THE RELATIONAL GOALS OF CHILDREN WITH EXTERNALIZING AND INTERNALIZING SYMPTOMS

by

Fiona Jill Currie

A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy, Department of Human Development and Applied Psychology, Ontario Institute for Studies in Education of the University of Toronto

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ABSTRACT

Relational goals relate to people's goals in relationships. Drawing from cognitive theories of emotion (e.g., Oatley & Johnson-Laird, 1987) and attachment theory (e.g., Bowlby, 1971), the association between four different relational goals in children and long-term patterns of emotional organization, operationalized as internalizing and externalizing symptoms, was explored. The goals examined in the present investigation included dominance, affiliation and two protection goals: perception of threat from the environment ("world threat") and the need to receive comfort from others.

Two hundred and eighteen children (117 girls and 101 boys) ages 10 to 14 from diverse cultural backgrounds participated in this study. Information about relational goals was obtained from the participants and from inferences made about the participants' goals by their peers. Both self- and peer-report relational goal measures were developed and evaluated. The measures contained multiple statements pertaining to each goal domain. Teachers completed behavioural ratings of externalizing and internalizing symptoms.

As expected, there was a positive relationship between relational goals as reported by the participants and by their peers. Direct relationships between goals and externalizing and
internalizing symptoms were also predicted. Externalizing symptoms were positively related to dominance goals and negatively related to world threat goals, as expected. Internalizing symptoms were negatively related to dominance and positively related to world threat goals, as anticipated. However, the results were more pronounced for male than for female participants and for peer-reports rather than for self-reports of goals. The balance of goals within individuals was also explored in an attempt to differentiate between children with higher and lower levels of symptomatology. On the basis of self- and peer-reports of goals, children who valued dominance more than protection goals had greater externalizing symptoms, while children who valued protection goals more than dominance goals had greater internalizing symptoms, as expected. Thus, there appeared to be a relationship between particular goal combinations and long-term patterns of emotional organization as indexed by behavioural symptoms. The associations between relational goals, behaviour and emotions are discussed as are issues pertaining to goal measurement.
ACKNOWLEDGEMENTS

I would like to express my deepest appreciation to my supervisor, Dr. Jennifer Jenkins who has guided me over the past six years. Dr. Jenkins put a considerable amount of time and energy into my research to and has helped me in my development as a future psychologist. I am grateful for her encouragement as well as her ability to give me a "kick" when I needed it.

I would also like to thank Dr. Michele Peterson-Badali and Dr. Joan Grusec for their valuable comments on the many drafts of my thesis. They always provided me with insightful comments and constructive criticism. An additional thank you to Dr. Jennifer Connolly, my external examiner for her suggestions and to Sue Elgie who came to my rescue on a few occasions and helped me to interpret my data.

I wish to thank all of the participants and their parents for allowing me to peek into their lives in order to find out more about relational goals. I am also grateful to the principals and teachers at each of the schools who helped facilitate the data collection process.

To my classmates Carol Root, Diane Warling, Rosemary Condillac and the members of Jenny’s research group: thank you for your great questions, your thoughtful advice and most importantly for you moral support. As well, Dr. Keith Oatley’s advice and suggestions about how to conduct myself in the defense are most appreciated.

On a personal note, I want to express my deepest gratitude to my family members for their support. To my newest family members, Barbara, Ken and Aaron: thank you for taking such an interest in my work and for supporting me through this very challenging time!

To my sister Deirdre who is probably more excited about my graduation than I am. If not for her optimism six years ago, I probably wouldn’t have pursued this degree in the first place. I also live in fear that she will find a dangling participle in this paper and won’t let me forget it.
To my father and mentor, Dr. Allan Currie, who acted as my proofreader and who is the primary reason I went to graduate school in the first place. While I didn’t play guitar until 4 a.m. in the lab and drink gallons of tomato juice, I still think I found the experience worthwhile. You also taught me the value of thinking logically and having a big heart at the same time.

Finally, to the best research assistant ever: a huge thank you and love to my husband Gary Labovitz who has been with me every step of the way. I can’t thank you enough for providing me with encouragement, self-confidence and for listening to me talk endlessly. Your knowledge and love of children has truly been an inspiration to me and I look forward to embarking on our new journey together as parents.

This paper is dedicated to the memory of my mother, Patricia Currie who would have been one of the few people willingly to read every word of this thesis. She continues to inspire me as a mother and woman. She taught me the valuable lesson of finding a balance between my professional and personal life. After all, what’s the use of having a diploma if you can’t go in the garden and eat worms?
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INTRODUCTION

We have all observed children playing together and have noticed how they can behave so differently from one another. For instance, imagine that two children are playing on swings in a playground and one child smiles at the other as she gets off the swing. What message is she sending to her playmate? A smiling child is likely sending a message that encourages her friend to interact with her further and likely signifies that the child is experiencing feelings of happiness. Although it is not difficult to make judgements about the smiling child’s behaviour and emotional state, can we also use this information to make inferences about her intentions or her goals towards her playmate? For example, feelings of happiness or contentment with corresponding friendly behaviour likely signify that the child has a goal related to affiliative behaviour. That is, she may want to feel close to her playmate and to engage in further positive interactions. In this way, her positive emotion state signals that she has a corresponding goal state related to co-operation or affiliation.

In contrast, imagine instead that one child pulls away the swing of her playmate and looks at her with anger. What is the message being sent in this situation and what emotion state might the child be experiencing? In this example, the act of pulling away the swing suggests that the child may be experiencing angry feelings which resulted in the aggressive act. Once again, this particular emotion state may provide information about the child’s internal intentions or goals. In this situation, it seems probable that the offending child has goals related to dominating or controlling her playmate in some way. Thus, her experience and expression of anger signals the presence of this goal. The other child may in turn respond with anger, perhaps signifying her intention of obtaining retribution. Alternatively, the other child may feel vulnerable and respond in a fearful manner, suggesting that she has a need to feel protected from her aggressive playmate.

Using these examples of typical childhood interactions, is it possible to determine the internal goal states, or intentions people experience in different situations? As illustrated above, it seems clear that a person’s behaviour is likely related to different internal states that are experienced, both on an emotional and cognitive level. Both kinds of internal states
are byproducts of interpersonal relations. The expressions of emotions seem to act as signals about the nature of a person's goals related to what is important to him or her and what he or she wants or needs from relationships with others. Thus, emotions appear to underlie goals or intentions of individuals, which in turn provide additional information about the internal processes that occur when people are engaged in social situations. For example, happiness seems to signal the desire for friendship or closeness with others, anger may signal the desire to dominate or win in relationships (e.g., Oatley & Jenkins, 1996), while sadness and fear might signal the desire to receive help from others in times of stress (e.g., Jenkins & Ball, 2000).

**Overview of Relational Goal Models**

Different theorists have examined the internal states of individuals in terms of emotions and their underlying relational goals. They include frameworks based on a cognitive theory of emotion (e.g., Lazarus, 1991; Oatley & Johnson-Laird, 1987), attachment (e.g., Bowlby, 1971) and object relations theories (e.g., Mead, 1934) and a social information processing model (e.g., Crick and Dodge, 1994; Crick & Ladd, 1993; Dodge, Pettit, Bates & Valente, 1995). Each theorist has adopted his or her own language to describe goals and how they relate to emotions. For the purposes of the present investigation, goals are defined as mental representations of relationships that individuals develop beginning in childhood. Goals exist theoretically as cognitive structures and enable individuals to think about what is important to them in relationships, their intentions towards others, and what others' intentions are towards them. Over time, these representations are modified by experiences with others and help shape future interactions. The use of the term "relational goal" further emphasizes the fact that goals pertain to relationships or social interactions. This definition of goals draws upon the work from several theoretical perspectives, each of which is discussed below.

**Cognitive Theory of Emotion and Relational Goals**

From a cognitive theory of emotion perspective (e.g., Oatley and Johnson-Laird, 1987; Simon, 1967; Tomkins, 1995), interactions between individuals are negotiated through the expression of emotions which act as signals about people's goals, or their needs and desires
in relationships. As Lazarus (1998) wrote, "if no goal is at stake, there can be no emotion" (p.359) while Baldwin (1992, p.461) defined relational goals as "cognitive structures representing regularities in patterns of interpersonal relatedness." Thus, emotions and goals are seen as relational in nature, in that they are ultimately shaped by social interactions and are formed on the basis of previous experiences and influence and are influenced by behaviour. Goals act as "shortcuts," allowing people to draw upon their previous interactions with others and to help make decisions about what behavioural strategies to pursue.

Advocates of a cognitive theory of emotion believe that there are a finite number of emotional signals or modes. Lazarus (e.g., 1991) described 15 different types of emotional states, 9 of which are negative and 4 of which are positive. Other researchers have focused on primary emotional states such as happiness, anger, sadness and fear (e.g., Baldwin, 1992; Jenkins & Ball, 2000). For example, if a person encounters a group of strangers in a dark alley, he or she would likely feel afraid. This emotion acts as a mechanism which helps to focus attention of the individual on the environment for the purpose of protection. Fear would then act as a signal to enable this person to respond in a manner that would ensure safety (e.g., fleeing the scene).

Each emotion contains a particular plot or story about relationships. Lazarus (e.g., 1999) proposed that as individuals make appraisals about the likelihood of their goals being successful in interactions with others or the environment, they produce a different emotion. The valence of an emotion then depends on whether or not a situation is deemed favourable for goal attainment. Whereas happiness might signal an individual to pursue the same course of action because a goal is likely attainable, anger signals that a goal has been blocked, resulting in an attempt to reinstate the goal. This may be achieved through the attempt to dominate or control the situation and typically involves a behavioural response related to aggression (e.g., Oatley & Jenkins, 1996). For example, Hastings and Grusec (1998) found that when they led parents to focus on their own goals in parent-child conflicts, they were more likely to feel annoyed and upset with the child and report that they would be more likely to employ strategies related to power assertion. Anger may also
involve blaming others because they are seen as being responsible for a goal being blocked (e.g., Lazarus, 1999).

Sadness may alert an individual to change the course of action but instead of acting out, he or she attempts to elicit help from others (Jenkins & Ball, 2000). Fear, as illustrated earlier, may also result in a change in the course of action by ensuring that an individual will become attuned to the environment (e.g., Oatley & Jenkins, 1996). In both cases, sadness and fear may involve the goal of suppressing aggression in others in order to reduce threats to an individual. For instance, research has demonstrated how angry or aggressive responses are more likely to involve reciprocal emotions and behavioural responses in others, whereas expressions of sadness and fear may de-escalate the situation (Biglan, Rothlind, Hops & Sherman, 1989).

In this way, emotions act as heuristics by allowing a multitude of data to be synthesized quickly allowing an individual to react in a timely fashion. For example, in the case of the person confronted by a group of strangers, in the time it would take to analyze details about the strangers and the surroundings, the individual may be placed in danger. Instead, the feeling of fear enables the individual to make very quick appraisals in a very short amount of time. In this illustration, the feeling of fear signifies that a goal related to feeling safe is not being met, which forces the person to act in a manner to change the course of events. Thus, in this way, emotions and goals are intimately linked.

Attachment Theory and Object Relations Models of Relational Goals
John Bowlby (e.g., 1971), the founder of attachment theory, has contributed significantly to our understanding of children’s relational goals. From his perspective, infants develop relational goals as a result of interacting with their primary caregivers. Bowlby (1971) believed that people represent their goals and the goals of others internally, and that these goal structures help individuals process interpersonal situations and infer information about the inner states of others. Bowlby (1971) coined the term “goal corrected partnership” to describe how infants and their caregivers develop goal structures by interacting with one another. Again, the relational aspect of goals is emphasized, in that they do not occur
within the individual, but involve relationships between people. Bowlby (e.g., 1971) proposed that children develop different relational goals depending upon their experiences with their parents. Consistent and responsive parenting were proposed to lead to the creation of adaptive relational goals, whereas, psychopathology was viewed as resulting from the internalization of negative relational goals.

Subsequent researchers (e.g., Ainsworth, Blehar, Walters & Wall, 1978) have used the term “attachment style” to represent individual differences in goal development. A “secure” attachment style or relational goal style is hypothesized to be the result of consistent and responsive parenting, in which an infant seeks out the caregiver in times of distress. Thus, valuing closeness to others may be the underlying goal associated with such an attachment style. Less adaptive relational goals are hypothesized to develop as the result of parenting that is not responsive to an infant’s needs. An avoidant style of relational goal development describes infants who “push” their parents away during times of stress and who do not value being protected by others. An ambivalent style of relational goal development describes infants who value protection by clinging to their parents during times of stress while simultaneously rejecting the comfort provided to them. Thus, differences in young children’s behaviour with their parents suggest that there may also be differences in their underlying relational goal states and that these individual variations begin to take shape quite early in life.

Other writers have emphasized the importance of relational goals (e.g., Mead, 1934; Sullivan, 1953), including object relations theorists (e.g., Mitchell, 1988). These authors have emphasized the importance of viewing the self not in isolation, but as inherently connected to the larger social world. In fact, Mead (1934) argued that the self could only be perceived through the larger social group. Mitchell (1988) has also conceptualized the self as being embedded within the environment. He maintained that the relationship, not the self, should be the basic unit for study. Some of the research on relational goals has been conducted from a cognitive-psychodynamic orientation (e.g., Luborsky & Crits-Christoph, 1989) that has grown out of investigations of transference in the therapeutic relationship. The therapeutic process is at its core relational. As clients project their
feelings about others in their lives onto the therapist, they attempt to work on relationship issues through their interactions in therapy. Luborsky and Crits-Christoph (1989) developed an assessment tool that examines the information that clients spontaneously provide about their relationships. Relational goals are contained in these narratives, just as are emotions and attributions made about the self and others. However, emotions and behaviour may interfere with the ability to process goal-related information. Thus, transcripts of sessions are analyzed by the clinician who may be able to draw inferences based on information provided in the therapeutic context. While other researchers have approached the topic of relational goals from different perspectives, (e.g., an information processing perspective used by Markus & Sentis, 1982), the commonality that exists between these various theoretical perspectives is the importance of examining the self in relation to the social environment.

Social Information Processing Models of Relational Goals

Relational goals have also been conceptualized from a social information processing perspective (Crick & Dodge, 1994). Crick and Dodge have developed a social information processing model in which individuals' cognitions about relationships are viewed as the mechanisms that influence interactions. Central to this theory is the notion that goals about relationships are one means by which social information is interpreted by children.

Research based on this model has focused to some extent on the relational goals that individuals attribute to others in ambiguous situations. The literature suggests that aggressive (Dodge et al., 1995; Dodge & Somberg, 1987; Slaby & Guerra, 1988) as well as depressed children (Quiggle, Garber, Panak & Dodge, 1992) make more hostile attributions about the goals of others in ambiguous situations than do non-disordered children. Specifically, these children are more likely to think that others are ill-intentioned towards them rather than interpreting actions that cause harm as mistakes. Socially rejected children also tend to attribute their poor peer relationships to external causes, whereas, more popular and non-rejected children are less likely to have this attributional style (Crick & Ladd, 1993). Other studies have shown how aggressive children are more likely to be confident in their ability to achieve their goals using aggressive strategies rather than by more
prosocial means (Erdley & Asher, 1998) and are more likely to believe their behaviour is legitimate (Huesman, Guerra, Miller & Zelli, 1992). One could make the argument that particular goals of children are associated with different behavioural outcomes (e.g., aggression or depression). For example, the interpretation that other children are hostile may be linked to goals pertaining to retribution. Thus, aggression may be the consequence of thinking that you must hurt others before they inevitably hurt you.

Drawing from the research discussed above, it seems that the relational goals of children may contain two complementary aspects. First, there are perceptions of others towards the self. For example, Dodge et al.'s (1995) research on the hostile attribution bias in some children has demonstrated that children can develop perceptions of the goals of others that lead them to negative action. Second, there are goals of the self with regards to other people. Such goals might include a desire to “win” in social situations or the importance of being close to others. Thus, these goals are derived by the self and can only be fulfilled through social interaction. While these two complementary aspects of relational goals are obviously related and may even be dependent on one another, they do focus on different aspects of social interactions. In the present study, the goals of the self in relation to others will be explored.

It is also important to note here the differences in how goals are perceived by the self and by others. When an individual is analyzing his or her goals, the focus would likely be on getting that particular goal or need met in a relationship. However, if external observers were to provide information about the individual’s goals, they would likely have to make inferences about those goals based on the individual’s behaviour. However, although observers may have to rely on information based on behaviour, they too make inferences about the underlying intentions of others. Thus, information obtained from various sources contributes to the knowledge of goals.
Developing a model to illustrate the relationship between emotions, goals and psychopathology

Two types of relationships between emotions and goals have been described in the literature. One is with respect to the short-term emotions that are experienced when a goal is or is not met (e.g., Oatley & Johnson-Laird, 1987). For example, if an individual wants something and is prevented from getting it by another person, the hypothesis is that this person will experience feelings of anger. The second manner in which emotions and goals have been conceptualized relates to how individuals develop stable emotional states over time (e.g., Jenkins & Oatley, 1996). Lazarus (1998) maintains that each long-term emotional state is associated with a core relational theme that is influenced by an individual's motivations, appraisals and belief system. For instance, retaliation and dominance are postulated to be core relational themes underlying anger (Jenkins & Oatley, 2000; Lazarus, 1998). Over time, these emotional states associated with a particular relational theme shape an individual's interpretation of the world. For example, individuals who develop an “angry” long-term emotional state would likely believe that it is important to dominate others in relationships and may be more likely to react in anger to someone that they perceive as blocking their goals. In this way, long-term emotional or mood states influence the more transient emotions that individuals exhibit in particular situations.

The development of psychopathology is also associated with long-term patterns of emotional organization (e.g., Jenkins & Oatley, 1996). One framework for understanding psychopathology is to view it as centering on one particular emotion more than others (e.g., Lazarus, 1991; Malatesta & Wilson, 1988; Tomkins, 1979). For example, externalizing disorders are characterized by behaviour in which individuals “act out” against the environment, typically by aggressive or antisocial acts, such as theft or physical violence. Thus, externalizing disorders may be thought of as a measure of long-term emotional organization centering on anger (Cole & Zahn-Waxler, 1992; Lemerise & Dodge, 1993). Conversely, people with internalizing disorders appear to focus their difficulties inward. Specifically, individuals who have disorders related to depression or anxiety experience emotions related to sadness or fear (see Figure 1). Thus, internalizing disorders may be
seen as reflecting long-term patterns of behaviour with an underlying emotional organization centered around sadness and fear (Jenkins & Oatley, 2000).

It is also likely that the goals associated with each kind of emotional state are linked to particular forms of psychopathology. One might hypothesize that the relational goals of individuals who develop emotional or behavioural disorders are so strong and embedded within the personality that they overshadow other competing goals (e.g., Jenkins & Oatley, 1996). For instance, goals related to dominance are likely related to an emotional organization centered around anger (externalizing symptoms), while protection-seeking goals are likely related to an emotional organization centered around sadness and fear (internalizing symptoms). Experiencing happiness seems to be related to the absence of psychopathological symptoms (Jenkins & Oatley, 2000). Thus, affiliation goals underlying happiness might also be expected to be related to the absence of psychopathology as well (see Figure 1).

From the previous discussion, it is apparent that emotions and goals are responses to relational meaning. How then does behaviour fit into this model? Some theorists (e.g., Dix, 1992) have argued that goals act on behaviour indirectly through an attributional process. For example, if a goal is perceived as unattainable because it is the fault of that individual, he or she may feel sadness and subsequently may engage in associated behaviours, such as crying or seeking out the help of others. Different types of parenting goals appear to be associated with different behavioural outcomes (e.g., Hastings & Grusec, 1998). For example, these researchers found that parents who were more concerned about their own goals in parent-child conflicts reported that they were more likely to employ behavioural strategies related to dominance. Conversely, parents who were focused on relationship goals reported they would be more likely to use reasoning strategies and were more responsive to their children. Thus, it appears that particular goals are related to different behavioural outcomes. However, some of the behavioural outcomes may have more serious implications than do others. Recent research has demonstrated a link between certain maladaptive relational goals (e.g., goals related to controlling or retaliating against others) and negative interpersonal outcomes, such as peer rejection (e.g., Asher, Renshaw
& Geraci, 1980), increased friendship conflict (e.g., Rose & Asher, 1999) and psychopathology (e.g., Dodge et al., 1995; Quiggle et al., 1992; Salzer Burks, Dodge, Price & Laird, 1999; Warren, Emde & Sroufe, 2000). Thus, differences in children’s goals appear to have a tremendous impact on future behaviour and interpersonal relationships.

