety of perspectives. Nancy Eisenberg, a leading researcher in the field of empathy and empathy-related responding in childhood, has studied empathy in terms of relations to parental expressivity, emotional regulation (Eisenberg, Wentzel, & Harris, 1998), physiology (Miller & Eisenberg, 1988), shyness, social functioning (Eisenberg, Fabes, Guthrie, & Reiser, 2000), and effortful control (Eisenberg et al., 2005). Taken together,
findings from these studies have shed light on the way in which empathy and empathy-related characteristics are associated with child development across a wide range of physiological, familial, and peer functioning dimensions. Despite much progress in the field, however, a paucity of research exists which has examined the manner in which empathy and empathy-related constructs are associated with anxiety symptoms during middle childhood.

Theory and research have tied empathy and prosocial behaviour through the concept of empathy-related responses. More specifically, response feelings of empathic concern are expected to lead to a pattern of prosocial behaviour that involves helping a distressed other. Feelings of personal distress are also expected to lead to helping behaviour by the observer, unless there is a preferred escape/avoidance opportunity available (as both the helping and escaping behaviours are presumed to be driven by the goal of relieving one’s own personal distress; Batson et. al., 1987; Eisenberg & Miller, 1987; Eisenberg et al., 1989).

Emerging from such studies by Eisenberg and others, the relation between empathy and prosocial behaviour has been well-supported. Probably the most influential study solidifying this research was that of Eisenberg and Miller (1987) who found, through a meta-analysis of over 85 studies, that empathy is positively related to prosocial behaviour. The strength of these relations varied dependent upon method used and was strongest when considering self-reports.

*Empathy and Externalizing Behaviour*

Although there is little existing research that examines the relation of empathy-related constructs to anxiety, an internalizing process, a plethora of studies exist examining empathy in relation to externalizing disorders or behaviour in children. The last ten years have seen an emergence in the literature of studies involving children characterized as being bullies, aggressors, antisocial, or oppositional (Eisenberg et. al., 2005; Farmer et al., 2001; Veenstra et.
al., 2005). By definition, *antisocial* implies the antithesis of prosocial and as a result, one may assume children with these behaviours would be unlikely to help others. Providing some support for this assumption, research has found that children displaying high levels of externalizing or anti-social behaviour score lower on measures of empathy in contrast to their non-disordered peers (Cohen & Strayer, 1996). Research has shown that empathy/sympathetic responding is negatively related to aggression (Miller & Eisenberg, 1988). One study conducted by Hastings, Zahn-Waxler, Usher, Robinson, and Bridges (2000) found that *concern for others* (a concept often tied with empathy) may play a protective role in the development of such externalizing behaviour problems, with these problems decreasing in stability as *concern for others* increased over time.

Recognizing the importance of such findings, school-based prevention programs, such as Mary Gordon’s *Roots of Empathy* (www.rootsofempathy.org), seek to teach skills to enhance empathy development in school-age children. Research evaluating this program has indicated that along with improvements in empathy-related skills come a decrease in forms of aggressive behaviour and an increase in reported prosocial behaviours (Schonert-Reichl, Smith, Zaidman-Zait, & Hertzman, April, 2003). Empathy may be a key feature promoting prosocial behaviour and may be lacking in child populations with externalizing disorders. Further exploring empathy as a variable potentially relating to internalization (i.e., trait anxiety) and prosocial behaviour seems to be a valuable area for exploration.

Consider for a moment the following list of behaviours or symptoms: anger/tantrums, irritability, oppositional attitude, inflexibility, aggression, inattentiveness, fidgety/hyperactive, refusal to go to school, and excessive resistance to doing work. In viewing such descriptors, one may automatically relate the behaviours to a child with an externalizing disorder. Interestingly,
as noted by clinicians and researchers, this list also conveys symptoms that often go unrecognized in children with anxiety. More particularly, Garland and Garland (2001) have noted oppositionality to be a characteristic of the internalizing population. Others additionally suggest that comorbidity between “internalizing disorders and externalizing, disruptive behaviour disorders is not uncommon” (Ollendick & King, 1994, p. 919). This apparent overlap/convergence in symptoms and noted difficulty with interpersonal relations is common to both internalizing and externalizing disorders. These similarities provide us with a rationale for further inquiry into the social behaviours and empathy of children with anxiety. Furthering this rationale, it would be equally as important to examine the differences.

Research has suggested that children with externalizing disorders, such as conduct disorder, exhibit lower levels of empathy and higher levels of aggression. Empathy appears to be related to and possibly a prerequisite of prosocial interaction. As a result, children with externalizing disorders are often considered unlikely to engage in interactions of this quality. However, despite some behavioural similarities between the two populations (internalizers and externalizers), it would seem presumptuous to follow this same line of reasoning to suggest highly anxious children possess less empathy and would be less likely to be prosocial.

One must regard the quality of intention behind and the consequences of externalizing behaviour. In the case of a “bully,” this child would likely use behaviour such as aggression or opposition as a means to obtain a goal (Arsenio & Lemerise, 2001). For a child with excessive anxiety, however, such behaviour may be less intentional. Instead, oppositional or aggressive behaviour may be more indicative of a “fight-or-flight” response to perceived threat (Schniering & Rapee, 2004), thus leaving potential for feelings of remorse or regret following the behaviour. In contrast, such expression of empathy is notably absent in antisocial populations, including
older children diagnosed with conduct disorder (Frick et al., 2003). The presence versus absence of remorse warrants a closer look at the influence of empathy and empathic responding in reference to prosocial behaviour.

In their study examining the cognitions of children and adolescents (ages 7 through 16 years old) with anxiety, depressive, or disruptive behaviour disorders, Schniering and Rapee (2004) discovered some marked differences between the participants in their study identified as having internalizing versus externalizing disorders. Their results suggested that in these youth, thoughts regarding social threat held the most strength in predicting anxiety symptoms, while the strongest predictors of aggression were thoughts of hostility or revenge. Thus, research suggests both similarities and differences concerning the social interactions, behaviour, and cognitive processes of children identified as having internalizing or externalizing problems. While much is known about the relations among externalizing disorders, empathy, and prosocial behaviour during childhood and adolescence, relatively little is known about the links among internalization (anxiety), empathy, and prosocial behaviour.

Focusing on potential gender and health issues, the World Health Organization (2002) has reported that the prevalence of aggressive, conduct-disordered, and other externalizing behaviours is higher amongst male than female children. Internalizing symptoms, like those attributed to anxiety, depression, and eating disorders, in contrast, are more frequently seen amongst females (World Health Organization, 2002). Thus, the potential role of gender should be considered when studying these concepts as an aspect either for control, or direct investigation.
The Relation Between Empathy and Anxiety

Anxiety disorders are one of the most prevalent mental health concerns in childhood (Langley et al., 2002). The etiology of anxiety disorders have been attributed to a variety of factors, including stressful life experiences, patterns of avoidance, temperament, inborn tendencies and biology, unpredictable lifestyle, and familial environment/learning (Caster, Inderbitzen, & Hope, 1999; Bouchard et al., 1999; Schwartz, Snidman, & Kagan, 1996). This study is based on the hypothesis that particular characteristics of anxiety may alter the experience of empathy and empathic responding. The potential relations between these characteristics of anxiety and empathy processes may best be presented using Feshbach’s three-component model of empathy. Forming the basis of her Empathy Training studies, Feshbach’s (1983) model of empathy fits with this study’s multidimensional view and definition of the construct. Feshbach describes three interacting elements of empathy including, “the capacity to discriminate and identify an emotional state in another, the ability to assume the perspective and role of another person, and the ability to respond affectively” (p. 267). A further discussion of these elements in relation to anxiety will be put forth in the following section.

Attention, Interpretation, and Emotional Literacy

The first component – discriminating and identifying emotions - describes the ability to tell what another person is feeling. Two likely prerequisites of this ability are a certain level of emotional literacy (recognizing and being able to label an emotion) and the capacity to attend to emotional cues (i.e., such as facial affect).

Research has considered the facial recognition abilities of populations demonstrating interpersonal difficulties. Simonian et al. (2001) conducted a study in which children ages 9-15 years meeting criteria for social phobia and control group children, were presented with selected
slides from Ekman and Friesen’s Pictures of Facial Affect (1976) measure (portraying six basic human emotions) for affect labeling. The children were also asked to allocate for themselves a rating of anxiety after completion of the labeling task. Significant differences were found between groups, in that the children with social phobia exhibited higher anxiety ratings after task completion and a made a greater number of labeling errors (especially for slides depicting the emotions of happiness, sadness, and disgust). Though limited by the sample obtained, this study suggests that children with the anxiety disorder of social phobia show deficits in reading or classifying others’ facial cues.

Conversely, other researchers examining whether or not socially anxious children have a response bias towards negative facial cues found no results supporting this emerging selective-attention theory. Noted within one such study, however, was that socially anxious children needed longer to classify expressions (Melfsen & Florin, 2002). This discrepancy within the research may suggest that increased study is required better to understand anxiety and its relation to emotional literacy and attention to cues. Many community programs for anxiety treatment, social skills training, and offender rehabilitation include in their curriculum a component of affect education, revealing the level of importance placed on this skill (Barrett, Lowry-Webster, & Holmes, 1999; Goldstein, 1988; John Howard Society of Alberta, 1997).

Adequate attentional abilities are required in the processes of empathy in order to notice the facial cues of others. The focusing of such attention will affect one’s interpretation or understanding of what is being viewed. Linking this with empathy, Lechowick (1997) found higher levels of reported empathy in children rated by their teachers as having adequate attending skills. Alternately stated, a low positive correlation was found between empathy and attention.
Research focusing on the cognitive processes of people with high levels of anxiety has produced intriguing findings relevant to the present study. Extending a number of studies demonstrating attentional and interpretational bias phenomena in anxious individuals (see Heinrichs & Hofmann, 2001 for a review), Murris, Merckelbach, and Damsma (2000) exposed 252 pre-adolescents to stories of ambiguous social situations. These children were read five-sentence stories that they were told could be “scary” stories or “not scary” stories. Children were to indicate upon the first reading as soon as they had decided the quality of the story, as a means of assessing their “threshold for threat perception.” After a second reading, children reported what they thought would happen in the story and these responses were examined by blind raters. Finally, the children gave scale ratings to assess how they thought they would feel in the story. In processing participant reactions, researchers found that the socially anxious children exhibited what they termed a “threat perception bias.” The socially anxious children perceived threat in the stories more quickly and more frequently than control children.

Related to this point, Barlow (2000) has developed a model of the process of anxious apprehension, wherein hypervigilance (a known characteristic of anxiety, the function of which is to prepare one for potential threat) impacts the frequency and focus of attention to cues in the environment. In this model, an individual having higher levels of trait anxiety would become “hypervigilant for cues or stimuli associated with sources of anxious apprehension” (p. 1250). Children experiencing the effects of anxiety possess increased vigilance, an attentional threat perception bias, and deficient skills of emotional literacy. Such factors could evoke interesting interactions with the processes of empathy. Increased anxiety assists a child to detect others’ distressed states and as a result, engage in empathic responding more quickly and frequently.
Alternatively, despite picking up interpersonal cues in the environment with greater vigilance, an anxious child may potentially misinterpret or overestimate the likelihood of personal threat.

*Cognitive and Affective Perspective-taking*

The second component of Feshbach’s model concerns the ability to engage in perspective taking. Research has identified two types of perspective-taking: cognitive and affective. Cognitive perspective-taking describes the ability to cognitively imagine oneself in another’s position or role, or use memory to access information that would assist in understanding that position (Eisenberg et. al., 2002). Affective perspective-taking is the “ability to discern and identify others’ affective states” (Eisenberg & Miller, 1987, p. 91).

Research provides us with reason to question how an anxious child would experience these aspects of the empathy process. In their study of social cognitive development and psychopathology in adolescence, Schonert-Reichl and Beaudoin (1998) found that internalizing symptoms were positively correlated with personal distress (aversive, self-oriented feelings of anxiety) and negatively correlated with perspective-taking. Davis (1987) has also reported scores on measures of perspective-taking to be related to a lack of shyness and social anxiety. Researchers have proposed and provided some support for the idea that anxiety (i.e., test, social, and generalized anxiety) is related to increased self-focused attention (Ingram, 1990; Mansell, Clark, & Ehlers, 2002; Wells, 1985). Self-focus may be at odds with the “other-focus” required for perspective-taking and empathic concern (sympathy).

In their attempts to research this self vs other focus, Joireman, Parrott, and Hammersla (2002) suggest that may be too simple. College students in their study filled out Trapnell and Campbell’s (1999) Rumination-Reflection Questionnaire, along with Davis measure of empathy (IRI, 1983) and Rosenberg’s (1965) Self-Esteem scale. Underlying the basis of the study was
the concept that self-focus may be split into two types: self-reflection and self-rumination. Analysis of results indicated that higher scores on the self-rumination subscale were related to higher scores of personal distress and lower scores for perspective-taking. In comparison, higher scores on the scale of self-reflection were accompanied by higher scores on empathic concern and perspective-taking. However, after further examining results (through partialling), they noted self-rumination demonstrated no relationship with empathic concern and self-reflection showed no relation to personal distress. Overall, the authors supported the concept of a “self-absorption paradox,” stating that private self-consciousness is positively related to both personal distress and perspective-taking. These authors suggested that more research is needed on the topic. Questions are raised as to how anxiety may interact with perspective-taking processes in children.

Empathic and Behavioural Responses

The last component of Feshbach’s model involves the ability to respond affectively to an individual with whom one is empathizing. Personal distress and empathic concern are two responses linked to affective empathy processes. From these two internal processes, a behavioural response is presumed to follow. In his book, Hoffman (2000) postulates two limitations to empathy affecting empathic responding: over-arousal and bias. If an observer experiences the signs of the distressed other as extremely intense and salient, there is a risk in the observer’s affect becoming aversive. Hoffman refers to this state as empathic over-arousal or personal distress. He also theorizes that such feelings can remove the person from the “empathic mode” (p. 198), resulting in less prosocial behaviour. It seems then, that the ability effectively to regulate one’s own affect is necessary to maintain an ideal level to motivate prosocial behaviour. The nature of an internalizing disorder suggests difficulty regulating
emotions such as sadness, anxiety, fear, and distress (Eisenberg et al., 2001). Would a highly anxious child viewing the distress of another be enough to remove him/her from this “empathic mode?”

Eisenberg and various colleagues (Eisenberg, Wentzel, & Harris, 1998) have postulated that dispositional emotionality (level of responsivity, including intensity, and quantity) and emotional regulation/behavioural coping ability are influential in determining if children will experience over-arousal. How emotional responses are communicated and the regulation of corresponding behaviour, have been associated with socially competent behaviour (Eisenberg, Fabes, Guthrie, & Keiser, 2000).

Studies examining emotional regulation through physiological indices have found positive associations between accelerated heart rate and personal distress, along with a deceleration of this rate upon the experience of empathic concern (Eisenberg et. al., 1988). The experience of physiological arousal associated with personal distress appears to mirror that seen in the experience of anxiety (Bouchard et al., 1999). This similarity provides reason to be curious about relations between anxiety and empathy-related responses, particularly when considering findings from one study that links self and other-focus feelings (personal distress and empathic concern) to prosocial behaviour. Eisenberg et al. (1989) conducted a multi-method effort to study potential relations between these variables. What they concluded from facial index assessments of child participants was that facial distress (personal distress) was negatively related to prosocial behaviour. Concern (sympathy) evidenced by facial cues, was positively related to prosocial behaviour.

Effective emotional regulation is governed by aspects of attention (focusing, distracting, management) and cognition (interpretation; Eisenberg et al., 2001). Evidence suggests that
children with anxiety experience both attentional difficulties (i.e., self-focus) and cognitive biases (i.e., increased threat perception). A child who is high in anxiety is emotionally over-aroused, which may remove him/her from the empathic mode and affect the ability to engage in socially competent behaviour.

*Behavioural Inhibition, Empathy, and Helping Behaviour*

Authors have suggested that children with high levels of behavioural inhibition, or reactivity to/fear of the unknown, are at a greater risk for later developing internalizing disorders such as social anxiety (Kagan, 1997; Hirshfeld-Becker et al., 2003). Behaviourally-inhibited children, or children with internalizing symptoms, are reportedly characterized by low impulsivity (see Hirshfeld-Becker et al., 2003). This inhibition, accompanied by a fear of the unknown, provides additional reason to be curious about relations between anxiety, empathic responding, and prosocial behaviour. Would an anxious child be behaviourally-inhibited to assist another in a prosocial manner despite experiencing empathy? See Figure 1 for a visual summary of theoretical concepts thus far.

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**Empathy**

- no help/avoid

- personal distress
  (self-oriented)

- help/relieve

- poor regulation
  (over-arousal)

- good regulation
  (control)

**Pre-requisites**

* attention
* emotional literacy
* cognitive perspective-taking
* affective perspective-taking

**View**

distressed
other

**No empathy**

- help

- sympathy/
  empathic concern
  (other-oriented)

- no help
Anxiety disorder subtypes suggest a developmental expression in childhood and adolescence. Recently, it has been recognized that children can and do experience many of the same anxiety symptoms as adults (Ollendick & King, 1994, p. 918). Differing symptoms of anxiety are observed to fall into unique categories or subtypes and newer assessment scales have been designed to accommodate this information. Assessment methods have moved away from measuring anxiety as a single construct to separating factors by physical symptoms and other characteristics unique to the diagnostic categories (Myers & Winters, 2002; Saavedra & Silverman, 2002). The possibility of one factor/construct overarching all symptom subtypes has also been explored (Spence, 1997, 1998).

The DSM-IV anxiety subtypes listed by Spence (1997) that are of most interest to this study include panic disorder/agoraphobia, social phobia, obsessive-compulsive disorder, generalized anxiety, separation anxiety and specific phobia. Symptoms categorized under panic/agoraphobia are dizziness and a rapid increase in heart rate. The subtype of social phobia includes evidence of anxious reactions in social or performance situations, while obsessive-compulsive involves symptoms relating to obsessive thought and compulsive repetitive or ritualistic behaviour. Generalized anxiety encompasses symptoms of elevated worry on many dimensions and an intolerance of uncertainty, while anxiety experienced upon separation from caregivers falls under separation anxiety. Finally, specific phobia is a heightened fear and avoidance around specific objects or situations (4th ed.; DSM-IV; American Psychiatric

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4 Spence uses specific symptom category titles of panic attack/agoraphobia, obsessions/compulsions, and fear of physical injury to refer to panic disorder, obsessive compulsive disorder, and specific phobia.
Recognition of anxiety subtypes is important within the present study for two reasons: first, utilizing a newer anxiety assessment scale that was created to differentiate between symptom subtypes will build upon prior knowledge and research assessing the validity of these categories; second, the unique characteristics of each anxiety subtype may result in different empathy-related responses and prosocial behaviour. Collapsing all subtypes into one broad anxiety category may be too general and increase the chances of overlooking an important finding when separating by symptom subtype.

For anxiety diagnoses, a defining criterion of most subtypes is high levels of physical symptoms that are accompanied by an impaired ability to function in social situations (Mash & Wolfe, 1999). Viewing the overall criterion for each diagnostic subtype, the role of social impairment could vary as an identifying characteristic of the anxiety subtype, versus a potential result or byproduct of the anxiety. For example, in terms of social phobia, social functioning (or lack of) appears to define the symptoms (e.g., child has fears concerning social situations and the evaluative views of others). In the case of obsessive-compulsive symptoms, it appears that social functioning may be affected by the symptoms (e.g., child spends a great deal of time engaging in compulsive behaviour to manage anxiety, results in decreased time spent with peers). Due to these potential qualitative differences in the role of social functioning and anxiety, it would be interesting to observe if differential relations with empathic processes are noted. Though these criteria refer particularly to clinically diagnosed anxiety, it is likely that children with lower levels of trait anxiety would still experience similar difficulties, to a lesser degree.
Analyzing a series of self-report measures completed by a mixed sample of adolescents experiencing, recovering, or having never received anxiety diagnosis, researchers found interesting gender differences. Assessing responses to the anxiety and psychosocial items, results indicated that “retrospective data indicate that at age 6, females are already twice as likely to have experienced an anxiety disorder than are males “(Lewinsohn, Lewinsohn, Gotlib, Seeley, & Allen, 1998, p. 109). Gender differences in anxiety are observed in that males are more apt to report experiencing obsessive-compulsive symptoms, while females tend towards those of panic attacks and specific phobia (Savedra & Silverman, 2002; Spence; 1997, 1998). Some suggest that these gender differences, particularly those in the case of the obsessive-compulsive subtype, become more equivalent across gender with age (Albano et al., 1996).

Recent conceptualizations of anxiety subtypes and evidence of gender differences by subtype provide reason for the inclusion of anxiety subtypes within assessment procedures. Thus, methods of the present study were meant to accommodate this information by using a measure encompassing these subtypes.

Prosocial Behaviour

Children identified as “prosocial” receive higher ratings of popularity and acceptance from peers (Ladd & Prolifet, 1996; Warden & MacKinnon, 2003). Some authors have attributed various categories of behaviour, such as “helping,” “caring,” “inclusion,” and “sharing,” to these popular prosocial children (Jackson & Tisak, 2001; Warden, Christie, Kerr, & Low, 1996). Thus, prosocial behaviours seem to be critical for building and maintaining relationships with others. Positive peer relationships, in turn, have been associated with emotional well-being, peer acceptance, school adjustment and academic success (Parker & Asher, 1993; Wentzel & Caldwell, 1997; Wentzel, McNamara Barry, & Caldwell, 2004).
Positive peer relations are believed by some practitioners to be a protective factor for children with mental health issues and conversely, children experiencing poor peer relations are believed to be at higher risk for later maladjustment (Parker & Asher, 1987 as cited in La Greca & Stone, 1993). If positive peer relationships can be a protective factor for children experiencing anxiety (remembering that anxiety disorders are the most prevalent mental health issue among children), we should be very concerned about the prosocial behaviour of these children. Knowing empathy and prosocial behaviour are related, we should also be concerned about anxiety’s potential to influence children’s ability to empathize.

Prosocial behaviour has been researched and operationalized using a variety of methods and there is controversy as to which is the most informative and accurate of these measurement methods (Eisenberg & Miller, 1987; Hymel et al., 2002; La Greca & Stone, 1993; Warden & MacKinnon, 2003). Within the empathy literature, prosocial behaviour has been studied using such methods as anonymous helping conditions (e.g., donations), ratings by teachers and peers, and laboratory studies manipulating various conditions (Eisenberg, 2000; Eisenberg & Miller, 1987). Within the literature on friendship, peer relations, and school adjustment, prosocial behaviour has been defined and measured by peer sociometric ratings, self-ratings, reports by teachers, and nominations by peers on specific behavioural indices (McNamara Barry & Wentzel, 2006; Warden et al., 2003). Results gathered from these methods have indicated differences reflective of developmental stage, gender, and differing perceptions of informants. These results demonstrate that children’s perceptions of normative prosocial behaviour change over development and children are also more likely to offer more same-sex nominations (Greener & Crick, 1999; Warden et al., 2003).
Some differences pertaining to the level of merit given to certain types of behaviours considered "prosocial" by children, parents, and teachers (Warden et al., 1996). Likewise, Greener and Crick (1999) note in their study of children's prosocial behaviour that, "peer-directed prosocial behaviours are qualitatively different" from those in the context of adult-child relationships (p. 350). Taking into account differences in environmental context (e.g., peer behaviour on a playground versus behaviour in the classroom) and how this may affect opportunities for certain behaviours, it seems logical that different informants would be privy to different information. Furthermore, reports from others may be limited by frequency of observation, environment, differences in interpretation, and a generally inability to report on the internal processes of the child – such as in the case of social behaviour (Warden, Cheyne, Christie, Fitzpatrick, & Reid, 2003).