**Dimensions of Relational Goals**

Based on the literature regarding social interaction and emotions (Kemper, 1990; Mason & Mendoza, 1993; Wayland & White, 1993;), goals related to dominance (i.e., the need to win in relationships), affiliation goals (i.e., the need to feel close to others) and protection goals are of interest in this investigation. Protection goals are further subdivided into two domains: the need to receive comfort from others in times of stress, and the extent to which children perceive the world as a threatening place. Research that discusses these relational goal dimensions is outlined below.

**Dominance Goals**

Goals related to dominance are important to understand as they tell us about the nature of power and control in social relationships. Dominance hierarchies have been found in non-human primate species where animals low in a dominance hierarchy are more inhibited than more powerful animals in the group (e.g., Sapolsky, 1993). In fact, Hawley (1999) argues that dominance patterns in humans are more similar to those found in other primate species than once thought and involve the competition for resources. Angry behavioural displays are associated with animals of a higher rank, while low status in a group is associated with sadness and fear (e.g., Mason & Mendoza, 1993). Thus, even for non-human primates, certain emotions are linked to behavioural expressions of power and control.

In terms of human relations, rank seems to be extremely important in defining how relationships are negotiated (e.g., Kemper, 1990). Research that has examined the implications of children’s social rank (e.g., Schwartz, Dodge & Coie, 1993) has found that submissive children are typically victims who are socially incompetent, who rarely initiate assertive behavior and who are more passive in play. Researchers also have found that
socially competent children are more likely to be assertive than aggressive in social interactions than are children without such social skills. Conversely, research by Dodge and his colleagues suggests that the desire to dominate others is a particular attributional style associated with aggression (Dodge et al., 1995; Dodge & Somberg, 1987). Specifically, children endorsing strong dominance goals are more likely to behave in an aggressive manner (Erdley & Asher, 1998; Lochman et al., 1983), believe that aggressive strategies will result in a positive outcome (Erdley & Asher, 1996) and are more likely to believe that their aggressive behaviour is legitimate (Huesman et al., 1992).

What makes displays of dominance (typically expressed through aggression) potentially problematic is that recipients of such displays are more likely to respond in kind, resulting in the escalation of aggression (Biglan et al., 1989). For example, Jenkins & Ball (2000) found that children who read vignettes where one person displayed anger were more likely to think that recipients of the angry responses would respond in an angry or aggressive fashion. Over time, it is likely that children who behave in an aggressive manner are exposed to repeated negative experiences that may further reinforce the development of goals related to dominating others. Thus, it seems plausible that dominance and its emotional correlate anger, may be the basis of externalizing symptomatology (Jenkins & Oatley, 1996). It is important to understand whether this hypothesis is true, since the negative outcomes associated with aggression can be very serious, such as poor peer relationships (Coie, Dodge & Kupersmidt, 1990).

There also appear to be risks for children who value dominance over other goals, as children at the other end of the dominance spectrum may also experience difficulties. Gilbert, Allan and Trent (1995) found that submissive behaviour was strongly related to depression in a clinical sample, and moderately correlated with depression in a non-clinical student sample. Thus, it appears as though too high or low goal levels could be potentially harmful.
Affiliation Goals

As with the dominance dimension found in the social interaction literature, evidence for an affiliation dimension, or the degree to which individuals want to be close to others has been described (e.g., Kemper, 1990; Romig & Bakken, 1992). Affiliative or prosocial behaviours can be seen in human and non-human species in acts of kinship and altruism (Oatley & Jenkins, 1996) and is thought to signal the willingness to co-operate with another’s goals. Unlike anger, emotions related to sadness and fear may have evolved to elicit prosocial responses from others. For example, Strayer (1980) found that children were more likely to share their toys with others who appeared sad rather than children who appeared angry.

Lovejoy (1981) theorized about the evolutionary reasons behind the development of relationships based on closeness and warmth. He believed that a turning point in the evolution of humans occurred when males began to take on a larger parenting role and shared their resources with their partners and children. As a result, the development of warm and close relationships would have helped to ensure the survival of their offspring. Other research on the effects of maternal sensitivity demonstrates the strong desire of people to be emotionally close in relationships (Maccoby & Martin, 1983), as mothers who are responsive to their children seem to convey the message to their infants that close relationships are important. This synchronization between mothers and infants seems to be important in helping infants form ideas about whether or not their relational goals will be met (e.g., Stern, 1994). Thus, affiliation goals are likely related to underlying feelings of happiness that signify co-operation in relationships (e.g., Lazarus, 1991).

Research examining both dominance and affiliation goals

Dominance and affiliation goals have also been researched together. For example, Lochman et al. (1993) examined social goals in aggressive adolescent boys (i.e., dominance, revenge, avoidance and affiliation) and found that the more aggressive adolescents had stronger dominance and revenge goals but lower affiliation goals than did the less aggressive boys. This finding suggests that having specific goals related to dominance and affiliation is related to particular behavioral outcomes. In a similar study,
Rabiner and Gordon (1992) gave peer rejected and non-rejected boys vignettes containing themes about co-operation and competition in peer relations. Children who were more aggressive and were rejected by their peers had more self-focused goals than did their non-rejected counterparts. Other research indicates that children with high dominance goals are less likely to be confident in their ability to choose prosocial goals (Erdley & Asher, 1998). As well, children who believe strongly in their right to behave aggressively are more likely to be rated by peers as being less prosocial than children who do not endorse these kinds of goals (Erdley & Asher, 1998).

Protection Goals
The conceptualization of the protection goal is drawn from the work of Bowlby (e.g., 1971) who hypothesized that attachment styles can be differentiated on the basis of underlying mental models of self and other. Securely attached children were predicted to have positive relational goals of self and other. Conversely, insecurely attached children were expected to have negative mental models. Infants who learned that they could depend on their caregiver to protect them were thought to internalize these experiences and develop positive cognitive representations of relationships. Gilbert et al., (1995) maintained that dependency associated with depression is in part related to the need for protection by others. That is, while valuing comfort from others seems adaptive, some individuals may try to fulfill their need for comfort excessively and to the point of pathology.

Based on Bowlby’s theory (e.g., 1971), an attempt was made to operationalize attachment theory by including two components of protection goals: 1) a child’s need to receive comfort from others in times of stress (referred to as “comfort” goals) and 2) a child’s perception of the world (including other people) as threatening (referred to as “world threat” goals). These two aspects of protection were included in the present study because it seems likely that an individual would have to feel somewhat threatened in order to activate goals related to needing comfort from others. Although these two types of protection goals appear inextricably linked, a goal related to feeling threatened in one’s surroundings may not be a goal in the same way as needing comfort from significant others. However, both comfort and world threat were treated as relational goals for the purpose of
the present investigation, based on the hypothesis that the need to be comforted by others would be the predominant protection goal.

Distinguishing Protection Goals from Affiliation Goals

MacDonald (1992) and Goldberg, Grusec and Jenkins (1999) have proposed that affiliation goals represent a separate dimension from protection goals but that they have come to be viewed as intertwined concepts in the attachment literature (e.g. Crowell & Feldman, 1988). MacDonald (1992) maintained that warmth and affection developed over the course of human history but for different reasons than why attachment components of relationships evolved. He argued that parental responses to infants in distress are linked to the security and safety of children, which is distinct from the development of affectionate bonds between parents and their children. It could be argued that affectionate bonds between infants and their caregivers developed for an entirely different reason: to keep the family unit intact, largely to entice fathers to provide support for infants during their formative years (Lovejoy, 1981).

Goldberg et al. (1999) argue that researchers have conflated protection and affiliation goals of parents. Measures of parental sensitivity, assessed both when a child is happy and when he or she is distressed confuse the child’s need for protection with the desire to be close to others. In further support of the idea that protection and affiliation systems may be different, there is physiological evidence that the joy experienced by people in close relationships may be distinct from experiences of fear when protection is needed. For example, Fox and Davidson (1987) found that infants who were more distressed when separated from their mothers had greater activation of their right frontal lobes in contrast to infants who were reunited with their mothers. In this case, the left frontal cortex was activated, suggesting that various regions of the brain may be differentially related to fear and happiness. For this reason, in the study a distinction was made between children’s reaching out for closeness because they desire to affiliate and children who are seeking protection or comfort.
Aims of the Present Study
There are several aims of the present study. The primary aim was to differentiate between children with higher and lower levels of internalizing and externalizing symptoms on the basis of their relational goals. It is essential to gain more knowledge about the relationship between goals and externalizing and internalizing symptomatology in order to target interventions for such children to improve their social interactions.

In order to accomplish this task, self- and peer-report measures of children's relational goals were developed and evaluated. Other researchers have developed their own measures of relational goals that typically include vignettes portraying conflictual situations focusing on dominance and prosocial goals (e.g., Chung & Asher, 1996; Erdley & Asher, 1998; Lochman et al., 1993; Rose & Asher, 1999). The measures used in the present study consisted of several items that assess dominance, affiliation and protection goals. Children were presented with a statement and asked to decide whether or not to endorse the statement about themselves (in the self-report) or others (in the peer-report).

There were several advantages of using the present relational goal measures over questionnaires developed by other researchers, such as Lochman et al. (1993) and Rose and Asher (1999). First, other measures only included items related to dominance and affiliation but not protection. Second, I wanted to use a more comprehensive measure of each domain beyond what could be ascertained from a single item (e.g., measures developed by Jenkins & Greenbaum, 1999 and Lochman et al., 1993). In addition, the larger number of scale items strengthened the reliability and validity analyses. Third, both dominance and affiliation ratings are typically based on vignettes involving peer conflict (e.g., Chung & Asher, 1996; Erdley & Asher, 1998). In the present study, questions were asked about conflictual as well as non-conflictual situations. Finally, the development of both a self- and peer-report measure enabled the researchers to assess the ability of different raters to report on relational goals.

The ambiguous provocation vignettes developed by Erdley and Asher (1998) and adapted from Dodge's (1980) work have been psychometrically assessed and would likely have
proven to be a good measure of a self-report of relational goals. This measure contains several vignettes that depict a variety of interpersonal conflicts between peers in which the intent of the individuals is unclear. After reading each vignette, children are provided with a choice of behavioural responses ranging from a physically aggressive response to a problem-solving approach. However, this measure was not available at the time of data collection. The Erdley and Asher (1998) measure differed from the self- and peer-report measures developed for the present study in a number of ways. However the most striking difference is that in the present study, children were given the choice of endorsing or not endorsing goals related to dominance, affiliation and protection, whereas in the Erdley and Asher (1998) study, children were given choices about their behavioural responses. Thus, the Erdley and Asher (1998) measure would not have answered the central question of this investigation related to how particular goal dimensions may be associated with emotional and behavioural symptoms. Specifically, the Erdley and Asher (1998) measure did not categorize goals into the domains used in the present study and it did not include any measurement of protection goals.

Exploring the relationship between relational goals as reported by children and by peers was the second aim of the study. Previous research has shown an association between self and peer ratings of several behavioural characteristics, such as antisocial behaviour (Laird, Pettit, Dodge & Bates, 1999). In order to test the hypothesis that peers would report children's goals in a similar way to how goals were rated by the children themselves, both self- and peer-report relational goal measures were developed. Peer ratings were used in addition to a self-report relational goal measure for several reasons. First, peer-reports helped to establish the validity of the self-report measure. Second and most importantly, the information from self- and peer-reports are derived by different means. Self-reports of goals are made directly and without inferences made by others, as children have greater access to information based on their own experiences. However, goals and emotions occur frequently in everyday interactions and may be at times difficult for children to reflect upon because they do not typically pause to analyze the nature of their goals - they feel, think and act very spontaneously. Peers, on the other hand, make inferences about others' goals based on behavioural observation. Thus, although they might draw similar conclusions, the
information that they use to evaluate others' goals is also valuable. For example, consider the vignettes described in the opening paragraphs. What would the girl and her playmate say about the relational goals of the child who pulled her playmate's swing away? Would the girl be able to reflect on her intentions at a later period or would it be as important to ask children who knew her best to make inferences about her goals? To answer this question, self- and external rater-reports of relational goals were utilized.

Although peer-reports were used to provide additional information about children's relational goals, the question remains, are goals out of reach of the conscious mind and difficult for participants to make self-reports about? Bargh and Chartrand (1999) maintain that goals, with repeated activation over time, actually involve fewer conscious resources and become automatic. In a series of experiments, (e.g., Bargh, Raymond, Pryor & Strack, 1995; Chartrand & Bargh, 1999), these researchers concluded that once activated, goals operate automatically, just as if they had involved intention and occur without much awareness. However, the work of Asher and his colleagues (e.g., Chung & Asher, 1996; Renshaw & Asher, 1983) is based on the presumption that children are able to consciously access their goals. In fact, Renshaw and Asher (1983) found that children were better able to reflect on their relational goals when later asked about their behavioural strategies. Although this issue continues to be debated, it may be that children have difficulty reflecting on their relational goals at the time they are activated because emotions and behaviour likely interfere with this process. However, it seems possible that upon reflection, goals are more easily accessible to the conscious mind and can be measured by using questionnaires similar to those used in the Erdley and Asher (1998) study and the measures used in the present study.

The third reason peer-reports were used was because many researchers have found that they are a better and more accurate external source of information with regards to children's social relationships as compared to teacher reports (e.g., Hymel & Rubin, 1985). Peers have access to information not known by adults in the school setting and interact with another in numerous situations (e.g., in class, at recess, etc.). Finally, peer ratings were an
essential component to this study, as the use of multiple data sources helped to ensure the
construct validity of the self-report relational goal measure. (e.g., LaGreca, 1990).

**Operationalizing the relational goal domains**
For the purpose of the present study, dominance goals were operationalized as reflecting a
need to win in relationships, such as wanting to be a leader or boss in a situation. Children
with greater externalizing symptoms were expected to value dominance goals more than
other goals as compared with children with lower levels of externalizing symptoms.
Conversely, children with internalizing symptoms were expected to value other goals more
than dominance (Schwartz et al., 1993).

Affiliation goals were operationalized as reflecting a need to be close to others in
relationships. Children with low levels of externalizing symptoms were expected to
endorse affiliation goals more strongly than were children with higher levels of
externalizing symptoms (e.g., Lochman et al., 1993; Maccoby & Martin, 1983).

Finally, protection goals were operationalized as falling along two continua: one that
reflects the degree to which an individual feels the need to receive comfort from others in
times of stress ("comfort" goals) and another goal dimension that reflects the degree to
which an individual perceives the world and other people as threatening ("world threat"
goals) (e.g., Bowlby, 1971). Children with higher levels of internalizing symptoms were
predicted to have a stronger need to receive comfort from others and were predicted to view
the world as more threatening than were children with lower levels of internalizing
symptoms.

**Balance of Relational Goals**
Recent research has suggested that children with behavioural and emotional disorders not
only express one emotion to the exclusion of others, but that psychopathology is related to
the expression of some emotions relative to others (i.e., a balance of emotions). Put another
way, it is not only important to look at the levels of emotions within individuals, but to
examine the combination of emotions to see how they might relate to the development of
disorders. For example, externalizing symptoms seem to be associated with higher levels of anger and lower levels of sadness and happiness, while internalizing symptoms appear to be associated with higher levels of sadness and lower levels of anger (Jenkins & Oatley, 2000). Therefore, it is important to determine the most predominant emotion expressed by children and to examine the relative proportions of emotions within individuals. Because goals are presumed to underlie emotions, it is plausible that different relational goals might also be related to particular externalizing and internalizing symptoms. However, it is also possible that a particular balance of goals is also related to emotional and behavioural symptoms as well. This question is central to the focus of the present investigation.

As can be seen in Figure 2, children who have higher dominance goals (which in turn are likely related to greater levels of anger and lower levels of happiness, sadness and fear) are hypothesized to have greater externalizing symptoms than those children who value being close to others or who value protection by others. It is maintained that it is these particular relationships among the relational goals that underlie aggressive and delinquent behaviour. Specifically, it seems likely that high dominance goals and lower comfort goals might best account for externalizing symptoms because such children would have the desire to “win” in relationships combined with a lack of desire to receive comfort from others. Similarly, children with externalizing symptoms are also expected to have a strong desire to win in relationships combined with a low desire of being close to others.

Alternatively, internalizing symptoms are hypothesized to be related to different goal combinations. Children who have greater protection goals (which in turn are likely related to lower levels of anger and happiness and higher levels of sadness and fear) are expected to have symptoms related to anxiety and depression more than do children with dominance goals. Thus, anxious or sad children are expected to desire comfort from others combined with a lack of desire to win in relationships.

The Role of Gender in Relational Goals
McNelles and Connolly (1999) maintain that the role gender plays in the expression of goals must be considered within a social context because boys and girls may differ in how
their goals are expressed behaviourally. These researchers concluded that both genders have goals related to intimacy or being close to others, but while girls express these goals through conversations with others, boys do so by means of shared activities. Thus, it was important to establish how gender may play a role in the kinds of relational goals that are expressed by children in the current investigation. Several studies have documented gender differences in the nature of relational goals. First, observations of children’s play groups reveal distinctive organizational patterns. While boys seem to have a hierarchical organization in which dominant boys have more power than other boys, girls’ play groups seem to be less hierarchical and are organized around goals pertaining to co-operation and negotiation (Maccoby, 1986). In terms of relational goals, there are consistent findings that boys endorse goals related to dominance and control (e.g., Chung & Asher, 1996; Rose & Asher, 1999), while girls appear to have stronger prosocial or affiliative goals (Bukowski, Hoza & Boivin, 1994; Chung & Asher, 1996). Thus, gender differences in relational goals were also explored in the present study.

Hypotheses

Hypotheses regarding the direct relationships between goals and outcomes

It was predicted that particular goals would be differentially related to internalizing and externalizing symptoms (see Figure 2 and Table 1). It was expected that children would rate themselves and be rated by their peers in the following ways:

1) Children with higher levels of dominance goals were expected to have more externalizing symptoms than were children with affiliation or protection (i.e., comfort or world threat) goals.

2) Children with higher levels of protection goals were hypothesized to have more internalizing symptoms than were children with dominance goals. No prediction was made regarding internalizing symptoms and affiliation goals.
Hypotheses regarding the balance of goals and outcomes

3) Children who valued dominance goals more than comfort goals were expected to have higher levels of externalizing symptoms, followed by children who valued dominance goals more than affiliation goals and finally children who valued dominance goals more than world threat goals (see Table 2). It was thought that comfort goals would be the predominant goal, more so than affiliation goals. World threat goals, because they in theory serve to activate comfort goals, were predicted to be the least influential goal domain of the three.

4) Children who valued comfort goals more than dominance goals were hypothesized to have higher levels of internalizing symptoms, followed by children who valued world threat goals more than dominance goals. Again, as comfort goals were hypothesized to be activated as a consequence of world threat goals, it was thought that they would have a greater impact on internalizing symptoms. No predictions were made regarding affiliation goals.

It was also predicted that there would be a positive association between relational goals as reported by the participants and by their peers. For example, a child who reported that affiliation goals were important would likely be rated by other children as also having strong affiliation goals.

In summary, research has demonstrated how children with different emotional and behavioural disorders vary in terms of their emotions. Specifically, children who experience considerable feelings of anger, tend to have externalizing symptoms, such as aggression (e.g., Cole & Zahn-Waxler, 1992) while children who are sad and fearful are more likely to have internalizing symptoms, such as anxiety and depression (Jenkins & Oatley, 2000). Jenkins and Oatley (2000) have taken the research one step farther by examining combinations of emotions and how they may be related to psychopathology. Recall that externalizing symptoms were related to higher levels of anger combined with lower levels of sadness and happiness, while higher levels of sadness and lower levels of anger predicted internalizing symptoms. Since many different theorists have advocated a
model of social interaction in which emotions point to or signal the presence of goals, it seems plausible that similar goals and goal combinations are related to externalizing and internalizing symptoms as well. This was the central focus of this investigation.

**Contributions of the Present Study**
The present study is the first of its kind to examine the question of how different goals and different goal combinations are associated with externalizing and internalizing symptomatology. This investigation is an attempt to broaden our understanding of relational goals and long-term emotional structures that are reflected in externalizing and internalizing symptoms. In addition, this study included items related to protection goals as well as goals related to dominance and affiliation. In this way, the notion that affiliative goals differ from those related to protection could be assessed. The measures developed for the present study are comprehensive because they assess each of the goal domains using several items and they were extensively tested, enabling the researcher to better answer the questions posed in the study. Finally, the reliability and validity of the relational goal reports were strengthened through the use of multiple data sources. Both self- and peer-reports of relational goals were used. Although peer reports of goals were based on inferences, they provided valuable information about how children view their classmates' goals. Finally, symptoms of externalizing and internalizing symptoms were reported by teachers. Using this model, the effects of intra-informant relationships were eliminated.
OVERVIEW OF METHOD AND RESULTS SECTIONS

First, the method, procedures and measures from the pilot study are discussed, followed by results (including reliability and validity analyses) obtained from this pilot sample. Following this discussion, the method, procedures and measures used in the main study are reviewed. A short description of the sample with respect to prevalence of externalizing and internalizing symptoms is discussed, followed by analyses related to missing data, internal consistency and the transformation of some of the variables. Next, some preliminary analyses are reviewed, including analyses of grade, marital status and socioeconomic status variables. Next, bivariate correlations are presented between the various predictor and outcome variables. The actual testing of the hypotheses is reviewed next, with a discussion of the role of gender, followed by an analysis of the direct relationships between relational goals and symptomatology ratings and an analysis of the balance of goals in relation to the symptomatology outcomes. Finally, factor analyses are discussed involving the relational goal domains.

PILOT STUDY

The aim of the pilot study was to develop self- and peer-report relational goal measures and to determine the feasibility of using these measures to test the hypotheses about the relationships between goals and symptomatology ratings.

METHOD

Sample
Forty-four children (23 boys and 21 girls) in grades 5 and 6 participated in the pilot study (mean age 10.5 years). The children attended a school in a large urban city in Ontario. Specific information about socio-economic status and parental occupation was not collected.
Measures

Self-Report Relational Goals Measure
This measure was developed to assess dominance, affiliation and protection relational goals. Items were generated based on previous research on goals and similar measures currently in use (e.g., Jenkins & Greenbaum, 1999; Lochman et al., 1993). The questions were designed to assess relational goals by having children make choices about how similar or different particular goals presented to them were in relation to their own goals. Thus, the measure asked children to reflect on their own needs and intentions when relating to other people. In this way, the measure helped determine whether a child places a high or low value on a particular goal.

The measure consisted of 36 items containing 10 dominance, 10 affiliation and two protection domains: 8 comfort items and 8 world threat items. A “children friendly” format similar to the Harter’s (1982) Perceived Competence Scale for Children was used. Children were presented with two statements, such as “some children think that it is important to be the boss but other children do not think it’s as important to be the boss.” They had to decide which statement was more like them and then make a choice about whether the statement was “sort of true” or “really true” for them, thus producing a four-point scale. The measure was used with this pilot sample before being slightly revised for the main sample. A copy of the final measure used in the main data collection can be found in Appendix A.

Peer-Report Relational Goals Measure
Children rated the relational goals of five of their classmates chosen at random regardless of gender. This measure asked children to reflect on their perceptions of the needs and intentions of their peers and to make a determination of the extent to which the particular goals apply to the specific child being rated.

The measure consisted of 24 items. Children were asked to rate 6 dominance items, 6 affiliation items, 4 comfort items and 4 world threat items. The questions were identical to those found in the self-report relational goals measure. However due to time constraints
only 24 of the 36 items from the self-report relational goal measure were chosen. Children answered the questions on a five-point Likert scale. For example, they would be asked to rate each statement (e.g., "some children like to work in groups") and decide how important the goal was for the person they were rating. Peer-report scores for each participant were calculated by taking the mean ratings across all five peer raters. A similar but much less comprehensive version of this measure was used in an earlier study (Jenkins & Greenbaum, 1999). Dominance and affiliation goals as rated by peers were found to be significantly related to teacher ratings of psychopathology and to be highly stable over a one-year period. The measure was used in this pilot sample before it was revised and used in the main data collection (see Appendix B for a copy of the version of the questions used in the main data collection portion of the study).

Procedure
Participants were given the self-report relational goal measure and the peer-report relational goal measure to be completed for five of their peers. They were asked to provide their assent to participate in the study and were instructed that they could return to their classroom at any time. The entire process took approximately 45 minutes. Two weeks later, the participants completed the self- and peer-report relational goal measures a second time. They were asked to rate the same peers as they had two weeks prior. As well, during the second phase of the data collection, the participants were asked to complete a measure by Lochman et al. (1993) in order to test the construct validity of the self- and peer-report measures. Lochman et al.'s (1993) measure includes single items measuring dominance, revenge and affiliation (but not protection) based on a hypothetical vignette about a peer conflict situation. The participants completed this brief self-report measure following their self- and peer-report relational goal ratings.

During both time 1 and time 2 of data collection, the order of the questionnaires was counterbalanced (i.e., half the children received the self-report measure before the peer-report measure while the other half received the reverse order of questionnaires). This procedure was conducted to reduce the likelihood of an effect due to the order of
administration. Results reported in the following sections were obtained from this pilot group.

RESULTS

Establishing Validity and Reliability of the Self-Report and Peer-Report Relational Goals Measures

Internal Consistency
The internal consistency of the self- and peer-report relational goal measures was ascertained using Cronbach’s Alpha. For the self-report measure, two items from the dominance domain and one item from the world threat domain were dropped because they reduced the internal consistency of each scale. For the peer measure, one item from the dominance domain and one item from the affiliation domain were dropped for the same reason. Items that were dropped as well as the items that formed the final scale can be found in Appendix C. Alphas for the relational goal dimensions of dominance, affiliation, world threat and comfort in others for the self- and peer-report measures were calculated. For the self-report relational goal measure, alphas ranged from $\alpha = .67$ to $\alpha = .92$ and for the peer-report relational goal measure, alphas ranged from $\alpha = .84$ to $\alpha = .92$, all of which demonstrated acceptable to very good internal consistency (see Table 3).

The greater consistency of the peer ratings raises the issue about differences in the way peers make attributions about others’ goals and the way children make attributions about their own goals. For instance, a phenomenon known as the fundamental attribution error involves the idea that other people rely more heavily on the behaviour exhibited by their peers and are more likely to perceive that behaviour as being the result of dispositional factors rather than situational factors (Fiske & Taylor, 1991). As a result, goals inferred by others may be perceived as having greater stability than goals rated by the individuals themselves.

The wording of some of the items in both the self- and peer-report measures was altered slightly for the main data collection and consequently internal consistency of the scales of
the main sample are also reported. Thus, alphas calculated from data from the main sample were used to determine the reliability of the measures in the main sample.

Test-retest reliability
Test-retest reliability was established by examining the bivariate correlations of scores between the two testing sessions. Correlations for each of the goal domains between the self- and peer-report relational goal measures are reported in Table 4. Test-retest reliabilities were found to be fairly similar across domains. Values ranged from $r(44) = .81$ to .84 for the affiliation domain, $r(44) = .78$ to .80 for the dominance domain, $r(44) = .75$ to .88 for the comfort domain and $r(44) = .60$ to .69 for the world threat domain. Overall, there was acceptable to good test-retest reliability within each relational dimension for both the self- and peer-report measures.

Bivariate Correlations Among The Relational Goal Domains
Correlations among the various relational goal domains were also examined. Due to space limitations, a table of such correlations is presented for each gender based on data from the main study later in the results section. However, generally the comfort and affiliation domains tended to be positively associated for both girls and boys (significant correlations ranged from $r = .20$ to .60) as were generally the comfort and world threat domains (significant correlations range from $r = .20$ to .50). The affiliation and dominance domains tended to be negatively associated for girls and boys (significant correlations range from $r = -.20$ to -.40). Overall, the results were in the directions expected and were consistent with the hypotheses.

Cross-Informant Bivariate Correlations
In order to examine the agreement between self- and peer-reports of relational goals, bivariate correlations were conducted for each of the domains for time 1 and time 2 for girls and boys separately. Self- and peer-reports were hypothesized to be related within each domain. For girls, there were non-significant findings between informants (see Table 5). However, for boys, there was a mild level of agreement within the world threat domain between the self- and peer-reports (correlations ranged from $r = .15$ to .36), while the level
of agreement within the dominance and affiliation domains ranged from extremely weak to moderate for dominance (correlations ranged from $r = .07$ to $.45$) and moderate to strong for affiliation ($r = .51$ to $.70$) (see Table 6). Thus, although the results for the female participants were weak, the results for the male participants were more encouraging.

**Construct Validity**

The cross-informant results discussed above also lent some support to the validity of the measures. In addition, a test of the construct validity of the measures was conducted. The relationship between the self- and peer-report measures and an established measure of social goals (i.e., Lochman et al.'s (1993) measure) was examined. The results that compare the Lochman et al. (1993) measure with the self- and peer-report dominance goals are presented in Table 7, while the results that compare the Lochman et al. (1993) measure with self- and peer-report affiliation goals are presented in Table 8.

**Self-Report**

As expected, the dominance and revenge items on the Lochman measure were positively related to the self-report dominance measure at time 1. However, the relationship between the two dominance items was only marginally significant at time 2. Lochman et al.'s (1993) measure of affiliation goals was not significantly associated with self-reports of affiliation at time 1 or at time 2, although the results were in the expected direction. In terms of discriminant validity, self-reports of affiliation were not positively related to Lochman’s measure of dominance and revenge, while self-reports of dominance were not positively related to Lochman’s measure of affiliation, as expected.

**Peer-Report**

No relationship was found between Lochman’s measure and peer-reports of dominance at either time 1 or time 2, which was not anticipated. However, peer reports of affiliation were significantly related to Lochman’s measure of affiliation at both time 1 and time 2. In terms of discriminant validity, peer-reports of affiliation were not positively correlated with Lochman’s measure of dominance and revenge, while peer-reports of dominance were not positively associated with Lochman’s measure of affiliation, as predicted. Overall, these
results provide some evidence of convergent validity by examining self- and peer-reports of dominance and affiliation with Lochman's measures of dominance, revenge and affiliation and strong evidence of discriminant validity. The results, although not completely definitive, suggest that the self and peer ratings for dominance and affiliation likely have acceptable construct validity.

While not entirely conclusive, the data piloted on the sample of 44 children provided evidence that the self- and peer-report relational goal measures had adequate reliability and validity. Specifically, both measures demonstrated adequate internal consistency and test-retest reliability. In addition, cross-informant correlations between the self- and peer-report relational goal measures were strong for the affiliation and comfort dimensions. Finally, some evidence of convergent validity between the self- and peer-report dominance and affiliation items and an established measure of dominance and affiliation (i.e., Lochman et al., 1993) was found. Conversely, there was strong evidence of discriminant validity between these same measures. Based on this evidence, a larger sample of data was collected in order to test the hypotheses between relational goals and externalizing and internalizing symptoms.
MAIN STUDY

METHOD

Sample and Procedure

Children were recruited from grades 6, 7 and 8 from three schools in a large urban area in Ontario. Letters were sent to parents (see Appendices D and E for a copy of the parent information and consent letters). The study was described as an investigation examining how emotions and behaviours of children are related to how they think about relationships. It was explained that children would be rating their peers on a variety of questions and that every effort would be made to ensure that the ratings were not discussed among the participants. Parents were clearly told that their child’s participation in the study was voluntary and that their child could withdraw from the study at any time. Parents were asked to give their written consent and to complete some demographic information (i.e., languages spoken at home, parents’ occupation and marital status, the child’s age). They were also provided with the phone number of the supervising researcher if they had any questions. Parents were informed that once the data were analyzed, the families of each child who participated, as well as each principal, would receive a summary of the research findings. A presentation was made to each class to explain the study to the students. Teachers were also required to give their written consent to participate in the study (see Appendix F for a copy of the teacher consent letter).

The same procedure was followed as in the pilot sample, such that groups of children were given the self-report relational goal measure and peer-report relational goal measures for five classmates chosen at random. Children were asked to provide their written assent to participate and were also explicitly told about the voluntary nature of their participation (see Appendix G for a copy of the student assent letter). Again, the order of the questionnaires was counterbalanced to eliminate any effect on the ratings.

The sample was of non-identified children and families that is linguistically diverse (see Table 9 for a summary of demographic information). Information was not collected about race for reasons of sensitivity. A high proportion of families spoke a second language other
than English at home. The response rate across all three schools was 46% for children who obtained parental consent and 90% for teachers providing consent. In the present sample, 219 students participated (117 girls and 101 boys in grades 6, 7 and 8). The data from one student were excluded because he did not understand how to do the ratings.

**Measures**

The self-report and peer-report questionnaires were revised slightly in terms of the questions used for the main data collection portion of the study (see Appendices A and B). On the peer-report, students were asked to make a rating about how well they knew the person they were rating. No effect due to level of familiarity was found. As well, no effect was found for the order of the questionnaires administered.

The following measures were used to assess externalizing and internalizing symptoms.

**Measures of Children’s Externalizing and Internalizing Symptoms**

The Child Behavior Checklist - Teacher Report Form (TRF) was used to measure children’s emotional and behavioural problems. Only items on the internalizing and externalizing subscales were used. The TRF has well-established reliability and validity (Achenbach, 1991a). It is the most widely used instrument for the assessment of internalizing and externalizing behaviors in children.

The Revised Children’s Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1985) was completed by all participants in the study. This measure was added because internalizing disorders, which include anxiety symptoms, are typically underrated by external sources, such as teachers and peers (e.g., Flannery, 1990). Thus, the depth and intensity of such inner feelings or symptoms are more difficult for others to evaluate (e.g., Kurdek & Berg, 1987), as opposed to more readily observable symptoms, such as aggression or hyperactivity (Michael & Merrell, 1998). As well, La Greca (1990) has argued that self-reports of internalizing symptoms should be included in a battery involving multiple raters as a means of reducing observer bias.
The RCMAS is a brief 37-item measure asking children to provide yes or no answers to questions about feelings of nervousness and worry. It takes approximately five minutes to complete. The questionnaire has been shown to have adequate psychometric properties, including good reliability and validity (Epkins, 1994; Epkins, 1996; Reynolds & Richmond, 1985).

Socioeconomic Status
Socioeconomic status (SES) was coded using the 1981 socioeconomic index for occupations in Canada (Blishen, Carroll & Moore, 1987). Fathers' and mothers' occupations were coded using this scheme, which is a widely used instrument in Canada for analyzing census data.

RESULTS

Descriptive Data of the Sample
Seven boys (7%) and nine girls (8%) fell within the clinical or borderline clinical range on the externalizing scale of the Achenbach Teacher Report Form, while four boys (8%) and eight girls (7%) met these criteria on the internalizing scale. For this questionnaire (Achenbach, 1991a), the clinical cutoffs established for both internalizing and externalizing symptoms is a T-score of 64, while the borderline clinical cutoff for both types of symptoms is a T-score of 60. In the present study, the externalizing T-score mean for the entire sample was 47.13 (SD=7.09), while the internalizing T-score mean was 45.77 (SD=7.92). Offord, Boyle and Racine (1989) generally found similar rates of boys and girls over a six-month period who met the criteria for externalizing and internalizing disorders based on the TRF. However, the present sample appears to contain a somewhat higher percentage of girls who fell within the clinical or borderline range than in the Offord et al. (1989) study.
For the RCMAS, seven boys (7%) and seven girls (6%) obtained scores above 60, which are considered clinically significant. The self-report internalizing T-score mean for the RCMAS was 47.40 (SD=8.48).

Overall, the rates of externalizing and internalizing symptoms in the present study are consistent with prevalence rates of behavioural and emotional disorders in the general population, although internalizing scores in the present sample were slightly more elevated for both genders. In the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994), the prevalence rate for conduct disorder in children is between 6 and 16% for boys and 2 and 9% for girls while the prevalence rate for separation anxiety in children is approximately 4% for both genders.

Analysis of Missing Data
Ten children were missing peer-report relational goal ratings, eleven children were missing self-report relational goal ratings and ten children were missing student-report ratings for the RCMAS. Twenty-two children were not rated by their teachers on the TRF, as two teachers chose not to participate in the study after their students had already completed the self and peer ratings. In all these cases, mean values by gender were substituted for the missing variables. Analyses were run with and without these substitutions and no appreciable differences were found. Analyses with mean values substituted for missing data are presented.

Confirming Internal Consistency of the Self- and Peer-Report Measures
The internal consistency of the final version of the self- and peer-report measures was ascertained using Cronbach’s Alpha. Two items were dropped from the self-report dominance and world threat domains in order to maximize the internal consistency of each scale. The items dropped as well as those that formed the final scale can be found in Appendix H. Alphas for the relational goals domains of dominance, affiliation and protection (world threat and comfort) for the self- and peer-report measures were calculated. For the self-report relational goal measure, the alphas ranged from $\alpha = .72$ to
$\alpha = .84$. For the peer-report relational goal measure, the alphas ranged from $\alpha = .83$ to $\alpha = .91$, all of which demonstrate acceptable to very good internal consistency (see Table 10).

Transformations

For the TRF, T-scores were calculated for the externalizing and internalizing scales. Achenbach (1991a) recommends using raw scores rather than T-scores when performing statistical analyses in order to take advantage of the full range of variation found in raw scores. However, the internalizing and externalizing indices do not yield T-scores which have truncated values, resulting in similar results when using either method, according to Achenbach (1991a). Both T-scores and raw scores were used in the statistical analyses. Although the results using both methods were very similar, results were slightly stronger using the T-score method and are thus reported in all of the analyses.

After examining the distributions of the self- and peer-report relational goal domain composites and the internalizing and externalizing scales of the TRF, transformations were made to some of the variables in order to more closely approximate the normal distribution. Both of the scales of the TRF as well as the self-report of affiliation were transformed using a log transformation. The self-report comfort domain was transformed using a square root transformation, as it was less skewed than the previously described measures. All results are reported using these transformations. Ranges and means for the untransformed and transformed symptomatology scores for the raw externalizing and internalizing total scales of the TRF and the RCMAS total score are presented in Table 11.

Preliminary Analyses

Before the main analyses were conducted, grade, marital status and socioeconomic status were examined in terms of their relationships to the goal domains and to the symptomatology outcomes. The relationship between gender and relational goals will be discussed in detail in the section concerning the testing of the hypotheses. A summary of the means and standard deviations can be found in Table 11.
Grade

No a priori predictions were made about the relationship between grade, relational goals and symptomatology outcomes. Grade level and self- and peer-report relational goal measures were compared using a multivariate analysis of variance. A multivariate main effect was found for grade in the self domain, $F(8, 426)=2.58, p<.009$. The univariate tests revealed significant differences in grade level for dominance, $F(2, 215)=6.94, p<.001$. Post hoc cell contrasts (Tukey) indicated that grade 7s rated themselves higher than did both grade 6s and grade 8s (see Table 12 for means).

For the peer domain, a multivariate main effect for grade was found to be significant, $F(8, 426)=2.50, p<.011$, with univariate analyses revealing differences in grade level for the comfort domain, $F(2, 215)=6.43, p<.002$. Post hoc cell contrasts (Tukey) indicated that grades 8s were rated by peers as being lower on this domain than were grade 6s and grade 7s (see Table 12 for means).

In terms of the relationship between grade and symptomatology ratings, a multivariate main effect for grade was significant, $F(6, 428)=4.28, p<.001$. A subsequent examination of the univariate analyses revealed differences between grade level for internalizing symptoms, $F(2, 215)=13.31, p<.001$. Post hoc cell contrasts (Tukey) revealed that teachers rated grade 7s as having fewer internalizing symptoms than they did grade 8s (see Table 12 for means).