Literature has suggested that prosocial behaviour is reflective of differences in individual reasoning or motivation. Popular perspectives put forth by Batson et al. (1987), suggest that ease of escape will determine whether a personally distressed individual will help another. If ease of escape from the situation is low, helping behaviour is more likely and probably the result of the helper's egoistic motivation to ease feelings of personal distress. Potential effects of motivation add to the curiosity of learning more about how individuals higher in anxiety may respond empathically and behaviourally. Though the quality of motivation was not formally assessed in this study, the possible interplay of internal factors like motivation provides added justification for using a multi-informant approach of prosocial behaviour. Teachers and peers may be able to report on observed behaviour, but it is the child experiencing the motivation determining the behaviour.
Careful consideration is required when assessing prosocial behaviour. A multi-informant approach involving self, peer, and teacher perspectives, was chosen for use in this study in an effort to reduce some of these measurement challenges.

The Present Study

The primary goal of this study was to clarify how aspects of empathy and prosocial behaviour may predict subtypes of anxiety. By examining proposed externalization-empathy-prosocial link, a rationale for studying potential internalization-empathy-prosocial link, becomes apparent.

Aside from one dissertation by Reichman (1982), I was challenged to find work directly concerning the variables of anxiety, empathy, empathic response tendency, and prosocial behavior simultaneously. A defining statement found in Reichman’s paper and providing basis to such exploration involved a reference to Hoffman’s developmental theory, which Reichman summarizes as, “Trait anxiety as an index of emotional security is thought to be an intervening variable in the performance of altruistic acts” (Reichman, 1982, p. 2).

In his study involving a community sample of 85 school children (grades 5 and 6), Reichman examined the relationship of variables of cognitive empathy, affective empathy, empathic sadness, and trait anxiety to dependent measures of altruism. The three dependent measures used included peer and teacher ratings of altruism, along with an opportunity to engage in anonymous donation behaviour. Identified control variables were age, sex, socioeconomic status, and IQ. Empathy variables were measured using an adapted version of Mehrabian and Epstien’s (1972) questionnaire (to assess affective empathy) and Rothenberg’s (1970) affective-
role-taking task (to assess cognitive empathy). The Reynolds and Richmond (1978) version of
the Children's Manifest Anxiety Scale was used to operationalize and measure trait anxiety.

Using methods of correlation and three separate multiple regression analyses (a
combination of hierarchical and stepwise methods), Reichman reported that affective empathy is
a positive predictor of altruism, as well as a better predictor of altruism in comparison to
cognitive empathy. However, his hypothesis stating that trait anxiety would have a negative
correlation to altruism and suppress the role of affective empathy on promoting altruism, was not
supported. It is important to note the limitations of this study. Firstly, the sample used was
found to exhibit significantly lower than average levels of trait anxiety. Secondly, the study was
limited by measures available at the time. The author modified Mehrabian and Epstein's (1972)
affective empathy questionnaire himself, as no appropriate measure for children had yet been
developed. Since the study, improved measures assessing these variables have been developed,
providing adequate reason to repeat research in this area. Though the current investigation is not
a direct extension of Reichman's work (the present study situates trait anxiety as the variable of
focus), it does build on these concepts.

The purpose of this study was to examine the various relations of levels of trait anxiety,
to multi-dimensional aspects of empathic responding, and prosocial behaviour in pre-adolescent
children. The intention was not to provide a comparison or determine if one population (e.g.,
internalizers vs externalizers) is more likely to help, but rather to gain greater awareness of the
interplay between variables. Likewise, the focus was not on pathology (disorders).
Alternatively, it was to note trends across a continuum of anxiety levels. Finally, as research
suggests differences in gender concerning anxiety and empathy-reporting, this study assessed for
the presence of such differences. This was primarily for exploratory, not explanatory purposes.
Method

Participants

Participants were drawn from 4th to 6th grade classrooms in two public elementary schools located in a large Western Canadian city. Recruitment involved contacting principals and/or counsellors of various schools first by phone to describe the study. Following the phone call, extensive informational materials outlining study procedures were sent to each school (see Appendix C). Meetings were then arranged with teachers who expressed interest involving their classrooms in the research. Parental consent forms were translated into five different languages (English, simplified Chinese, Korean, Spanish, and Punjabi), representative of the demographics of the school population (see Appendix C for the English-version parental consent form and informational document on anxiety resources available to parents).

Of those children recruited for participation, 107 had active parent consent (55 girls, 52 boys) out of a potential 172 participants, resulting in a participation rate of 62%. Students and their teachers ($n = 6$) were drawn from six classrooms. Data collected from three male students were omitted due to absence and insufficient completion of measures (language comprehension difficulties). The final sample was comprised of a total of 104 children (55 girls, 49 boys), ranging in age from 9 to 12 years, with a mean age of 11.12 years ($SD = 0.69$). With respect to native language, demographic information was as follows: 52.9% Chinese, 26.9% English, 4.8%
Korean, 3.8% Japanese, 2.9% Spanish, and 8.7% languages of other origins (e.g., Romanian, Vietnamese, Persian, Russian, Albanian). With regard to family composition, 66.3% of the participants reported living primarily with both their mother and father, 31.7% reported residing with a single parent (93.9% of whom lived solely with their mother, 6.1% with their father) and 1.9% reported living with another adults (e.g., extended adult family members).

Procedures

Administration of measures took place in participants’ classrooms (with the exception of one class administration occurring in the school library) during regular school hours, in one 55-60 minute class period. Measures were administered by the researcher and one or more project assistants. Prior to administration, children were informed of their research rights and asked to complete a “Student Assent” form on two occasions (once during a visit to explain the study and hand out parental permission slips, and secondly, at the time of administration; see Appendix D). Instructions for completing the measures, sample practice items, and all of the survey questions were read out loud to students in order to take into account variability in reading levels. Teacher-report measures were given to each teacher when student questionnaires were administered with the instructions that they return them within two weeks. One “make-up” session was conducted with the three students absent on the original day of administration.

To comply with ethical obligations, parents were informed in the original letter of consent that they would be contacted by the researcher investigator if their child reported levels of anxiety that could benefit from further investigation. Follow-up procedures in such cases involved personal phone contact by the research investigator, followed by a letter outlining main points and listing potential options concerning follow-up procedures (see Appendix E). For
those parents identified as speaking another language in the home, the phone call was conducted by one of the research assistants fluent in their identified language.

To recognize the participation efforts of those involved in this study, teachers received a booklet of 20 lesson plans, compiled by me, to address the school district’s Social Responsibility curriculum requirements (see Appendix F).

**Measures**

**Demographic Questionnaire**

Information regarding participants’ age, grade level, gender, first language, and family composition was obtained using an eight-item demographic questionnaire (see Appendix D).

**Trait Anxiety**

To assess children’s self-report of anxiety, each student completed the self-report form of the *Spence Children’s Anxiety Scale* (SCAS; Spence, 1998). This scale consists of 45 items assessing a range of anxiety symptoms (along with six positively worded filler items). The six subscales are based on the latest classifications of anxiety disorders found in the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM-IV*; American Psychiatric Association, 1994) and include panic/agoraphobia, social anxiety, separation anxiety, generalized anxiety, obsessions/compulsions and fear of physical injury. Examples of statements from each subscale included sentences such as, “I suddenly feel as if I can’t breathe when there is no reason for this,” (*Panic/agoraphobia*), “I worry about being away from my parents” (*Separation Anxiety*), “I am afraid of being in crowded places” (*Social Phobia*), “I can’t seem to get bad or silly thoughts out of my head” (*Obsessions/compulsions*), “I worry about things” (*Generalized/overanxious*) and “I am scared of dogs” (*Fear of Physical Injury*). Participants are
asked to rate their responses on a 4-point scale (0 = never, 1 = sometimes, 2 = often, and 3 = always) and higher scores for each scale indicate higher levels of anxiety. Each subscale also possesses a pre-determined “cut-off” score identified by the instrument author to represent potential clinical levels. Spence determined such scores by calculating mean scores for each factor and establishing cutoff points proportionate to the number items comprising each of these (equivalent to an average response of “2” across all items, or “3” on over half of the items comprising the factor).

Development of the SCAS (see Appendix D) was based on community samples and has been used with children and youth ranging from 7 to 19 years of age (Muris, Schmidt, & Merckelbach, 2000). Original data from Spence (1998) demonstrates internal consistency with subscale coefficient alphas ranging from 0.60 to 0.82 (total 0.92). Data gathered by other researchers (Essau, Muris, & Ederer, 2002; Muris, Merckelbach, Ollendick, King, & Bogie, 2002) mirror these values, with the noted exception of the “physical injuries” subscale (lower than 0.60). Total scores for test-retest reliability were reported at 0.60 over 6 months (Spence, 1998). Convergent validity has been reported by Muris et al. (2002) with the MASC (March, Multidimensional Anxiety Scale for Children, 1997; 0.71), the SCARED (Birmaher et al., Screen for Child Anxiety and Related Emotional Disorders, 1997; 0.84), RCMAS (Reynolds Children Manifest Anxiety Scale, 1978; 0.76), the STAIC (Speilberger, State-Trait Anxiety Inventory for Children, 1973; 0.79) and the FSSC-R (Silverman & Nelles, Fear Survey Schedule for Children – Revised, 1988; 0.76).

In the present study, scale internal consistencies (as assessed by Cronbach’s alpha) were as follows: Panic/Agoraphobia, α = .80; Social Anxiety/Phobia, α = .67; Separation Anxiety, α = .67; Generalized Anxiety, α = .70; Obsessions/Compulsions, α = .71; and Fear of Physical Injury,
$\alpha = .49$. Due to the low reliability and inter-item correlation of the physical injury subscale, this subscale was omitted to produce an overall alpha of .88 for the SCAS. A summary of all scale reliabilities and measure modifications of the present study is provided in Table 1.

The validity of having an “outsider” report on another’s internal processes often raises questions. Though it is recognized that parents are valuable informants concerning children’s experience of anxiety, evidence suggests that “agreement between child and parent regarding child symptomatology is often quite low” (Langley et al., 2002, p. 103). Similar findings are indicated with the assessment of internalizing symptoms (DiBartolo & Grills, 2006; Herjanic & Reich, 1997). Due to this discrepancy, the need to balance time constraints with obtaining the most pertinent information, and the inability to provide translated versions of the anxiety measure, parent and teacher-reports of anxiety were not collected.

**Empathy**

This study included an assessment of the multiple dimensions of empathy in order to reflect the current ideas expressed in empathy literature. To represent this effort, two measures (namely, the *Index of Empathy for Children and Adolescents* and modified *Interpersonal Reactivity Index*) were used, each having unique and desirable reporting qualities to promote a holistic picture of children’s empathy. The first measure, though assessing empathy in a more global manner, was created specifically for the child population. The second, intended to assess empathy’s multiple theoretical dimensions, has been adapted to target the child population. Each is proposed to tap into aspects of empathy in a slightly different manner.

**Dispositional sympathy.** To obtain a global, unidimensional assessment of participants’ empathy levels, students completed an adapted version of Bryant’s (1982) *Index of Empathy for Children and Adolescents* (see Appendix D). Based on the adult-focused measure of emotional
empathy by Mehrabian and Epstein (1972), the Bryant was designed by the measure author to investigate affective emotional arousal in children. Bryant (1982) indicates an emphasis on vicarious emotional response as opposed to accurate cognitive insight or perspective-taking, though some have argued it taps into aspects of both (Zhou et al., 2003). In her work with colleagues, Eisenberg refers to this construct as “dispositional sympathy,” which is the “other-focused” emotional response to seeing another in distress (Valiente et al., 2004). Item phrases such as, “It makes me sad to see a kid who can’t find anyone to play with” are intended to encompass these concepts. Originally a 22-item dichotomous response scale, adaptations were made in this study to involve a 4-point response scale (1 = absolutely not like me, 2 = sort of like me, 3 = really like me, 4 = very much like me). This alteration follows the response format set out by Mehrabian and Epstein (1972) and later employed by Cohen and Strayer (1996) and Valiente et al. (2004) in their adaptation of the Bryant. This measure format was chosen to allow for greater differentiation in responding, while higher scores indicate increased levels of empathy.

Bryant (1982) reported moderate internal validity of the original scale, with Cronbach alpha coefficients ranging from 0.54 (for first graders) to 0.79 (for seventh graders). Test-retest reliability coefficients ranged from 0.74 to 0.85 over a 2-week time period, while the measure exhibited convergent validity through correlations (ranging from 0.33 to 0.76) with empathy measures by Feshbach and Roe (1968) and Mehrabian and Epstein (1972). Non-significant relations between empathy and reading achievement and social desirability, provides evidence for the scales’ discriminant validity. Intercorrelations (negative significant relations) between empathy and acceptance of individual differences, as well as teacher ratings of aggressiveness, demonstrate construct validity (values ranging from -0.45 to -0.1). In the present investigation,
this scale yielded an original Cronbach’s alpha value of $\alpha = .67$. Item 10 was omitted due to potential difficulties with accurate participant comprehension and this removal increased the reliability to $\alpha = .70$.

**Empathic responding.** To gather further information more specific to empathic responding, a modified version of Davis’s (1980, 1983) *Interpersonal Reactivity Index* (IRI) was utilized. The IRI is a 28-item self-report questionnaire based on Davis’s proposed multidimensional approach to empathy, which recognizes both affective and cognitive components to empathic responding. Likert-type items, answered on a 5-point response scale, compose the four dimensions/scales of this measure and aim to tap aspects of empathy including *Perspective-taking* (PT), *Fantasy* (F), *Empathic Concern* (EC, “sympathy”) and *Personal Distress* (PD). The PT scale assess cognitive ability to perceive another’s point of view, the F scale assess the ability to imagine oneself in the position of fictitious movie/book/play characters, the EC scale taps into feelings of sympathy and concern for another in distress, and the PD scale measures the degree of experienced anxiety/discomfort in response to seeing another in distress.

As the measure was originally formulated for adults, Miller’s (2003) adapted and previously administered children’s version involving the *Empathic Concern* and *Perspective-taking* scales (*Thoughts and Feelings Questionnaire*) was used in the present study. This was done in conjunction with a modification of a more developmentally-appropriate version of the *Personal Distress* scale, as completed by the research authors. This modification is based closely on Davis’s original items and deemed necessary due to a lack of a pre-existing PD scale for children. It was not formally piloted for use before this study. We chose to exclude F scale from this combined measure due to decreased relevance (see Appendix D for full measure
administered). Examples of statements pertaining to the three scales included, “Sometimes I feel very sorry for other people when they are having problems (EC), “I try to understand how other kids feel before I decide what to say to them” (PT), and “In emergency situations, I feel nervous and tense” (PD).

The IRI has been cited as being the “most widely used instrument” in research pertaining to empathy assessment (Pulos, Ellison, & Lennon, 2004). In his development and testing of the measure, Davis reported internal reliabilities of the subscales to range from 0.71 to 0.77, while values of 0.62 to 0.72 were discovered for test-retest reliabilities over an 8-10 week test period. Relationships between the IRI and measures of social functioning, emotionality, self-esteem, sensitivity to others and other unidimensional measures of empathy demonstrated adequate convergent and divergent validity of the IRI (Davis, 1983). As expected, the only scale to differ in its relationships with other measures of empathy construct was the Personal Distress scale.

Use of the adapted scales comprising Miller’s Thoughts and Feelings Questionnaire has reported adequate validity. Both scales are reported to have reliability coefficient alphas of 0.77. This questionnaire has since been used by Schonert-Reichl (2003) in her work assessing the impact of the Roots of Empathy program (a classroom-based social competence promotion program being implemented across Canada for students in Kindergarten through grade 8). Additionally, Eisenberg (personal communication, March 24, 2005) has used items from this scale to create The Child-report Sympathy Scale (Eisenberg et al., 1996), reporting alpha levels of 0.73 with a kindergarten sample.

Reliability tests from the current investigation demonstrated the following in terms of subscale internal consistency: Empathic Concern scale, $\alpha = .83$, Perspective-taking, $\alpha = .81$ and Personal Distress, $\alpha = .80$. The Cronbach’s alpha value reported here for the Personal Distress
scale reflects the decision to remove Item 20 stating, “When I see someone getting hurt, I usually stay calm and ‘keep my cool.’” Given the propensity of participants citing their first language as one other than English, along with the potential of this item to be viewed as an idiom of the English language, the decision was made to omit the item.

*Prosocial Behaviour*

*Prosocial behaviour: child report.* The first scale to be employed concerning this construct was a 15-item prosocial behaviour scale developed by Caprara and Pastorelli (1993) as part of a larger effort to examine the concepts and measurement of emotional instability, prosocial behaviour and aggressive behaviour. This scale intends to elicit general information concerning the child’s view of their own prosocial behaviours and perceptions of frequency by which they engage in these behaviours. Ten items offer descriptions of behaviours portraying concepts such as altruism, caring, sharing, trust and agreeableness (e.g. “I share things I like with my friends”), while five control items are also included. Responses to these items are given by indicating how often these occur (3 = often, 2 = sometimes, and 1 = never). The scale’s normative data is based on children ages 7 to 10 years, while teachers and mothers were also given modified versions of the scale (ratings) to complete in reference to each child.

The Cronbach’s alpha levels (denoting internal consistency) for the informants within Caprara and Pastorelli’s (1993) study were 0.77 (self-report), 0.91 (teacher-report) and 0.71 (mother-report). Correlations between this scale and the scale of aggression were negative and significant for self and teacher-reports, demonstrating support for this scale’s validity (though these values were reportedly non-significant for mother ratings and peer nominations). Referring to correlations of the prosocial behaviour scale across informants, evaluations were positively and significantly correlated, with the exception of the peer/mother value. External criteria
involved sociometric measures of popularity, rejection, social impact, social preference, as well as scales from Achenbach and Edelbrock's Child Behavior Checklist (CBCL; teacher and parent forms; 1983, 1986) to assess concurrent validity. This scale (see Appendix D) has been used to measure prosocial behaviours in other studies by Bandura, Barbaranelli, Caprara and Pastorelli (1996). In this study, internal consistency as measured by Cronbach's alpha was $\alpha = .72$.

**Prosocial behaviour: peer-report.** Various forms of peer nomination methods have been used by researchers to gain information about the interactions of children (Asher & Dodge, 1986; Crick, 1996; Ladd & Prolifet, 1996; Parkhurst & Asher, 1992; Schonert-Reichl, 1999; Terry & Coie, 1991; Wentzel, 1993; Wentzel & Erdley, 1993). The method used in this study involved a similar format to that of Wentzel (1993) in her studies of the relation between peer acceptance and academic success. Each child is given a list of all of his/her classmates, paired with behavioural descriptor statements (see Appendix D). The items used in this particular study were drawn from those used by Wentzel and others used by Schonert-Reichl (1999). Though the four items describing prosocial behaviour and prosocial characteristics were of most interest (e.g. "Students who share their things and cooperate with others"), two antisocial behavioural descriptors and one relational aggression descriptor were included to ensure discrimination in response. Only scores gathered from the prosocial behaviour items were used within analyses. As the two prosocial behaviour descriptor scores were highly correlated ($r = .75, p < .01$), a composite prosocial score was created combining these two questionnaire items (prosocial characteristics and aggression items were not included).

When using peer nominations, it has been indicated that a participation rate of 75% (per class) is required (Crick & Ladd, 1989). In this study, the majority of class participation rates fell below this recommended percentage, however it is noted that other studies have reported
adequate stability and validity using lower participation rates (Sandstrom & Cillessen, 2003). Thus, the method of calculating composite scores was appropriate to increase reliability and validity so that this peer-reported information could be retained.

Respondents circled the names of the students on the list they chose to nominate as engaging in each particular behaviour (nominations are unlimited and may include self) and proportions for each student were then calculated. Gender differences have been noted concerning nomination strategies (Warden et al., 2003) and often children offer more same-sex nominations. In response to this factor and changes in classroom sizes, corresponding proportions were calculated. However, given the relatively low participation rates, overall composites (including nominations by both genders) were used in analyses. Scoring/tallying procedures for peer nomination measures were repeated twice for each classroom, by different raters to ensure accuracy.

Prosocial behaviour: teacher-report. To assess teachers’ report of student prosocial behaviour, one brief measure was filled out for each child. The Prosocial With Peers measure was given to each teacher when student questionnaires were administered with the instructions that they return them within two weeks. This particular measure was chosen for its focus on prosocial behaviour occurring specifically within the context of peer-to-peer interactions, as opposed to views of general prosocial behaviour (e.g., how helpful a child is, which may be influenced by the teacher-child power differential). The Prosocial With Peers scale is one of six subscales emerging from a principal component factor analysis of the 75-item Child Behaviour Scale (Ladd & Prolifet, 1996). Responses to the measure are given in a 3-point format, indicating whether the statement is true for the child “never,” “sometimes,” or “often” (see Appendix D). Higher scores indicate increased prosocial behaviour, as indicated by the teacher.
This scale, consisting of 7 items, exhibited internal consistency across multiple measurement occasions with Cronbach alpha values from 0.91 to 0.92. Stability of this subscale was demonstrated through correlation of scores across two, 4-month interval occasions (values of 0.62 and 0.65). Negative correlations with those scales tapping peer rejection, externalizing behaviours and scales relating to social withdrawal, were found to range from -0.11 to -0.65. Construct validity was established through correlations with observational indexes, the Child Behavior Profile – Teacher Report Form (Achenbach, 1991) and peer nominations. Children rated as prosocial with peers were also rated by observers to be less aggressive and exhibit more prosocial behaviour, scored lower on the CBP-TRF problem behaviour subscales, and received fewer aggressive nominations from peers. In the present investigation, the scale’s Cronbach alpha value denoting internal consistency was $\alpha = .93$.

**Distracter Task**

To limit potential negative effects of peer nomination tasks (e.g., sharing of answers amongst peers, magnification of peer status), a “distracter” task (Appendix D) was added as the last point of completion in the questionnaire packet (as recommended by Bell-Dolan and Wessler, 1994). This task asked students to list three things people do when they want to be nice to someone and was based on open-ended questions found within Greener and Crick’s (1999) study looking at children’s conceptualizations of prosocial behaviour. Results from this task were not intended for use in this study’s reporting procedures.
Table 1

*Scale Reliability Values*

<table>
<thead>
<tr>
<th>Variable</th>
<th>α</th>
<th>M</th>
<th>SD</th>
<th>Modification</th>
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<td>Total composite</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panic/agoraphobia</td>
<td>.80</td>
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<td>2.89</td>
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<tr>
<td>Social phobia</td>
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<td>3.06</td>
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<td>Generalized/overanxious</td>
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<td>2.88</td>
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<tr>
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<td>2.49</td>
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<tr>
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<table>
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<tr>
<th>Peer Nominations</th>
<th>Participation rate (%)</th>
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<td>Class 1</td>
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<td>Class 2</td>
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<td>Class 3</td>
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<td>Class 4</td>
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<td>Class 5</td>
<td>52%</td>
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<tr>
<td>Class 6</td>
<td>68%</td>
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*Cronbach’s alpha values listed above reflect calculations made after the described modification.*
Results

Analytic Strategy

The results are presented in three sections according to type of analyses conducted. First, data screening procedures and descriptive analyses are presented. Gender differences are explored and tested for significance using group comparison methods (MANOVA and univariate follow-up analyses). Second, results from a series of bivariate correlations are put forth with regard to relations among variables of trait anxiety, empathy-related responses, and multi-informant reports of prosocial behaviour. Finally, a series of hierarchical regressions are presented, which were conducted in order to determine how empathy and prosocial behaviour singularly and collectively predict subtypes of anxiety.

Preliminary and Descriptive Analyses

Data Screening

Descriptive statistics for the total sample, including ranges, means, and standard deviations were calculated for each variable and are presented in Table 2. Separate descriptive statistics are also provided for the eight individuals who surpassed the “cutoff” values outlined by Spence (1998) on the SCAS anxiety measure. The means, ranges and standard deviations of this group are provided in Appendix A.