These results were unanticipated, as no specific predictions were made with regards to grade level. The results are also not largely supported in the literature, especially those effects of a non-linear nature. However, to ensure that the grade level was not a contributing factor to any of the results, analyses were run separately by grade in the hypothesis testing section. For all significant findings, the pattern of results was consistent across grade level. Thus, grade level was not used as a covariate in the analyses.

Marital Status

Marital status was coded into two groups: those students who had married parents, and
those students who did not have married parents. This latter group was composed of parents who were separated, divorced or single and those parents who were in the "other" category. Four parents placed themselves in the other category, three without providing an explanation and one reported that the spouse was deceased. This latter group accounted for 10% of the sample.

Multivariate analyses were conducted examining the possible association between parents’ marital status and self and peer ratings of relational goals. The multivariate F statistic was not significant for the self domain, $F(4, 212)=1.782, p<.134$ or the peer domain, $F(4, 212)=4.38, p<.781$, indicating that there were no significant differences in marital status in terms of children’s ratings of relational goals (see Table 13 for means).

Multivariate analyses were also conducted to examine the possible relationship between parents’ marital status and symptomatology ratings. The multivariate F statistic was not significant, $F(3, 213)=5.31, p<.661$, indicating that married and non-married parents did not differ terms of the number of internalizing or externalizing problems observed in their child (see Table 13 for means).

Since marital status did not yield any significant results in terms of the relational goals or symptomatology outcomes, it was not used as a covariate in any of the analyses.

Socioeconomic status
In terms of socioeconomic status, many more mothers (27%) than fathers (3%) were not employed outside the home. Therefore, fathers’ occupation was deemed to provide a better indication of family SES and is reported in this study. A mother’s SES score was substituted if the father’s information was missing or if the father was unemployed. Ratings for occupations ranged from 21.26 (service labourer) to 101.74 (dentist) with a mean of 48.20, $SD = 12.73$ for boys in the study and a mean of 48.12, $SD = 14.10$ for girls. No coding for unemployment is used in the Blishen scheme. In order not to exclude data from these families, unemployment was given a code of 20.00, which was just below the
lowest occupation code. The means for family SES scores by gender can be found in Table 11. Of the entire sample, 209 sets of parents completed the occupational ratings and provided enough information to make a classification possible. Thus, information was missing for 9 children participating in the study.

Bivariate correlations were run between SES, relational goals and the symptomatology outcome measures. All correlations were found to be non-significant.

**Cross Informant Bivariate Correlations Among and Between Self- and Peer-Report Relational Goal Measures**

The relationships among the relational goal domains were also similar across gender, with affiliation and comfort domains being positively associated with one another within both the self- and peer-report measures. The dominance and affiliation domains and the dominance and comfort domains were also positively correlated for both genders, which was unexpected. As well, dominance and world threat were negatively related while comfort and world threat were positively related for boys. Overall, the results among the goal domains were stronger for boys than girls and for the peer-report measure than for the self-report measure.

As predicted, there was generally a positive association between self- and peer-report relational goal ratings of dominance, affiliation, comfort and world threat dimensions for girls and boys, with the majority of these relationships reaching significance (see Tables 14 and 15). However, the size of the effects between self- and peer-reports of goals was greater for affiliation and dominance goals for girls than for the comfort and world threat domains, although the weaker results were also in the expected direction. Overall, these findings provide some evidence that the relational goals of children may be linked to how others view their goals.
Cross-Informant Bivariate Correlations Between Relational Goals Measures and Teacher Ratings of Externalizing and Internalizing Symptoms

The correlations between the self- and peer relational goal measures and teacher reports of externalizing and internalizing symptoms were examined. The results were stronger overall for boys than for girls and for peer-reports than for self-reports of goals (see Tables 16 and 17).

Girls

None of the relationships between self-reports of goals were related to any of the outcome measures of externalizing and internalizing behaviour.

For peer-reports, teacher ratings of internalizing symptoms were positively associated with world threat goals and negatively related to self-reports of affiliation goals, as anticipated. Thus, those participants who perceived the world as threatening and who did not value being close with others were more likely to be rated by teachers as exhibiting greater symptoms of anxiety and depression.

Boys

Self-reports of comfort and world threat goals were negatively related to teacher reports of externalizing symptoms, as expected. However, comfort goals were negatively related to internalizing symptoms, contrary to the hypothesis.

For peer ratings, reports of dominance were positively related to symptoms of externalizing behaviour, as predicted. As well, dominance and affiliation goals were negatively related to internalizing symptoms while world threat goals were positively associated with internalizing symptoms, as anticipated.

Overall, these findings provide support for the hypotheses and suggest that students who are perceived by their teachers as exhibiting more anxiety and depression symptoms are less
likely to be rated by peers as valuing closeness to others and are more likely to be rated by peers as perceiving the world as threatening.

**Cross-Informant Bivariate Correlations Between Relational Goals Measures and Student-Report Ratings of Anxiety**

**Girls**
Self-reports of world threat goals were positively related to their own ratings of anxiety, as expected. Thus, those students who perceived the world as threatening were more likely to report feeling anxious (see Table 16).

Peer-reports of world threat goals were also positively related to student ratings of anxiety, as predicted.

**Boys**
Student ratings of anxiety were positively related to world threat goals, as predicted and negatively related to affiliation goals. Thus, those students who reported feeling more anxious were more likely to perceive the world as threatening and less likely to value being close to others (see Table 17).

Peer-reports of comfort and world threat goals were positively related to student ratings of anxiety, as predicted.

As expected, both self- and peer-reports of world threat were positively associated with self-reports of anxiety. Thus, those students who were more anxious were more likely to rate themselves and be rated by peers as being perceiving the world as threatening. However, a weaker relationship was found for the comfort from others dimension.

Overall, the correlations provide support for a positive relationship between world threat goals and internalizing symptoms and for a negative relationship between affiliation goals
and internalizing symptoms. Thus, these results suggest that the presence or absence of certain goals may be linked to the presence of behavioural or emotional disorders.

**Testing the Direct Relationships Between Relational Goals and Symptomatology**

The Role of Gender

Before any analyses were conducted regarding the hypotheses, multivariate analyses of variance were conducted with gender as a predictor and dominance, affiliation, comfort and world threat as outcome variables. If differences occurred, it would be important to ensure that they were accounted for when examining relationships between the other variables. Analyses were not conducted between gender and the symptomatology outcomes, as these measures are standardized within gender. Multivariate multiple regression analyses were conducted for self and peer domains separately.

For the self domain, a significant multivariate main effect was found for gender, $F(4, 213) = 10.79, p < .001$. Univariate analyses revealed that there were gender differences in terms of affiliation, $F(1, 216) = 5.88, p < .016$, comfort, $F(1, 216) = 28.83, p < .001$ and world threat, $F(1, 216) = 23.17, p < .001$. In all of these cases, girls rated themselves significantly higher than did boys, which is consistent with research suggesting that girls have a stronger need for closeness to others (e.g., Strough & Berg, 2000). Contrary to the prediction, no gender differences were found for dominance, $F(1, 216) = 1.54, p < .215$, although boys rated themselves slightly higher than did girls (see Table 18 for means).

For the peer domains, a multivariate main effect was found for gender, $F(4, 213) = 34.65, p < .001$ and thus the univariate analysis for each relational goal domain was examined. Gender differences were found in all four goal domains. Girls were rated as having stronger affiliation goals than were boys, $F(1, 216) = 29.60, p < .001$. Girls were also rated by peers as having stronger comfort goals, $F(1, 216) = 106.94, p < .001$ and world threat goals than were boys, $F(1, 216) = 33.25, p < .001$. Conversely, boys were rated by peers as having stronger dominance goals than were girls, $F(1, 216) = 3.96, p < .048$ (see Table 18
for means). These results are also consistent with the literature that supports the idea that boys are more dominant than are girls (e.g., Rose & Asher, 1999) while girls desire more affiliation from others (e.g., Strough & Berg, 2000). There was a stronger gender effect for peer ratings of dominance than for self-report ratings. Although the effect for self-report ratings did not reach significance, it was in the expected direction.

Overall, gender played a significant role in almost every relational goal domain for the both self- and peer-report relational goal measures. Clearly, peers perceived boys as being more dominant than they perceived girls. Conversely, girls perceived themselves and were perceived by peers as desiring more affiliation from others and feeling the need to receive comfort from others than did boys. Because of this strong relationship between gender and relational goals, gender was used as a covariate in subsequent analyses.

Separate predictions were made with regards to teacher ratings of externalizing and internalizing symptoms and relational goals. However, because internalizing and externalizing symptoms were correlated with one another for both girls ($r (117) = .50, p<.001$) and boys ($r (101) = .32, p<.001$), partial correlations were calculated for the relational goal domains in order to covary out the effect of one variable on the other. The results are presented separately by gender since it was found to play such a significant role with regards to relational goals.

Girls

Externalizing

For girls, after controlling for internalizing symptoms, externalizing scores were marginally related to peer-report ratings of dominance, as expected. Specifically, girls rated by peers as valuing dominance goals were more likely to have symptoms of aggression and delinquency (see Table 19).

Internalizing

After controlling for externalizing symptoms, internalizing symptoms were negatively
associated with peer dominance and positively associated with ratings of world threat, as expected (see Table 19). Internalizing symptoms were also negatively correlated with affiliation ratings. The comfort domain was marginally negatively related to teacher reports of internalizing symptoms, which was unexpected. A possible explanation for this result was the strong relationship found between the comfort and the affiliation domains, such that needing to receive comfort from others may have been interpreted as being more indicative of affiliative behaviour, rather than being perceived as a need for comfort in times of stress. However, these results support the hypothesis that the other protection goal, namely world threat ratings, are positively related to internalizing symptoms.

Boys

**Externalizing**

For boys, after controlling for internalizing symptoms, self-reports of world threat were negatively associated with externalizing symptoms as expected, suggesting that more aggressive boys were less likely to perceive their world as threatening than were less aggressive boys. Self-reports of affiliation goals were marginally positively to externalizing symptoms, which was not anticipated but was consistent with the literature (e.g., Coie and Dodge, 1988; see Table 20).

For boys, peer ratings of affiliation and dominance were positively associated with externalizing symptoms, while peer reports of world threat were marginally negatively correlated with externalizing symptoms. Thus, the evidence supports the hypothesis that students who were rated as valuing dominance and who did not perceive their world as threatening were more aggressive and delinquent than boys without these goal levels. However, the positive association between externalizing symptoms and affiliation was not predicted.

**Internalizing**

After controlling for externalizing symptoms, internalizing symptoms were marginally
positively associated with self-reports of world threat. Thus, the more boys perceived the world as threatening, the more internalizing symptoms they had (Table 20).

Peer reports of dominance were negatively related to internalizing symptoms, while peer world threat ratings were positively associated with internalizing symptoms, as predicted. Peer ratings of affiliation were also negatively associated with internalizing symptoms.

Overall, these results lend support to the hypothesis that higher dominance goals and lower world threat goals are related to greater externalizing symptoms while higher world threat goals and lower dominance and affiliation goals are associated with greater internalizing symptoms (see Figure 1). Once again, peer ratings of goals proved to be more strongly related to teacher ratings of symptomatology than were self-reports of relational goals, although the effects found were generally small to medium sized (Cohen, 1977). As well, the results were stronger for the boys than for girls on the outcome variables. Thus, although this result was not anticipated, it suggests that relational goals were more strongly associated with symptomatology ratings for boys in the sample than they were for girls.

**Testing the Balance of Goals Within Individuals**

The previous analyses examined how children differed from one another in terms of relational goals and how those goals may be related to the presence of behavioural or emotional disorders. For instance, do children with high externalizing ratings value dominance and protection more than do children with low externalizing ratings? In these examples, it is possible that different children could account for the relationship between dominance goals and externalizing symptoms than children with low protection goals. Thus, the previous analyses did not address the issue related to the balance of goals within individuals. This hypothesis was tested using the next set of analyses. That is, do children with higher levels of a particular goal relative to other goals have different ratings of externalizing and internalizing symptoms than individuals with relatively evenly balanced goals? For example, one might predict that children with higher dominance goals as
compared with affiliation and protection goals would be rated more highly on externalizing symptoms than would children with equally high yet more balanced levels of goal domains.

Difference scores between certain goals were created based on the hypotheses and were entered as predictor variables. Calculating a difference score allowed for an examination of the balance of goals within individuals by comparing those individuals with high discrepancies between goals versus individuals with a more even distribution of goals. For example, predictions made with regards to externalizing symptoms led to the creation of difference scores as follows: dominance subtracting affiliation, dominance subtracting comfort and dominance subtracting world threat. Thus, the strength of one of the goals could be ascertained relative to the strength of the other goals. These difference scores were entered into the regression equations as dummy variables, where “1” represented a high discrepancy between scores. Thus, students in the top 25% of the distribution on any of the difference scores (“high” group) were compared to those students below the 75th percentile (“low” group) in terms of symptomatology ratings. Z scores were calculated within each gender and used to form difference scores since gender was found to be strongly associated with relational goals.

In order to determine how the relative proportions of relational goals within individuals might be related to internalizing or externalizing symptomatology, hierarchical regression equations were constructed. These analyses enable the effects of particular independent variables to be examined after controlling for the effects of others. Thus, the unique amount of variance attributed to individual predictors in terms of the outcome variable can be ascertained. The rating of internalizing or externalizing symptomatology was entered as the outcome variable. The other symptomatology score was entered first into the equation in order to partial out its effects. Gender was entered as another covariate. The relational goals were then entered in a hierarchical manner. Thus, it was possible to examine the unique effects of each goal while controlling for the others. Multicollinearity was assessed in each model and the predictors were found to be within acceptable limits in terms of tolerance. Interactions between the relational goals and gender were also entered but
produced either weak effects or were only significant when another interaction term was in the equation. Interaction terms were only left in the model if they were significant on their own. The results are described below and are summarized in Table 21.

Teacher Reports of Externalizing Symptoms

Self Domain

Three difference scores were entered hierarchically into the equation after controlling for internalizing symptoms and gender: ‘valuing dominance more than comfort goals,’ ‘valuing dominance more than affiliation goals’ and ‘valuing dominance more than world threat goals.’ The results indicated that there was no effect due to gender, however those students who valued dominance goals more than comfort goals were more likely to have higher externalizing symptoms (see Table 21). Thus, students who valued winning in relationships more than receiving comfort from others were more likely to engage in aggressive or delinquent behaviour. In addition, students who valued closeness with others more than winning in relationships were more likely to be rated as having higher externalizing problems over and above the variance accounted for by the previous relationship. This result was not anticipated and is considered in the discussion.

Peer Domain

For the peer ratings, students who valued dominance more than world threat goals were more likely to have more symptoms of aggression and delinquency (see Table 21). Such students would likely approach a situation with the idea that winning was important and at the same time not perceive the world as threatening and thus experience little fear of reprisals.

Teacher Reports of Internalizing Symptoms

Self Domain

For both the self and peer ratings, two difference scores were entered hierarchically into the equation after controlling for externalizing symptoms and gender: valuing comfort more than dominance goals and valuing world threat more than dominance goals, based on the
hypotheses. For the self-report ratings, there was no effect due to gender. There was a marginally significant effect such that students who valued world threat more than dominance goals were somewhat more likely to have higher internalizing symptoms. These students were likely somewhat fearful in stressful situations and would be less likely to try to want to win in relationships (see Table 21).

Peer Domain
For the peer ratings, students who valued world threat more than dominance goals had higher internalizing symptoms. Thus, these results provide further evidence that students rated as perceiving the world as threatening more than valuing winning in relationships are more likely to experience symptoms of depression and anxiety (see Table 21).

Student Reports of Anxiety Symptoms
Self Domain
Like the predictions made for teacher ratings, two difference scores were entered hierarchically into the equation at once after controlling for gender: valuing comfort more than dominance goals and valuing world threat more than dominance goals. For the self-report domain there was a main effect due to gender, with boys having higher internalizing ratings than did girls (see Table 21). A closer analysis of this result indicated that it was boys in grade 6 who had significantly higher anxiety scores than did girls in the same grade, \( F(1,69)=7.65, p<.007 \). No significant differences were found for boys and girls in grades 7 or 8. Not only was this result unexpected but it is difficult to interpret, as boys' ratings of anxiety were also higher, although not significantly so, than girls in grades 7 and 8.

Over and above the gender effect, students who valued world threat more than dominance goals accounted for unique variance in anxiety symptoms. Again, this result is consistent with earlier findings that students who perceive the world as threatening more than valuing winning in relationships are more likely to be anxious.
Peer Domain
In terms of the peer ratings, anxiety symptoms were predicted by gender only (with boys rating themselves higher than did girls), as there were no significant relational goal effects (see Table 21).

In sum, students who valued dominance more than protection goals accounted for unique variance in externalizing symptoms, while children who valued world threat over dominance goals better predicted internalizing symptoms as rated by teachers and by the students’ own ratings. Thus, there appears to be a link between a balance of certain relational goals in children and presence of externalizing or internalizing symptoms. However, peer ratings of the relational goals tended to be more consistent with the predictions regarding internalizing and externalizing symptoms.

Factor Analytic Analyses
The design and analysis up to this point was based on the theoretical contention that there are three emotion goal systems that are important in behaviour and psychopathology. The construction of the measures was based on this theoretical premise. However, I wanted to ascertain using a purely statistical approach whether or not the four constructs (dominance, affiliation and protection subdivided into comfort and world threat goals) that I had developed would be confirmed. An exploratory technique using principal component analyses with varimax rotation were conducted for both the self and peer domains. These analyses helped determine whether the different goal dimensions were clustered in a manner different than was conceptualized or whether the four factors should remain constructed as theorized. Specifically, it was important to ascertain whether there was empirical support for the dominance affiliation and the two protection goal domains or whether the items clustered in some other way.

Self Domain
Stevens (1996) suggested specific guidelines for retaining the number of factor loadings. Using the scree test, two factors were found to be reliable. However, this result should be
interpreted with caution, as most of the communalities were low (i.e., less than .70). Using Stevens' (1996) suggestion, only factor loadings of .40 and above were considered significant for practical purposes. He advises that one should only consider factors that share at least 15% of the variance with the construct they will help name. The first factor contained affiliation and comfort items. The second factor contained the rest of the dominance items plus negative loadings of the world threat items. Thus, it appears as though the affiliation and comfort domains were more closely associated, while dominance and low world threat items (i.e., perceiving the world as threatening) clustered together (see Appendix I for the item loadings).

Peer Domain
Three factors as determined by the scree test were found. Again, many of the item communalities (14 out of 24) were lower than .70, which reduced the reliability of these factors. Although three factors were found, Stevens (1996) cautions about using a factor that does not share at least 15% of its variance with the construct it will help name. Thus, the third factor was dropped, as it accounted for only 13.3% of the construct factor variance. A two factor loading model was used instead. The first factor loading contained the affiliation and comfort items with two world threat items (i.e., "bad things will happen" and "unsafe when walking") and several affiliation items. The second factor contained the dominance items with some negative world threat items (i.e., "others won’t hurt me,” “others are not mean” and “safe when walking”). Generally, affiliation and the “positive” protection items formed the first factor score, while dominance and the “negative” world threat items formed the second factor score (see Appendix I for item loadings).

Overall these results were consistent across the domains and suggest that based on a purely statistical approach, the relational goal domains may be conceptualized in a different manner than the theoretically driven model. Specifically, the items seemed to cluster around two primary factors: one factor that represented the “positive” items related to being close and seeking comfort from others and a second factor that contained items related to winning and perceiving the world as less threatening. These analyses were intended to be
purely exploratory in nature and given the strong theoretical basis upon which the relational goal dimensions were constructed, four distinct goal domains were utilized in the present study.
DISCUSSION

The present study was the first of its kind to include protection goals of children in addition to dominance and affiliation goals and to examine the balance of these relational goals in children. Because relational goals underlie emotions, it is essential to learn more about them in order to prevent long-term negative outcomes, such as the development of psychopathology. Erdley and Asher (1999) emphasized the importance of targeting children's relational goals in the treatment of emotional and behavioural disorders because goals are one of the underlying factors that affect children's behaviour.