The data set were screened for errors in data entry, as well as missing or erroneous values. Inclusion criteria for data involved each participant answering 80% or more of the questionnaire items per scale, resulting in the retention of all 104 cases for each scale. To account for missing data and create a greater level of standardization across scales and measures, mean scores were calculated from the raw data for each variable scale (M = total score/number of items).
Assumptions and other issues pertinent to data analysis procedures were examined using recommendations offered by Tabachnick and Fidell (1989). The first of these involved checking for normality and the presence of outliers. Procedures used to identify outliers and their impact involved visually inspecting each scale by means of histograms, box-and-whisker plots, examination of the 5% trimmed means and additional tests for normality. Relevant histograms, along with calculations of skewness and kurtosis statistics assisted to provide a sense of distribution shape and adherence to normality assumptions (summary of these statistics can be found in Table 3). Additional examinations of scatterplots, residuals (assessing equal variance), collinearity diagnostics (Variance Inflation Factors, VIF), leverage values and correlation values were used to assess linearity, homoscedasticity, multicollinearity, and influential points.

Regarding these points, Tabachnick and Fidell (1989) recommend using a standardized residual value of 2.50 to 3.3 (above or below) to identify potential outliers, and this was the criterion used in the present study. Overall, two consistent outliers were identified throughout analyses using this criterion. Similarly, Miles and Shevlin (2001) suggest using a value of 2.00 to provide guidance in detecting skewness and kurtosis. A closer look at scales with particularly large values (by means of histograms) indicated that the skewness and kurtosis detected in this study's results seemed to be explained by the two identified outliers. In regards to the anxiety subscales, some skewness was expected due to the nature of the concepts being assessed (e.g., most of the population will report low frequency on the anxiety items) and previous reports by others indicating similar trends (Spence, 1997, 1998).

Concerning the treatment of the identified outliers, several points were considered before deciding to retain them within the data set used for analyses. According to Osborne and Overbay (2004), outliers may be caused by a variety of factors such as data errors, misreporting, sampling
error, standardization failure, faulty distribution assumptions or legitimate cases within the population. Considering current sample size (just over 100) and the nature of the variables (particularly anxiety, wherein there is an expected 6.5% prevalence rate of cases falling outside of the norm), the latter explanation seemed most probable in this case. Some statisticians suggest that if outlying scores appear to represent an artefact of data from the target population, efforts should be made to retain these scores (Dr. Bruno Zumbo, personal communication, July 17, 2006). To examine the impact of outlier retention, analyses were conducted both with and without the outliers. Additionally, both original and 5% trimmed means were compared for each variable (a procedure recommended by Pallant, 2001). Outcome changes using this comparison procedure were <.05 on each scale. Based on these results, it was decided that all cases would be retained in analyses.

While several statisticians recommend transformation of scores and the use non-parametric tests as methods to deal with skewness and data abnormality (Field, 2005; Stevens, 1996; Tabachnick & Fidell, 1989), Zimmerman (1995) has provided valid support challenging the ability of these methods to do so effectively. Given these points, along with the potential challenges involved when interpreting data based on psychological constructs, it was decided that transformation methods would not be used.
Table 2

Descriptive Statistics of Variables for Composite Sample

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
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<td></td>
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<td>.39</td>
<td>2.47</td>
<td>.03</td>
<td>2.50</td>
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<td>.38</td>
<td>2.56</td>
<td>.00</td>
<td>2.56</td>
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<td>.00</td>
<td>2.17</td>
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<td>.00</td>
<td>3.00</td>
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<td>.00</td>
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### Skewness and Kurtosis Values

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<th>Variables</th>
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<th>Skewness Std. Error</th>
<th>Kurtosis Statistic</th>
<th>Kurtosis Std. Error</th>
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<td><strong>Empathy (self-reported)</strong></td>
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</tr>
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<td>Bryant</td>
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<td>Peer-report</td>
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<td>.47</td>
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</table>
Gender Differences

Descriptive statistics are provided separately for girls and boys in Table 4 for ease of comparison. Given that gender differences have been reported by researchers in the assessment of anxiety (Spence, 1997, 1998), empathy (Eisenberg, 2000), and prosocial behaviour (Warden et al., 2003), group comparison procedures were conducted to decipher if differences between boys and girls were significant in the present investigation. The goal of assessing group differences within this study was for exploratory, as opposed to explanatory purposes.

Three exploratory one-way between-groups multivariate analysis of variance (MANOVA) were performed to investigate gender differences in variables of anxiety, empathy (Bryant, EC, PT, PD) and reports of prosocial behaviour (self, teacher, and peer). The independent variable was gender. The subscales of the anxiety measure were not entered with the total anxiety score as variables in the MANOVA, as it is contraindicated to use scores contributing to a larger composite score of the same construct (Field, 2005). Thus, the total anxiety score was examined separately using an independent samples t-test. Assumptions for normality, linearity, univariate and multivariate outliers, homogeneity and multicholinearity were checked prior to these tests.

The first MANOVA conducted involved the anxiety subtype variables. Results indicated that there was a statistically significant difference for boys and girls: \( F(5, 97) = 3.01, p < .01; \) Wilks' Lambda = .87; partial eta squared = .13. However, when the results for the dependent variables were considered separately (by way of follow-up univariate analyses), no differences reached statistical significance using a Bonferroni adjusted alpha of \( p < .01 \) (a procedure recommended by Field, 2005). Results of the independent t-test using the total anxiety score
also indicated no significant differences for males \((M = .62, SD = .37)\), and females \([M = .75, SD = .40; t(102) = -1.81, p = .07]\).

The second MANOVA examined differences between girls and boys considering empathy variables. Results indicated that there was a statistically significant difference for boys and girls: \(F(4, 98) = 4.41, p < .01; \text{Wilks' Lambda} = .85; \text{partial eta squared} = .15\). In conducting follow-up analyses, differences reaching statistical significance using the Bonferroni adjustment of \(p < .01\) included the Empathic Concern and Perspective-taking variables. Regarding the Empathic Concern scale, girls were found to score significantly higher than boys, \(F(1, 102) = 10.92\). Likewise, girls’ scores were significantly higher than the boys on the Perspective-taking dimension, \(F(1, 102) = 12.25\).

The last MANOVA conducted examined the self, peer and teacher-reports of prosocial behaviour as dependent variables. Again, a statistically significant difference was noted for boys and girls: \(F(3, 100) = 18.50, p < .001; \text{Wilks' Lambda} = .64; \text{partial eta squared} = .36\). Univariate analyses indicated girls scored significantly higher than boys on self, peer and teacher reports of prosocial behaviour: \(F(1, 102) = 11.52, F(1, 102) = 31.32, \text{and } F(1, 102) = 40.92\).

Table 5 provides the means, standard deviation, and accompanying \(F\), partial eta and \(p\) values for all gender comparisons.

To summarize, data were examined to assess adherence to normality assumptions. Based on information gathered from these procedures, the decision was made to conduct all further analyses with the full data set. Descriptive statistics were calculated for all variables and reported for the total sample and then separately, by gender. Multivariate analysis of variance results indicated significant differences in means for girls and boys. More specifically, of the variables tested, five demonstrated differences wherein girls scored significantly higher than
boys. These included *Empathic Concern, Perspective-taking* and all three informant reports of *prosocial behaviour*. 
Table 4

Descriptive Statistics of Variables by Gender

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Table 5

**Comparisons of Boys and Girls on Trait Anxiety, Empathy and Prosocial Variables**  
(*Boys, N=49; Girls, N = 55*)

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\*p < .01 (Bonferroni’s adjustment, p < .05/5 = .01).  
\**p < .001.
Intercorrelations

A series of Pearson product-moment correlations were calculated with the total sample to determine associations among variables of anxiety, empathy, and prosocial behaviour. The purpose of these analyses was to explore potential associations, as well as their presumed strength as demonstrated by the correlational coefficient. Correlational results can be found in Table 6. First, as can be seen, correlations among related constructs were in the expected direction. All subscales of the trait anxiety measure were highly correlated (positive), the Bryant empathy measure exhibited positive correlations with the three dimensions of the empathy-related response measure (modified IRI), and lastly, the multi-informant measures of prosocial behaviour were significantly and positively correlated to each other.

In accord with previous research with adolescents and adults, (Cliffordson, 2001; Davis, 1983; Schonert-Reichl & Beaudoin, 1998), the Empathic Concern scale was correlated positively and significantly to the Perspective-taking scale. A moderate positive correlation between the Empathic Concern and Personal Distress scales was present, while no correlation between the Perspective-taking and Personal Distress scales was found. Examining relationships between empathy and prosocial behaviour, Table 6 shows a positive correlation was found between Bryant scores of empathy and self-reported prosocial behaviour, as expected based on the literature (Eisenberg & Miller, 1987). This relation was not found for the other prosocial measures (teacher and peer-report). As expected based on the findings of others (Batson et al., 1987; Davis, Hull, Young, & Warren, 1987; Eisenberg & Miller, 1987), multidimensional empathy scores of Perspective-taking and Empathic Concern were positively related to all reports of prosocial behaviour.
Recall the first question in this study stated as, “What is the relation of anxiety symptom subtypes to empathy-related responses and reports of prosocial behaviour as rated by self, peers, and teachers?” As can be seen in Table 6, total composite anxiety scores were significantly and positively related to the Bryant measure of empathy, as well as Empathic Concern, Perspective-taking and Personal Distress scores of the modified IRI. When breaking results down further by the six SCAS anxiety subscales, the Panic/Agoraphobia, Social Anxiety and Generalized Anxiety subscale scores were positively related to Bryant empathy scores. Perspective-taking was found to have a significant positive relation with the Panic/Agoraphobia and Separation Anxiety subscales scores, while all but the Obsessions/Compulsions subscale, were positively and significantly associated with Empathic Concern. Personal Distress scale scores exhibited moderate to strong positive correlations with all anxiety subscales scores, the strongest of these relationships was observed with the Generalized/Overanxious Anxiety scale. The Obsessions/Compulsions scale exhibited no significant relations with empathy measures aside from the Personal Distress scale. Also a positive and significant association, scores of the Social Phobia scale were correlated with teacher reports of prosocial behaviour. Subtypes of anxiety to prosocial behaviour were otherwise unrelated.

As significant gender differences were noted in the sample, correlations were examined splitting the file by gender. This purpose of this was to get a better sense of the potential impact of gender and to explore which areas in particular may benefit from further future study by others. Separation of results by gender revealed potential differences in variable correlations (see Tables 7 and 8 for summaries of these correlations by gender). Differences in score ranges and standard deviations between the two groups should be considered when interpreting these results.
Significant positive relations were noted for boys regarding total anxiety scores to the Bryant and the Empathic Concern dimension. Anxiety subtypes of Panic/Agoraphobia, Separation Anxiety, Obsessions/Compulsions and Generalized/Overanxious were also positively associated to the Bryant empathy for boys. Similar positive associations were found with regards to the relation of Empathic Concern to the Separation Anxiety, Obsessions/Compulsions and Generalized/Overanxious subtypes. Results from the girls demonstrated one significant positive relation involving the Panic/Agoraphobia subscale to the Bryant empathy measure. Personal Distress presented significant positive relations with anxiety scales for both boys and girls. In summary, correlations between subtypes of anxiety and empathy were generally observed to be moderate to high strength for the boys and of lesser strength for the girls.

Interrelations between empathy-related responses and empathy to prosocial behaviour variables in boys followed the same correlational trends noted in results with the composite sample. For girls, correlations of lesser strength were noted. In particular, Empathic Concern and Perspective-taking exhibited a positive, significant association. Self-reported and teacher-reported prosocial behaviour were significantly related to their Perspective-taking scores, in a positive direction. In contrast, teachers reported girls' Personal Distress levels to be negatively and significantly associated with their prosocial behaviour.

Anxiety variables appeared to be unrelated to prosocial measures for both genders, with exceptions involving low-moderate negative correlations of the Panic/Agoraphobia and Obsessions/Compulsions subscales to girls’ peer-nominated prosocial behaviour. As mentioned, differences in the size and significance of correlations among girls and boys may due in part to the smaller sample sizes used in correlational analyses.
Summarizing main points of this section, anxiety exhibited the strongest relation to *Personal Distress* and was also related to *Empathic Concern* and *Perspective-taking* dimensions of empathy. Anxiety was generally unrelated to reports of children’s *prosocial behaviour*. Some variations in these associations occurred when considering separate subtypes of anxiety and when splitting results by gender. These differences may be due in part to the significant differences in means noted between girls and boys on dimensions of empathic concern and perspective-taking, as well as reports of prosocial behaviour.
Table 6

Intercorrelations of Variables: Total Sample

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*p < .05. **p < .01.
Table 7

*Intercorrelations of Variables by Gender: Girls*

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*p < .05.  **p < .01.*
Table 8

Intercorrelations of Variables by Gender: Boys

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*p < .05. **p < .01.*
Hierarchical Regression Analyses

With links between externalization, empathy, and prosocial behaviour having already received attention in the literature, the larger goal of the present study was to explore potential links between internalization, empathy, and prosocial behaviour. Internalization in this study refers to anxiety. Given research findings and assessment have demonstrated unique subtypes under which anxiety symptoms fall (Myers & Winter, 2002), the goal of analyses was to explore if these distinctive subtypes would be differentially predicted by variables of empathy and prosocial behaviour. Hierarchical multiple regressions were conducted to answer the second research question, “How does empathy and prosocial behaviour singularly and collectively predict anxiety subtypes in middle childhood?”

In developing the regression model for this study, it was considered that relations have already been established between anxiety disorders and social behaviour (Inderbitzen et al., 1997; La Greca & Stone, 1993; Strauss et al., 1988), as well as empathy and prosocial behaviour (Batson et al., 1987; Eisenberg & Miller, 1987; Schonert-Reichl et al., 2003). Bringing these variables together within a theoretical framework, anxiety and empathy appear to be closely tied as internal processes. Perhaps less closely related, prosocial behaviour could be viewed as indicative of a behavioural response, potentially governed by these internal processes. Thus, it was predicted that aspects of empathy would play a larger role in the prediction of anxiety subtypes. More specifically, the model chosen for study predetermined anxiety (the total score) as the response variable, while empathy-related responses and prosocial behaviour indices were entered as potential predictor variables. Separate regressions were run for each anxiety symptom subscale to further explore potentially unique outcomes. Assumptions, including efforts to avoid
issues multicholinearity and singularity, were also considered in the formation of this model (Stevens, 2002).

Acknowledging the impact gender may play within hierarchical regressions, gender was considered as a predictor variable in multiple regression analyses. The order of variable entry involved gender and age as the two variables composing the first block or Step 1 in each regression, in an effort to control for these variables. The Bryant, Empathic Concern, Perspective-taking, and Personal Distress variables were entered together within the second block. As a third and final step, prosocial behaviour measures (self, peer and teacher-report) were entered\(^6\). Table 9 displays at each step the contributions of empathy and prosocial behaviour to total trait anxiety, through the zero-order correlational coefficient, the standardized regression coefficients \(\beta\), adjusted \(R^2\), change in \(R^2\), and change in \(F\) values. The \(F_{\text{change}}\) value indicates the significance of the contribution of each block. All \(R^2\) values reported hereafter represent the adjusted values.

For the first regression examining the contribution of empathy and prosocial behaviour in predicting children's total anxiety scores, Step 1 was entered involving gender and age in the equation. After this step, \(R^2 = .02\) demonstrating this was not a significant contribution. After Step 2, however, with the entry of the empathy-related response indices, \(R^2 = .29\), and this was considered significant, \(F_{\text{change}} (4, 97) = 10.68\). The addition of the final prosocial block added little to the prediction equation and was not a significant predictor. Overall, the model accounted for 32% of the variance of children's total trait anxiety, \(F(9,94) = 6.35, p < .001\). Considering

\(^6\) Analyses were later conducted switching the placement entry of empathy and prosocial blocks in the model, in order to observe the potential impact of variable entry order. Results indicated that the first order of block entry (e.g., empathy variables before prosocial behaviour variables) was more informative in terms of a prediction model. Thus, this study will only report results referencing the first model.
the beta weights, it is indicated that the **Personal Distress** variable had the largest standardized beta weight when all variables were entered into the model.

Regression analyses were next considered for each anxiety symptom subscale. In each of these analyses, each separate subscale of anxiety was considered the dependent variable. The remainder of the step entries held the same entry format as the first and results are presented in Tables 10 to 14. The goal was to determine more specifically how each anxiety subtype was predicted by empathy and prosocial behaviour variables.

As shown in Table 10, outcomes from the regression placing **Panic/Agoraphobia** as the response variable resulted in a similar pattern of results. As in the previous analysis, after Step 1, gender and age did not emerge as significant predictors. Changes in the $R^2$ statistic did reach significance at Step 2, $R^2 = .21$, $F_{change}(4, 97) = 8.26$. Again, the **Personal Distress** variable appeared to have primary influence on this change, as well as the Bryant predictor variable. The last step did not reach significance and the model explained 24% of the variance in the **Panic/Agoraphobia** subscale of trait anxiety, $F(9,94) = 4.52, p < .001$.

The prediction model using the **Separation Anxiety** subscale as the response variable performed slightly different in that changes in the $R^2$ statistic reached significance at the first step upon the entry of gender and age. Thus, results demonstrated $R^2 = .05$, $F_{change}(2, 101) = 3.58$. Again, entry of the block of variables at the second step were significant contributors (the Bryant and PD predictors demonstrating the highest beta weights), resulting in $R^2 = .20$, $F_{change}(4, 97) = 5.84$. The final step involving the prosocial variable block did not add significant predictive value to the model. Thus, the overall $R^2 = .21$, $F(9,94) = 4.08, p < .001$.

With the **Obsessions/Compulsions** subscale entered as the response variable, a result with different characteristics emerged. Entry of the first block induced no significant results and
keeping with prior tests, entry of the empathy block did induce significant changes in the $R^2$ statistic, $F_{\text{change}}(4, 97) = 7.56, p < .001$. Lastly, the teacher-report and peer-report variables in the third block demonstrated significant contributions to the equation (however, in opposite directions according to the beta values). After Step 3, the model accounted for 24% of the variance in this subscale variable of anxiety, $F(9,94) = 4.59, p < .001$.

Outcomes for the Social Phobia regression model exhibited similar results those obtained with the Obsessions/Compulsions subscale in that entry of the final block involving prosocial measures was significant above and beyond the first two block entries. Summarizing this change, entry of the first block of gender and age was not of significance. Upon Step 2 entry, again significance in the change was obtained, $R^2 = .14, F_{\text{change}}(4, 97) = 4.18$. Lastly, Step 3 results indicated a change of .07 in $R^2$, with an overall outcome of 18% predictive value, $F(9,94) = 3.57, p < .001$.

Lastly, the Generalized/Overanxious hierarchical regression processes was significantly affected by gender and age entries within the first step, $R^2 = .04, F_{\text{change}}(2, 101) = 3.19$. Likewise, entry of the empathy indices of the second step was significant, $R^2 = .35, F_{\text{change}}(4, 97) = 12.76$. Entry of all model variables at the Step 3 indicated that 34% of the variance was accounted for by the model, $F(9,94) = 6.97, p < .001$. Upon inspection of beta weight values, Personal Distress and teacher-report prosocial variables appeared to be influencing the significance of this result as predictors. It is observed that in regression analyses for the subtypes of Separation Anxiety and Generalized/Overanxious, sole entry of the first block (gender and age) demonstrated a significant change. However, the significance of these variables was no longer apparent within the full prediction model.
Summarizing the results of regression analyses, empathy variables were the strongest predictors of children’s anxiety, when considering both empathy and prosocial behaviour variables. Prosocial behaviour variables were significant predictors in the collective model with regards to the anxiety subtypes of *Obsessions/Compulsions* and *Social Phobia*. 
## Table 9

**Summary of Hierarchical Regression Analysis for Variables Predicting Total Trait Anxiety**

*(N = 104)*

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<th>r</th>
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**NOTE:** B = unstandardized regression coefficient, β = standardized regression coefficient, SE = standard error, r = zero-order correlations, adjusted $R^2$ = adjusted coefficient of determination, Δ$R^2$ = change in $R^2$, F = F ratio.

*p < .05. **p < .01. ***p < .001.
Table 10

Summary of Hierarchical Regression Analysis for Variables Predicting Panic/Agoraphobia Symptoms
\((N = 104)\)

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<th>(r)</th>
<th>(R^2)</th>
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Total \(R^2\)     \(\quad .24***\)

**NOTE:** \(B\) = unstandardized regression coefficient, \(\beta\) = standardized regression coefficient, \(SE\) = standard error, \(r\) = zero-order correlations, adjusted \(R^2\) = adjusted coefficient of determination, \(\Delta R^2\) = change in \(R^2\), \(F\) = F ratio.

\(*p < .05\). \(**p < .01\). \(***(p < .001\).
Table 11

Summary of Hierarchical Regression Analysis for Variables Predicting Separation Anxiety Symptoms
(N = 104)

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NOTE: B = unstandardized regression coefficient, β = standardized regression coefficient, SE = standard error, r = zero-order correlations; adjusted R² = adjusted coefficient of determination, ΔR² = change in R², F = F ratio.

*p < .05. **p < .01. ***p < .001.
Table 12

Summary of Hierarchical Regression Analysis for Variables Predicting Obsessions/Compulsions Symptoms (N = 104)

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Total R²       .24***

NOTE: B = unstandardized regression coefficient, β = standardized regression coefficient, SE = standard error, r = zero-order correlations, adjusted R² = adjusted coefficient of determination, ΔR² = change in R², F = F ratio.

*p < .05. **p < .01. ***p < .001.
Table 13

Summary of Hierarchical Regression Analysis for Variables Predicting Social Phobia Symptoms
(N = 104)

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</tbody>
</table>

Total $R^2$         .18***

NOTE: $B$ = unstandardized regression coefficient, $β$ = standardized regression coefficient, $SE$ = standard error, $r$ = zero-order correlations, adjusted $R^2$ = adjusted coefficient of determination, $ΔR^2$ = change in $R^2$, $F$ = $F$ ratio.

*p < .05.  **p < .01.  ***p < .001.
Table 14

Summary of Hierarchical Regression Analysis for Variables Predicting Generalized/Overanxious Symptoms (N = 104)

<table>
<thead>
<tr>
<th>Variables Entered</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>r</th>
<th>Adjusted $R^2$</th>
<th>$\Delta R^2$</th>
<th>F change</th>
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<tr>
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<td>.24*</td>
<td>.04</td>
<td>.06*</td>
<td>3.19*</td>
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<td>-.07</td>
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<tr>
<td>Step 2</td>
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<tr>
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<td>.35</td>
<td>.32***</td>
<td>12.76***</td>
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<td>-.03</td>
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<tr>
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<td>.14</td>
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<tr>
<td>Empathic Concern</td>
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<td>-.09</td>
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<tr>
<td>Step 3</td>
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</tr>
<tr>
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<td>.10</td>
<td>.17</td>
<td>.23**</td>
<td>.34</td>
<td>.02</td>
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<tr>
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<td>.05</td>
<td>.28**</td>
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<td></td>
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<tr>
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<td>.07</td>
<td>.06</td>
<td>.17*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Distress</td>
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<td>.52***</td>
<td>.58***</td>
<td></td>
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<tr>
<td>Prosocial behaviour - self-report</td>
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<td>.04</td>
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<td></td>
<td></td>
<td></td>
<td>.34***</td>
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</table>

NOTE: $B =$ unstandardized regression coefficient, $\beta =$ standardized regression coefficient, $SE =$ standard error, $r =$ zero-order correlations, adjusted $R^2 =$ adjusted coefficient of determination, $\Delta R^2 =$ change in $R^2$, $F =$ F ratio.