The purpose of the study was twofold: first, to determine whether the balance of different relational goals within individuals was linked to specific emotional and behavioural symptoms. Second, it was important to ascertain whether there was an association between relational goals as rated by children and by their peers. These goals were accomplished by developing and evaluating self- and peer-report measures of relational goals.

Summary of Results

Self Domain
Relational goals as reported by the participants in the study were evaluated in terms of their direct relationships with teacher ratings of symptomatology. A different set of analyses was conducted to examine the balance of relational goals within individuals and how they related to externalizing and internalizing symptoms.

It was hypothesized that externalizing symptoms would be positively related to self-reports of dominance scores while being negatively related to affiliation, comfort and world threat scores once the effect of internalizing symptoms was removed. Boys' own ratings of world threat were negatively associated with externalizing symptoms, as hypothesized, while self-report ratings of affiliation goals were marginally related to externalizing symptoms, which
was unexpected. Contrary to the hypotheses, none of the self-rated goal domains were related to externalizing symptoms for girls.

Once the overlapping variance between externalizing and internalizing symptoms was accounted for, it was predicted that internalizing symptoms would be positively correlated with self-rated comfort and world threat scores, while being negatively correlated with dominance goal ratings. Although many of the relationships were in the expected direction, none of them reached significance for either boys or girls. However, there was a marginal positive relationship between boys' ratings of world threat and internalizing symptoms.

The balance of children's goals was assessed to determine which proportion of goals predicted externalizing or internalizing symptoms. As expected, children who valued dominance more than comfort goals were more likely to have higher externalizing symptoms. Thus, those students who had strong goals about winning with a comparatively weaker need to receive comfort from others were more likely to be perceived by teachers as engaging in aggressive and delinquent behaviour. In addition, children who valued affiliation more than dominance goals predicted externalizing symptoms over and above the first effect. This result was not anticipated and is difficult to interpret, as it indicates that children with very high affiliative goals as compared with dominance goals are more likely to have greater externalizing symptoms, which seems counterintuitive.

Contrary to the hypothesis, internalizing symptoms were not related to students who valued comfort over dominance goals. A trend was found for children valuing world threat more than dominance goals, but this effect did not reach significance.

A self-report measure of anxiety was included, since internalizing symptoms are difficult for external raters, such as peers and teachers to assess (e.g., Flannery, 1990). Similar predictions were made regarding students' relational goals and their ratings of anxiety.
However, evidence for such relationships was not considered as powerful as the cross-informant relationships because both ratings were obtained from the same individual.

Direct relationships were found between boys’ and girls’ ratings of world threat goals and students’ ratings of anxiety, as expected.

In terms of the balance of goals, as predicted, children who valued world threat more than dominance goals rated themselves as being more anxious than did children with a more even distribution of goals. Thus, there is added support for the finding that those children who perceived the world as threatening more than valuing winning in relationships were more likely to have heightened feelings of anxiety.

**Peer Domain**

As expected, peer ratings of girls and boys’ dominance goals were positively related to externalizing symptoms after controlling for the effects of internalizing symptoms. Peer ratings of world threat goals were negatively associated with externalizing symptoms as predicted, although this effect occurred only for boys.

For boys, affiliation goals were positively related to externalizing problems, which was contrary to the hypothesis. However, this result may not be entirely surprising, as some research suggests that there is a subtype of aggressive children (typically boys) who also have a certain degree of social skills as well. Some researchers (e.g., Coie & Dodge, 1988; Coie, Dodge & Copottelli, 1982; Dodge, 1983) have coined the term “controversial” to describe these boys. When using both negative and positive peer nomination scores, controversial boys have been shown to be more aggressive and disruptive than popular and rejected boys but are also well-liked and are less likely to engage in solitary play. Thus, the finding that affiliation and externalizing symptoms are positively correlated for boys seems to be consistent with this literature. Although the literature describes boys’ behaviour, it
seems possible that these children have comparable underlying goals related to affiliation that are reflected in their prosocial behaviour.

Once externalizing symptoms were removed, internalizing symptoms were negatively related to dominance and positively associated with world threat goals for both genders, as predicted. As well, internalizing symptoms were also negatively related to affiliation goals. Thus, children who were more anxious or depressed were less concerned about winning and being close with others and perceived their environment as more threatening. The first finding is also consistent with the literature regarding depression (e.g., Gilbert et al., 1995) which links low dominance goals (i.e., submissive goals) with feelings of sadness and anxiety. However, contrary to the hypothesis, internalizing symptoms were marginally negatively related to peer ratings of comfort goals for girls.

In terms of the balance of goals, valuing dominance more than affiliation goals was not associated with externalizing symptoms, contrary to the hypothesis. However, as expected, children who valued dominance more than world threat goals were more likely to have higher externalizing symptoms.

There appears to be a link between valuing winning more than the need to be protected in relationships and expressing these goals in an aggressive manner. An extreme example of such a personality profile might be that of psychopathy. Researchers have investigated a small group of children who demonstrate a lack of concern for others, a lack of guilt and low levels of anxiety (e.g., Christian, Frick, Hill, Tyler & Frazer, 1997). The first group is also characterized by deficits in emotional functioning (e.g., O'Brien & Frick, 1996). This finding may account for the children in the present sample who were the most aggressive and who had the highest dominance goals compared with goals related to comfort and world threat. These low levels of protection goals may be interpreted to mean that these children do not feel the need to seek out others as a source of comfort. Other studies have suggested that anxiety may play a protective role, such that conduct disordered children
who also have accompanying levels of anxiety are less impaired than conduct disordered children without anxiety (Walker, Lahey, Russo, Frick, Christ, McBurnett, Loeber, Stouthamer-Loeber & Green, 1991). However, other researchers (e.g., Zoccolillo, 1994) have disputed such findings.

Contrary to the hypothesis, internalizing symptoms were not related to valuing comfort more than dominance goals. However, those children who valued world threat goals more than dominance goals had higher internalizing symptoms. Children with this profile perceive the world as threatening and are much less likely to want to win in relationships. Such children would almost certainly appear anxious and sad, not only due to their perception of the world as threatening, but perhaps due to being bullied by their peers. Thus, their anxiety may be exacerbated by being victimized by more controlling classmates (e.g., Coie et al., 1990). This finding is also consistent with the research of Gilbert et al. (1995). As outlined previously, these authors linked depression to “an activation of an evolved internal inhibitory system under conditions of perceived involuntary, subordinate status and self-evaluation” (p. 743). Thus, it is not surprising that weak goals related to winning, combined with the perception of the world as threatening would be associated with anxiety and depression in children.

Peer ratings of relational goals and student reports of anxiety were also examined. It was hypothesized that comfort and world threat goals would be positively related to ratings of anxiety. This hypothesis was confirmed for boys, although only world threat goals were positively related to internalizing symptoms for girls.

For the balance of goals hypotheses, it was predicted that those students who valued comfort more than dominance goals and students who valued world threat more than dominance goals would be related to higher anxiety ratings. However, neither of these relationships was confirmed.
Overall, many of the hypotheses regarding relational goals and symptomatology scores were supported. Although many of the results were stronger for boys than girls and for peer-report ratings rather than for self-report ratings, there seems to be a clear pattern between higher dominance goals, lower world threat goals and externalizing symptoms. In particular, it appeared as though children who valued dominance more than protection goals engaged in more aggressive and delinquent activities than children without such goal discrepancies. Internalizing symptoms appeared to be related to an absence of dominance goals and the presence of world threat goals. However, the connection between affiliation goals and internalizing symptoms remains somewhat unclear. In terms of the balance of goals, internalizing symptoms seemed to be the greatest in children who valued world threat more than dominance goals. These results confirm that in addition to the absence or presence of different goals, it is a particular combination of goals that can be linked to the presence of emotional and behavioural problems. Weaker but similar results were found for students' own ratings of anxiety and relational goals (see Tables 1 and 2).

Comparing Results from the Self and Peer Domains
The peer-report measure was included in the study in order to help validate the self-report measure by providing additional information about relational goals. A positive relationship between self-reports of relational goals and reports from peers within the relational goal domains was expected. As predicted, there were positive correlations between all self and peer relational goal domains (although the relationships for the comfort and world threat goals for girls were nonsignificant), indicating that the participants rated themselves similar to their peers on all four dimensions of dominance, affiliation, comfort and world threat. These positive associations also provided evidence for the reliability and validity of the self-report measure.

There were distinct patterns found between goals and symptomatology for the self and peer goal domains. Generally, stronger findings were obtained for peer-reports of relational goals than for self-report ratings, suggesting that inferences made by peers about others’
goals are more similar to the behavioural ratings made by the teachers, which also involve inferences about behaviour. It would be interesting to have included a self-report measure of behavioural and emotional symptoms, such as the Youth Self Report (Achenbach, 1991b) to examine how related students' ratings of their behaviour and their goals actually are. Overall, this finding suggests that it is important to include peer ratings when assessing relational goals because they may provide additional and somewhat different information about the nature of others' relational goals than asking participants about their own goals. This issue will be discussed further in the "limitations" section to follow.

By cross-referencing the results between the self and peer domains, it is possible to assign a certain degree of confidence to those results that were confirmed in both domains. For example, the negative relationship found between world threat goals and externalizing symptoms and the positive relationship between world threat goals and internalizing symptoms was confirmed by both self and peer ratings. In addition, some of the results obtained from the balance of goals analyses were strengthened because of the multi-informant model. The results obtained comparing the dominance and the protection goals and their relationships to both externalizing and internalizing symptoms for both the self and peer domain were more conclusive. However, the results regarding affiliation and these symptoms were more tenuous, since support was not as strong within the peer domain.

The Role of Gender
Past research has documented how boys are more likely to have goals related to dominance (e.g., Rose & Asher, 1999), while girls are more likely to desire closeness from others (e.g., Chung & Asher, 1996). On this basis, the gender of the participants was expected to result in different patterns of goal ratings. As expected, girls rated themselves and were rated by peers as valuing affiliation, comfort and world threat goals more than were boys. However, the distinct patterns of relationships between the goal ratings and teacher reports of externalizing and internalizing symptoms between the two genders was not anticipated. In
terms of the direct relationships between goals and anxiety, the results were stronger for boys than for girls. Specifically, boys reported higher anxiety ratings than did their female classmates, which was surprising and contrary to previous literature findings. A closer inspection of the data revealed that the significant result occurred primarily for the grade 6 participants, with boys rating themselves significantly higher on a self-report measure of anxiety. This result was unanticipated, as epidemiological studies have shown that girls are more likely to have anxiety disorders than are boys (e.g., Anderson, Williams, McGee & Silva, 1987; DSM-IV; American Psychiatric Association, 1994). These results are somewhat peculiar and may be idiosyncratic to this sample. However, the role of gender in how relational goals are rated is quite pronounced and should be considered in future studies.

Limitations of the Study
Although the current study has many strengths, there were some limitations that may have minimized some of the effects. First, the effects obtained were generally small to medium sized (Cohen, 1977). Second, the effects obtained were not as strong for the self-report goal ratings as they were for the peer-report findings. Although the relationships found were generally in the expected direction, the results raise some questions about the validity of the self-report relational goal measure. Because relational goals are so hard to describe, these weaker effects may have been the result of a measurement issue rather than a conceptual one. Other researchers have developed different ways of capturing goals based on the idea that they are best measured in a subtler manner. For example, the Adult Attachment Interview (AAI) developed by George, Kaplan and Main (1985) taps into attachment styles by using an interview format to elicit information about early relationships. As discussed earlier, attachment styles may be seen as reflecting different goals. For example, a secure attachment style may reflect people who value closeness to others, while an anxious or preoccupied attachment style might reflect people who value protection from others. Questions about early losses and separation from parents are asked. Trained coders then look for patterns and clues in the speech of the participants to make
inferences about the underlying forces driving relationships. On this basis, adults are
classified into an attachment category that corresponds with childhood attachment
classifications (i.e., secure, ambivalent, avoidant).

This narrative approach is similar to the assessment tools utilized by some therapists who
use the process of transference in order to better understand the fundamental processes at
work within their clients (e.g., Luborsky & Crits-Christoph, 1989). By analyzing
narratives, relational goals and emotions are revealed to the therapist in a manner that may
be more accurate than asking clients questions about their goals directly. Other researchers
have attempted to measure the internal representations of children with a variety of
attachment styles through narrative techniques (e.g., Bretherton, Ridgeway & Cassidy,
1990). In one study, Warren et al. (2000) provided children with story stems that contained
themes of separation or moral dilemmas. Children who had negative expectations about the
ending of the stories were more likely to be anxious and to have parents who were anxious
themselves.

Although these means of capturing goals within individuals are promising, they are
typically very time consuming and require trained individuals to ask pertinent questions and
to interpret the information obtained. Even for measures demonstrating sufficient
psychometric data, it can be very difficult to obtain adequate reliability levels (Sattler,
1982). The self-report measure developed in the present study may be viewed as a step
forward from a purely observational approach while taking a more direct way of eliciting
information about goals than a narrative method. Perhaps a middle ground approach needs
to be investigated in which the subtlety of the narrative or discourse analysis methods are
maintained while the brevity and more ‘user friendly’ method employed in the current
study is utilized. In addition, measures used in the collection of data from children need to
be specially tailored for this population to ensure that the children understand the questions
posed to them.
A possible limitation of the study concerns the idea of what was actually being measured in the self- and peer-report questionnaires. Specifically, the question of whether the peer-report questionnaire measured peer perceptions of classmates' goals or simply behaviour needs to be discussed. The issue of measuring goals is particularly challenging, as they are cognitively-based, amorphous structures that underlie both emotions and psychopathology. The question about the extent to which goals are within conscious awareness may not be resolved. However, if children are aware of their goals once having reflected upon them, it seems likely that using questionnaires similar to those used in the Erdley and Asher (1998) study and the measures used in the present study would be a good means of capturing this information. The question of how accessible goals are also highlights the importance of including both self- and peer-reports with the understanding that these two types of ratings may yield similar yet distinct information about a person's goals.

Unlike self-reports, peer-reports rely on inferences made about goals. However, because an inference is involved, peer ratings of goals are more than simply behavioural ratings. For instance, I would argue that there is a distinct difference between asking a student whether a classmate co-operates frequently with others as opposed to whether the student thinks that it is important for the classmate to co-operate with others. Thus, the possibility exists in the mind of the rater that although a peer may not co-operate with others all of the time, there is an underlying importance for that person to do so. Having said this, it is apparent that inferences made about others' goals are not the same as when self-report ratings are used, since the degree of information known to the outside rater is more limited.

Because the goals being measured were relational in nature, it was deemed necessary to include peer ratings in order to capture as much information about goals as possible. While self ratings may be thought of as a "purer" measure of relational goals, they are also subject to some disadvantages. As mentioned previously, relational goals may not be entirely accessible to individuals. In fact, there may be different processes that cloud the accuracy of such ratings. Factors such as social desirability (Routh, 1990) may come into play so
that individuals project the best image of themselves rather than admitting to less desirable characteristics. Thus, self-reports provide a less tainted version of goals because they do not require that inferences be made, while peer-reports provide a less biased measure of goals because they reduce the likelihood of such factors as social desirability. Given that both self- and peer-reports of relational goals have their strengths and disadvantages, it would seem appropriate, if not necessary, that both types of ratings were included in the measurement of these goals.

Another limitation of the study involves the use of behavioural ratings of symptoms by teachers. Although such methods are routinely employed (Miller, Boyer & Rodoletz, 1990), there are different means of obtaining information about the emotional and behavioural problems of children. Clinical interviews are widely used but they require trained personnel and are usually lengthy to administer. Behavioural ratings can be useful because they do not rely on retrospective data. However, they require that the observations be accurate and also require considerable time to complete. Increasingly, standardized assessment methods have been developed that allow a clinician to make a diagnosis. For example, the Diagnostic Interview Schedule for Children (Costello, Edelbrock, & Costello, 1985) is a structured interview in which anxiety and depressive disorders can be diagnosed. These types of instruments have good reliability and validity (Miller et al., 1990) and allow for a detailed account of a child’s functioning to be assessed. Again, time constraints and the need for qualified clinicians to administer the questionnaires eliminated the possibility of using such an assessment tool.

An issue that needs to be addressed is the question of whether world threat ratings are goals or are in fact more reflective of a behavioural state. As mentioned previously, these ratings were included based on the theoretical premise that an individual needs to be in a threatened state in order for “comfort” goals to be activated (e.g., Bowlby, 1971). While world threat goals had a clear and direct relationship to both externalizing and internalizing symptoms, the case could be made that they are a behavioural response related to anxiety
rather than representing a goal. As such, the construct underlying world threat may involve a different process than the three other goals examined in the study. For example, in the case of dominance, affiliation and comfort goals, the individual has needs that can only be fulfilled by seeking out particular relational experiences. Conversely, perceiving the world as threatening may reflect more of a behavioural state as the result of an external danger. Thus, in the future, issues pertaining to the measurement of protection goals should be re-examined. Specifically, researchers may want to assess comfort goals only once an individual's well being is seriously threatened which would likely prove to be a better test of their relationship with externalizing and internalizing symptoms. However, despite the conceptual issues related to world threat, there was a significant degree of association between them and comfort goals, which suggests that both should be included in some form in order to best measure the concept of protection goals.

In addition, judging by the students' ratings, a possibility exists that they strongly associated the affiliation and comfort domains. The researchers intended for the latter domain to represent the need to receive comfort in times of stress, whereas the students may have interpreted these items to be more affiliative in nature. The factor analysis seemed to confirm this possibility as the comfort and affiliation items clustered together for both the self and peer domains (see Appendix 1). As such, it is not surprising that the world threat domain seemed be somewhat more related to externalizing and internalizing symptoms than was the comfort domain. Although the world threat and the comfort from others domains were positively related, there appears to be enough of a distinction to suggest that the two concepts represent two different types of relational goals. Whereas world threat ratings were related to internalizing symptoms, items in the comfort domain may have been perceived as a more socially desirable characteristic than representing a goal related to comfort in times of stress. One possibility is that children in the study were not in a state of threat and thus their comfort goals may not have been activated as they might be in a real world situation. Other researchers should attempt to examine the relationship between these two protection goals and how they may or may not be related to affiliation. In
addition, questionnaires should be refined to reflect these differences so that participants do not become confused. While future studies may endeavor to determine the extent of the differences between the two protection dimensions, it is clear that results were obtained linking the comfort dimension to particular emotional and behaviour symptoms. Thus, relational goal dimensions may prove worthwhile to study in subsequent research programs.

The sample was restricted in terms of externalizing and internalizing symptoms, reflecting children who were largely well-adjusted. This factor may be partially due to the high socioeconomic status of many of the families. While there was little variance in terms of the outcome variables, the merits of collecting data from a sample from the general population rather than from a clinical sample outweighs the drawbacks. High socioeconomic status scores aside, the results obtained in the present study are far more generalizable to other samples than would be data collected from a more specialized group. It can be said with a certain degree of confidence that the issues facing the students in the present study reflect the issues that are confronting many children in large urban North American areas.

Finally, there were other issues that arose with regard to the peer ratings. First, there were concerns that some peers would not be familiar with students they were asked to rate. However, given the relatively small class sizes, students appeared to be familiar with the vast majority of their classmates. In fact some children rated their closest friends, thus making it difficult to ascertain whether the ratings were accurate or whether they were positively inflated. The concern about a bias towards making high affiliation ratings is illustrated in a study by Doyle, Connolly and Rivest (1980) who found that children prefer familiar over unfamiliar peers as companions. It is likely that such positive ratings will occur in schools with relatively small classes where students know each other well. However, this issue should be examined more carefully in future studies.
Strengths of the Study
This study was the first of its kind to examine the balance of relational goals in relation to externalizing and internalizing symptomatology in the general population. In order to assess relational goals, a self-report measure of four goal dimensions was constructed. The rationale for developing new measures was based on the fact that no questionnaires existed which measured protection dimensions in addition to dominance and affiliation dimensions. As well, previous questionnaires typically used a vignette format in which only conflictual situations were portrayed and the measures consisted of only a few items for each relational goal (e.g., Jenkins & Greenbaum, 1999; Lochman et al., 1993). The current self- and peer-report measures are comprehensive in scope, as each goal is represented by several items. Students were asked to make ratings based on their goals regarding others that may or may not involve conflict (e.g., wanting to be the boss, enjoying playing with others). The measures are easily administered to children as young as 10 years old. Thus, the measures developed were best suited to the objectives of the current study.