* $p < .05$. ** $p < .01$. *** $p < .001$. 
Discussion

Previous literature has examined empathy and prosocial behaviour in relation to externalizing behaviours and processes in children (Cohen & Strayer, 1996; Eisenberg et. al., 2005; Farmer et al., 2002; Veenstra et al., 2005). In contrast, there is little extant research that examines the relation of empathy and prosocial behaviour to anxiety, an internalizing process. Though variables of anxiety, empathy, and prosocial behaviour have been studied individually, there is a lack of research of potential relations among all three are simultaneously considered. Most knowledge concerning empathy-related responses discusses the functioning of these processes in adults, as opposed to children (aside from one noted study by Eisenberg et. al., 1989, involving both children and adults). The current investigation addressed the need for more research exploring relations among constructs of anxiety, empathic responding, and prosocial behaviour in the child population. The first goal of the study was to examine potential associations among subtypes of trait anxiety, empathy-related responses, and prosocial behaviour in a community sample of children. A second goal of the study was to consider how empathy-related responses and prosocial behaviour variables contribute to the prediction of anxiety subtypes in children. Research questions were answered using statistical methods of correlation and hierarchical regression analyses.

Overall, the results of this study directly address the intended research goals. Correlational findings in response to the first goal of this study suggest that subtypes of anxiety and empathy-related responses are related in significant ways. As demonstrated by findings from hierarchical regressions, aspects of this empathy-related responding, along with prosocial behaviour, significantly predict levels of trait anxiety.
Stemming from these general results are additional findings of this study and implications worthy of discussion. These include the following topics: relations between trait anxiety and all three empathy-related responses, differing results by unique anxiety subtype, unique relations among empathy-related responses in children, significant gender differences in empathy and prosocial variables, challenges to the construct validity of personal distress and anxiety, and a demonstrated lack of relations between anxiety and prosocial behaviour variables. Issues of measurement are discussed throughout to illustrate current challenges in the field. To provide a context for the findings of this study, comparisons of current results to previously studied results reported in psychology literature will be presented.

**Trait Anxiety and Empathy-related Responses**

Results from the composite sample of this study indicate that trait anxiety in children ages 9 through 12 years is positively and significantly related to all dimensions of empathy-related responding, including perspective-taking, empathic concern, and personal distress. In other words, children scoring higher on levels of trait anxiety also scored higher on the three empathy-related responses. The association of greatest strength was the relation between personal distress and total anxiety scores. It would be important to discuss these links between each of the unique empathy-related responses and anxiety in more detail.

Perspective-taking scores from the composite sample (including both boys and girls) were moderately and significantly related to children's total anxiety scores in this study. There is a paucity of research specifically examining the link between the empathic process of perspective-taking and anxiety constructs in children. However, two studies of related research provide information with regards to potential relations between these two constructs. In their research with 220 adolescents, Schonert-Reichl and Beaudoin (1998) measured empathy using
Davis's IRI (1980) and assessed internalizing symptoms by means of the Reynold's Adolescent Depression Survey. Correlational results indicated that internalizing symptoms were negatively associated with perspective-taking. Though this study defines internalization through the operationalization of depression (as opposed to anxiety), it provides some insight concerning the internalization to empathy link. Additionally, research by Davis (1983) addressed similar relations between anxiety and perspective-taking using self-report measures and scales pertaining to audience anxiety, social anxiety, and shyness. Empathy-related responses were measured using the IRI. Correlational results of his study suggest that greater perspective-taking ability is positively associated with less self-reported anxiety. These results were not mirrored within the current study's sample.

Perspective-taking is defined as the ability to assume the perspective or role of another person and is considered an other-oriented response (Batson et. al., 1987; Feshbach, 1983). Skills necessary to focus outwardly during the process of perspective-taking would likely oppose the self or inward-focusing involved in the experience of anxiety (Ingram, 1990; Mansell et al., 2002; Wells, 1985). Anxiety would theoretically express trends similar to the experience of personal distress. It is of interest then, that results of this study found that perspective-taking was positively related to self-reported anxiety.

Considering potential theoretical explanations interpreting this finding, it may be useful to revisit the suggestion by some researchers that anxiety is closely tied to cognitive activity. Such cognitive processes include negative thought patterning or rumination, self-focusing, scanning the environmental for threat cues, and of most interest, assumptive thoughts regarding perceptions by others (Abbot & Rapee, 2004; Schniering & Rapee, 2004). Recall that escalation in the frequency of such anxious processes may result in the classification of an anxiety disorder.
(Axelson & Birmaher, 2001). One possible explanation linking the present finding (which indicates a positive relation of anxiety to perspective-taking) is that anxiety is characterized by an overall increase in certain cognitive processes - including perspective-taking (albeit potentially inaccurate or biased). Thus, perhaps perspective-taking skills in children with higher levels of anxiety are somewhat primed and easily engaged in situations evoking empathy.

The present study proposes that empathic concern and personal distress are also related to trait anxiety in children. This provides support to Davis’s (1983) original investigation using the IRI with adults, wherein he found empathic concern and personal distress to be positively associated with shyness, anxiety, and lower extraversion. Similarly, in a later investigation involving undergraduate participants, Davis et al. (1987) assessed the differing influence of cognitive and emotional empathy on affective reactions. Following observation of two emotionally evocative films, individuals scoring high on previously completed self-reports of empathic concern reported feeling more anxious, depressed, and hostile than those reporting lower levels on this dimension of empathy.

Summarizing these points, the present research findings mirror previous research linking anxiety to empathic concern and personal distress. In contrast, results linking perspective-taking to anxiety in a positive manner, are not typical of prior research. It seems that one “cost” of well-developed empathic processes may be a pairing with an increased experience of anxiety or perhaps, overall emotionality. Is it possible that anxiety is a necessary part of the empathic process in children and increased anxiety may actually assist children to empathize with an individual in distress? Alternatively, we may consider that increases in empathic ability are paired with increases in anxiety. As the results of this study were correlational, the directionality of these associations cannot be determined. However, results do lead us to consider if children
demonstrating higher levels of empathy-related responding require additional attention and support with regards to anxiety management (to avoid consistent reactions of personal distress).

**Anxiety Subtype Considerations**

Methods and measures of the present study were chosen in an effort to gather information relevant to recent trends in the anxiety literature. Changing trends in the conceptualization of anxiety suggest that children in clinical and community populations experience anxiety symptoms forming unique subtypes (4th ed.; *DSM-IV*; American Psychiatric Association, 1994; Spence, 1997; 1998). These unique anxiety subtypes were considered for their potential to demonstrate differing results within analyses.

Correlational and regressional results of this study were impacted by anxiety subtype. Considering correlations of anxiety's unique symptom subtypes to the three empathy-related responses, personal distress was uniformly positively and significantly related to children's reports on all categories of anxiety symptoms (including panic/agoraphobia, separation anxiety, obsessions/compulsions, social phobia, and generalized/overanxious symptoms) for the composite sample. In other words, regardless of subtype, children reporting anxiety symptoms also experienced personal distress. Children with higher levels of empathic concern reported higher on all anxiety symptom subtypes, except the obsessions/compulsions scale (which was only related to personal distress). Thus, only children with obsessions/compulsions experienced greater personal distress that was not necessarily paired with greater empathic concern.

Children with generalized/overanxious and social phobia symptoms were found to experience personal distress and empathic concern, but these symptoms were unrelated to their perspective-taking. Meanwhile, those children with higher levels of panic/agoraphobia and separation anxiety symptoms were found to report more perspective-taking. In general, children's
perspective-taking demonstrated fewer associations of lesser strength with anxiety symptom subtypes.

Summarizing, trends in associations with anxiety across subtypes seem to follow (in order of strength): personal distress, then empathic concern, and lastly, perspective-taking. Further variation was noted when considering unique anxiety subtypes. These nuances in results lead us to question whether unique symptoms interact with empathic processes differently. For example, why would a child with separation anxiety symptoms have higher levels of perspective-taking?

Bringing together the variables of anxiety, empathy, and prosocial behaviour, this study inquired how empathy and prosocial behaviour singularly and collectively predict subtypes of anxiety in children. To answer this question, this study utilized a hierarchical regression model, entering empathy variables first and prosocial variables second (based on their hypothesized predictive ability). Collectively, the full model’s predictive power appeared to change depending on the subtype of anxiety symptoms being considered. For example, only aspects of empathy predicted children’s scores of total anxiety, separation anxiety, and generalized/overanxious anxiety. In particular, the Bryant and personal distress indices were the only significant predictors, which may be indicative of their ability to tap into more affective aspects (e.g., those relative to negative emotionality). In practical terms, results suggest children reporting more empathy can be predicted to have higher levels of symptoms pertaining to overall anxiety, separation anxiety, and generalized/overanxious anxiety.

However, both empathy and prosocial behaviour were able to predict children’s scores on the anxiety subtypes of obsessions/compulsions and social phobia. More specifically, teacher reports of prosocial behaviour contributed to the significance of the model predicting social
phobia and obsessions/compulsions symptoms. Yet, peer-reports of prosocial behaviour provided a unique contribution in the opposite (negative) direction for the obsessions/compulsions and panic/agoraphobia categories (though this did not add significance to the overall model in the case of the panic/agoraphobia category). Thus, it appears children with obsessions/compulsion symptoms are considered to be higher on empathy and described as prosocial by their teachers as well, while perceived as less prosocial by their peers. Children with social phobia symptoms may also be regarded as empathic and perceived as prosocial by their teachers. Predictive findings indicate that children higher in overall empathy and particularly personal distress, should be considered for their potential to experience increased anxiety, across all anxiety subtypes.

The importance of these results can be summarized in three points. First, varying results of prediction models by anxiety subtype provide added support to the existence of these subtypes. The fact that anxiety subtypes performed differently in analyses provides evidence supporting current anxiety research and assessment conceptualizing anxiety as involving categorical clusters of symptoms. In turn, this variety among results provides more information explaining how these subtypes are unique. For example, social phobia is well-known for fears concerning the perceived perceptions of others (4th ed.; DSM-IV; American Psychiatric Association, 1994). It could be that the role of social variables in this particular anxiety subtype resulted in a greater relevance of social factors (i.e., prosocial behaviour) within the collective prediction model. However, this line of reasoning may not fit for the significance of prosocial behaviour variables seen within the prediction of the obsessions/compulsions subtype. In other words, why prosocial behaviour is able to partially predict obsessions/compulsions is unclear. This area evidently requires further study. Third, as some subtypes were predicted in part by
social/behavioural factors, it would be beneficial to bring the associated symptoms or related social behaviours to the awareness of teachers, parents, or community members interacting with children within a social arena. Perhaps children scoring higher on reports of obsessions/compulsions and social phobia symptoms are the children for whom peer relations and social adjustment may be more greatly affected. Although this study found relatively no associations between anxiety and prosocial behaviour or personal distress to prosocial behaviour, these variables do come together within the larger model in a significant manner of which we should be aware.

Relations Among Empathy-related Responses

Previous authors have discussed relations among the empathy-related responses of empathic concern, perspective-taking, and personal distress. Recall that the first two are generally considered other-oriented responses and the third, a self-oriented response (Batson et al., 1987; Funke, 2003). Results from other investigations of empathy-related responding typically provide evidence for either a lack of a significant relation, or the presence of a negative association, of personal distress to empathic concern and perspective-taking (Batson, Bolen, Cross, & Neuringer-Benefiel, 1986; Davis, 1983; Schonert-Reichl & Beaudoin, 1998). In Davis’s (1983) study, a small positive correlation between empathic concern and personal distress was reported. This result was attributed to the large sample size as opposed to a genuine finding, however. The logic explaining earlier findings is that as one enters personal distress the focus shifts inwards, thus inhibiting the other or outward-focus necessary for empathic concern and perspective-taking.

In contrast, the present investigation found a positive significant association between empathic concern and personal distress and no relation of personal distress to perspective-taking.
Thus, children ages 9 through 12 years high in levels of empathic concern also demonstrated higher levels of personal distress, while this distress was unrelated to their perspective-taking (which is interesting considering the positive relation discovered between anxiety and perspective-taking). Most previous studies of empathic-responding to which this sample is compared have primarily involved adults. This brings us to two points of discussion regarding the present finding: the first concerns the validity of findings in the present study within the context of currently available methodologies used with children; second, if this is a valid finding (i.e., that personal distress is related significantly and positively to empathic concern, but expresses no relation to perspective-taking in children), potential interpretations of these results are necessary in order to provide direction for future study.

Recall that current literature in the field describes empathy in terms of a multidimensional process of affect and cognition in order to feel and understand another’s experience (Eisenberg, 2000). Given this definition, it would seem essential to have available for use reliable methods studying all three dimensions simultaneously in children. In a search of the literature, researchers of this study were unable to locate wherein a composite self-report method of empathy, involving all three dimensions, was utilized with children. Instead, empathic concern and sympathy were often studied simultaneously (often using self-report methods), while personal distress was assessed separately (using methods such as physiological indices, situational self-report, or coding of facial affect; Eisenberg et. al., 1989; Eisenberg et al., 1996; Tromsdorff & Freidelmeier, 1999; Valiente et al., 2004). Within the Bryant (1982), all three dimensions of empathy-related responding are assumed to be studied simultaneously, with affective components receiving more attention. However, results of this measure are presented through a composite score instead of scores reflective of the unique empathic dimensions.
The present study involved a combination of previously modified versions of Davis’s Empathic Concern and Perspective-taking scales (Miller’s Thoughts and Feelings Questionnaire, 2003), along with our own modified version of Davis’s Personal Distress scale. Results of this study indicate that this modified measure of personal distress demonstrates adequate reliability and should be considered for use by researchers wishing to assess children’s self-report of multiple dimensions of empathy. Additional use by others would facilitate assessment of this scale as a valid measure for use in the measurement of empathy.

Summarizing discussion of the first point (concerning the validity of findings reported here), it would appear that results suggesting that children’s empathic concern and personal distress are related, while their personal distress and perspective-taking are unrelated, are supported through the use of psychometrically sound measures.

The second point of discussion refers to potential explanations of these particular correlations. It may be helpful to consider differences between children and adults in their experience of empathy. Revisiting literature on the development of empathy, Hoffman (2000) posits that children’s development of empathy begins at the first stage with emotional contagion. This gradually moves into more sophisticated processes, mirroring the ongoing development of cognitive processes and acquisition of skills facilitating emotional regulation. By the fourth stage (approximately age nine), this theory suggests that children are better able to perspective-take and differentiate themselves and their own needs from those of others’ (Litvak-Miller & McDougall, 1997). Restated, the differentiation of self from others facilitates perspective-taking and regulation of personal distress.

The idea of the self becoming more differentiated with age is mirrored by researchers in the field of adolescent development (Harter & Monsour, 1992). However, it is noted that within
this research, differentiation of the self is a process encouraged by the increased socialization and
cognitive advances beginning in adolescence (approximately ages 13 and up). Researchers in
this area suggest that along with self-other differentiation come a differentiation among multiple
roles attributed to the self (e.g., self with mother, self with peers, and self in various social
contexts; Harter & Monsour, 1992). It appears that such differentiation between “self” and
“other,” along with internal components within oneself, would require advanced skills in
perspective-taking. Considering these points, it is plausible that the differentiation of self-other
focus is not yet fully developed in children ages 9-12 years, resulting in a positive association
between empathic concern and personal distress, and no relation between personal distress and
perspective-taking. This point provides encouragement for additional research examining
differences between children, adolescents, and adults in the context of the development of
multiple dimensions of empathy.

Gender Differences

Researchers have previously reported gender differences with regards to boys’ and girls’
experience of empathy, anxiety, and prosocial behaviour (Bryant, 1982; Cohen & Strayer, 1996;
Eisenberg et. al., 1988; Mash & Wolfe, 1999; Saavedra & Silverman, 2002; Spence, 1997, 1998;
Warden et al., 2003). The validity of some of these gender differences has been questioned.
Some researchers in the field of empathy maintain that observed differences may be more
reflective of the items and methods used in study, as opposed to genuine differences in
experience (Bryant, 1982; Eisenberg, 2000; Zhou et al., 2003). Illustrating this point by referring
to comments of a linguistic expert in the field, Bryant states of her own study, “Indeed, the
wording of affect in the empathy index reflects the more direct style Shimanoff proposes is more
characteristic of female emotional statements” (Bryant, 1982, p. 422).
Results emerging from the present study indicate significant differences in means between boys and girls on dimensions of empathy and prosocial behaviour, providing support to previous findings in the literature. Significant gender differences regarding anxiety reporting were not found in the current investigation. Looking closer at observed differences, girls reported higher mean levels of empathic concern and perspective-taking than boys. These results contrast with those of Eisenberg and colleagues (1988) who found females did not report more empathic concern than males. Meanwhile, the present study’s results coincide with findings by Cohen and Strayer (1996) and Bryant (1982) who found higher overall empathy reporting by females on affective vicarious responses. Regarding prosocial behaviour reports in this study, girls self-reported significantly higher levels of prosocial behaviour than boys, while teachers and peers reported girls to engage in more prosocial behaviour than boys. These results add support to the current body of research regarding these points (Warden et al., 2003). Measurement issues aside, it appears girls are observed as more empathic and prosocial than boys.

Though not the focus of this investigation, it was important to explore potential differences in variable associations in order to recognize the potential impact of gender. Due to the type of analyses conducted, interpretation of these findings is limited and can only be reported as trends characteristic of the current sample. It should be noted that smaller sample size and differing ranges may affect results and also limit interpretations. When separating correlational results by gender, several variations were of great interest. In terms of empathy-reporting, strong significant positive associations of empathic concern to perspective-taking and personal distress were indicated for boys. This suggests that boys who express more empathic concern also experience greater perspective-taking and personal distress. These associations
were of notably lesser strength for girls. Such findings mirror those of Davis (1983) in his research with adults, wherein the strength of association between these variables was stronger for males. Based on these findings, one may question if empathy-related responses are more closely tied and less differentiated among boys than girls.

In terms of associations among anxiety and empathy variables, boys appeared to demonstrate stronger relations than girls between empathy-related response indices and subtypes of anxiety. In this manner, it appears that for males in the sample, personal distress was very strongly associated with all subtypes of anxiety. Girls associations here were of lesser strength. Relations with the Bryant (proposed to focus more specifically on the measurement of affective-empathy), also retained strong associations with various anxiety subtypes in boys. These results were not characteristic in the girls in that their Bryant, empathic concern, and perspective-taking scores were virtually unrelated to their anxiety.

Limited by the analyses conducted and a lack of prior research in the area for comparison, it is difficult to make definitive interpretations of these results. We could suggest that such results are indicative of differences in the way boys and girls experience anxiety subtypes and processes of empathy. Alternatively, results may also reflect gender biases in the methods used for measurement. What does appear to be true is that in the current investigation, boys’ affective empathy processes (empathic concern and personal distress) were more closely linked with anxiety than girls’ (the significance of this difference remains undetermined). This result is interesting when considering that girls typically report more anxiety symptoms and empathy than boys (Barrios & O’Dell, 1998; Bryant, 1982). Additionally, boys are typically reported to have more challenges with externalizing versus internalizing behaviours (World Health Organization, 2002). Taken together, this leads us to further question the impact of
gender differences on internal processes of anxiety and empathy. Related to this, regulation of affect (over-control vs under-control) and resulting behavioural expression become areas of interest in terms of gender differences.

Looking closely at associations of anxiety to prosocial behaviour, girls reporting symptoms of panic/agoraphobia and obsessions/compulsions were reported by peers to engage in less prosocial behaviour, which deviates from the results seen in the total sample and the boys. Additionally, girls exhibiting higher levels of personal distress were seen as less prosocial by their teachers, an association absent in the total sample and that of the boys. These findings add to the curiosity surrounding anxiety symptom expression and if it plays a role in these differing associations by gender. Thus, it would appear from results of this study that girls' prosocial behaviour is more affected by their levels of anxiety than boys.'

Other associations regarding prosocial behaviour were of particular interest. Boys self-reporting higher levels of empathic concern and perspective-taking also self-reported having more prosocial behaviour. Positive associations between the multiple informants of prosocial behaviour were noted for boys. Aside from positive relations between their perspective-taking and self-reported prosocial behaviour, these associations were not present, or were of lesser strength for girls. Correspondence between informants of girls' prosocial behaviour was not indicated in this study. Taken together, we may continue to question whether prosocial behaviour is more closely tied to empathic concern for boys, while personal distress and anxiety are more closely tied to the expression (or lack of) prosocial behaviour in girls. Additionally, results may be reflective of differing attitudes among boys, girls, and other informants about what is regarded as prosocial and empathic, and if these expectations change by gender.
To summarize, in this study, results gathered from boys appeared to mirror those of the total sample. In contrast, results obtained from the girls deviated from these trends. Though interpretation of gender differences evidenced in the present study is limited by the type of analyses conducted, additional support has been provided by the present research for future examination of these differences. Future investigations may consider researching if these differences are the result of the methods currently used to assess empathy (e.g., if methods function differently for girls and boys). Alternatively, if differences are genuine and valid, continued investigation of the nature of these differences would be important.

Anxiety and Personal Distress: Identical vs Overlapping Constructs

The large contribution of personal distress in the prediction of anxiety subtypes emerged as an area for further interest in this study. Uniform across all symptom subtypes of anxiety, personal distress demonstrated significance and appeared to contribute the most in prediction models. Positive associations between children's anxiety and personal distress were strong and significant in this study, regardless of anxiety subtype considered. How the relation of these two variables - anxiety and personal distress – can be explained, remains challenging to tease apart.

To date, it appears the concepts of anxiety and distress as described in the anxiety literature have remained separate entities from descriptions within the empathy literature. Within the field of anxiety research, the concept of *distress* has been incorporated as part of the larger definition of anxiety, or as a criterion of anxiety disorders (4th ed.; *DSM-IV*; American Psychiatric Association, 1994; Bouchard, 1999; Mash & Wolfe, 1999). Within the field of empathy, *personal distress* has been regarded as a type of empathic response, while the term anxiety has been used synonymously with personal distress or incorporated within the definition (Funke, 2003). In fact, when assessing for personal distress, often physiological indices of
anxiety are used to indicate the presence of this empathy-related response (Eisenberg et al., 1989).

Both fields have looked at physiological, behavioural, and cognitive correlates of each and similar characteristics of the two are noted. Regarding some of these similarities, both anxiety and personal distress are paired with heightened physiological and arousal responses (Eisenberg et al., 1988; Langley et al., 2002) and both seem to involve a behavioural “flight” or escape inclination. For example, recall that Batson et al. (1987) discussed helping behaviour as a method used to ease personal distress when presented with a situation characterized by a low-escape opportunity. In a situation wherein escape is possible, however, the individual would be more likely to choose the “flight” option. Cognitively, anxiety and personal distress are additionally presumed to similarly involve an increased level of self-focus (Batson et al., 1987; Ingram, 1990; Mansell, Clark, & Ehlers, 2002; Wells, 1985).

With the strong correlation between the two variables within this study, the high involvement of personal distress within regression analyses, and similar characteristics, it is tempting to suggest anxiety and personal distress are essentially the same construct in children. This conclusion would mean large implications concerning current methods of measurement and how each is defined and operationalized. Being so closely linked, how may we ensure that it is not essentially the same construct being measured? Such conclusions claiming construct equivalence may overly-general, however, when considering that, unlike anxiety, the empathy-related response of personal distress was not related to perspective-taking in this study. Similarly, anxiety has been split into subtypes based on unique symptoms. No such subtypes of personal distress have been noted to date. Taking into account these points, perhaps personal distress and anxiety can instead be considered for their overlapping qualities. Theoretically,
anxiety may be explained as an emotion within the empathic emotional response of personal distress. Alternatively, if high levels of distress are already present in children with heightened trait anxiety, perhaps the threshold to enter a personally distressed state upon empathizing is lower for these children.

What is evident from data collected in this study is that anxiety’s ties with empathy seem to be stronger with regards to affective perspective-taking rather than cognitive-perspective-taking. It would be helpful to consider potential underlying processes linking the two constructs of personal distress and anxiety. Authors have mentioned negative arousal/emotionality and emotional regulation as pertinent and important areas to consider within both anxiety and personal distress literature (Chorpita et al., 1998; Eisenberg et al., 2000; Eisenberg et al., 2001). Both sets of literature suggest a sort of intermediary role played by negative emotionality and emotional regulation in affecting levels of distress (i.e., as an experienced state of affect) and personal distress (i.e., as an empathic response; Chorpita et al., 1998; Eisenberg et al., 2001; Hoffman, 2000). It is questionable, then, if anxiety could be an emotion related to the empathic response of personal distress through a third intervening variable of emotionality or affect regulation.

Recall in the present study that children with higher levels of empathy-related responses demonstrated higher levels of anxiety. Considering the value of preventative programs, it seems essential that the promotion of empathy, be paired with the prevention of feelings of anxiety causing overwhelm (contributing to responses of personal distress). It would be worthwhile for programs to place additional focus on the pairing of emotional regulation skills with affective-perspective taking skills. More specifically, a component of training in emotional regulation may assist to bring down anxious processes potentially associated with empathic processes.
Knowing that personal distress is a predictor of anxiety, children who typically engage in this response when empathizing with a distressed other should be targeted in anxiety prevention efforts.

Considering the above points explored, it remains questionable as to whether the construct of personal distress should continue to be classified in terms of empathy. Perhaps its ties with anxiety provide reason to reconsider the current conceptualization of personal distress as being an empathic process.

Anxiety Symptoms, Personal Distress, and Prosocial Behaviour

Within the composite sample, all subtypes of anxiety were found to be unrelated to reports of children's prosocial behaviour in this investigation. The only exception to this was the positive relation of the social phobia symptoms to the teacher-report. There is a propensity of literature that illustrates the hindering effects of anxiety on the social relations amongst clinically anxious populations (Inderbitzen et al., 1997; La Greca & Stone, 1993; Strauss et al., 1988). Given the lack of relations between anxiety and prosocial variables found in this study of non-clinical child participants, it may be important to consider points for future research consideration.

First, we might consider the potential for anxiety to function differently in its relations with prosocial behaviour among clinical and non-clinical child populations. Second, variations in methodologies may be responsible in part for variations in results. It appears primarily peer social status/sociometric methods have been used in the extant research (e.g., classification into neglected, rejected, popular categories, often using "liked-most," "liked-least" nominations). These methods differ from the specific descriptors of prosocial behaviour for which children were nominated within this study. This may contribute in part to differential findings.
Perhaps an encouraging finding of the present study of non-clinical children is that personal distress and anxiety were generally unrelated to children’s ability to engage in prosocial behaviours (i.e., efforts to share and cooperate with others). The exception of the social phobia subtype in its positive relation to children’s prosocial behaviour should be considered for two possible implications: first, the high correlation between teacher-reported prosocial behaviour and social phobia symptoms in children provides support to others’ suggestions that teachers are able to provide valuable information concerning social behaviour (Ladd & Prolifet, 1996); second, we may consider the potential application of this information. Preventative and socio-emotional programs may be informed by this relation and encouraged to target symptoms characteristic of social phobia, knowing that these symptoms may affect prosocial behaviour and peer relations.

This study indicated that children’s personal distress demonstrated no relation, positive or negative, to their prosocial behaviour. This result contrasts with prior theory and research evidence suggesting significant relations between these two variables (Batson et. al., 1987; Eisenberg & Miller, 1987; Eisenberg et al., 1989). Researchers have debated the proposed direction of prior relations observed between personal distress and prosocial behaviour. In their investigation using factor analyses methods studying self-reports of adults, Batson et al. (1987) discovered that in a no-escape situation, helping behaviour is likely due to an egoistic motivation to relieve distress. In contrast, Eisenberg et al. (1989) found that personal distress (as measured by coding of facial data) is typically negatively related to indices of prosocial behaviour in children ages 8 to 10 years (as measured by situational opportunity to help/volunteer). These studies, in combination with current findings, reveal that relations between personal distress and prosocial behaviour remain unclear and are likely representative of the large variation in
theoretical and operational definitions of the constructs. Related to this point, *prosocial behaviour* (as measured by reports of behavioural descriptors in this study) and *helping behaviour* may actually represent two different constructs with differing functions.

Taken together, correlational results indicate personal distress and anxiety are generally unrelated to prosocial behaviour (aside from social phobia). This finding provides some encouraging information with regards to the empathic and social processes or abilities of children scoring higher on anxiety symptoms.

*Additional Measurement Considerations*

This study provides additional support to previously proposed links between empathy and prosocial behaviour (Eisenberg & Miller, 1987; Eisenberg, et al., 1991; Tromsdorff & Freidelmeier, 1999). In particular, children’s scores on dimensions of empathic concern and perspective-taking were significantly and positively associated with all reports of their prosocial behaviour (by self, teacher, and peers). Of interest was the difference in measure performance, however. Reports of empathy using the Bryant were associated to self-reported prosocial behaviour, yet this association was lacking with teacher and peer-report variables. Whereas modified IRI scores of empathic concern and perspective-taking demonstrated positive relations with all reports of prosocial behaviour. These differences may be indicative of the noted differences between the two empathy measures (Bryant and modified IRI). Prior literature has suggested that the Bryant appears to access the more affective or emotional aspects of empathy (Cohen & Strayer, 1996), while the IRI is often chosen for its ability to distinguish between the differing cognitive and affective dimensions. This finding stresses the difficulty that remains in defining and operationalizing empathy and prosocial behaviour.
To summarize points of this section, several categories of implications emerging from results of this study are identified. First, children higher in levels of trait anxiety appear to experience higher levels of empathy-related responding. Second, different subtypes of anxiety potentially exhibit different trends in their relations with empathy and prosocial behaviour, which may be indicative of the unique characteristics of each subtype. Third, results here imply that children may experience empathy-related responding differently from adults and this area would benefit from further study. Fourth, gender differences continue to suggest a need for further research examining the nature of these differences, including how much of these differences are due in part to measurement issues. Fifth, distinctions between anxiety and personal distress remain unclear and clarification in this area is needed to assist future study involving these variables. Sixth, results of this study demonstrated a lack of association between anxiety and prosocial behaviour, encouraging continued research into the validity of these findings. Finally, this field of study would benefit from greater standardization in definition and measurement concerning the constructs of anxiety, empathy, and prosocial behaviour to allow for more comparable results.

Limitations

Several limitations are noted when interpreting the results of the present study. First, sampling procedures were somewhat limited in size (n = 104) and overall population representation (two schools located in a primarily middleclass area). For results to be generalized more fully to other populations, sampling across locations with greater variability in socioeconomic class, culture, school environment, and location would be required. Similarly, sampling in this study was pseudo-random which has potential to affect results. Referring back to demographic information, it was noted that over half of the participants identified languages
other than English as spoken in the home. Given the measures used in this study were primarily normed on information gathered from middle-class Caucasian children, generalization to other cultures may be limited. Differing attitudes around self-reporting and even the theoretical concepts themselves (e.g., what it means to be prosocial) have potential to illicit differences in responses.

Low participation rates were considered for their effect within the present investigation. For example, the overall child participation rate for the entire study was 62%. As it were, the timing of the research study coincided with a period following a province-wide strike by teachers and declaration by teachers of reduced involvement in “extra-curricular” activities. Potential sampling bias must also be considered with regards to those children who chose to participate and received parental permission to be part of the study. It is possible that children representing the higher end of anxiety scores may not have responded (potentially due in part to the avoidant nature of anxiety). Thus, generalization of results outside of this sample is limited.

In terms of class involvement, participation rates affecting peer nomination measures ranged from 47% to 79%, averaging 62% across the six classrooms. The decision to retain the peer nominations despite these low rates was based on the fact that they appeared to perform as expected in other ways (e.g., correlating positively with other reports of prosocial behaviour and reports of empathy). They are, however, considered for their potential as a limitation.

Velting et al., (2004) note, “Because of the private and subjective nature of anxiety, child self-report measures are important, yet parent and teacher report are useful in completing the diagnostic picture” (p. 46). It is possible that reports from others (e.g., parents and teachers) concerning children’s anxiety would provide additional valuable information to improve upon the current study’s findings (Spence, 1997). The quality of agreement between informant reports
of children’s anxiety has been questioned by some researchers (DiBartolo & Grills, 2006). Nevertheless, the fact that information concerning anxiety was gathered using only self-reports may limit the results of this study and be a potential area for improvement. This study did not employ a multi-informant approach to anxiety reporting due to time constraints (the study already requested a prosocial measure from the teachers) and measure limitations (no translated versions of the measure were available, while over half of the children cited languages other than English as being spoken in the home). Future endeavours may choose to involve multiple informants with regards to children’s anxiety and thus, may broaden what is known about the experience of anxiety in relation to empathy and prosocial behaviours.

Another potential limitation is based on the methods of measurement used within this study. Particularly, this involves the method used to assess the multidimensional aspects of empathy in children. This study modified the adult items of the IRI to produce a personal distress scale. Although the scale did demonstrate adequate reliability in this study, results must be interpreted with caution as it is unclear whether this modification would be stable over time and across populations. A point of further attention then, is the study of personal distress in children. It seems a review of the adequacy of methods currently and previously used by researchers, along with the development of new methods (including self-report methods), would be two helpful directions for this field of study.

The present study provides reason to question potential differences between adult and child populations considering the relation of anxiety to empathy and prosocial behaviour. Variations in how these processes are experienced by each should be considered. Conclusions from this study with children are limited when considering that they are primarily being compared and contrasted to results from studies with adults.
Finally, of additional importance to note is that all results gathered here are correlational, not causal. Therefore, conclusions that may be drawn from such information are limited. For example, we may say that children’s reports of anxiety are positively related to their reports on dimensions of empathy such as empathic concern, perspective-taking, and personal distress. However, we are not able to determine the direction of these relationships. For example, it cannot be determined if anxiety causes greater levels of empathy dimensions, or if higher levels of empathy-related responses cause greater anxiety. Similarly, results from the prediction model of this study tell us that dimensions of empathy and prosocial behaviour are able to predict subtypes of anxiety, but we do not know how, or the nature by which this occurs.

Given these limitations, potential for future study is expansive. Methods comparing children categorized as “clinical” versus “non-clinical” in terms of anxiety may tell us more about the relationships between these constructs. Using more sophisticated models of mediation, moderation, and interaction may also reveal more about the roles of variables. For example, exploring certain dimensions of empathy-related responding for their potential role as mediators between the other variables would be of interest (e.g., empathic concern as a mediator of the anxiety-personal distress relationship). Gender also emerged as an area requiring further investigation in terms of its interactive or mediating effects between variables. Cultural components may account for differences in population responses and variable interrelationships and these areas require additional study. Overall, further investigation would take the field from knowing that differences between groups exist (e.g., gender), to knowing more about the quality and nature of such differences.
Summary

In conclusion, this study investigated the associations of anxiety subtypes to variables of empathy-related responses and prosocial behaviour in children. It was found that children’s anxiety is positively related to the three empathy-related response dimensions of empathic concern, perspective-taking and personal distress, yet generally unrelated to self, peer, and teacher-reports of prosocial behaviour. Significant gender differences were noted, and this supports previous research findings. Children’s personal distress was a salient predictor of their anxiety, while prosocial behaviour was also a relevant predictor depending on the subtype of anxiety considered. A number of opportunities for further research pertaining to these variables remain to be investigated. This study has formed a basis from which we may begin to understand how anxiety, empathy, and prosocial behaviour come together to affect the experience of school-age children.
References


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(Eds.), *Anxiety Disorders in Children and Adolescents*, (pp. 127-158). Cambridge, UK: Cambridge University Press.


Mental Health Evaluation and Community Consultation Unit (April, 2002). *Provincial Anxiety*


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### Appendix A

**Descriptive Statistics of Variables for Clinical-Scoring Group**

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
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<tr>
<td>Trait anxiety (self-reported)</td>
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<td></td>
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<tr>
<td>Total composite</td>
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<td>.53</td>
<td>1.50</td>
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<td>Panic/agoraphobia</td>
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<td>.33</td>
<td>2.56</td>
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<td>Separation</td>
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<td>.63</td>
<td>1.50</td>
<td>.67</td>
<td>2.17</td>
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<td>Obsessions/compulsions</td>
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<td>2.00</td>
<td>1.00</td>
<td>3.00</td>
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<tr>
<td>Social phobia</td>
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<td>.11</td>
<td>1.00</td>
<td>1.33</td>
<td>2.33</td>
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<tr>
<td>Generalized/overanxious</td>
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<td>.70</td>
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<td>Empathy (self-reported)</td>
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<td>Bryant</td>
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<td>3.01</td>
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<td>1.57</td>
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<td>3.90</td>
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<td>Modified IRI</td>
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<td>Empathic Concern</td>
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<tr>
<td>Self-report</td>
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<td>.80</td>
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<td>Peer-report</td>
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<td>.40</td>
<td>.17</td>
<td>.50</td>
<td>.17</td>
<td>.67</td>
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</table>

**NOTE:** Of the eight individuals, three scored above cutoff levels on subscales of *separation anxiety* (SA), three on *social phobia* (SP), five on *obsessions/compulsions* (ObC), three on *generalized/overanxious* (GA) and two on *fear of physical injury* (PI). These results reflect that some individuals reached clinical levels on more than one scale. The PI scale was eliminated from all other analyses conducted.
Appendix C: Information Letters and Consent Forms

THE UNIVERSITY OF BRITISH COLUMBIA

Department of Educational and Counselling Psychology, and Special Education

Faculty of Education
2125 Main Mall
Vancouver, BC, Canada V6T 1Z4

Dear School Principal,

We are writing to request your school’s participation in a research project that we are doing called, “The Relation of Anxiety to Empathy and Prosocial Behaviour During Childhood.” The goal of the research is to help us further understand how anxiety may affect children’s thoughts, feelings and responses in social situations. We would like to invite classroom students and teachers to participate in this study. We feel that information gained from the study can help to inform us how to create positive classroom climates. We would greatly appreciate if you and your staff would help us in this project. A description of the project is given below, in order to help you make a decision.

Purpose of Study: In this project, we want to examine the relation of children’s experience of anxiety to how they think, feel and behave in social situations. Information gained from the study will assist us to learn more about how to optimize social relationships in classrooms. The study is a part of a Master of Arts degree for Ms. Leanne Fessler.

Study Procedures: Students in grades 5 and 6 will take part in a 50-60 minute group testing session in their classroom, during regular school hours (time to be selected at teachers’ convenience). During this session, students will fill out questionnaires. The first questionnaire will ask students about backgrounds, such as age, race/ethnicity, gender and family composition (used only to provide us information about our sample/participants). One questionnaire will be about the kind of fears children experience and how often these fears occur (e.g., “I worry that something bad will happen to me”). Two others will concern how children think and feel about others (e.g., “It’s easy for me to understand why people do the things they do”). Students will also be asked to provide information about their own social behaviour (e.g., “I try to make sad people happier”) and views concerning their classmates’ social behaviour (e.g., “Please circle the names of students who share and cooperate”).

Teachers will be asked to fill out one short questionnaire for each participating child (7 items in total, approximately 3-5 minutes per child), providing information about student social behaviour. Looking at all of this information will help us to learn how children’s fears and worries may affect how they think, feel and act during social interactions with others.

Version 2: October, 2005
When will this study take place?

**Proposed date: March 2006**

**Students:** Questionnaires  
Grades 5 and 6: group administered, 1 session @ 50 minutes

**Teachers:** Prosocial Scale of Child Social Behaviour Scale to be completed for each participating student (7 items - approximately 5 minutes per student)

**How will the students/teachers/principals be asked to participate?**

- In the next 2 – 3 weeks, Project Co-ordinator Leanne Fessler will go to each participating classroom to hand out permission slips and describe the study to the students. Students should take these permission slips home and bring them back signed with either a "yes" or "no." Note that we will be connecting with the teachers to determine the best approach for collecting permission slips from parents.
- We would like to include a cover letter (on school letterhead) from the principal encouraging parents/guardians to have their child participate. We will get this letter from the Principal.
- An incentive will be offered to students to return their completed permission slips. This incentive will be a pizza party for all class members that will take place at the discretion of the teacher, at anytime during the school year.

**NOTE: IT IS VERY IMPORTANT THAT WE GET A HIGH RATE OF PARTICIPATION IN THIS STUDY FOR PURPOSES OF GENERALIZABILITY OF FINDINGS.**

- Active assent to participate in the study will also be requested of the student and teachers.

**What are the measures that participants will be asked to complete?**

**Demographic Information:**
- Demographic Questionnaire

**Level of Trait Anxiety:**
- “Fears and Worries” - Spence Children’s Anxiety Scale

**Global Empathy, Emotional Awareness and Empathic Response Style:**
- “Feelings about Feelings” – Bryant’s Index of Empathy for Children and Adolescents
- “Thoughts and Feelings Questionnaire” – Miller’s revised Interpersonal Reactivity Index

**Self-report of Prosocial Behaviour**
- “More About Me” - Caprara & Pastorelli’s Prosocial Behaviour Scale

**Peer-report of Prosocial Behaviour**
- “Peer Assessment of Prosocial Behaviour” – Wentzel’s method

**Teacher-report of Prosocial Behaviour**
- “Prosocial with Peers Scale” – from Ladd & Prolifet’s Child Behaviour Scale
How long will student/teacher assessments take to complete?

Students: The group administration of the questionnaires takes approximately 45 – 60 minutes across one session. These measures will be administered at the teacher's convenience. For best results, it is recommended this administration time be slotted after recess or lunch break.

Teachers: Each behaviour checklist takes less than 3-5 minutes to complete per student. NOTE: TEACHERS WILL BE PROVIDED WITH A BOOKLET OF 20 LESSON PLANS ADDRESSING SOCIAL RESPONSIBILITY CURRICULUM FOR THEIR PARTICIPATION IN THIS PROJECT.

What will the teachers be asked to do?

- Collect permission slips from children
- Provide a classlist to the investigator
- Co-ordinate with the investigators times that are convenient to distribute the permission slips and administer the questionnaires to students.
- Complete the Child Behaviour Prosocial Scale for each participating student.

What do we need from each school?

1. A class list for each participating classroom.
2. A letter from the principal on school letterhead (an outline of this can be e-mailed to school to facilitate preparation).
3. A convenient time to co-ordinate logistics of the project.
4. Languages in which permission slips should be translated for your school.
Appendix C (cont’d): Teacher Informed Consent Form

THE UNIVERSITY OF BRITISH COLUMBIA

Department of Educational and Counselling Psychology, and Special Education

Faculty of Education
2125 Main Mall
Vancouver, BC, Canada V6T 1Z4

Dear Elementary School Teacher,

We are writing to invite you and your classroom to participate in a research project. This project is titled, “The Relation of Anxiety to Empathy and Prosocial Behaviour During Childhood.” The goal of the research is to help us further understand how anxiety may affect children’s thoughts, feelings and responses in social situations. Below is a description of the project to better assist you in making an informed decision.

Purpose of Study: In this project, we want to examine the relation of children’s’ experience of anxiety to how they think, feel and behave in social situations. Information gained from the study will assist us to learn more about how to optimize social relationships in classrooms. The study is a part of a Master of Arts degree for Ms. Leanne Fessler.

Study Procedures: Students will take part in a 50-60 minute group testing session in their classroom, during regular school hours (time to be selected at your convenience). During this session, students will fill out questionnaires about their backgrounds, the kind of fears they experience and how often these fears occur, as well as about how they think and feel about others. Additionally, students will be asked to provide information about their own social behaviour and views about their classmates’ social behaviour.

Teachers will be asked to fill out one short questionnaire for each participating child (7 items in total, approximately 3-5 minutes per child), providing information about student social behaviour. Looking at all of this information will help us to learn how children’s fears and worries may affect how they think, feel and act in social situations. It is important to note that in our project, students are not being “tested” in any way and there are no “right” or “wrong” answers.

Participation will require parental consent, which will be indicated by parents/guardians filling out and returning a permission form provided by the researchers. Participation is voluntary, meaning teachers/students may withdraw at any time. The decision to partake in this study will not affect student grades or education in any way. Students who do not participate may be given an activity to do that is related to a topic being covered in their regular class.

Version 2: October, 2005
Appendix C (cont'd): Parental Informed Consent Form

THE UNIVERSITY OF BRITISH COLUMBIA

Department of Educational and Counselling Psychology, and Special Education

Faculty of Education
2125 Main Mall
Vancouver, BC, Canada V6T 1Z4

Dear Parent(s) or Guardian(s),

We are writing to request permission for your son or daughter to participate in a research project that we are doing at (name of school). The title of this project is "The Relation of Anxiety to Empathy and Prosocial Behaviour During Childhood." The goal is to help us further understand how anxiety may affect how children in grades 5/6 think, feel and respond in social interactions with other children. We would greatly appreciate if you and your child would help us in this project. A description of the project is given below, in order to help you make a decision.

Purpose of Study: In this project, we want to learn how children's' feelings of anxiety may influence how they think, feel and behave in social situations. The study is a part of a Master of Arts degree for Ms. Leanne Fessler.

Study Procedures: Students from grades 5 and 6 will take part in a 50-60 min group testing session in their classrooms, during regular school hours (time selected by teacher). During this session, students will fill out questionnaires. Only students who receive permission from their parent/guardian will participate. Participation is voluntary and your child may withdraw at any time. Students not participating will not be on the class list and will remain in their class to continue with regular schoolwork during these times.

The first questionnaire will ask students about backgrounds, such as age, race/ethnicity, gender and family composition (used only to provide us information about our sample/participants). One questionnaire will be about the kind of fears children experience and how often these fears occur (e.g., "I worry that something bad will happen to me"). Two others will concern how children think and feel about others (e.g., "It's easy for me to understand why people do the things they do"). Students will also be asked to provide information about their own social behaviour (e.g., "I try to make sad people happier") and views concerning their classmates' social behaviour (e.g., "Please circle the names of students who share and cooperate").

Your child's teacher will be asked to fill out one short questionnaire for each participating child, providing information about student social behaviour. Looking at all of this information will help us to learn how children's fears and worries may affect how they think,
What is anxiety?
Anxiety is a normal emotion that we all experience in our lives in response to situations we may find difficult. For example, often many people feel anxious when they have to speak in public or complete a test. In many ways, it is very similar to fear. However, one important way anxiety is different from fear is that it can be felt when we are not in situations of immediate threat. In other words, it may come as the result of worrying thoughts.

How do we experience anxiety?
Responses to anxiety can differ from person to person, but will usually include responses that are:
1. Psychological – how you think, e.g. worrying
2. Physical – how your body feels, e.g. quick heart beat
3. Behavioural – how you act, e.g. irritable

How does this relate to my child?
Though anxiety is normal, it may become a problem when a child feels anxious more often than usual for their age, or developmental level. Sometimes children who experience high levels of anxiety refuse to go to school, have re-occurring stomach aches, cry often or act out in class. As mentioned, reactions may be different for each child. However, it is important that if you suspect anxiety may be a problem for your child, that you and your family receive some support. Anxiety IS treatable and there ARE solutions!

What should I do if I suspect anxiety is a challenge for my child?
If you suspect your child may experience greater than normal levels of anxiety for his/her age, some options you may choose are:
➢ Speak with your child’s school counsellor
➢ Talk with your family doctor
➢ Contact the Anxiety Disorders Association of British Columbia (www.anxietybc.com)
➢ Have him/her assessed at B.C. Children’s Hospital Mood & Anxiety Disorders Clinic

Information from:

Recommended readings for parents of children with anxiety concerns:

Champsky, Tamra. (2000). Freeing your child from OCD.


Excellent parent workbook helping parents to understand how to intervene appropriately when children refuse/are reluctant to attend school due to anxiety concerns. It has some very practical approaches for parents, teachers and kids.