Over 200 children participated in the study with a relatively equal gender distribution (117 girls to 101 boys). Multiple informants were used to assess relational goals (i.e., self and peer ratings) while teachers assessed the participants in terms of externalizing and internalizing symptoms. Not only did the multiple informants model help validate the measures developed, but it also strengthened the methods and analysis sections, since the effects of intra-informant issues were eliminated.

Future Directions
A longitudinal design would greatly enhance the research on relational goals and psychopathology. Jenkins and Greenbaum (1999) found that dominance and affiliation goals as measured by single items are relatively stable over a one-year period. As well, these researchers were able to examine the relationship between goals and teacher ratings of psychopathology one year later. Such designs enable psychopathology ratings to be predicted by relational goals as assessed at an earlier time to determine the direction of the
relationships. In the present study, directionality of the relationships between goals and the outcome variables could not be ascertained because of the cross sectional nature of the data.

Once longitudinal studies have been undertaken to examine the role of relational goals in the development of psychopathology in both normative and clinical samples, intervention programs should be researched in order to help children at risk for developing emotional and behavioural disorders. Some intervention programs targeting children's relational goals have had some degree of success (e.g., Guerra & Slaby, 1990; Rose & Asher, 1999). In fact, Erdley and Asher (1999) stress that goals may be even more important than focusing on other factors, such as social skills, for this very reason. However, future programs should be developed to include protection goals in addition to dominance and affiliation dimensions. Perhaps such programs could target children's relational goals by administering self- and peer-reports similar to the ones developed for the present investigation. After determining which goals were predominant, intervention programs could be implemented to explore alternative and more adaptive ways of thinking about relationships.

The model conceptualized in the present investigation was based on the notion that long-term emotional states underlie goals and lead individuals to interpret goals and events in a particular manner. Thus, dominance goals were hypothesized to be related to an emotional state centering on anger, while protection goals were thought to be related to feelings of sadness and anxiety. Although results from the study support this model, it would also be informative to examine the short-term emotional reactions when goals are and are not met. For example, if a child who has strong dominance goals succeeds in his or her need to win in relationships, what emotion would be experienced? Would this child experience a positive emotion once the goal was achieved, or would the child continue to feel angry? Subsequent research investigations could include a more direct examination of this question by targeting specific goals and asking children about their emotional reactions in response
to the outcome. In this manner, a clearer understanding of the relationships between short-
term emotions, goals and behaviour would be gained.

Another direction suggested by the present research pertains to the results obtained in the
principal component analyses, which revealed that there may be different ways of
conceptualizing relational goals. The affiliation and comfort domains appeared to load on
the same factor for both self and peer domains. As well, dominance questions plus
"positive" world threat questions seemed to form another factor. These findings suggest
that there may be a common element underlying the affiliation and comfort dimensions,
such as a desire to be close to others, while a confident and assertive as opposed to
submissive attitude about one's place in relationships and in the world may underlie the
dominance and "positive" world threat items. Although it would be interesting to
investigate whether these results can be replicated in future studies, the present study does
provide ample evidence that the four relational goal domains used are associated with
specific emotional and behavioural problems.

Overall these results provide evidence that specific distributions of relational goals are
related to different forms of emotional and behavioural symptomatology. It seems as
though children who value dominance goals more than protection goals are prone to being
aggressive and engage in delinquent activities. Conversely, children who value strong
world threat goals more than dominance goals are more likely to be anxious and depressed.
What these profiles illustrate is how potentially problematic it can be for children to have
one particularly strong goal and other considerably weaker goals. Perhaps such children are
at risk because one goal is activated more easily and at the expense of other goals. Another
possibility is that it is the specific combination of goals that is important. For example,
strong dominance goals combined with weak world threat goals seem to be related to
aggression, while the reverse combination is related to internalizing symptoms. Future
research should further examine different proportions of goals to see if an even distribution
is more beneficial than having one strong goal with other comparatively weaker goals.
This study contributes to our understanding of how individuals process relational information and how they develop ways to understand their social experiences. Clearly, children as young as 10 years old develop goal structures of an emotional and cognitive nature which are associated with the presence of particular emotional and behavioural symptoms. Learning more about the relationships between emotions, relational goals and behaviour will place mental health professionals in a better position to identify those children at risk of developing psychopathology and to become more proactive in their attempts to help such children.
FIGURES

Figure 1. Relationship between goals, emotions and psychopathology

<table>
<thead>
<tr>
<th>goal structure</th>
<th>long term emotional patterns</th>
<th>psychopathology</th>
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<tr>
<td>dominance</td>
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<tr>
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<td>non-disordered</td>
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<tr>
<td>protection</td>
<td>sadness/fear</td>
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Figure 2. Relationship between balance of goals, emotions and psychopathology

<table>
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<th>psychopathology patterns</th>
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<td>high dominance</td>
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<tr>
<td>high protection</td>
<td>low anger, low happiness, high sadness/fear</td>
<td>internalizing symptoms</td>
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### TABLES

**Table 1. Hypotheses Regarding Direct Relationships Between Relational Goals and Externalizing and Internalizing Symptoms**

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<td>low</td>
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**Table 2. Hypotheses Regarding Balance of Goals and Externalizing and Internalizing Symptoms**

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<th>Behavioural Symptoms</th>
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<td>2) valuing dominance more than affiliation goals</td>
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</tr>
<tr>
<td>3) valuing dominance more than world threat goals</td>
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</tr>
<tr>
<td>1) valuing comfort more than dominance goals</td>
<td>internalizing symptoms</td>
</tr>
<tr>
<td>2) valuing world threat more than dominance goals</td>
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**Table 3. Internal Consistency of Self- and Peer-Report Relational Goal Measures (Cronbach's Alpha) of Pilot Data**

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<th>time 2</th>
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<tr>
<td></td>
<td>world threat</td>
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<td>peer-report measure</td>
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Table 4. Test-Retest Reliability for Self- and Peer-Report Relational Goal Measures (Pilot Data)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Dimension</th>
<th>time 1 and time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-report measure</td>
<td>dominance</td>
<td>.78***</td>
</tr>
<tr>
<td></td>
<td>affiliation</td>
<td>.84***</td>
</tr>
<tr>
<td></td>
<td>comfort</td>
<td>.88***</td>
</tr>
<tr>
<td></td>
<td>world threat</td>
<td>.60***</td>
</tr>
<tr>
<td></td>
<td>dominance</td>
<td>.80***</td>
</tr>
<tr>
<td>Peer-report measure</td>
<td>affiliation</td>
<td>.81***</td>
</tr>
<tr>
<td></td>
<td>comfort</td>
<td>.75***</td>
</tr>
<tr>
<td></td>
<td>world threat</td>
<td>.69***</td>
</tr>
</tbody>
</table>

N=44
*p<.05. ** p<.01. *** p<.001

Table 5. Cross-Informant Agreement between Self- and Peer-Reports of Relational Goals (Pilot Data for Girls)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Peer measure time 1</th>
<th>Peer measure time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>dominance</td>
<td>Self measure time 1</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>Self measure time 2</td>
<td>.06</td>
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<tr>
<td>affiliation</td>
<td>Self measure time 1</td>
<td>-.25</td>
</tr>
<tr>
<td></td>
<td>Self measure time 2</td>
<td>-.18</td>
</tr>
<tr>
<td>comfort</td>
<td>Self measure time 1</td>
<td>-.12</td>
</tr>
<tr>
<td></td>
<td>Self measure time 2</td>
<td>-.25</td>
</tr>
<tr>
<td>world threat</td>
<td>Self measure time 1</td>
<td>-.04</td>
</tr>
<tr>
<td></td>
<td>Self measure time 2</td>
<td>.23</td>
</tr>
</tbody>
</table>

N=21
+ p<.10. *p<.05. ** p<.01. *** p<.001
#with one item removed "some kids want others to comfort them when they are frightened"
Table 6. Cross-Informant Agreement between Self- and Peer-Reports of Relational Goals (Pilot Data for Boys)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Peer measure time 1</th>
<th>Peer measure time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self measure time 1</td>
<td>.09</td>
<td>.07</td>
</tr>
<tr>
<td>Self measure time 2</td>
<td>.45*</td>
<td>.44*</td>
</tr>
<tr>
<td>Affiliation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self measure time 1</td>
<td>.51*</td>
<td>.70***</td>
</tr>
<tr>
<td>Self measure time 2</td>
<td>.57**</td>
<td>.62**</td>
</tr>
<tr>
<td>#comfort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self measure time 1</td>
<td>-.09</td>
<td>.12</td>
</tr>
<tr>
<td>Self measure time 2</td>
<td>-.05</td>
<td>.11</td>
</tr>
<tr>
<td>World threat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self measure time 1</td>
<td>15</td>
<td>.36+</td>
</tr>
<tr>
<td>Self measure time 2</td>
<td>15</td>
<td>.33</td>
</tr>
</tbody>
</table>

N=23
* p<.10. ** p<.05. *** p<.01. **** p<.001
# with one item removed “some kids want others to comfort them when they are frightened”

Table 7. Correlations between the Lochman et al.’s (1993) Measure (dominance, revenge and affiliation) and Self- and Peer-Report Relational Goal Measures (dominance) – Pilot Data

<table>
<thead>
<tr>
<th>Measure</th>
<th>Lochman et al. (1993) measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-report measure</td>
<td></td>
</tr>
<tr>
<td>dominance</td>
<td>Time 1</td>
</tr>
<tr>
<td></td>
<td>.46**</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
</tr>
<tr>
<td></td>
<td>.30+</td>
</tr>
<tr>
<td>peer-report measure</td>
<td></td>
</tr>
<tr>
<td>dominance</td>
<td>Time 1</td>
</tr>
<tr>
<td></td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
</tr>
</tbody>
</table>

N=44
* p<.10. ** p<.05. *** p<.01. **** p<.001

Table 8. Correlations between the Lochman et al. (1993) Measure (dominance, revenge and affiliation) and the Self- and Peer-Report Relational Goal Measures (affiliation) – Pilot Data

<table>
<thead>
<tr>
<th>Measure</th>
<th>Lochman et al. (1993) measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-report measure</td>
<td></td>
</tr>
<tr>
<td>affiliation</td>
<td>Time 1</td>
</tr>
<tr>
<td></td>
<td>-05</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
</tr>
<tr>
<td></td>
<td>-.06</td>
</tr>
<tr>
<td>peer-report measure</td>
<td></td>
</tr>
<tr>
<td>affiliation</td>
<td>Time 1</td>
</tr>
<tr>
<td></td>
<td>-.07</td>
</tr>
<tr>
<td></td>
<td>Time 2</td>
</tr>
<tr>
<td></td>
<td>-.02</td>
</tr>
</tbody>
</table>

N=44
* p<.10. ** p<.05. *** p<.01. **** p<.001
### Table 9. Demographic Information for Main Study

<table>
<thead>
<tr>
<th>Total sample</th>
<th>N</th>
<th>% of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>101</td>
<td>46</td>
</tr>
<tr>
<td>Females</td>
<td>117</td>
<td>54</td>
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<tr>
<td>Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>71</td>
<td>33</td>
</tr>
<tr>
<td>7</td>
<td>73</td>
<td>33</td>
</tr>
<tr>
<td>8</td>
<td>74</td>
<td>34</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>196</td>
<td>90</td>
</tr>
<tr>
<td>Divorced/separated/other</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>Primary language spoken at home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>191</td>
<td>87</td>
</tr>
<tr>
<td>Cantonese</td>
<td>10</td>
<td>4.5</td>
</tr>
<tr>
<td>Italian</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Spanish</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Polish</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Portuguese</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Tagalog</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Farsi</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Arabic</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Swedish</td>
<td>1</td>
<td>0.5</td>
</tr>
</tbody>
</table>

### Table 10. Internal Consistency of Self- and Peer-Report Relational Goals Measures (Cronbach’s Alpha)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Dimension</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>self-report measure</td>
<td>*dominance</td>
<td>( \alpha = .80 )</td>
</tr>
<tr>
<td></td>
<td>affiliation</td>
<td>( \alpha = .72 )</td>
</tr>
<tr>
<td></td>
<td>comfort</td>
<td>( \alpha = .84 )</td>
</tr>
<tr>
<td></td>
<td>**world threat</td>
<td>( \alpha = .75 )</td>
</tr>
<tr>
<td>peer-report measure</td>
<td>Dominance</td>
<td>( \alpha = .90 )</td>
</tr>
<tr>
<td></td>
<td>Affiliation</td>
<td>( \alpha = .83 )</td>
</tr>
<tr>
<td></td>
<td>comfort</td>
<td>( \alpha = .91 )</td>
</tr>
<tr>
<td></td>
<td>world threat</td>
<td>( \alpha = .85 )</td>
</tr>
</tbody>
</table>

* with two items removed “important to have ideas heard” and “want everyone to listen to ideas”

** with two items removed “worry about things that might happen in the future” and “worry when see bad things on TV”
Table 11. Descriptive Statistics of Predictor and Outcome Variables for Main Study

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th></th>
<th>Girls</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>Std. Deviation</td>
<td>N</td>
</tr>
<tr>
<td>self affiliation</td>
<td>101</td>
<td>3.76</td>
<td>.12</td>
<td>117</td>
</tr>
<tr>
<td>self comfort</td>
<td>101</td>
<td>2.42</td>
<td>.24</td>
<td>117</td>
</tr>
<tr>
<td>self dominance</td>
<td>101</td>
<td>1.33</td>
<td>.65</td>
<td>117</td>
</tr>
<tr>
<td>self world threat</td>
<td>101</td>
<td>1.18</td>
<td>.69</td>
<td>117</td>
</tr>
<tr>
<td>peer affiliation</td>
<td>101</td>
<td>3.02</td>
<td>.42</td>
<td>117</td>
</tr>
<tr>
<td>peer comfort</td>
<td>101</td>
<td>2.59</td>
<td>.49</td>
<td>117</td>
</tr>
<tr>
<td>peer dominance</td>
<td>101</td>
<td>1.66</td>
<td>.16</td>
<td>117</td>
</tr>
<tr>
<td>peer world threat</td>
<td>101</td>
<td>1.47</td>
<td>.15</td>
<td>117</td>
</tr>
<tr>
<td>grade</td>
<td>101</td>
<td>7.01</td>
<td>.83</td>
<td>117</td>
</tr>
<tr>
<td>marital status</td>
<td>100</td>
<td>1.12</td>
<td>.33</td>
<td>117</td>
</tr>
<tr>
<td>family SES</td>
<td>101</td>
<td>48.20</td>
<td>12.73</td>
<td>117</td>
</tr>
<tr>
<td>externalizing (untransformed)</td>
<td>101</td>
<td>4.25</td>
<td>3.65</td>
<td>117</td>
</tr>
<tr>
<td>internalizing (untransformed)</td>
<td>101</td>
<td>2.58</td>
<td>2.98</td>
<td>117</td>
</tr>
<tr>
<td>RCMAS total raw score</td>
<td>101</td>
<td>9.48</td>
<td>9.35</td>
<td>117</td>
</tr>
<tr>
<td>externalizing (log transform)</td>
<td>101</td>
<td>1.67</td>
<td>6.877</td>
<td>117</td>
</tr>
<tr>
<td>internalizing (log transform)</td>
<td>101</td>
<td>1.65</td>
<td>7.174</td>
<td>117</td>
</tr>
<tr>
<td>RCMAS T-score</td>
<td>101</td>
<td>48.77</td>
<td>8.3641</td>
<td>117</td>
</tr>
</tbody>
</table>

* range of possible scores for the externalizing scale is 0 to 66, 0 to 62 for the internalizing scale and 0 to 28 for the RCMAS scale.

** self domain (scale from 1 to 4, 4 representing highest goal rating), peer domain (scale from 1 to 5, 5 representing highest goal rating)
<table>
<thead>
<tr>
<th>Mean Ratings</th>
<th>Scores based on logarithmic transformations</th>
<th>N=218</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.95</td>
<td>4.71</td>
<td>4.57</td>
</tr>
<tr>
<td>1.67</td>
<td>1.66</td>
<td>1.66</td>
</tr>
<tr>
<td>1.66</td>
<td>1.55</td>
<td>1.42</td>
</tr>
<tr>
<td>1.51</td>
<td>1.49</td>
<td>1.37</td>
</tr>
<tr>
<td>1.51</td>
<td>1.42</td>
<td>1.37</td>
</tr>
<tr>
<td>1.51</td>
<td>1.32</td>
<td>1.25</td>
</tr>
<tr>
<td>1.51</td>
<td>1.24</td>
<td>1.19</td>
</tr>
<tr>
<td>1.32</td>
<td>1.19</td>
<td>1.08</td>
</tr>
</tbody>
</table>

**Table 13.** Means of Relational Goal Ratings (Self- and Peer-Reports) by Marital Status

<table>
<thead>
<tr>
<th>Mean Ratings</th>
<th>Scores based on logarithmic transformations</th>
<th>N=218</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.845</td>
<td>4.65</td>
<td>4.45</td>
</tr>
<tr>
<td>1.68</td>
<td>1.67</td>
<td>1.66</td>
</tr>
<tr>
<td>1.66</td>
<td>1.66</td>
<td>1.66</td>
</tr>
<tr>
<td>1.66</td>
<td>1.66</td>
<td>1.66</td>
</tr>
<tr>
<td>1.65</td>
<td>1.64</td>
<td>1.64</td>
</tr>
<tr>
<td>1.65</td>
<td>1.64</td>
<td>1.64</td>
</tr>
<tr>
<td>1.65</td>
<td>1.64</td>
<td>1.64</td>
</tr>
<tr>
<td>1.65</td>
<td>1.64</td>
<td>1.64</td>
</tr>
</tbody>
</table>
Table 13. Bivariate Correlations Among and Between Self- and Peer-Report Relational Conflict Measures (Boys)

<table>
<thead>
<tr>
<th></th>
<th>Peer Report</th>
<th>Self Report</th>
<th>World Hierarchy</th>
<th>Conflict</th>
<th>Affiliation</th>
<th>Domination</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>0.4</td>
<td>0.09</td>
<td>0.08</td>
<td>0.10</td>
<td>0.11</td>
<td>0.14</td>
</tr>
<tr>
<td>3.5</td>
<td>0.22</td>
<td>0.15</td>
<td>0.09</td>
<td>0.21</td>
<td>0.25</td>
<td>0.27</td>
</tr>
<tr>
<td>3.0</td>
<td>0.24</td>
<td>0.16</td>
<td>0.10</td>
<td>0.22</td>
<td>0.26</td>
<td>0.28</td>
</tr>
<tr>
<td>2.5</td>
<td>0.25</td>
<td>0.17</td>
<td>0.11</td>
<td>0.23</td>
<td>0.27</td>
<td>0.30</td>
</tr>
<tr>
<td>2.0</td>
<td>0.26</td>
<td>0.18</td>
<td>0.12</td>
<td>0.24</td>
<td>0.28</td>
<td>0.31</td>
</tr>
<tr>
<td>1.5</td>
<td>0.27</td>
<td>0.19</td>
<td>0.13</td>
<td>0.25</td>
<td>0.29</td>
<td>0.32</td>
</tr>
<tr>
<td>1.0</td>
<td>0.28</td>
<td>0.20</td>
<td>0.14</td>
<td>0.26</td>
<td>0.30</td>
<td>0.33</td>
</tr>
</tbody>
</table>

Table 14. Bivariate Correlations Among and Between Self- and Peer-Report Relational Conflict Measures (Girls)