March, J. S. (1995). Anxiety Disorders in Children and Adolescents. John March is head of the RUPP study, and is out of Duke University. He is a collaborator on the VP3 Friends Project, and a very approachable man. He is a psychiatrist.


This book helps parents understand the most frequently experienced anxiety problems among children and provides instruction in how parents can help their children overcome their fears. The entire range of anxiety is covered including the small fears experienced by many children all the way to full blown anxiety disorders. Skills and strategies are covered in detail. The authors recommend that this book is used in conjunction with consultation with a qualified mental health professional to best apply this book to the individual needs of each child.


Provides a perspective on how children deal with stress and how parents and clinicians can teach them effective coping strategies.

Recommended websites for parents of children with anxiety concerns:

www.anxietybc.com
Run and operated by the Anxiety Disorders Association of BC, a nonprofit organization whose mission is to increase awareness and promote education of anxiety disorders, increase access to evidence-based treatment, and to encourage and develop new treatments and delivery. Has a click and print self-test for anxiety disorders for adults.

www.adaa.org
Run and operated by the Anxiety Disorders Association of America. Has a very good page on literature for children, adolescents, parents, and professionals. Is supported by drug companies. Has a click and print test for adolescents for anxiety disorders.

www.childanxiety.net
A nonprofit educational website.

Reading list by Anxiety.project@ubc.ca, 2004
Appendix D (cont’d): Demographics Questionnaire

Identification Number ___________________

Appendix Ba: Tell us About Yourself

Instructions: We would like to know a little about your background. Read each of the following questions to yourself and write you answers in the line. Please be careful not to skip any questions.

1) Are you a boy or a girl? (CIRCLE ONE) BOY GIRL

2) What is your birthdate? _______ _______ _______
   (month) (day) (year born)

3) Put a check beside the adults you live with most of the time?
   ___ Mother ___ Father ___ Stepfather ___ Stepmother
   ___ Grandmother ___ Grandfather
   ___ Other adults (Explain, for example, aunt, uncle, mom’s boyfriend, etc.)
   __________________________

4) Check where you live
   ___ House ___ Apartment ___ Basement Suite
   ___ Other _______________________

5) What is the first language you learned at home? ________________

6) Which language(s) do you speak at home? ________________

7) Which language do you prefer to speak? ________________

8) What grade are you in?
   Circle One:  K  1  2  3  4  5  6  7
Appendix D (cont’d): Trait Anxiety Scale

<table>
<thead>
<tr>
<th>Identification Number</th>
</tr>
</thead>
</table>

**Appendix Bb: Fears and Worries**

Please put a circle around the word that shows how often these things happen to you. There are no right or wrong answers, so please answer honestly. Thank you!

<table>
<thead>
<tr>
<th>Fears and Worries</th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I worry about things.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>2. I am scared of the dark.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>3. When I have a problem, I get a funny feeling in my stomach.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>4. I feel afraid.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>5. I would feel afraid of being on my own at home.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>6. I feel scared when I have to take a test.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>7. I feel afraid if I have to use public toilets or bathrooms.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>8. I worry about being away from my parents.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>9. I feel afraid that I will make a fool of myself in front of people.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>10. I worry that I will do badly at my school work.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>11. I am popular amongst other kids my own age.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>12. I worry that something awful will happen to someone in my family.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>13. I suddenly feel as if I can’t breathe when there is no reason for this.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>14. I have to keep checking that I have done things right (like the switch is off, or the door is locked).</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

**STOP**

CHECK TO MAKE SURE YOU ONLY HAVE ONE NUMBER CIRCLED PER LINE
<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. I feel scared if I have to sleep on my own.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. I have trouble going to school in the mornings because I feel nervous or afraid.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. I am good at sports.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I am scared of dogs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I can't seem to get bad or silly thoughts out of my head.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. When I have a problem, my heart starts to beat really fast.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. I suddenly start to tremble or shake when there is no reason for this.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. I worry that something bad will happen to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. I am scared of going to the doctors or dentists.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. When I have a problem, I feel shak y.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. I am scared of being in high places or lifts (elevators).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. I am a good person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. I have to think of special thoughts to stop bad things from happening (like numbers or words).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. I feel scared if I have to travel in the car, or on a bus or train.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. I worry what other people think of me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. I am afraid of being in crowded places (like shopping centres, the movies, buses, busy playgrounds).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. I feel happy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. All of a sudden I feel really scared for no reason at all.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. I am scared of insects or spiders.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
34. I suddenly become dizzy or faint when there is no reason for this. | Never | Sometimes | Often | Always
---|------|-------|------|-----
35. I feel afraid if I have to talk in front of my class. | Never | Sometimes | Often | Always
36. My heart suddenly starts to beat too quickly for no reason. | Never | Sometimes | Often | Always
37. I worry that I will suddenly get a scared feeling when there is nothing to be afraid of. | Never | Sometimes | Often | Always
38. I like myself. | Never | Sometimes | Often | Always
39. I am afraid of being in small, closed places, like tunnels or small rooms. | Never | Sometimes | Often | Always
40. I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order). | Never | Sometimes | Often | Always
41. I get bothered by bad or silly thoughts or pictures in my mind. | Never | Sometimes | Often | Always
42. I have to do some things in just the right way to stop bad things happening. | Never | Sometimes | Often | Always
43. I am proud of my school work. | Never | Sometimes | Often | Always
44. I would feel scared if I had to stay away from home overnight. | Never | Sometimes | Often | Always

45. Is there something else that you are really afraid of? Please write down what it is.

How often are you afraid of this thing? Never Sometimes Often Always

CHECK TO MAKE SURE YOU ONLY HAVE ONE NUMBER CIRCLED PER LINE

STOP
### Appendix Bc: Feelings About Feelings

The following describe some ways that you may feel. For each sentence, please circle the number that shows HOW TRUE the statement is for you. Read each question carefully. Answer honestly. There are no right or wrong answers. Thank You!

<table>
<thead>
<tr>
<th>Feelings</th>
<th>Absolutely not like me</th>
<th>Sort of like me</th>
<th>Really like me</th>
<th>Very much like me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It makes me sad to see a kid who can't find anyone to play with.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. People who kiss and hug in public are silly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Boys who cry because they are happy are silly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I like to watch people open presents, even if I don't get a present myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Seeing a boy who is crying makes me feel like crying.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I get upset when I see a girl being hurt.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Even when I don't know why someone is laughing, I laugh too.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Sometimes I cry when I watch T.V.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Girls who cry because they are happy are silly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. It's hard for me to see why someone else gets upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I get upset when I see an animal being hurt.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. It makes me sad to see a boy who can't find anyone to play with.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. Some songs make me feel so sad I feel like crying.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. I get upset when I see a boy being hurt.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Feelings</td>
<td>Absolutely not like me</td>
<td>Sort of like me</td>
<td>Really like me</td>
<td>Very much like me</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>------------------------</td>
<td>----------------</td>
<td>---------------</td>
<td>------------------</td>
</tr>
<tr>
<td>15. Grown-ups sometimes cry even when they have nothing to be sad about.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. It's silly to treat dogs and cats as though they have feelings like people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>17. I get mad when I see a classmate pretending to need help from the teacher all of the time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>18. Kids who have no friends probably don't want any.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>19. Seeing a girl who is crying makes me feel like crying.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>20. I think it is funny that some people cry during a sad movie or while reading a sad book.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21. I am able to eat all of my cookies even when I see someone looking at me and wanting one.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22. I don't feel upset when I see a classmate being punished by a teacher for not obeying school rules.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

CHECK TO MAKE SURE YOU ONLY HAVE ONE NUMBER CIRCLED PER LINE
Appendix D (cont’d): Modified Interpersonal Reactivity Index

Identification Number _______________________

**Appendix Bd: Thoughts and Feelings Questionnaire**

The following sentences describe ways children might feel about others. For each sentence, tell us how well it describes you by circling the number that describes HOW TRUE it is for you. Read each question carefully. Answer honestly. Thank You!

<table>
<thead>
<tr>
<th>Thoughts and Feelings</th>
<th>Not at all like me</th>
<th>A little bit like me</th>
<th>Kind of like me</th>
<th>A lot like me</th>
<th>Always like me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I often feel sorry for people who don't have the things I have.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. It's easy for me to understand why other people do the things they do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Sometimes I feel very sorry for other people when they are having problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. When I see someone being picked on, I feel kind of sorry for them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Sometimes I try to understand my friends better by imagining how they think about things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Even when I'm mad at someone, I try to understand how they feel.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I often feel sorry for other children who are sad or in trouble.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I try to understand how other kids feel before I decide what to say to them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. When I see someone being treated mean, it bothers me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Even when I know I'm right I listen to what other people think.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I often have strong feelings about things that happen around me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Before I say anything bad about anyone, I try to imagine how I would feel if I were that person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Thoughts and Feelings</td>
<td>Not at all like me</td>
<td>A little bit like me</td>
<td>Kind of like me</td>
<td>A lot like me</td>
<td>Always like me</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------</td>
<td>--------------------</td>
<td>----------------------</td>
<td>-----------------</td>
<td>---------------</td>
<td>----------------</td>
</tr>
<tr>
<td>13. I am a person who cares about the feelings of others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. There are different ways to think about a problem and I try to look at all of them</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. When I see someone who really needs help in an emergency, I panic (lose it).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. I feel there is nothing I can do when I am in the middle of a very upsetting situation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. In emergency situations, I feel nervous and tense.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. Usually, I can handle emergencies well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. When I am in situations that are very emotional, I get stressed and scared.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. When I see someone getting hurt, I usually stay calm and &quot;keep my cool&quot;.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. I usually lose control or panic in emergencies.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

CHECK TO MAKE SURE YOU ONLY HAVE ONE NUMBER CIRCLED PER LINE
Appendix D (cont’d): Prosocial Behaviour Scale – Self-report

Identification Number

Appendix Be: More About Me

Please read the following sentences carefully. For each sentence, tell us how well it describes you by circling the number that describes HOW OFTEN these things are true for you. Read each question carefully. Answer honestly. There are no right or wrong answers. Thank You!!

<table>
<thead>
<tr>
<th>Prosocial Behaviour</th>
<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I try to make sad people happier.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. I spend time with my friends.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. When I have to do things that I don’t like I get mad.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. I try to help others.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. I am gentle.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. I cry about things that don’t matter.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7. I share things I like with my friends.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8. I feel annoyed.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9. I help others with their homework.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10. I let others use my toys.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11. I have bad dreams.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>12. I like to play with others.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>13. I trust others.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>14. I bite my fingernails.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>15. I hug my friends.</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

CHECK TO MAKE SURE YOU ONLY HAVE ONE NUMBER CIRCLED PER LINE
Appendix D (cont'd): Peer Nomination of Social Behaviour

Identification Number

Appendix Bi: Peer Assessment of Social Behaviour

DIRECTIONS:

On the following pages, is a list of your classmates. We would like to get some information about your feelings about them and their behaviours. Please follow the directions carefully.

YOU MAY CIRCLE YOUR OWN NAME if you believe the description applies to you.
Identification Number __________________

In each of these long boxes, circle the names of:  *(Do one box at a time.)*

<table>
<thead>
<tr>
<th>1) Students who share their things and cooperate with others</th>
<th>2) Students who start fights</th>
<th>3) Students who help other kids when they have a problem</th>
<th>4) Students who break the rules and do things they're not supposed to do</th>
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In each of these long boxes, circle the names of: *(Do one box at a time.)*

<table>
<thead>
<tr>
<th>5) Students who understand other kids' point of view.</th>
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<th>6) Students who get angry easily and fight back when teased.</th>
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<th>7) Students who are kind.</th>
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Appendix D (cont’d): Prosocial Behaviour Scale – Teacher-report

Identification Number

**Appendix Bk: Prosocial with Peers Scale**

Please consider the descriptions contained in each of the following items below and rate the extent to which each of these descriptions applies to this child, particularly in the contest of his/her behaviour with peers. Using the answers "never or not true," "sometimes or somewhat true" and "often or very true," how often would you say that this child... (Circle the number corresponding to your answer, mark only on response per item).

<table>
<thead>
<tr>
<th>Prosocial Behaviour</th>
<th>Never or not true</th>
<th>Sometimes or somewhat true</th>
<th>Often or very true</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Helps other children.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Shows a recognition of the feelings of others; is empathic.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. Seems concerned when other children are distressed.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. Kind toward peers.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. Cooperative with peers.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Shows concern for moral issues (e.g., fairness, welfare of others).</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. Offers help or comfort when other children are upset.</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Appendix D (cont'd): Distracter Task

Identification Number ______________________

Appendix Bj: What it Means to Be “Nice”

DIRECTIONS:

We are interested to know what “being nice” means to Canadians kids. Please list three things people do when they want to be nice to someone.

1).

2).

3).
Dear Parent(s) or Guardian(s),

Last month your child, (child's name), received your permission to participate in a research study entitled, “The Relation of Anxiety to Empathy and Prosocial Behaviour During Childhood.” As mentioned in the information letter sent home to parents, procedures involved the participation of 107 students from Vancouver classrooms, filling out questionnaires. The goal of the project was listed as gathering information to help us learn how children’s feelings of anxiety may influence how they think, feel and behave in social situations. This letter also stated that we would be contacting parents of any children showing, “levels of anxiety that may benefit from further investigation.”

One questionnaire included in this research involved a common standard screening measure of anxiety in children. Anxiety could be defined as a state of apprehension resulting from the anticipation of a real or imagined threat (an event or situation), often affecting physical and psychological functioning. Amongst Canadian children, about 6.5% or 6 out of 100 children have been diagnosed with an anxiety disorder (Source: Mental Health Evaluation and Community Consultation Unit, http://www.heretohelp.bc.ca/publications/factsheets/child_youth_mental_disorders.html). This letter is to inform you that your child scored “higher than average” on the measure of anxiety that we utilized in our study, suggesting that anxiety may be a concern for your child. There are many possible reasons for this, such things as stress due to recent life changes or anxiety problems of a more serious nature. Because your child’s score reflects a higher than average level of anxiety, your daughter may benefit from further assessment in relation to anxiety.

Should you choose to further explore this area with your child, attached is a list of some suggested referrals for services available in your area.

AT SCHOOL:
Meeting with School Counsellor
On site at your child’s elementary is school counsellor, (counsellor name). This counsellor is aware of this study and prepared to work with your child to provide extra one-to-one support. However, your child’s name, questionnaire answers and scores are confidential and will not be released to the counsellor without your written permission. As a first step to assisting your child, we would like to offer you and your family the opportunity to meet with both the counsellor and
Appendix F: Teacher’s Booklet of Social Responsibility Curriculum Lesson Plans

3-D Social Responsibility

Curriculum Ideas Promoting Social-Emotional Learning and Responsibility in Our Children
Booklet Created by Leanne Fessler
3-D SOCIAL RESPONSIBILITY CURRICULUM

Foreward:

The BC Ministry of Education has recognized that Social Responsibility should be included as a necessary component to children’s academic learning. Research supports this movement and demonstrates that socially responsible behaviour correlates positively with academic achievement. For example, one researcher (Wentzel, 1991) discovered that children who are socially responsible, trust their classmates and solve interpersonal problems in adaptive ways earn higher marks than those who do not.

As a teacher, you have likely been asked to promote such concepts as part of your classroom learning goals. So what exactly is Social Responsibility? Others have described it in terms of prosocial behaviour (i.e. sharing, helping, cooperating; Wentzel, 1991), following social rules and expectations, and social-moral values (i.e. responsibility, respect, justice, fairness, trustworthiness, caring civic virtue and citizenship; Federal Register, 1995). BC’s Ministry has defined it for you in terms of four categories of performance standards, those categories being:

1. Contributing to the Classroom and School Community
2. Solving Problems in Peaceful Ways
3. Valuing Diversity and Defending Human Rights
4. Exercising Democratic Rights and Responsibilities

(please refer to http://www.bced.gov.bc.ca/perf_stands/ for a reminder of those standards applicable to your grade level)

A large precursor to the development of social responsibility is Social Emotional Learning (SEL), which is defined as, “the process through which children enhance their ability to integrate thinking, feelings, and behaving to achieve important life tasks (Zins, Bloodworth, Weissberg & Walberg, 2004, p. 6). SEL is made up of five components including the following:

- **Self-Awareness** – aware of feeling, abilities, self-confidence
- **Social Awareness** – take others’ perspectives, value diversity
- **Self-Management** – regulate own emotions
- **Relationship Skills** – establish healthy relationships, negotiate conflict
- **Responsible Decision-making** – assess risk, respect others, personal responsibility (From: www.casel.org)

The following curriculum ideas and activities are based on knowledge of these definitions, provincial Social Responsibility standards and concepts of SEL.

AND NOW..... THE FUN BEGINS!!!!
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<tbody>
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<td>11</td>
<td>Treating others with fairness and kindness</td>
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<td>12</td>
<td>Diversity in Our Class</td>
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<td>Activity sheet: Family global ties</td>
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<td>13</td>
<td>Taking care of others</td>
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<td>14</td>
<td>Portrait of a hero</td>
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<td>15</td>
<td>Creating a 3-D superhero</td>
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<td></td>
<td>EXERCISING DEMOCRATIC RIGHTS AND RESPONSIBILITIES</td>
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<tr>
<td>16</td>
<td>Taking care of ourselves</td>
</tr>
<tr>
<td>17</td>
<td>Being responsible for me</td>
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<tr>
<td>18</td>
<td>Asking for help</td>
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<td>Handout: How to ask for help</td>
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<td>19</td>
<td>Being a helper</td>
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<td>Template: Letter to parents</td>
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<td>Template: 100 Acts of Kindness recording chart</td>
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<tr>
<td>20</td>
<td>Companion reading</td>
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<td>REFERENCES</td>
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Session 1 – Introducing Concepts of 3-D Social Responsibility

Goals:
1) To introduce the concept of social responsibility and what it means to be a socially responsible person.
2) Students will be able to engage in a discussion about the value of seeing things from different perspectives.
3) To promote valuing of diversity as each student creates their own personalized pair of 3-D glasses, reflecting aspects of self/personality.

Learning Concepts/discussion:
To begin, the teacher engages the classroom in a discussion about 3-D viewing and what they may know or have experienced about this topic. Ideas for discussion could include:
- What does it mean to see “3-D” — what does the 3 stand for, the “D” (three dimensions)?
- What equipment do you need to see 3-D? Have you ever seen a movie in 3-D?
- What is the effect of being able to see 3-D? What makes it so special?

After brainstorming, relay to students that together they are going to learn how to see social situations and their social relationships in 3-D. This means they will be learning the three dimensions of Social Responsibility:

1). Respect and Responsibility for Self
2). Respect and Responsibility for Others
3). Respect and Responsibility for Our Emotions

But first – they need a pair of 3-D glasses!

Activity: Creating 3-D Glasses
In this activity, students will be asked to make their own pair of 3-D glasses. In creating them, students should be thinking about what they can add to reflect aspects of their personality, likes, dislikes, etc.

Materials:
- Heavy construction paper or card stock
- Scissors
- Glue or tape
- Cellophane sheets (red and blue)
- Photocopy of 3-D glasses template

Process Points:
- Relate back to earlier discussion. Review that in order to get "the full picture" of our social situations, we need to consider three different perspectives including, the role of the SELF in the situation, the role of OTHERS and the role of EMOTIONS.
• We consider these points in order to become socially responsible people, or in other words trustworthy people who believe in fairness, sharing, caring, cooperate and being good citizens in our communities.

• The importance of this can be explained using developmentally-appropriate language, including how such affects: making/keeping friends, getting along with family members, success in school/work and life-long relationships.
Print out and glue, or tape this template on to a heavier piece of paper such as card stock. Then cut out the three templates below. Remember to cut out the eye holes.

Right Eye
Blue Cellophane

Left Eye
Red Cellophane

Visit The Paper Project http://lifesciences.asu.edu/paperproject

Once you have the three pieces cut out, glue, or tape pieces of cellophane on to the inside of the glasses. Be careful not to get the glue on the viewing area of the cellophane. You can find cellophane or similar materials at craft and art stores, or stores that sell party supplies.

Finally, glue on the side panels to complete your own cool 3-D glasses.

Fold the the end panels to complete your glasses and try them out on our cool 3-D images of paper at http://lifesciences.asu.edu/paperproject/slcmgallery.html
Contributing to the Classroom and School Community
Session 2 – The Classroom Community

Goals:
1) Students will understand how the classroom and school function like teams and communities.
2) To consider, as a class, the role of the individual as contributing to the community.
3) To focus on role of respect and responsibility as essential to building strong communities.

Learning concepts/discussion:
• Pose the following question for consideration: What is a team? What is a community? – brainstorm for ideas.
• Additional helpful questions – Have you ever been on a team? Have you ever seen a team (on tv, people who work, sports, etc)? What kind of teams are there? How did you know they were a team? What have you noticed about teams? What makes a team work well / not work well?
• Describe how the classroom is like a team within the school community.
• Keeping with this theme, encourage students to think about other students on their team, along with the strengths that each individual brings to the team.
• Create a classroom team identity. This could include a name, colors, aspects that set this team apart, something the team could be “known” for within the school community, etc. *teacher may wish to promote respect and responsibility here)? Does each member have a special role on the team?

Materials:
• Large sheet of white roll paper
• Materials with which to decorate – scissors, crayons/felts, glue, etc.

Activity: Collaborative Team Banner
In this activity, students will create a collaborative banner that represents the classroom team. Aspects to consider could involve how they can represent respect and responsibility on their banner, along with the importance of these two words to their team. Inform students they may use pictures, drawings, words, handprints, etc. Classroom may be split into smaller groups to create multiple banners if classroom size is too large for whole group.

Process points:
• Discuss how the students experienced the activity
• Generate examples of how they worked well as a team, areas that proved to be a challenge
• Consider team roles – did each person do something different?
• Ask students to “put on your 3-D glasses” to consider: how did they represent 3-D Social Responsibility (respect/responsibility for self, others, emotions)?
Session 3 – Cheerleaders, Coaches and Helpers/Team Players

Goals:
1) Students will learn points of cooperation, including what it means to work together as a team.
2) Students will be able to demonstrate the ability to use cooperative and teamwork skills.
3) Class will be able to relate these concepts to concepts of respect and responsibility for self, others and emotions.

Learning concepts/discussion:
- Review last session’s points of learning. Did they notice anything about how their classroom team worked throughout the session?
- On a team there are Coaches, Cheerleaders and Helpers / Team Players
  - Have students consider: What do each of these roles do?
  - **Coach** – gives directions in a supportive way, helps team members accomplish collective goal, offers pointers. Helpful example: “Try moving to the left.” Unhelpful example: “You’re not doing it right!”
  - **Cheerleader** – cheers on team members, makes them feel good, boosts confidence, creates positive energy. Helpful example: “Yahhh! Good job – you’re doing great!” Unhelpful example: “You’re doing horrible – come on – get going!”
  - **Helper / Team member** – assists other players, works together with others, adds own contribution. Helpful example: “I’ll pass you the ball, let me help you reach that.” Unhelpful example: Action – person you never passes the ball, “I can do it all myself”
  - Consider how each of the above is related to 3-D Social Responsibility. How would a person’s emotions be affected in each example (helpful versus unhelpful)?

Materials:
- Index cards – each with one role (cheerleader, coach, helper/player)

Activity: Role Play
In this activity students will split into smaller groups (3-5 per group). Each person will randomly be given an index card labelling the role they will take (there will be duplicates of cheerleaders and players, and only one coach card per group). The teacher will present the class with a scenario that they will role-play within their small groups. An example of such could be going to a soccer game, a team in a work setting, etc. The students will then act out their role within the scenario, generating positive examples of things they might say or do to encourage as a coach, cheer on team members or assist other team members. If time permits, students may be asked to trade role identification cards with other group members to try out each different role. Discuss their experience as a class.

Process points:
- Ask them to “put on their 3-D glasses” and consider: what did they notice worked to contribute positively to the team experience and what did not? How does this relate to respect and responsibility to self, others, and each person’s emotions?
Session 4 – Interesting People (adapted from Mannix, 1993; Social Skills Activities for Special Children)

Goals:
1) Students will be able to identify how they contribute to the class by listing unique things about themselves.
2) Students will be able to identify techniques to show their interest in others.
3) Class will be able to relate these concepts to those of respect and responsibility for self, others and emotions.

Part 1: Being Interesting

Learning concepts/discussion:
- All of us have qualities and characteristics that make us interesting and unique. We contribute these parts of ourselves to the classroom and within our communities.
- It is important to recognize, identify and acknowledge these characteristics, both in ourselves and other people (could use a metaphor to describe; e.g. pieces of a quilt that when viewed alone are boring, but once put together is interesting at which to look).
- Questions to have the students consider:
  - how are you different from everyone in this room? (name, family, physical appearance, talents, etc.)
  - what are some differences that make you feel proud? (achievements – academic, sports, social, etc.)
  - what would you like others to know about you?
  - what about being the “same?” Can that also contribute to making you an interesting person to others?

Materials:
- “Being Interesting” activity sheet
- pencil/pen

Activity: Fill in Sheet
In this activity, students will list 15 things about themselves that others may find interesting.

Process points:
- Ask them to “put on their 3-D glasses” and consider: what did they learn about themselves? What was it like to consider from another’s perspective what characteristics they possess that could be interesting? How could this contribute to concepts of Social Responsibility?
Activity Sheet: Being Interesting

List 15 things about yourself that someone else may find interesting.

1. ____________________________________________
2. ____________________________________________
3. ____________________________________________
4. ____________________________________________
5. ____________________________________________
6. ____________________________________________
7. ____________________________________________
8. ____________________________________________
9. ____________________________________________
10. ____________________________________________
11. ____________________________________________
12. ____________________________________________
13. ____________________________________________
14. ____________________________________________
15. ____________________________________________

We Are All Interesting and Unique!
Part 2: Being Interested in Others

Learning concepts/discussion:

- Showing real interest in other people is a good strategy to making and keeping friendships. Ask students to consider how it makes them feel when others show interest in them.
- There are many ways to learn about other people including asking questions (i.e. ask about brothers/sisters), noticing the skills and talents of others’ (i.e. “You really know how to draw well”), making eye contact or noticing someone’s actions (i.e. “You are really good at passing, would you like to play pass sometime?”), clothing, etc.
- Ask students to consider:
  - Why do they think it is important to have friends in the first place?
  - How might you show someone else you would like to be their friend?
  - Why is showing your interest in others more helpful then just talking about yourself all the time?
  - Describe the difference between being interested and being nosey.

Materials:

- “Being Interested in Others” worksheet
- Pencil/pen
- Handout: “25 Things That Friends Do” – to review with whole class if time permits

Activity: Fill in Sheet

In this activity students will read brief descriptions about the characters and write two or more ways they could show that person they are interested in getting to know them. If time permits you may choose to have the students split into pairs to try out these skills with each other (e.g. have a conversation using questions, statements to show their interest and gather more information).

Process points:

- Ask them to “put on their 3-D glasses” and consider: what did they learn about others by showing their interest? What strategy did they usually use to show their interest? How could this contribute to showing respect and responsibility or Social Responsibility?
Activity Sheet: Being Interested in Others

Below are some people who might be interesting to know. Read about them and write down two things you might say or do to show this person that you would be interested in knowing more about them.

1. Jacque plays soccer on a community team. He just moved here from Quebec last January.

2. Leah has a horse and loves to ride. She likes to wear clothes that are different from other kids you know.

3. David has great ideas for making new games. He makes other kids laugh and is nice to everyone.
25 THINGS THAT FRIENDS DO

1. Talk together.
2. Laugh together.
3. Work together.
4. Play together.
5. Share quiet times.
6. Help each other.
7. Encourage each other.
8. Praise each other.
9. Stick up for each other.
10. Try to see each other's point of view.
11. Think about each other's wants and needs.
12. Think about how they want to be treated. Treat each other that way.
13. Use kind words.
14. Use gentle touches.
15. Treat each other with respect.
16. Share their feelings with each other.
17. Ask for what they need.
18. Listen to each other.
19. Solve problems together.
20. Compromise when they don't agree.
21. Understand that sometimes people feel angry, sad, or afraid.
22. Know that it's not okay to take out their anger, sadness, or fear on each other.
23. Keep their hands and feet to themselves when they feel angry.
24. Say "I'm sorry" when they say or do hurtful things.
25. Know that it's okay to sometimes disagree with each other.
Session 5 – Taking Care of Our Classroom and School Community (adapted – Tillicum Social Responsibility Initiative)

Goals:
1) To review concepts of classrooms as team and schools as communities.
2) Students will better understand what it means to work as a team to take care of the classroom and school community environment.
3) Students will be able to identify ways that they can take care of this community and identify behaviours that reflect not taking care.
4) Class will be able to relate these concepts to concepts of respect and responsibility for self, others and emotions

Learning concepts/discussion:
• Brainstorm ideas about what it means to take care of the classroom and the school and write down these suggestions (e.g. not damaging property, being respectful).
• Discuss students’ thoughts about why they think it is important to take care of their community space.
• Generate as a class, specific examples of behaviours that would involve taking care of the community (e.g. put garbage in the garbage can).
• Generate as a class, specific examples of behaviours that do not demonstrate taking care (e.g. littering, breaking things).

Materials:
• Poster paper or blackboard, felt pen or chalk
• Poster paper for each student
• Pencil crayons, markers, crayons and paint
• Box and small pieces of paper

Activity:
In this activity, students will create a poster with a picture of someone taking care of the community/classroom. Ask the students to notice when they are taking care of the community and have them write it down anonymously on the small pieces of paper and put it in the box. At the end of each day, have them reflect on the things they did to take care of the community. Pull out an example from the box to read to the class for that day.

Taking Care of Our Community
Means....

Putting Your Garbage
In the Garbage Can

Process points:
• Ask them to “put on their 3-D glasses” and consider: how does taking care of our classroom and school community contribute to 3-D Social Responsibility? How might it relate to self, others, and our emotions?
Solving Problems in Peaceful Ways
Session 6 – My Feelings are Important

Goals:
1) Students will be able to recognize the function and importance of their emotions.
2) Students will be able to identify a variety of different emotions and consider how they personally experience these feelings.
3) Class will be able to relate these concepts to concepts of respect and responsibility for self, others and emotions

Learning concepts/discussion:
- Discuss with the class what they already know about feelings and emotions. Together try and brainstorm as many feelings as possible together.
- Talk about what feelings are – neutral signals to let us know what is going on for us. Feelings are neither good nor bad, but what we do with them can have negative or positive consequences. Sometimes they let us know what we like or don’t like, when we don’t feel safe or when there is a problem and we need to ask for help.
- Our feelings affect our body, our thoughts, our facial expressions and our actions.
- Ask the students why it would be important to know what we are feeling. Then have the take out their 3-D glasses and ask them to first look all around the room, but only through the blue lens. Then ask them to do the same with the red lens. Explain to the students that it is important to know what we are feeling because it can “color” or affect how we see people and situations.
- By acknowledging our feelings, we learn to respect our emotions and in turn, be responsible for what we do with them.

Materials:
- Handout of feelings chart
- Template of gingerbread man
- Pencil crayons, markers, crayons and paint

Activity:
In this activity, students will choose one of the feelings on the feelings chart. They will complete the gingerbread handout using that feeling. On this paper, they will illustrate how the particular feeling affects their body, giving examples of what thoughts they might think, the expression that may be on their face and actions they might use when feeling this way. Run through an example with the students before beginning to ensure their understanding.

Process points:
- Ask them to “put on their 3-D glasses” and consider: how does understanding their feelings contribute to 3-D Social Responsibility? How might it relate to self, others, and our emotions?
EXAMPLES OF POSSIBLE FACIAL EXPRESSIONS FOR "A B C OF FEELINGS"

A is for angry.

B is for bashful.

C is for curious.

D is for discouraged.

E is for excited.

F is for frustrated.

G is for glad.

H is for happy.

I is for ignored.

J is for jolly.

K is for kind.

L is for lonely.

M is for mad.

N is for naughty.

O is for overwhelmed.

P is for playful.

Q is for quite silly.

R is for restless.

S is for scared.

T is for tired.

U is for unhappy.

V is for vicious.

W is for worried.

Z is for zany.
Activity Sheet: My Feelings

1. Pick one feeling from the feelings chart (e.g. nervous).
2. Illustrate using the outline below, how and where this feeling affects your body (e.g. butterflies in stomach).

3. Write down a thought you might be having if you were feeling this way (e.g. “I’m going to do horrible on this test”).

4. Write down something you might do if you were feeling this way (e.g. tell the teacher you are feeling sick and ask to go home).
Session 7 – Life in Other Peoples’ Shoes

Goals:
1) Students will be able to recognize the importance of being attentive to the feelings and emotions of others (empathy).
2) Students will be able to identify a variety of strategies to put themselves in “someone else’s shoes” to understand what they are feeling.
3) Class will be able to relate these concepts to concepts of respect and responsibility for self, others and emotions

Learning concepts/discussion:
• Ask students if they have ever heard the expression about stepping in another person’s shoes. Elicit their thoughts on what this comment might mean.
• Allow students to offer examples of times when they guessed correctly how someone else was feeling. How were they able to tell that was how the other person was feeling? How did they respond as a result of guessing how the other person was feeling?
• Discuss clues or strategies that we use to help us understand how someone else may be feeling including facial expressions, body language, tone of voice, knowing their situation and considering how we might feel in their place.
• Let students know that this is one area in which it is very important to learn to use their 3-D glasses to get all perspectives of a situation.

Materials:
• Index cards with a variety of feelings labels, one on each card.

Activity: Mirror Images (adapted from Cihak & Heron; Games Children Should Play)
In this activity, students will be split into pairs. Begin by having one person take on the role of “leader” and the other, “mirror image.” The leader must go through a variety of slow actions/movements that their partner must follow. Have each pair then switch roles to ensure that each receives an opportunity to mirror the other. Then, pass out a feelings index card to the leader of each pair. The leader will do their best to act out this feeling, while their partner mirrors this feeling, trying to identify what feeling is being portrayed. Again, this is repeated with partners in opposite roles.

Process points:
• Ask them to “put on their 3-D glasses” and consider: how does understanding and recognizing others’ feelings contribute to 3-D Social Responsibility? How might it relate to self, others, and our emotions?
Session 8 – Feelings are not Problems, Problems are Problems

Goals:
1) Students will be able to recognize the importance of being attentive to their own feelings and emotions when problems arise.
2) Students will be able to identify strategies to relax and label what they are feeling instead of acting upon that feeling.
3) Class will be able to relate these concepts to concepts of respect and responsibility for self, others and emotions

Learning concepts/discussion:
- Have students think of a time when they’ve encountered a problem and remember how they felt. Often when we come across a problem, our body tells us with an uncomfortable feeling, like feeling angry, upset or sad. It is important to know when we are having that feeling. Ask students to consider: what feeling do you usually experience when you meet a problem and how does your body let you know that you are having that feeling? Have students write down how this feeling affects them.
- Remind students that feelings are not problems, problems are problems. But we DO need to know positive ways to deal with our feelings when we have a problem. What might happen if we don’t take the time to deal with our feelings? Has this ever happened to anyone and what was the outcome?
- Often the most helpful thing to do before we can solve a problem is identify what we are feeling and learn ways to calm down and relax.
- The first steps, then, to solving a problem is to:
  1) Ask yourself: what is my body feeling?
  2) Relax and calm down.

Materials:
- Soft Ball
- Relaxation script

Activity I: Anger-Ball Toss
In the first activity, the “Anger-Ball Toss,” students will be able to practice what it is like to “use their words” to say what they are feeling. To begin, have the class stand in a circle. Begin by completing the sentence, “I feel angry when ...” Ask for a volunteer who is willing to restate what you just said. Toss that student the ball. That student restates what you said, then completes the sentence for him/herself. He/she then tosses the ball to someone else, who repeats what was said, then completes the sentence for himself, and so on. From: http://www.teachervision.fen.com/page/2922.html?detoured=1

Activity II: Relaxation
In this second activity, students learn what it is like to feel the effects of relaxation. Be sure to point out that in order to relax, it is important that they learn to take deep breaths to slow down their heart rate and think clearly. After engaging in the relaxation exercise, provide them with a shortened version that they may use “in the moment,” when they are experiencing a problem and uncomfortable feelings. Example shortened version: Take three slow, deep breaths and remind the tense parts of your body to relax.
Process points:
- Ask them to “put on their 3-D glasses” and consider: how does relaxing help us solve problems and contribute to 3-D Social Responsibility? How might it relate to self, others, and our emotions?

Two Examples of Relaxation Scripts

Short Version:

Sit comfortably close your eyes and think of nothing.

Now make your hands into fists, go on really squeeze those fists. Feel that tight feeling, feel that tight feeling. And now relax/go floppy. Think of that lovely feeling of relaxation (or think of that lovely floppy feeling for younger children.)

Make your hands into tight fists again and bring your hands up to touch your shoulders. Feel that tight feeling along your arms. Feel the tight feeling and relax, think of that lovely feeling of relaxation (or think of that lovely floppy feeling.)

Now relax your arms, let them hang loosely by your side. Push your shoulders up and try and touch your ears. Go on really push upwards. Feel that tight feeling in your shoulders. Feel the tight feeling and relax, think of that lovely feeling of relaxation (or think of that lovely floppy feeling.)

This time scrunch up your face. Really scrunch up your face. Feel that tight feeling in your face and relax, think of that lovely feeling of relaxation (or think of that lovely floppy feeling).

Now make your tummy muscles tight go on really tighten those muscles. Feel that tight feeling. Feel the tight feeling and relax, think of that lovely feeling of relaxation (or think of that lovely floppy feeling.)

Push your tummy forward this time, make your back arch, feel the tight feeling all along your back, feel that tight feeling and relax, think of that wonderful feeling of relaxation.

Tighten the muscles in your legs, feel those muscles tightening, feel that tight feeling and relax. Feel that tight feeling along your arms. Feel the tight feeling and relax, think of that lovely feeling of relaxation (or think of that lovely floppy feeling.)

Now make yours toes into fists, really scrunch up those toes. Feel that tight feeling. Feel the tight feeling and relax, think of that lovely feeling of relaxation (or think of that lovely floppy feeling.)
Take a deep breath hold that breath, feel that tight feeling in your lungs, feel the tight feeling now let the breath out slowly and feel all the tightness go away. Think of that lovely feeling of relaxation (or think of that lovely floppy feeling.)

Keep your eyes closed, we are going to check each part of your body to see if there is any tightness. Think of your hands and arms if there is any tightness just let go of it. Now check your shoulders, neck and face. If you find any tightness just let go. Check your back and shoulders, your legs and feet. If you find any tension just let go.

You should now be feeling wonderful and relaxed/floppy. Just enjoy that wonderful feeling and when you feel ready open your eyes

From: http://www.educational-psychologist.co.uk/relax.htm

Longer Version:

Introduction
Today we’re going to practice some special kinds of exercises called relaxation exercises. These exercises help you to learn how to relax when you’re feeling up-tight and help you get rid of those butterflies-in-your-stomach kinds of feelings. They’re also kind of neat because you can learn how to do some of them without anyone really noticing.

In order for you to get the best feelings from these exercises, there are some rules you must follow. First, you must do exactly what I say, even if it seems kind of silly. Second, you must try hard to do what I say. Third, you must pay attention to your body. Throughout these exercises, pay attention to how your muscles feel when they are tight and when they are loose and relaxed. And fourth, you must practice. The more you practice, the more relaxed you can get. Do you have any questions?

Are you ready to begin? Okay, first, get as comfortable as you can in your chair. Sit back, get both feet on the floor, and just let your arms hang loose. That’s fine. Now close your eyes and don’t open them until I say to. Remember to follow my instructions very carefully, try hard, and pay attention to your body. Here we go.

Hands and Arms
Pretend you have a whole lemon in your left hand. Now squeeze it hard. Try to squeeze all the juice out. Feel the tightness in your hand and arm as you squeeze. Now drop the lemon. Notice how your muscles feel when they are relaxed. Take another lemon and squeeze. Try to squeeze this one harder than you did the first one. That’s right. Real hard. Now drop the lemon and relax. See how much better your hand and arm feel when they are relaxed. Once again, take a lemon in your left hand and squeeze all the juice out. Don’t leave a single drop. Squeeze hard. Good. Now relax and let the lemon fall from your hand. (Repeat the process for the right hand and arm.)

Arms and Shoulders
Pretend you are a furry, lazy cat. You want to stretch. Stretch your arms out in front of you. Raise them up high over your head. Way back. Feel the pull in your shoulders.
Stretch higher. Now just let your arms drop back to your side. Okay, kitten, let’s stretch again. Stretch your arms out in front of you. Raise them over your head. Pull them back, way back. Pull hard. Now let them drop quickly. Good. Notice how your shoulders feel more relaxed. This time let’s have a great big stretch. Try to touch the ceiling. Stretch your arms way out in front of you. Raise them way up high over your head. Push them way, way back. Notice the tension and pull in your arms and shoulders. Hold tight, now. Great. Let them drop very quickly and feel how good it is to be relaxed. It feels good and warm and lazy.

**Jaw**

You have a giant jawbreaker bubble gum in your mouth. It’s very hard to chew. Bite down on it. Hard! Let your neck muscles help you. Now relax. Just let your jaw hang loose. Notice that how good it feels just to let your jaw drop. Okay, let’s tackle that jawbreaker again now. Bite down. Hard! Try to squeeze it out between your teeth. That’s good. You’re really tearing that gum up. Now relax again. Just let your jaw drop off your face. It feels good just to let go and not have to fight that bubble gum. Okay, one more time. We’re really going to tear it up this time. Bite down. Hard as you can. Harder. Oh, you’re really working hard. Good. Now relax. Try to relax your whole body. You’ve beaten that bubble gum. Let yourself go as loose as you can.

**Face and Nose**

Here comes a pesky old fly. He has landed on your nose. Try to get him off without using your hands. That’s right, wrinkle up your nose. Make as many wrinkles in your nose as you can. Scrunch your nose up real hard. Good. You’ve chased him away. Now you can relax your nose. Oops, here he comes back again. Right back in the middle of your nose. Wrinkle up your nose again. Shoo him off. Wrinkle it up hard. Hold it just as tight as you can. Okay, he flew away. You can relax your face. Notice that when you scrunch up your nose your cheeks and your mouth and your forehead and your eyes all help you, and they get tight too. So when you relax your nose, your whole body relaxes too, and that feels good. Oh-oh. This time that old fly has come back, but this time he’s on your forehead. Make lots of wrinkles. Try to catch him between all those wrinkles. Hold it tight, now. Okay, you can let go. He’s gone for good. Now you can relax your face. Notice that when you wrinkle up your forehead your cheeks and your nose and your mouth and your eyes all help you, and they get tight too. So when you relax your forehead, your whole body relaxes too, and that feels good.

**Stomach**

Hey! Here comes a cute baby elephant. He has landed on your stomach. It doesn’t see you lying in the grass, and he’s about to step on your stomach. Don’t move. You don’t have time to get out of the way. Just get ready for him. Make your stomach very hard. Tighten up your stomach muscles real tight. Hold it. It looks like he is going the other way. You can relax now. Let your stomach go soft. Let it be as relaxed as you can. That feels so much better. Oops, he’s coming this way again. Get Ready. Tighten up your stomach. Real hard. If he steps on you when your stomach is hard, it won’t hurt. Make your stomach into a rock. Okay, he’s moving away again. You can relax now. Kind of settle down, get comfortable, and relax. Notice the difference between a tight stomach and a relaxed one. That’s how we want to feel—nice and loose and relaxed. You won’t believe this, but this time he’s coming your way and no turning around. He’s headed straight for you. Tighten up. Tighten hard. Here he comes. This is really it. You’ve got to hold on tight. He’s stepping on you. He’s stepped over you. Now he’s gone for good. You
can relax completely. You’re safe. Everything is okay, and you can feel nice and relaxed.
This time imagine that you want to squeeze through a narrow fence and the boards have
splinters on them. You’ll have to make yourself very skinny if you’re going to make it
through. Suck your stomach in. Try to squeeze it up against your backbone. Try to be
skinny as you can. You’ve got to be skinny now. Just relax and feel your stomach being
warm and loose. Okay, let’s try to get through that fence now. Squeeze up your stomach.
Make it touch your backbone. Get it real small and tight. Get it as skinny as you can. Hold
tight, now. You’ve got to squeeze through. You got through that narrow little fence and no
splinters! You can relax now. Settle back and let your stomach come back out where it
belongs. You can feel really good now. You’ve done fine.

Legs and Feet
Now pretend that you are standing barefoot in a big, fat mud puddle. Squish your toes
down deep into the mud. Try to get your feet down to the bottom of the mud puddle.
You’ll probably need your legs to help you push. Push down, spread your toes apart, feel
the mud squish up between your toes. Now step out of the mud puddle. Relax your feet.
Let your toes go loose and feel how nice that it feels to be relaxed. Back into the mud
puddle. Squish your toes down. Let your leg muscles help push your feet down. Push
your feet. Hard. Try to squeeze that puddle dry. Okay. Come back out now. Relax your
feet, relax your legs, relax your toes. It feels so good to be relaxed. No tenseness
anywhere. You feel kind of warm and tingly.

Conclusion
Stay as relaxed as you can. Let your whole body go limp and feel all your muscles
relaxed. In a few minutes I will ask you to open your eyes, and that will be the end of this
practice session. As you go through the day, remember how good it feels to be relaxed.
Sometimes you have to make yourself tighter before you can be relaxed, just as we did in
these exercises. Practice these exercises everyday to get more and more relaxed. A
good time to practice is at night, after you have gone to bed and the lights are out and
you won’t be disturbed. It will help you get to sleep. Then, when you are really a good
relaxer, you can help yourself relax at school. Just remember the elephant, or the jaw
breaker, or the mud puddle, and you can do our exercises and nobody will know. Today
is a good day, and you are ready to feel very relaxed. You’ve worked hard and it feels
good to work hard. Very slowly, now, open your eyes and wiggle your muscles around a
little. Very good. You’ve done a good job. You’re going to be a super relaxer.

From: http://www.yourfamilyclinic.com/adhd/relax.htm
Session 9 – What is the Problem? (adapted from Short, 2005; Psychoeducational group activity - Problem-solving unit)

Goals:
1) Students will be able to recognize when there is a problem and identify what the problem is “using their words.”
2) Class will be able to relate these concepts to concepts of respect and responsibility for self, others and emotions

Learning concepts/discussion:
- Review the first two steps to problem solving learned from the prior session.
  1) Ask yourself: what is my body feeling?
  2) Remind yourself to relax and calm down (take 5 deep breaths and remind body)
- Let students know that sometimes it is actually quite hard to identify what the real problem is. Instead, sometimes we focus on our interpretation of the problem or something that is happening as a result of it.
- Give the example: You can’t find your pen and when you turn around, someone else is using one just like it. You tell the person to give you your pen back and they say “no, it’s my pen.” You get angry and grab the pen away. The teacher notices and you get into trouble.
- What is the real problem – that someone stole your pen, that the other person is mean, that you got in trouble or that there was a misunderstanding?
- Discuss the importance of considering the problem from different perspectives, including those of any other people involved. How might doing this be helpful?