<table>
<thead>
<tr>
<th></th>
<th>Peer Report</th>
<th>Self Report</th>
<th>World Hierarchy</th>
<th>Conflict</th>
<th>Affiliation</th>
<th>Domination</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>0.4</td>
<td>0.09</td>
<td>0.08</td>
<td>0.10</td>
<td>0.11</td>
<td>0.14</td>
</tr>
<tr>
<td>3.5</td>
<td>0.22</td>
<td>0.15</td>
<td>0.09</td>
<td>0.21</td>
<td>0.25</td>
<td>0.27</td>
</tr>
<tr>
<td>3.0</td>
<td>0.24</td>
<td>0.16</td>
<td>0.10</td>
<td>0.22</td>
<td>0.26</td>
<td>0.28</td>
</tr>
<tr>
<td>2.5</td>
<td>0.25</td>
<td>0.17</td>
<td>0.11</td>
<td>0.23</td>
<td>0.27</td>
<td>0.30</td>
</tr>
<tr>
<td>2.0</td>
<td>0.26</td>
<td>0.18</td>
<td>0.12</td>
<td>0.24</td>
<td>0.28</td>
<td>0.31</td>
</tr>
<tr>
<td>1.5</td>
<td>0.27</td>
<td>0.19</td>
<td>0.13</td>
<td>0.25</td>
<td>0.29</td>
<td>0.32</td>
</tr>
<tr>
<td>1.0</td>
<td>0.28</td>
<td>0.20</td>
<td>0.14</td>
<td>0.26</td>
<td>0.30</td>
<td>0.33</td>
</tr>
</tbody>
</table>
Table 16. Bivariate Correlations Between Self- and Peer-Report Relational Goal Measures and Symptomatology Ratings (Girls)

<table>
<thead>
<tr>
<th>Domain</th>
<th>RCMAS T-score</th>
<th>Externalizing T-score</th>
<th>Internalizing T-score</th>
</tr>
</thead>
<tbody>
<tr>
<td>self dominance</td>
<td>.16</td>
<td>.00</td>
<td>-.10</td>
</tr>
<tr>
<td>self affiliation</td>
<td>.04</td>
<td>.06</td>
<td>-.10</td>
</tr>
<tr>
<td>self comfort</td>
<td>.10</td>
<td>-.08</td>
<td>.02</td>
</tr>
<tr>
<td>self world threat</td>
<td>.38***</td>
<td>-.03</td>
<td>-.02</td>
</tr>
<tr>
<td>peer dominance</td>
<td>-.08</td>
<td>.16</td>
<td>-.09</td>
</tr>
<tr>
<td>peer affiliation</td>
<td>-.08</td>
<td>-.04</td>
<td>-.21**</td>
</tr>
<tr>
<td>peer comfort</td>
<td>.08</td>
<td>.04</td>
<td>-.14</td>
</tr>
<tr>
<td>peer world threat</td>
<td>.30***</td>
<td>.09</td>
<td>.24***</td>
</tr>
</tbody>
</table>

N=117  
+p<.10, *p<.05, **p<.01, ***p<.001

Table 17. Bivariate Correlations Between Self- and Peer-Report Relational Goal Measures and Symptomatology Ratings (Boys)

<table>
<thead>
<tr>
<th>Domain</th>
<th>RCMAS T-score</th>
<th>Externalizing T-score</th>
<th>Internalizing T-score</th>
</tr>
</thead>
<tbody>
<tr>
<td>self dominance</td>
<td>-.04</td>
<td>.12</td>
<td>-.01</td>
</tr>
<tr>
<td>self affiliation</td>
<td>-.18*</td>
<td>.13</td>
<td>-.08</td>
</tr>
<tr>
<td>self comfort</td>
<td>.09</td>
<td>-.18*</td>
<td>-.21**</td>
</tr>
<tr>
<td>self world threat</td>
<td>.38**</td>
<td>-.28***</td>
<td>.06</td>
</tr>
<tr>
<td>peer dominance</td>
<td>-.10</td>
<td>.25***</td>
<td>-.25***</td>
</tr>
<tr>
<td>peer affiliation</td>
<td>-.039</td>
<td>.15</td>
<td>-.30***</td>
</tr>
<tr>
<td>peer comfort</td>
<td>.25***</td>
<td>-.08</td>
<td>-.15</td>
</tr>
<tr>
<td>peer world threat</td>
<td>.22***</td>
<td>-.09</td>
<td>.24***</td>
</tr>
</tbody>
</table>

N=101  
+p<.10, *p<.05, **p<.01, ***p<.001
Table 19. Partial Correlations between Relational Goal Ralniges (Self- and Peer-Reports) and Symptomatology Ralniges

Table 20. Partial Correlations between Relational Goal Ralniges (Self- and Peer-Reports) and Symptomatology Ralniges

Table 18. Means of Relational Goal Ralniges (Self- and Peer-Reports by Gender)
<table>
<thead>
<tr>
<th>Step 1</th>
<th>Goal-Internal Domains (Student)</th>
<th>Percent Correct-Dominance</th>
<th>Percent Correct-Dominance (Report)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.16</td>
<td>1.98</td>
<td>2.71</td>
<td>1.10</td>
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<tr>
<td>1.00</td>
<td>1.20</td>
<td>1.40</td>
<td>1.20</td>
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<td>1.60</td>
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<tr>
<td>1.80</td>
<td>1.90</td>
<td>1.90</td>
<td>1.90</td>
</tr>
</tbody>
</table>

**Table 21. Hierarchical Regressions with Symptomatology Raters as Outcomes and Goal Raters as Predictors**
APPENDIX A
Self-Report Relational Goals Measure

School ID _______ Class ID _______ Student ID _______ Order Admin _______

NAME: ________________________________________________

What grade are you in? _______ How old are you? _______ (years)

What is your gender? (please circle one): BOY       GIRL

PLEASE ANSWER THESE QUESTIONS BY YOURSELF WITHOUT TALKING TO THE OTHER STUDENTS.

ANSWER THE FOLLOWING QUESTIONS BY CIRCLING ONE OF THE STATEMENTS THAT YOU READ THAT IS THE MOST LIKE YOU. THEN DECIDE IF THE STATEMENT IS "SORT OF TRUE" OR "REALLY TRUE" FOR YOU. FOR EXAMPLE, IF YOU SEE:

(CIRCLE ONE ONLY)                    BUT Other kids are more outgoing
Some kids are shy

YOU MAKE A CHOICE BY CIRCLING ONE OF THESE STATEMENTS. THE PERSON WHO FILLED THIS QUESTION OUT DECIDED TO CIRCLE "some kids are shy".

THEN YOU MUST DECIDE HOW MUCH THE STATEMENT IS LIKE YOU.

really true for me

(CIRCLE ONE ONLY) -OR-

sort of true for me

THE PERSON WHO FILLED THIS QUESTION OUT DECIDED TO CIRCLE "really true for me".

NOW YOU TRY. REMEMBER, YOU ARE ANSWERING FOR YOURSELF:

(CIRCLE ONE ONLY) Some kids like team sports like soccer or baseball BUT Other kids like non team sports like swimming or jogging

really true for me -OR-

sort of true for me
1)  
(CIRCLE ONE ONLY)  
For some kids, it is really important for them to get their way  
BUT  
For other kids, it is not so important for them to get their way  
Now decide if this is:  
(CIRCLE ONE ONLY)  
really true for me OR sort of true for me  

2)  
(CIRCLE ONE ONLY)  
Some kids want others to make them feel better when they are worried  
BUT  
Other kids like to make themselves feel better when they are worried  
Now decide if this is:  
(CIRCLE ONE ONLY)  
really true for me OR sort of true for me  

3)  
(CIRCLE ONE ONLY)  
Some kids think that it is important to get close to other people  
BUT  
Other kids think that it is not as important to be close to other people  
Now decide if this is:  
(CIRCLE ONE ONLY)  
really true for me OR sort of true for me  

4)  
(CIRCLE ONE ONLY)  
Some kids are frightened that they are going to be hurt  
BUT  
Other kids are never frightened about getting hurt  
Now decide if this is:  
(CIRCLE ONE ONLY)  
really true for me OR sort of true for me  

5)  
(CIRCLE ONE ONLY)  
Some kids think it is important to tell other kids what to do  
BUT  
Other kids do not think it's so important to tell other kids what to do  
Now decide if this is:  
(CIRCLE ONE ONLY)  
really true for me OR sort of true for me
6) **(CIRCLE ONE ONLY)** Some kids think it is important to be the leader **BUT** Other kids think that it's not so important to be the leader

Now decide if this is:

**(CIRCLE ONE ONLY)** really true for me **OR** sort of true for me

7) **(CIRCLE ONE ONLY)** Some kids think that it is important to co-operate with others **BUT** Other kids think that it is not so important to co-operate with others

Now decide if this is:

**(CIRCLE ONE ONLY)** really true for me **OR** sort of true for me

8) **(CIRCLE ONE ONLY)** Some kids feel unsafe when they are walking alone **BUT** Other kids never feel unsafe when they are walking alone

Now decide if this is:

**(CIRCLE ONE ONLY)** really true for me **OR** sort of true for me

9) **(CIRCLE ONE ONLY)** Some kids want others to comfort them when they are frightened **BUT** Other kids want to comfort themselves when they are frightened

Now decide if this is:

**(CIRCLE ONE ONLY)** really true for me **OR** sort of true for me

10) **(CIRCLE ONE ONLY)** Some kids want others to calm them when they are worried **BUT** Other kids calm themselves when they are worried

Now decide if this is:

**(CIRCLE ONE ONLY)** really true for me **OR** sort of true for me
<table>
<thead>
<tr>
<th></th>
<th>(CIRCLE ONE ONLY)</th>
<th>Some kids think that they are always right</th>
<th>BUT</th>
<th>Other kids don’t think it’s as important if they are always right</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Now decide if this is:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(CIRCLE ONE ONLY)</td>
<td>really true for me</td>
<td>OR</td>
<td>sort of true for me</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>(CIRCLE ONE ONLY)</th>
<th>Some kids think it is important to always play with other kids</th>
<th>BUT</th>
<th>Other kids think it’s not as important to always play with other kids</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Now decide if this is:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(CIRCLE ONE ONLY)</td>
<td>really true for me</td>
<td>OR</td>
<td>sort of true for me</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>(CIRCLE ONE ONLY)</th>
<th>Some kids really like to work with other kids in a group</th>
<th>BUT</th>
<th>Other kids don’t really like to work with other kids in a group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Now decide if this is:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(CIRCLE ONE ONLY)</td>
<td>really true for me</td>
<td>OR</td>
<td>sort of true for me</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>(CIRCLE ONE ONLY)</th>
<th>Some kids think that it is important to rely on others when they are upset</th>
<th>BUT</th>
<th>Other kids think it is important to rely on themselves when they are upset</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Now decide if this is:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(CIRCLE ONE ONLY)</td>
<td>really true for me</td>
<td>OR</td>
<td>sort of true for me</td>
</tr>
<tr>
<td>16)</td>
<td>(CIRCLE ONE ONLY)</td>
<td>Some kids worry that other kids might hurt them</td>
<td>BUT</td>
<td>Other kids never worry that other kids are going to hurt them</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Now decide if this is:</td>
<td>(CIRCLE ONE ONLY)</td>
<td>really true for me</td>
<td>OR</td>
<td>sort of true for me</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>17)</th>
<th>(CIRCLE ONE ONLY)</th>
<th>Some kids want to win arguments</th>
<th>BUT</th>
<th>Other kids do not want to win arguments as much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now decide if this is:</td>
<td>(CIRCLE ONE ONLY)</td>
<td>really true for me</td>
<td>OR</td>
<td>sort of true for me</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>18)</th>
<th>(CIRCLE ONE ONLY)</th>
<th>Some kids think that bad things are going to happen to them</th>
<th>BUT</th>
<th>Other kids think that only good things are going to happen to them</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now decide if this is:</td>
<td>(CIRCLE ONE ONLY)</td>
<td>really true for me</td>
<td>OR</td>
<td>sort of true for me</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>19)</th>
<th>(CIRCLE ONE ONLY)</th>
<th>Some kids like to do things with other people most of the time</th>
<th>BUT</th>
<th>Other kids don't really like to do things with other people most of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now decide if this is:</td>
<td>(CIRCLE ONE ONLY)</td>
<td>really true for me</td>
<td>OR</td>
<td>sort of true for me</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>20)</th>
<th>(CIRCLE ONE ONLY)</th>
<th>Some kids want others to help them when they are scared</th>
<th>BUT</th>
<th>Other kids help themselves when they are scared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now decide if this is:</td>
<td>(CIRCLE ONE ONLY)</td>
<td>really true for me</td>
<td>OR</td>
<td>sort of true for me</td>
</tr>
</tbody>
</table>
21)  
(CIRCLE ONE ONLY) Some kids think that it is important to be the boss  
BUT Other kids think that it is not so important to be the boss  
Now decide if this is:  
(CIRCLE ONE ONLY) really true for me  OR sort of true for me  

22)  
(CIRCLE ONE ONLY) Some kids worry when they see bad things happen on the news  
BUT Other kids never worry when they see bad things happen on the news  
Now decide if this is:  
(CIRCLE ONE ONLY) really true for me  OR sort of true for me  

23)  
(CIRCLE ONE ONLY) Some kids want to talk things out with others when they are scared  
BUT Other kids keep to themselves when they are scared  
Now decide if this is:  
(CIRCLE ONE ONLY) really true for me  OR sort of true for me  

24)  
(CIRCLE ONE ONLY) Some kids think that it is important to give hugs to friends  
BUT Other kids don't think it's so important to give hugs to friends  
Now decide if this is:  
(CIRCLE ONE ONLY) really true for me  OR sort of true for me  

25)  
(CIRCLE ONE ONLY) For some kids, it is really important to get their ideas heard  
BUT Other kids don't think it's as important to get their ideas heard  
Now decide if this is:  
(CIRCLE ONE ONLY) really true for me  OR sort of true for me
Some kids think they would have more fun if they did things with others.

Other kids think they would have more fun doing things on their own.

Now decide if this is:

really true for me OR sort of true for me

Some kids worry a lot about things that might happen in the future.

Other kids are not worried at all about things that might happen in the future.

Now decide if this is:

really true for me OR sort of true for me

Some kids want others to listen to their ideas.

Other kids don't want others to listen to their ideas as much.

Now decide if this is:

really true for me OR sort of true for me

Some kids often want to work with others.

Other kids don't want to work with others as much.

Now decide if this is:

really true for me OR sort of true for me

Some kids think that others are only going to be mean to them.

Other kids think that others will only be nice to them.

Now decide if this is:

really true for me OR sort of true for me
(CIRCLE ONE ONLY) Some kids want others to comfort them when they are upset BUT Other kids comfort themselves when they are upset

Now decide if this is:

(CIRCLE ONE ONLY) really true for me OR sort of true for me

32)

(CIRCLE ONE ONLY) Some kids think it is important to get what they want BUT Other kids don’t think it’s that important to get what they want

Now decide if this is:

(CIRCLE ONE ONLY) really true for me OR sort of true for me

33)

(CIRCLE ONE ONLY) Some kids think that it is important to win at games BUT Other kids think that it is not as important to win at games

Now decide if this is:

(CIRCLE ONE ONLY) really true for me OR sort of true for me

34)

(CIRCLE ONE ONLY) Some kids think that it is important to be with other people most of the time BUT Other kids don’t really think it is so important to be with other people most of the time

Now decide if this is:

(CIRCLE ONE ONLY) really true for me OR sort of true for me
Some kids want to rely on others when they are scared. Other kids think it is best to rely on themselves when they are scared.

Now decide if this is:

- really true for me
- sort of true for me

Some kids like to share important things about themselves with others. Other kids don't really like to share important things about themselves with others.

Now decide if this is:

- really true for me
- sort of true for me
**APPENDIX B**

**Peer-Report Relational Goals Measure**

<table>
<thead>
<tr>
<th>School ID</th>
<th>Class ID</th>
<th>Student ID</th>
<th>Order Admin</th>
<th>Rater</th>
<th>#</th>
</tr>
</thead>
</table>

*NAME:* ____________________________  __ __

**YOU ARE ANSWERING THE FOLLOWING QUESTIONS ABOUT:** ____________________  ID# __________ (leave blank)

For each sentence, you are to circle the number that you think best says how this person usually acts.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>not important for</td>
<td>sort of important for</td>
<td>very important for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to be nice</td>
<td>to be nice</td>
<td>to be nice</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For example, if it was very important for this person to be nice to others, you would circle the “5”. If it was sort of important for this person to be nice, you would circle the “3” and if it was not important for this person to be nice, you would circle the “1”. You would circle the “4” or the “2” if you thought your answer was somewhere in between.

**GO AHEAD AND CIRCLE THE NUMBER YOU THINK BEST TELLS HOW IMPORTANT IT IS FOR THE PERSON YOU ARE RATING TO BE NICE.**

**REMEMBER:** YOU ARE ANSWERING THE QUESTIONS FOR THE PERSON WHOSE NAME IS AT THE TOP OF THIS PAGE. WHEN YOU SEE THE _____ OR BLANK SPACE, JUST IMAGINE THAT THIS PERSON’S NAME IS THERE.

**How well do you know this person?**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>very well</td>
<td>well</td>
<td>somewhat</td>
<td>a little bit</td>
<td>not well</td>
</tr>
</tbody>
</table>

**REMEMBER:** ONLY CIRCLE ONE NUMBER FOR EACH SENTENCE.
<table>
<thead>
<tr>
<th>Sentence</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>not important for to work with other kids in a group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sort of important for to work with other kids in a group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very important for to work with other kids in a group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not important for to have other people comfort them when they are frightened</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sort of important for to have other people comfort them when they are frightened</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very important for to have other people comfort them when they are frightened</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>doesn't think that others are only going to be mean to them</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sometimes thinks that others are only going to be mean to them</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>always thinks that others are only going to be mean to them</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not important for to get what they want</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sort of important for to get what they want</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very important for to get what they want</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>not important for to hug their friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sort of important for to hug their friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very important for to hug their friends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not important for others help them when they are scared</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>sort of important for others help them when they are scared</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>very important for others help them when they are scared</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7)  
| 1 | 2 | 3 | 4 | 5 |
|----------------|----------------|----------------|----------------|
| not important for ____ to | sort of important for ____ to | very important for ____ to |
| the leader | be the leader | be the leader |

8)  
| 1 | 2 | 3 | 4 | 5 |
|----------------|----------------|----------------|----------------|
| not important for ____ | sort of important for ____ | very important for ____ |
| to rely on others | to rely on others | to rely on others |
| when they are upset | when they are upset | when they are upset |

9)  
| 1 | 2 | 3 | 4 | 5 |
|----------------|----------------|----------------|----------------|
| not important for ____ | sort of important for ____ | very important for ____ |
| to co-operate with others | to co-operate with others | to co-operate with others |

10)  
| 1 | 2 | 3 | 4 | 5 |
|----------------|----------------|----------------|----------------|
| ____ doesn't worry | ____ sometimes worries | ____ always worries |
| that other kids might hurt them | that other kids might hurt them | that other kids might hurt them |

11)  
| 1 | 2 | 3 | 4 | 5 |
|----------------|----------------|----------------|----------------|
| not important for ____ | sort of important for ____ | very important for ____ |
| to let others make them | to let others make them | to let others make them |
| feel better when they are worried | feel better when they are worried | feel better when they are worried |

12)  
| 1 | 2 | 3 | 4 | 5 |
|----------------|----------------|----------------|----------------|
| not important for ____ | sort of important for ____ | very important for ____ |
| to get close to other people | to get close to other people | to get close to other people |
### 13)  

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ is not scared when they are alone</td>
<td>___ is sometimes scared when they are alone</td>
<td>___ is always scared when they are alone</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 14)  

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>not important for ___ to think they are always right</td>
<td>sort of important for ___ to think they are always right</td>
<td>very important for ___ to think they are always right</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 15)  

<table>
<thead>
<tr>
<th>1</th>
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<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>not important for ___ to arguments</td>
<td>sort of important for ___ to win arguments</td>
<td>very important for ___ to win arguments</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 16)  

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>not important for ___ important things about themselves with others</td>
<td>sort of important for ___ to share important things about themselves with others</td>
<td>very important for ___ to share important things about themselves with others</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 17)  

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>doesn’t think that bad things might happen to them</td>
<td>___ sometimes thinks that bad things might happen to them</td>
<td>___ always thinks that bad things might happen to them</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 18)  

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>not important for ___ to have everyone listen</td>
<td>sort of important for ___ to have everyone listen to their ideas</td>
<td>very important for ___ to have everyone listen to their ideas</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tr>
<tr>
<td>19)</td>
<td>not important for to play with other kids</td>
<td>sort of important for to play with other kids</td>
<td>very important for to play with other kids</td>
<td></td>
</tr>
<tr>
<td>20)</td>
<td>not important for to tell other kids what to do</td>
<td>sort of important for to tell other kids what to do</td>
<td>very important for to tell other kids what to do</td>
<td></td>
</tr>
<tr>
<td>21)</td>
<td>doesn’t think it is important to be the boss</td>
<td>sometimes thinks it is important to be the boss</td>
<td>always thinks it is important to be the boss</td>
<td></td>
</tr>
<tr>
<td>22)</td>
<td>doesn’t feel unsafe when they are walking alone</td>
<td>sometimes feels unsafe when they are walking alone</td>
<td>always feels unsafe when they are walking alone</td>
<td></td>
</tr>
<tr>
<td>23)</td>
<td>doesn’t like to do things with other people most of the time</td>
<td>sometimes likes to do things with other people most of the time</td>
<td>always likes to do things with other people most of the time</td>
<td></td>
</tr>
<tr>
<td>24)</td>
<td>doesn’t want others to comfort them when they are upset</td>
<td>sometimes wants others to comfort them when they are upset</td>
<td>always wants others to comfort them when they are upset</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C
Questions Used for Analysis from the Self- and Peer-Report Relational Goals Measures
Including Items Dropped – Pilot Study

Self-Report Measure

Items included:

**Dominance:**
1) “important to get their way”
5) “important to tell others what to do”
6) “important to be the boss”
11) “think that they are always right”
17) “want to win arguments”
21) “important to be the boss”
32) “important to get what they want”
33) “important to win at games”

**Affiliation:**
3) “important to get close to other people”
7) “important to co-operate with others”
13) “important to always play with other kids”
14) “like to work with other kids in a group”
19) “like to do things with other people most of the time”
24) “important to give hugs to friends”
26) “think they would have more fun if they did things with others”
29) “often want to work with others”
34) “important to be with others most of the time”
36) “like to share important things about themselves with others”

**Comfort:**
2) “want others to make them feel better when they are worried”
9) “want others to comfort them when they are frightened”
10) “want others to calm them down when they are worried”
15) “important to rely on others when they are upset”
20) “want others to help them when they are scared”
23) “want to talk things out with others when they are scared”
31) “want others to comfort them when they are upset”
35) “want to rely on others when they are scared”

**World Threat:**
4) “frightened that they are going to be hurt”
30) “think that others are only going to be mean to them”

Items Excluded:

25) “important to get their ideas heard”
28) “want others to listen to their ideas”
8) “feel unsafe when walking alone”  
12) “scared when they are alone”  
16) “worry that other kids might hurt them”  
18) “think that bad things are going to happen to them”  
22) “worry when they see bad things happen on the news”  
27) “worry a lot about things that might happen in the future”

**Peer-Report Measure**

**Items included:**

_Dominance:_
4) “important to get what want”  
7) “important to be the leader”  
15) “want to win arguments”  
18) “important for others to listen to their ideas”  
20) “important to tell other kids what to do:

_Affiliation:_
1) “important to work with other kids in a group”  
5) “important to hug their friends”  
9) “important to co-operate with others”  
12) “important to get close to other people”  
16) “important to share important things about themselves with others”  
23) “likes to do things with other people most of the time”

_Comfort:_
2) “important to have other people comfort them when they are frightened”  
6) “important to have others help them when they are scared”  
8) “important to rely on others when they are upset”  
11) “important to let others make them feel better when they are worried”  
24) “wants others to comfort them when they are upset”

_World Threat:_
3) “always thinks that others are only going to be mean to them”  
10) “worry that other kids might hurt them”  
13) “scared when walking alone”  
17) “thinks that bad things might happen to them”  
22) “feels unsafe when they are walking alone”
APPENDIX D
Parent Information Letter

Dear Parent/Guardian,

We are writing to ask for your permission for your child to take part in a study that is being carried out at his/her school. The aim of the study is to find out how children think and feel about relationships with their friends. In particular, we are interested in finding out if the ways that they think about relationships might affect behavior at school, including emotions that they show, getting into arguments and other such behaviors. By getting a clearer picture about the ways in which children think about relationships, we are in a better position in the future to help those children who have difficulties in their friendships.

Your child will be asked to fill out a questionnaire that has statements about which aspects of his/her relationships are most important to him/her. Your child will be asked about areas, such as how much he/she likes to work with others and how important it is for him/her to seek out others when feeling sad. As well, your child will be asked to make similar judgements about other classmates who are also participating in the study. For instance, he/she will be asked how important it is for other children to work in groups or to work independently, or how important it is for others to win at games, etc. In turn, other children will answer these questions about your child. Your child's teacher will also be asked to provide a report of your child's behavior, including emotions that he/she shows, getting into arguments, etc. However, the teacher will not see your child's completed questionnaires, nor will the teacher see the other students' ratings of your child. It will take approximately 45 minutes for your child to complete the questionnaires.

The questionnaires from your child, his/her peers and the teacher are entirely confidential. They will not be seen by school staff or the other children. Information will be stored in a locked filing cabinet in the office of Dr. Jenkins and will be destroyed in five years. Your child's name will be removed from all questionnaires once the ratings have been made and only numbers will be kept on computer files.

We have carried out similar studies in other schools and children generally enjoy these activities. If for any reason, however, your child decides at any time not to participate (including in the middle of the tasks), he/she can stop participating. We have worked with many children and we are sensitive to their wishes. If your child seems hesitant or uncomfortable during our tasks (which rarely happens), we ask if he/she would like to stop and return to the classroom. Although there is the risk that the children might talk about their responses, every effort will be made to ensure that this does not happen. Specifically, the children will be told not to share their responses with each other, and they will be closely monitored during the actual administration of the test.
Teachers will also be asked to monitor the children and will report back to the researchers if they observe any negative effects of these ratings. Finally, every attempt will be made for the children not to have “free time” following the testing, so that they do not have the opportunity to share their responses with one another. In doing this research at other schools, we have not found this to be a problem.

Thank you for considering your child's participation in this study. Your child's participation will not benefit him/her directly, but it will be of great help to the community of children and parents and to professionals working with children. You may withdraw your child from the study at any time. Participation in this study is completely voluntary and your child will not be penalized academically if you do not want him/her to be involved in the research.

Please sign the form on the next page and seal it in the envelope provided. Please return the form to your child's teacher within one week if you are willing to have your child take part in this study. At the end of the study, parents will be informed about the results in terms of general findings. Please complete the information on the following page if you want to receive written feedback. It is only with the help of parents like yourselves that such research is possible. Thank you for your help.

If you have any questions about the study, please contact Dr. Jenkins.

Dr. Jenny Jenkins, Ph.D., C. Psych
Associate Professor

Fiona Currie, M.A.
Ph.D. Candidate and Researcher

PLEASE KEEP THIS LETTER FOR YOUR RECORDS
APPENDIX E
Parent Consent Letter

I __________________________ give permission for my child __________________________
(parent's first and last name) (child's first and last name)

to participate in a study about the way children think about relationships being conducted by Dr. Jenny Jenkins and Fiona Currie.

I understand that my child will be asked to complete questionnaires about how he/she feels about relationships. I understand that my child will be asked to make similar judgements about other classmates participating in the study, and in turn other children will answer these questions about my child. I also give permission for my child's teacher to complete a questionnaire about my child's behavior and emotions.

I understand that the questionnaires that my child, his/her peers and the teacher complete will be entirely confidential and will not be seen by school staff or other children. As well, my child's teacher will not see my child's completed questionnaires, or the questionnaires that other children complete for my child. I realize that all of this information will be kept in a locked filing cabinet and only numbers will be kept on computer files.

I understand that my child can decide at any time not to participate in this study (including when he/she is in the middle of the tasks). I am aware that if my child seems hesitant or uncomfortable during the tasks, my child will be asked if he/she would like to stop and return to the classroom. I understand that the children involved in the study may share their responses with one another, but that every effort will be made to prevent this from happening. I also understand that I may withdraw my child from the study at any time and that my child will not be penalized academically if I do not want him/her to be involved in the research.

__________________________________________  __________________________________________
Parent or guardian's signature Date

Please include the following information:

Father’s occupation _______________ Mother’s occupation _______________
Language(s) spoken in home: ________________________________
Child’s first language: ________________________________
Child’s other languages (if any): ________________________________
Parents’ marital status: (please check one of the categories)
made ______ separated _______ divorced _______ single _______ other ______

If you would like some written feedback at the completion of the study, please complete the following information:

Name:
Address (including postal code):
APPENDIX F

Teacher Consent Letter

I __________________________ am willing to participate in a study about the way children (print name)

think about relationships that is being conducted by Dr. Jenny Jenkins and Fiona Currie.

I understand that students who obtain parental consent will be asked to complete questionnaires about how they feel about relationships and that these students will be asked to make judgements about other children participating in the study. I understand that I will be asked to complete a questionnaire about each of the participating child’s behavior and emotions. This questionnaire will take approximately 10 minutes to complete for each child.

I understand that the questionnaires that I complete about each individual child are entirely confidential and will not be seen by anyone except for the researchers. I realize that all information will be kept in a locked filing cabinet and that numbers will be kept on computer files instead of names. I understand that all data will be destroyed after five years.

I understand that the researchers will compensate me for my time by paying me $5.00 an hour to a maximum of $25.00 for completing the ratings of the children in my class who are participating in this study. However, I understand that I can decide at any time not to participate in this study without being penalized in any way.

________________________________________________________________________
Teacher’s signature                                  Date
APPENDIX G

Student Assent Letter

I understand that I will be asked to complete some questions about how I feel about relationships with other people. I understand that I will be asked about my opinions about other children participating in this study and that other children will be answering the same questions about me. For example, I will be asked about how important it is for other children to win at games and other children will be asked how important it is for me to win at games. I realize that my teacher will also be filling out questions about the way I act and feel at school.

I understand that the questions that my classmates and my teacher and I fill out will be kept completely private and that nobody except the researchers (Fiona Currie and her professor Dr. Jenkins) will be able to read what I wrote. As well, no one else but the researchers will see what other children write about me. Once I answer all the questions, my name will be removed and I will get a special number that only the researchers will know.

I understand that I can choose not to participate in this study at any time (including when I am in the middle of answering questions). Also, if I feel uncomfortable answering the questions, then I will be asked if I want to go back to the classroom. I also understand that if I choose not to participate in this study that I will not be treated any differently than those children who choose not to participate.

I have read and understood all of the information on this page and I agree to participate in the study.

-----------------------------------------------------------------------------------------------------------------------------------
(please sign your first and last name)                                      Date
APPENDIX H
Questions Used for Analysis from the Self- and Peer-Report Relational Goals Measures Including Items Dropped – Main Study

Self-Report Measure

Items included: Items Excluded:

**Dominance:**
1) “important for kids to get their way”
5) “important to tell other kids what to do”
6) “important to be the leader”
11) “think they are always right”
17) “want to win arguments”
21) “important to be the boss”
32) “important to get what they want”
33) “important to win at games”
25) “important to get their ideas heard”
28) “want others to listen to their ideas”

**Affiliation:**
3) “important to get close to other people”
7) “important to co-operate with others”
13) “important to always play with other kids”
14) “like to work with other kids in a group”
19) “like to do things with other people most of the time”
24) “important to give hugs to friends”
26) “think they would have more fun if they did things with others”
29) “often want to work with others”
34) “important to be with other people most of the time”
36) “like to share important things about themselves with others”

**Comfort:**
2) “want others to make them feel better when they are worried”
9) “want others to comfort them when they are frightened”
10) “want others to calm them when they are worried”
15) “important to rely on others when they are upset”
20) “want others to help them when they are scared”
23) “want to talk things out with others when they are scared”
31) “want others to comfort them when they are upset”
35) “want to rely on others when they are scared”

**World Threat:**
4) “frightened they are going to get hurt”
27) “worry a lot about things that might happen in the future”
8) "feel unsafe when they are walking alone" 30) "worry when they see bad things happen on the news"
12) "scared when they are walking alone"
16) "worry that other kids might hurt them"
18) "think bad things are going to happen to them"
30) "think that others are only going to be mean to them"

Peer-Report Measure

Items included:

Dominance:
4) "important to get what they want"
7) "important to be the leader"
14) "think they are always right"
15) "important to win arguments"
18) "important to have everyone listen to their ideas"
20) "important to tell other kids what to do"
21) "important to be the boss"

Affiliation:
1) "important to work with other kids in a group"
5) "important to hug their friends"
9) "important to co-operate with others"
12) "important to get close to other people"
16) "important to share important things about themselves with others"
19) "important to play with other kids"
23) "likes to do things with other people most of the time"

Comfort:
2) "important to have other people comfort them when they are frightened"
6) "important to have others help them when they are scared"
8) "important to rely on others when they are upset"
11) "important to let others make them feel better when they are worried"
24) "wants others to comfort them when they are upset"

World Threat:
3) "always thinks that others are only going to be mean to them"
10) "worry that other kids might hurt them"
13) "scared when walking alone"
17) "thinks that bad things might happen to them"
22) "feels unsafe when they are walking alone"
### APPENDIX I
Factor Analysis - Items Loadings for Self- and Peer-Report Relational Goals

Self-Report Measure

Rotated Component Matrix (varimax)

<table>
<thead>
<tr>
<th>Scale item</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 'get their way' (D)</td>
<td>6.784E-02</td>
<td>-1.054E-02</td>
</tr>
<tr>
<td>#10 'calm when worried' (C)</td>
<td>.593</td>
<td>.534</td>
</tr>
<tr>
<td>#11 'think always right' (D)</td>
<td>-.112</td>
<td>.368</td>
</tr>
<tr>
<td>#12 'scared when alone' (WT)</td>
<td>.266</td>
<td>-.253</td>
</tr>
<tr>
<td>#13 'play with others' (A)</td>
<td>.316</td>
<td>.390</td>
</tr>
<tr>
<td>#14 'work in groups' (A)</td>
<td>.340</td>
<td>.235</td>
</tr>
<tr>
<td>#15 'rely on when upset' (C)</td>
<td>.578</td>
<td>2.417E-02</td>
</tr>
<tr>
<td>#16 'others might hurt' (WT)</td>
<td>.188</td>
<td>-1.86</td>
</tr>
<tr>
<td>#17 'win arguments' (D)</td>
<td>-9.022E-02</td>
<td>.534</td>
</tr>
<tr>
<td>#18 'bad things happen' (WT)</td>
<td>.158</td>
<td>-1.298</td>
</tr>
<tr>
<td>#19 'do things with others' (A)</td>
<td>.431</td>
<td>.287</td>
</tr>
<tr>
<td>#20 'feel better when worried' (C)</td>
<td>.621</td>
<td>-2.835E-02</td>
</tr>
<tr>
<td>#21 'boss' (D)</td>
<td>-1.054E-02</td>
<td>.588</td>
</tr>
<tr>
<td>#22 'bad things in news' (WT)</td>
<td>.321</td>
<td>-.325</td>
</tr>
<tr>
<td>#23 'talk things out when scared' (C)</td>
<td>.534</td>
<td>-.254</td>
</tr>
<tr>
<td>#24 'hugs to friends' (A)</td>
<td>.525</td>
<td>6.421E-02</td>
</tr>
<tr>
<td>#25 'ideas heard' (D)</td>
<td>.301</td>
<td>.306</td>
</tr>
<tr>
<td>#26 'fun with others' (A)</td>
<td>.384</td>
<td>.222</td>
</tr>
<tr>
<td>#27 'worry about future' (WT)</td>
<td>.145</td>
<td>-.152</td>
</tr>
<tr>
<td>#28 'listen to ideas' (D)</td>
<td>.321</td>
<td>.426</td>
</tr>
<tr>
<td>#29 'work with others' (A)</td>
<td>.392</td>
<td>.278</td>
</tr>
<tr>
<td>#3 'close to other people' (A)</td>
<td>.338</td>
<td>4.123E-02</td>
</tr>
<tr>
<td>#30 'others mean' (WT)</td>
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</tr>
<tr>
<td>#31 'comfort when upset' (C)</td>
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<td>-8.764E-02</td>
</tr>
<tr>
<td>#32 'get what they want' (D)</td>
<td>5.826E-02</td>
<td>.581</td>
</tr>
<tr>
<td>#33 'win at games' (D)</td>
<td>-.148</td>
<td>.451</td>
</tr>
<tr>
<td>#34 'be with other people' (A)</td>
<td>.411</td>
<td>.408</td>
</tr>
<tr>
<td>#35 'rely on others when scared' (C)</td>
<td>.640</td>
<td>-8.964E-02</td>
</tr>
<tr>
<td>#36 'share things with others' (A)</td>
<td>.427</td>
<td>.158</td>
</tr>
<tr>
<td>#4 'frightened hurt' (WT)</td>
<td>.218</td>
<td>-.458</td>
</tr>
<tr>
<td>#5 'tell others what to do' (D)</td>
<td>1.941E-02</td>
<td>.412</td>
</tr>
<tr>
<td>#6 'leader' (D)</td>
<td>2.214E-02</td>
<td>.577</td>
</tr>
<tr>
<td>#7 'co-operate' (A)</td>
<td>.395</td>
<td>-3.183E-02</td>
</tr>
<tr>
<td>#8 'unsafe walking alone' (WT)</td>
<td>.276</td>
<td>-.441</td>
</tr>
<tr>
<td>#9 'comfort when frightened' (C)</td>
<td>.607</td>
<td>-8.133E-02</td>
</tr>
</tbody>
</table>

Legend: D = dominance items, A = affiliation items, C = comfort items, W = world threat items
# Peer-Report Measure
## Rotated Component Matrix (varimax)

<table>
<thead>
<tr>
<th>Scale item</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 average 'work in group' (A)</td>
<td>.366</td>
<td>.538</td>
</tr>
<tr>
<td>#10 average 'others hurt' (WT)</td>
<td>.308</td>
<td>-.555</td>
</tr>
<tr>
<td>#11 average 'better when worried' (C)</td>
<td>.814</td>
<td>-.7164E-02</td>
</tr>
<tr>
<td>#12 average 'close' (A)</td>
<td>.703</td>
<td>.259</td>
</tr>
<tr>
<td>#13 average 'scared when alone' (WT)</td>
<td>.505</td>
<td>-.460</td>
</tr>
<tr>
<td>#14 average 'always right' (D)</td>
<td>.106</td>
<td>.686</td>
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<tr>
<td>#15 average 'win arguments' (D)</td>
<td>3.733E-02</td>
<td>.735</td>
</tr>
<tr>
<td>#16 average 'share things' (A)</td>
<td>.631</td>
<td>.306</td>
</tr>
<tr>
<td>#17 average 'bad things happen' (WT)</td>
<td>.418</td>
<td>-.394</td>
</tr>
<tr>
<td>#18 average 'listen to ideas' (D)</td>
<td>.346</td>
<td>.655</td>
</tr>
<tr>
<td>#19 average 'play with others' (A)</td>
<td>.256</td>
<td>.600</td>
</tr>
<tr>
<td>#22 average 'comfort when frightened' (C)</td>
<td>.865</td>
<td>3.295E-02</td>
</tr>
<tr>
<td>#20 average 'tell what to do' (D)</td>
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<td>.571</td>
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<tr>
<td>#21 average 'boss' (D)</td>
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</tr>
<tr>
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<tr>
<td>#23 average 'do things with others' (A)</td>
<td>.313</td>
<td>.591</td>
</tr>
<tr>
<td>#24 average 'comfort when upset' (C)</td>
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<tr>
<td>#3 average 'others mean' (WT)</td>
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<tr>
<td>#4 average 'get what want' (D)</td>
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<td>.606</td>
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<td>#5 average 'hug friends' (A)</td>
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</tr>
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<tr>
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<tr>
<td>#9 average 'co-operate' (A)</td>
<td>.407</td>
<td>.101</td>
</tr>
</tbody>
</table>

**Legend:** D = dominance items. A = affiliation items. C = comfort items. W = world threat items
REFERENCES