Materials:
- Lunch bag
- Cut-up slips of paper – each with a different problem scenario on it

Activity: Identifying the Problem
In this whole-class activity, students will be split into 4-5 groups. Rotating between groups, one person from each group will go up to the front of the class and pull out a “problem slip” from the teacher’s lunch bag. The student will read the problem aloud and then return to their group. On a sheet of paper, each group will identify what the problem is in the particular situation. Then, the groups will try to identify all the potentially different perspectives of each problem (e.g. how might the other person/teacher/parent see it from his/her point of view, how might others in the situation be feeling?) After each slip, the class reviews what each group came up with as being the problem. Careful – sometimes what seems to be the problem is actually a result or symptom of the problem! After a few rounds of this, have each group of students come up with a “problem slip” of their own to place in the bag and repeat this procedure.

Process points:
- Ask them to “put on their 3-D glasses” and consider: how does identifying the problem and other possible perspectives contribute to 3-D Social Responsibility? How might it relate to self, others, and our emotions?
Example Problem Situations (Cut up and put into bag)

It is lunch time, you go to your bag to get your lunch but it is gone! You see a classmate eating a pudding just like the one you had in your lunch.

At recess, you are playing on the swings. You swing up really high and jump off the swing to do your favourite trick. When you turn around to get back on the swing, someone has taken your swing.

You are working on a story on the school computer. A classmate comes over and says, “You have been on the computer forever and it’s my turn now.” You are not finished your story yet and when you tell your classmate that, she calls you a name.

Your sister and you both want to watch TV, but you want to watch different programs.

Your mom comes home from shopping and she did not buy you your favourite cereal, instead you have something you think is gross! Plus, she is making something for dinner that has onions in it, you do not like onions.

You are lining up to get some gym equipment when another student cuts in front of you to get theirs first.

You want to go to your friend’s house, but your mother wants you to tidy up your room

Your friend is playing with your cool brand new birthday present. You really want to use it yourself, and you are scared your friend is going to break it. Your parents remind you to share your stuff.
Session 10 – What Are Some Possible Solutions?

Goals:
1) Students will be able to identify multiple potential solutions to problems.
2) Students will be able to consider helpful and unhelpful consequences on potential solutions/action plans.
3) Class will be able to relate these concepts to concepts of respect and responsibility for self, others and emotions

Learning concepts/discussion:
- Review the first three parts to problem solving learned from the prior session.
  1) What is my body feeling?
  2) Relax and calm down (take 5 deep breaths and remind body)
  3) What is the problem?
- Let students know that today they will be thinking about how to solve problems
- Explain that there are many ways people resolve conflicts and it is important to consider all possible solutions or alternatives, along with their consequences. This way you can choose one where everyone wins.
- Some helpful word to remember are: communicate (talk it out and explain to clear up any misunderstandings first), negotiate (when two or more people work it out together to come up with a solution that satisfies everyone’s needs), mediate (sometimes asking someone else, like an adult to mediate/help can aid in decision making).

Materials:
- Handout: Successful Solutions with Ideas (Reithaug, 1998)

Activity: Fill in Sheet
In this activity, students will fill in the solutions sheet using a problem that they have experienced in the past, or are experiencing presently. This is to gain a better sense of the steps to working through a problem. Also have the students add to the sheet by listing potential “helpful” and “unhelpful” consequences of each alternative solution.

Process points:
- Ask them to “put on their 3-D glasses” and consider: how does identifying many possible solutions to problems contribute to 3-D Social Responsibility? How might it relate to self, others, and our emotions?
Successful Solutions with Ideas

Name: __________________________  Gr. __  Date: ____________

Draw or write about your problem and your feelings:

List three possible solutions:
1. __________________________________________________________________________
2. __________________________________________________________________________
3. __________________________________________________________________________

I choose #_ and will try it out when ________________________________

Ideas:

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<tr>
<th>Problem Words</th>
<th>Feeling Words</th>
<th>Solution Words</th>
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<tbody>
<tr>
<td>argue</td>
<td>angry</td>
<td>ask for help from ___</td>
</tr>
<tr>
<td>fight</td>
<td>disappointed</td>
<td>leave or walk away</td>
</tr>
<tr>
<td>hit</td>
<td>embarrassed</td>
<td>count to ten</td>
</tr>
<tr>
<td>hurt</td>
<td>fearful</td>
<td>ask the person to stop</td>
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<tr>
<td>push</td>
<td>frustrated</td>
<td>discuss what is happening</td>
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<tr>
<td>yell</td>
<td>nervous</td>
<td>apologize if needed</td>
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<tr>
<td></td>
<td>sad</td>
<td>work out a bargain that pleases both of you</td>
</tr>
<tr>
<td></td>
<td>worried</td>
<td></td>
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</tbody>
</table>

Orchestrating Positive and Practical Behaviour Plans (1998) by Dawn Reithaup
Valuing Diversity
and Defending
Human Rights
Session 11 – Treating Others with Fairness and Kindness (adapted from Payne & Rohling's A Leader's Guide to We Can Get Along: A Child's Book of Choices)

Goals:
1) Students will be able to identify how they like to be treated and to understand how it feels to be treated fairly.
2) Students will be able to generate ways they could show kindness toward others.
3) Class will be able to relate these concepts to concepts of respect and responsibility for self, others and emotions.

Learning concepts/discussion:
• Begin classroom discussion about the inclusion of fair and equal treatment in the Canadian Charter of Rights and Freedoms
• Ask students to recall times when others have done something nice for them.
• Discuss how they felt during these times and encourage them to consider how others might feel in similar situations. Emphasize the importance of using their new abilities to see different perspectives to understand their own and others' experiences.
• Tell the students that they are going to spread these good feelings by making gift certificates for people in their lives.

Materials:
• Large card stock paper
• Business size envelopes
• Pencils, crayons, colored pencils, markers
• Art supplies and glue sticks

Activity:
For this activity, students will create gift certificates describing/illustrating acts of kindness they will do for someone else. This could include such things as assisting a parent with supper duties, sharing a hug, running an errand, etc. Hand out a piece of cardstock to each child, along with an envelope. They will then fill in/make the certificate accordingly, decorate it and take it home to pass off to the individual for whom they have created it. May be helpful to provide them with a writing template such as “This gift certificate is issued to ____________ and is good for ________________, expiry date, etc.

Process points:
• Ask them to “put on their 3-D glasses” and consider: how does treating others kindly and family contribute to 3-D Social Responsibility? How does this demonstrate respect and responsibility for self, others and emotions?
Session 12 – Diversity in Our Class

Goals:
1) Students will have a better understanding of personal and culturally diversity, along with the benefits of such.
2) Students will be able to explore diversity within their own classroom, while also learning of commonalities.
3) Class will be able to relate these concepts to those of respect and responsibility for self, others and emotions.

Learning concepts/discussion:
- Open up the discussion with the question: what is diversity? Let students know that “diversity” can include a variety of things – including but not limited to race, ethnicity, national origin, gender, sexual orientation, socioeconomic class, marital status, religious or non-religious background and mental and physical ability.
- Discuss: why is diversity a good thing? A diverse classroom let us share different perspectives and ways of being. Without sharing, learning is impossible. We value diversity because we value learning.
- Relate this to 3-D social responsibility and the concept of dimensions/perspectives. Without other perspectives, what we can see is limited and less exciting.
- Then discuss “sameness” – how are we the same even though we are also very different (e.g. all have feelings, all have two eyes, etc.)?

Activity I: We Are All the Same On The Inside (adapted from http://www.atozteacherstuff.com/go/search.cgi?grade=3-5&catid=70&t=lessonplans)

Materials:
- one or more brown eggs
- one or more white eggs
- a bowl

In this activity, students will be shown a brown egg and a white egg. Discuss the similarities and differences of the eggs (e.g. same shape, different color). Then break each egg into the bowl and dispose of the shell (try to do this without their awareness of which yolk came from which shell). Ask if they can tell which yolk came from which shell? Follow up with a discussion that like people, even though we may look different on the outside, on the inside we are very similar.

Activity II: The World in the Classroom (adapted from http://fga.freac.fsu.edu/misc/world.htm)

Materials:
- family photos, small items or objects from home representing each child’s background/culture (will need to ask them to bring this in one day ahead of time)
- Activity Sheet: Family Global Ties
- Art paper for map location or map
In this activity, students will explore their ethnic or cultural backgrounds and resources by interviewing each other. Begin with a discussion on how our families represent world cultures. Split the students into partners and have them share with each other the items they brought in. One partner acts as the interviewer and takes notes on the worksheet. Both students plot the other’s origin on a map placing name at the birth origin. Have the students make a brief oral report to the class telling some of the information to the class and emphasizing the partner’s strengths. Discuss what were the most common reasons for the immigration of our ancestors? In what ways does our class share origins?

Process points:
- Ask them to “put on their 3-D glasses” and consider: how does cultural diversity contribute to 3-D Social Responsibility? How might it relate to self, others, and our emotions?
### Activity Sheet: Family Global Ties

#### of
**Reporter/Interviewer**

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<th>Date</th>
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<table>
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<th>From (member)</th>
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<table>
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<th>Customs/Traditions</th>
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<th>Special Memberships or Activities</th>
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<table>
<thead>
<tr>
<th>Number of moves and places moved</th>
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<table>
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<tr>
<th>Size of family</th>
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<tr>
<th>Any stories about photograph or object brought in</th>
</tr>
</thead>
</table>
Session 13 – Taking Care of Others (adapted – Tillicum Elementary’s Social Responsibility Initiative)

Goals:
1) Students will better understand what it means to “take care of others.”
2) Students will be able to identify ways they take care of others.
3) Class will be able to relate these concepts to concepts of 
   respect and responsibility for self, others and emotions

Learning concepts/discussion:
- Brainstorm ideas about what it means to take care of others and write down these suggestions (e.g. sharing)
- Discuss students’ thoughts about why they think it is important to take care of others (e.g. important to treat others fairly and as we would like to be treated)
- Generate as a class, specific examples of behaviours that would involve taking care of others (e.g. saying sorry, offering someone help)
- Generate as a class, specific examples of behaviours that do not demonstrate taking care (e.g. calling someone a name, refusing to help)

Materials:
- Poster paper or blackboard
- Felt pen, chalk
- Index cards
- Pens
- Box and small pieces of paper

Activity:
For this activity, the teacher will write out all of the suggestions for taking care of others on the index cards and put them in the box. Break the students into groups of four and have one person from each group select a card. Each group will then prepare a skit showing an example of taking care of others. Have the students write a short script. The title will be:

Taking Care of Others
Means....

(Ideas that they have)

Have the students present their skits to the rest of the class. Ask the students to notice when they are taking care of others and write it down anonymously on the small pieces of paper and put it in the box. At the end of each day, have them reflect on the things they did to take care of others. Pull out an example from the box for that day and read it to the class.

Process points:
- Ask them to “put on their 3-D glasses” and consider: how does taking care of others contribute to 3-D Social Responsibility? How might it relate to self and emotions?
Session 14 – Portrait of a Hero

Goals:
1) Students will have a greater understanding of a particular individual or "hero" known for their efforts to stand up for human rights. They will be able to see concrete ways in which empathy is demonstrated.
2) Students will begin to think about how they can stand up for human rights and vulnerable peoples within their own lives.
3) Class will be able to relate these concepts to concepts of respect and responsibility for self, others and emotions.

Learning concepts/discussion:
• Let students know that today they will be talking about a very special person – a person who is known in history for standing up for others, or human rights.
• Sometimes seeing others’ difficult situations and how they have been helped by a caring person allows us to become more aware of emotions and “empathy” (remind them that empathy is like stepping into someone else’s shoes). It may also help us to think of behaviours and actions we can take to help others.

Materials:
• chosen media to present life story of empathic historical figure

Activity:
For this activity, present a case study of a famous helping person, such as Mother Theresa, Martin Luther King, etc. This could be presented in the form of a videotape, excerpt from a book, or another suitable and age-appropriate means. This case study is meant to evoke the emotions in viewers to move them towards an empathic response.

Process Points:
• After the presentation, have the students write about their reactions to what they saw including:
  - how did the hero demonstrate 3-D Social Responsibility
  - what emotions did they notice in the story
  - describe their own feelings and reactions when watching the video or hearing the story
  - brainstorm about ways they might apply this information by helping others at home, at school and in the community

• Ask them to “put on their 3-D glasses” and consider: how does learning about the work of other humanitarians contribute to 3-D Social Responsibility? How might it relate to self and emotions?
Session 15 –Creating a 3-D Super Hero

Goals:
1) Students will be able to demonstrate what they know about social responsibility and defending human rights in a creative way.
2) Students will begin to think about how they can stand up for human rights and vulnerable peoples within their own lives.
3) Class will be able to relate these concepts to concepts of respect and responsibility for self, others and emotions.

Learning concepts/discussion:
• Begin a discussion reviewing what was learned in last session about the historical “hero.”
• Discuss what everyone knows about superheros. What superhero do the kids know of (e.g. batman, superman)? What makes a superhero? Hints to offer: special super power (make things disappear), special substance that gives them energy (e.g. Popeye and spinach), costume, weakness, sidekick, etc.
• Ask students to consider, if last session’s example hero was a superhero in a comic, how might you describe him/her? What would be his/her special powers, things they did to “save” the world in their own way, etc.
• Let the students know they are going to have the opportunity to create their own superhero – one that stands up for diversity, human rights and social responsibility

Materials:
• pre-drawn superhero outline (optional)
• pens/markers/crayons and other decorating materials
• scissors, glue

Activity:
For this activity, instruct the students that they will be creating a superhero whose specialization is all the things you’ve been talking about related to social responsibility. They then get to decide if that means he/she helps people cooperate, knows how to detect what others are feeling, how this is done, any secret devices, physical characteristics, etc. (e.g. big ears for listening, a cape). Allow them some time to “flesh out” their idea of a super/comic book hero. Then give each person a paper with a pre-drawn body outline to begin to make their superhero (but encourage they can add/change the shape according to their ideas – this is just to get them started).

Process points:
Ask them to “put on their 3-D glasses” and consider: how does treating others kindly and family contribute to 3-D Social Responsibility? How does this demonstrate respect and responsibility for self, others and emotions?
Exercising Democratic Rights and Responsibilities
Session 16 – Taking Care of Ourselves (adapted – Tillicum Elementary’s Social Responsibility Initiative)

Goals:
1) Students will better understand what it means to “take care of ourselves.”
2) Students will be able to identify ways they take care of themselves.
3) Class will be able to relate these concepts to those of respect and responsibility for self, others and emotions

Learning concepts/discussion:
- Brainstorm ideas about what it means to take care of yourself and write down these suggestions (e.g. make sure you are healthy)
- Discuss students’ thoughts about why they think it is important to take care of themselves (e.g. valuing self, responsibility in a democracy)
- Generate as a class, specific examples of behaviours that would involve taking care of yourself (e.g. brushing your teeth)
- Generate as a class, specific examples of behaviours that do not demonstrate taking care (e.g. eating too much candy)

Materials:
- Poster paper or blackboard
- Felt pen, chalk
- Modeling clay or other modeling material
- Cardboard squares 10cm x 10cm
- Box and small pieces of paper

Activity:
In this activity students will create a figurine out of clay of a person doing something to take care of him or herself. This will be mounted on a piece of cardboard with the saying:

Taking Care of Ourselves
Means....

Eating Healthy Foods

Ask the students to notice when they are taking care of themselves, what they did, and have them write this down anonymously on the small pieces of paper to be put in the box. At the end of each day, have them reflect on the things they did to take care of themselves and pull out an example from the box for that day. Read it aloud to the class.

Process points:
- How does taking care of ourselves contribute to 3-D Social Responsibility? How might it relate to self, others, and our emotions?
Session 17 – Being Responsible for Me (adapted from Payne & Rohling’s *A Leader’s Guide to We Can Get Along: A Child’s Book of Choices*)

**Goals:**
1. Students will understand what it means to be personally responsible for their words and actions or what they choose to say and do.
2. Students will learn to consider their words and behaviour before they speak and act.
3. Class will be able to relate these concepts to those of **respect and responsibility for self, others and emotions**.

**Learning concepts/discussion:**
- Begin by reciting to the students the line, “I am in charge of my words and actions. They belong to me.”
- Open up discussion by asking students to share their ideas about what this line might mean.
- Run through examples with students illustrating ownership of *words and actions*. Thus, the person saying the words “owns” the words, while the person committing the action “owns” that action. Then illustrate examples wherein someone may be “blamed” for owning an action/words by another (e.g. “Tom made me hit him because he made me mad”) – reword this for proper ownership (e.g. I chose to hit Tom and I chose to act on my anger).

**Materials:**
- Small paper sacks (lunch bags)
- Assortment of small soft and hard objects (fabrics, branches, rocks, cotton, etc) in a large, shallow box or tray
- Crayons, pencils, markers

**Activity:**
In this activity, students will each be given a paper sack and asked to write their name on it. Explain that they will use this to hold their words and actions collection. Then direct their attention to the tray holding the items pointing out objects that may stand for words, and those that may represent actions. The teacher may say that the soft ones stand for things that our friends say and do, while the hard ones represent what they don’t say and do, or that are unhelpful to our feelings. Have students think about the things they have said and done. Ask them to then choose objects accordingly to put in their bag. In pairs, they may share about what they’ve put into their bags and why.

**Process points:**
- Ask them to “put on their 3-D glasses” and consider: how does “owning” their words and actions contribute to 3-D Social Responsibility? How might it relate to self, others, and our emotions?
Session 18 – Asking for Help (adapted from www.GoodCharacter.com)

Goals:
1) Students will understand the importance of asking for help from others.
2) Students will be able to think of and demonstrate different ways to ask for and accept help from someone else.
3) Class will be able to relate these concepts to those of respect and responsibility for self, others and emotions.

Learning concepts/discussion:
• Open the discussion by posing a few questions to students such as:
  - Have you ever felt embarrassed because you didn’t know something or couldn’t do something? How did it feel? What did you do about it?
  - Think about a time when you needed help because you didn’t know how to do something. Who did you turn to? How did you feel asking for help?
  - If you need help but don’t ask for it, how can that lead to more problems?
• Talk about the importance of asking and allowing others to help, along with the benefits of doing this (e.g. having more than one person come up with solutions or ideas, sharing of knowledge).
• Hand out to each student a copy of “How To Ask For Help” Tips Sheet and review this with the class.

Materials:
• Sheets of paper
• Pens/pencils

Activity:
In this activity, students will engage in a group writing project. Have students get into groups with two or three classmates and make a list of different things kids might need help with—one to a page. Pass the pages around the group and have each group member add a new idea for getting help with that problem.

Process points:
• Ask them to “put on their 3-D glasses” and consider: how does learning how to ask for help contribute to 3-D Social Responsibility? How might it relate to self, others, and our emotions?
HOW TO ASK FOR HELP

• Remember, it's okay to ask for help. Don't be embarrassed, and don't worry about other people judging you.

• Think what might happen if you don't get help—or if you do.

• Decide what the problem is and what help you need.

• Think about who you can ask for help. Choose someone you trust and who will know how to help you.

• Think about what you'll say when you ask for help. Do it.

• Remember, getting help when you need it is part of being responsible—to yourself.
Session 19 – Being a Helper (as adapted from http://www.readwritethink.org/lessons/lesson_view.asp?id=259)

Goals:
1) Students will learn the importance of helping others within their school, within their homes and community, and on a global level.
2) Students will be able to identify ideas they have and ways in which they can help others.
3) Class will be able to relate these concepts to those of respect and responsibility for self, others and emotions.

Learning concepts/discussion:
• Remind students of the hero they studied earlier, the defender of human rights and icon of kindness. Let them know that it is possible and encouraged that everyone can help out, both in our everyday lives and on a global level.
• Have students brainstorm to identify ways or efforts they have heard of wherein people help out at home (e.g. help with dinner), in their school (e.g. help a younger child) and across the world (e.g. contributions to efforts such as UNICEF). Put these into categories on the chalkboard.
• Discuss what it might be like to be in the position of someone less fortunate and how that person might feel.
• Let the children know that over the next while, they will be working on two class projects: one will be in their community (to reach a class goal of recording 100 Acts of Kindness) and the second will benefit outside of their community (to be chosen by class).

Materials:
• Letter to circulate around school and send home to parents (download template at http://www.readwritethink.org/lesson_images/lesson259/100acts.pdf)
• Chart to record 100 Acts of Kindness (download at http://www.readwritethink.org/lesson_images/lesson259/100s2.pdf)

Activity:
In the activity, “100 Acts of Kindness,” students will be introduced to the recording chart. They will be informed that as a class, they are going to try to record 100 helping acts that they see others perform. They will also be involving others around them (friends, family) so that their own acts of kindness get noticed. To do this, a letter will be sent home to parents, telling them about the project.
Secondly, as a class students will identify one project that they would like to work towards throughout the school year to benefit people outside of their school community (e.g. collect donations for food bank, collect for UNICEF, adopt a foster child as a class, etc.). With the teacher’s help, they will identify the project and formulate a plan of action.

Process points:
• Ask them to “put on their 3-D glasses” and consider: how does offering help to others contribute to 3-D Social Responsibility (both locally and globally)? How might it relate to self, others, and our emotions?
Dear Parents and Family Members,

We studied about Martin Luther King, Jr. this week, and we learned that Dr. King had a dream where everyone would be kind, helpful, and respectful of others. We have begun a special project to celebrate his birthday, which was January 15th. From Dr. King's Birthday until Valentine's Day, we are going to see if we can do 100 acts of kindness.

Our rule is that you cannot report your own act of kindness; someone else has to report something nice that you did for them.

At school, children are going to be watching one another to look for those acts of kindness. If someone helps you find your lost crayon, that's an act of kindness to report. If you fall and someone helps you up and checks to be sure you're OK, that's an act of kindness too.

We want to invite parents, grandparents, friends, and neighbors to participate too. For example, if your child helps you fold clothes, carries out the trash without even being asked, or does an especially nice thing for you, please write a note and tell us about it. If you as a family recycle, do service projects in our community, or help at the food pantry, write and share that too. We are looking for those loving things that warm your heart. Share them with us!

Between now and Valentine's Day, we will be doing a class project of collecting food for the food pantry. Please send your donations to school with your child.

We are ready to start now, so help us watch for those special acts of kindness. Thanks for your help and participation. Together we can make Dr. King's dream come true!

Mrs. Hamner and the Kindergarten Kids
# 100 Acts of Kindness

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Session 20 – Companion Reading (adapted from Dr. Michelle Borba’s Character Builder Curriculum “RESPECT for Self and Others: A K-6 Education Program”)

Goals:
1) Student will be able to transfer and apply concepts/skills learned concerning listening, empathy and helping others skills.
2) Student will have the opportunity to be a role model of empathic behaviour for a younger student.
3) Class will be able to relate these concepts to those of respect and responsibility for self, others and emotions.

Learning concepts/discussion:
• Engage students in a discussion reminding them that once a person learns something valuable, it is that individual’s responsibility to share that learning with others, or to use those skills.
• Review/brainstorm with the students all of the skills and ideas that they think they have learned over the last sessions. How do they think they might apply this learning from now on?
• Inform students that part of passing on knowledge is becoming a role model for someone else. Talk about what a role model is and ask students to share what they know about role models. Who are their own role models and why?
• Let them know that today they will be getting practice in being a role model to a younger student in their school.

Materials:
• chosen companion reading material

Activity:
In this activity, students will be paired up with kindergarten children to whom they will read a short story. While reading to the younger student, the older student will encourage questions and may even ask the younger child questions about the story and its characters (e.g. how a character might be feeling). The older student will be encouraged to use their listening skills in this activity. Most importantly, the student will have the opportunity to feel proud of their role-model status and their ability to assist a younger student. Upon completion of this session, the older students are brought back together for a quick discussion and review of the experience.

Process points:
• Ask them to “put on their 3-D glasses” and consider: how does being a role model ourselves contribute to 3-D Social Responsibility? How might it relate to self, others, and our emotions?
REFERENCES

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www.GoodCharacter.com

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Other's Ideas:

Short, C. – activities for psychoeducational problem-solving groups.